



City Research Online

City St George's, University of London

Citation: Pearson, J.A. (2009). Portfolio of doctorate in health psychology. (Unpublished Doctoral thesis, City University London)

This is the accepted version of the paper.

This version of the publication may differ from the final published version. To cite this item please consult the publisher's version.

Permanent repository link: <https://city-ref-test.eprints-hosting.org/id/eprint/8602/>

Copyright and Reuse: Copyright and Moral Rights remain with the author(s) and/or copyright holders. Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge, unless otherwise indicated, provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way. For full details of reuse please refer to [City Research Online policy](#).

Portfolio of Doctorate in Health Psychology

By

Julie Ann Pearson

**Submitted in fulfilment of the requirements
of the degree**

DOCTORATE IN HEALTH PSYCHOLOGY

City University

London

Psychology Department

May 2009

Contents

	Page
Section A	
Preface	1
Section B	
Research	
Acknowledgments	7
Declaration	8
Abstract	9
1 Introduction	10
1.1 The history of smoking cessation	10
1.1.2 Stop Smoking Pregnancy Services	10
1.2 Ten years of progress	11
1.3 Evidence-based guidelines	12
1.3.1 Recommendations	12
1.4 [REDACTED] smokers at a glance	13
1.4.1 [REDACTED] prevalence of maternities and smoking at time of delivery	13
1.4.2 [REDACTED] Stop Smoking Pregnancy Service	14
1.5 Smoking during pregnancy	15
1.5.1 Placental complications	16
1.5.2 Ectopic pregnancy	16
1.5.3 Miscarriage	17
1.5.4 Stillbirth	17

	Page
1.5.5 Mechanisms involved with the effects of smoking during pregnancy	17
1.6 Profile of pregnant women who continue to smoke while pregnant	18
1.6.1 Factors involved with continued smoking during pregnancy	19
1.6.2 Personal immunity around the issue of smoking during pregnancy	20
1.6.3 Multiparous women	21
1.6.4 Social attitudes towards smoking in pregnancy	21
1.6.5 Addiction	22
1.6.6 Impact of smoking during pregnancy on healthcare costs	22
1.6.7 Adverse effects of smoking in the last two trimesters of pregnancy	23
1.6.8 Guilt	23
1.6.9 Barriers to accessing Stop Smoking Pregnancy Services	24
1.7 Nicotine withdrawal in babies	24
1.8 Cessation during pregnancy	25
1.8.1 Prevalence of smoking cessation during pregnancy	25
1.8.2 Factors involved with cessation in pregnancy	26
1.8.3 Motivation for smoking cessation among pregnant women	28
1.8.4 Spontaneous quitters	28
1.8.5 Support during pregnancy	29
1.8.6 Success attributions for cessation during pregnancy	30
1.8.7 The reality of the pregnancy	30
1.8.8 Advantages of cessation during pregnancy	31
1.8.9 Attitudinal change for cessation	31

	Page
1.9 Pregnancy-Specific physiological changes on smoking behaviour	32
1.10 Incentives use in maintaining cessation during pregnancy	32
1.10.1 Nicotine replacement therapy in pregnancy and lactating mothers	34
1.10.2 Health behaviour change techniques in implementing and maintaining cessation from smoking	35
1.10.3 Motivational Interviewing and the rationale for use in smoking Cessation interventions	35
1.10.4 Stages of Change Model	37
1.11 Postpartum relapse	39
1.11.1 Factors involved with postpartum relapse	39
1.11.2 Stages of Change in relation to postpartum relapse	40
1.11.3 Smoking context	41
1.11.4 Change in mood during the postpartum period	42
1.11.5 Concerns over weight gain	42
1.11.6 Postpartum intention to resume smoking	43
1.11.7 Smoking-related behaviour change	44
1.12 Smoking relapse and early weaning in the postpartum period	44
1.12.1 Variables associated with postpartum relapse	45
1.12.2 Lapses to relapse	46
1.12.3 Relapse prevention in the postpartum period	47

	Page
1.13 Adverse effects of passive smoking on the developing child	48
1.13.1 Respiratory illnesses	48
1.13.2 Impaired growth and development	48
1.13.3 Behavioural problems	49
1.13.4 Adverse effects of infants and children living with smokers	49
1.14 Maintaining cessation in the postpartum period	50
1.14.1 Shift in motivation	50
1.14.2 Interventions and support for postpartum	51
1.14.3 Recommendations for future practice	53
1.14.4 Coping strategies	53
1.14.5 Breast feeding as a protective factor involved with cessation	54
1.14.6 Factors involved with postpartum relapse	55
1.14.7 Smoke-free home	56
1.14.8 Conclusion	57
1.14.9 Study rationale	57
1.14.10 Research question	59
2.0 Method	59
2.1 Design	59
2.1.1 Groups	59
2.1.2 Participants	60
2.1.3 Exclusion criteria	61
2.2 Procedure	61
2.2.1 Ethics	61
2.2.2 Patient Information Sheets	61

	Page
2.2.3 Consent forms	62
2.3 Interview schedules	62
2.3.1 Interview format	63
2.3.2 Recruitment process	66
2.3.4 Interview process	66
2.3.5 Adverse events	67
2.3.6 Participants response rate	68
2.3.7 Revision in sample size	69
2.4 Procedure for analysis	69
2.4.1 Format for analysis of data	69
2.5 Interpretative Phenomenological Analysis (IPA)	70
2.6 Results	70
2.6.1 Group 4 (Cessation during pregnancy and postpartum)	71
2.6.2 Group 3 (Cessation during pregnancy)	81
2.6.3 Group 1 (Cessation during pregnancy and relapsed postpartum)	92
2.6.4 Group 2 (Relapse during pregnancy)	102
2.6.5 Duplication of master themes across the groups	110
2.6.6 Support	111
2.6.7 Addiction	111
2.6.8 Coping strategies	111
2.6.9 Emotions	112
2.7 Reflective analysis of results	112

	Page
2.8 Discussion	114
2.8.1 Group 4 (Cessation during pregnancy and postpartum)	114
2.8.2 Group 3 (Cessation during pregnancy)	120
2.8.3 Group 1 (Cessation during pregnancy and relapsed postpartum)	125
2.8.4 Group 2 (Relapse during pregnancy)	129
2.9 Limitations of the study	132
2.9.1 Conclusion	133
2.10 References	135
2.11 Appendices for Section B	153
2.11.1 Appendix A1 Patient Information sheet	153
2.11.2 Appendix A2 Consent sheet	155
2.11.3 Appendix A3 Introduction letter	156
2.12 Appendix A4 Clustering themes for Group 4	157
2.12.1 Appendix A5 Clustering themes for Group 3	164
2.12.2 Appendix A6 Clustering themes for Group 1	171
2.12.3 Appendix A7 Clustering themes for Group 2	177
2.13 Appendix A8 Summary table of master themes (Group 4)	181
2.13.1 Appendix A9 Summary table of master themes (Group 3)	181
2.13.2 Appendix A10 Summary table of master themes (Group 1)	182
2.13.3 Appendix A11 Summary table of master themes (Group 2)	182
2.14 Appendix A12 Interview transcript for Participant 1	183

2.14.1 Appendix A13 Interview transcript for Participant 2	189
2.14.2 Appendix A14 Interview transcript for Participant 3	194
2.14.3 Appendix A15 Interview transcript for Participant 4	200
2.14.4 Appendix A16 Interview transcript for Participant 5	206
2.15 Appendix A17 Interview transcript for Participant 6	210
2.15.1 Appendix A18 Interview transcript for Participant 11	213
2.15.2 Appendix A19 Interview transcript for Participant 13	218
2.15.3 Appendix A20 Interview transcript for Participant 15	223
2.16 Appendix A21 Interview transcript for Participant 8	230
2.16.1 Appendix A22 Interview transcript for Participant 14	233
2.16.2 Appendix A23 Interview transcript for Participant 12	236
2.17 Appendix A24 Interview transcript for Participant 7	241
2.17.1 Appendix A25 Interview transcript for Participant 9	245
Section C	
3.0 Professional Practice	250
3.1 Teaching case study	251
3.1.1 Appendix B3 Aims and Objectives	259
3.1.2 Training case study	261
3.1.3 Appendix C Training timetable	267
3.2. Consultancy case study	268
3.2.1 Appendix D6 Service Level Agreement	280
3.2.2 Appendix D12 Professional Fees and Expenses	284

	Page
3.3 Case study for 5.1 Implement interventions to change health-related behaviour.	285
3.3.1 Appendix E Request for NRT	298
3.4 Case study for 5.2 Direct the implementation of interventions	299
3.4.1 Appendix F Needs assessment for 5.2	307
3.5 Generic case study	311
Section D	321
4.0 Systematic Review	322
4.1 Appendix H Quality Assessment System	360
4.1.2 Appendix H1 Data Extraction Tables	373

2.3 Profile of pregnant women who continue to smoke while pregnant

2.3.1 Factors involved with continued smoking during pregnancy

2.3.2 Personal immunity around the issue of smoking during pregnancy

2.3.3 Multiparous women

2.3.4 Social attitudes towards smoking in pregnancy

2.3.5 Addiction

2.3.6 Impact of smoking during pregnancy on healthcare costs

2.3.7 Adverse effects of smoking in the last two trimesters of pregnancy

2.3.8 Guilt

2.3.9 Barriers to accessing Stop Smoking Pregnancy Services

2.3.10 Nicotine withdrawal in babies

Section A: Preface

Theoretical and Practical Experience of the journey of becoming a health psychologist

This portfolio demonstrates the skills and knowledge of a 'health psychologist' in training and how all the various competencies have been achieved. Overall this portfolio consists of case studies on teaching and training, consultancy, directing the implementation of an intervention and implementing an intervention to change a health-related behaviour change. Additionally skills such as critically evaluating previous research and writing up the findings (systematic review) have been essential in applying this knowledge to undertake and report findings of such research (Doctoral Thesis). The majority of the work is inter-linked in the field of smoking cessation and the various component parts of this topic area are: encouraging people to give up smoking; teaching students and health care professionals how to help people give up smoking, increasing awareness of smoking cessation to prisoners and helping pregnant women and postpartum women maintain cessation.

The systematic review and the consultancy competence provided an opportunity to develop knowledge and expertise in other topic areas of how health psychology can be applied to see how people cope with a diagnosis of breast cancer and designing research to explore the attitudes and beliefs of people regarding their salt consumption and whether any behaviour change such as reduced salt consumption took place post-intervention. Two competencies are strongly inter-linked: namely 5.1 implementing interventions to change health-related behaviour and the research and smoking cessation and relapse in pregnant and postpartum women. Reducing the prevalence of smokers in England remains one of the key targets the Government set UK-based Stop Smoking Services. Pregnant smokers are seen as one of the main priority groups as smoking during pregnancy is the single most preventable cause of premature death and poor birth outcomes.

However, even though this target was set, little is known about the complexities and factors surrounding the behaviour change for pregnant women. As relapse rates postpartum are high, scarce knowledge about how pregnant women maintain cessation in the postpartum period is unknown. The research conducted has added to this evidence-based knowledge of smoking cessation during pregnancy and postpartum and the findings from the research will be a valuable asset when designing interventions for this group of people wishing to give up smoking.

The initial idea for my research was developed from the competence 5.1 designing an intervention to implement behaviour change in a client two months pregnant who wish to give up smoking. As the client wish to give up smoking we discuss her reasons for wanting to give up smoking and how to employ coping strategies to avoid relapsing back to smoking. As a rapport was developed it was identified how support played a key part in the maintenance of the behaviour change. From these potential findings ideas were developed for the Doctoral Thesis.

Throughout my training I have taught health professionals and students the topic of smoking cessation and how health psychology is used and applied in a NHS setting such as helping clients give up smoking. The structure of these training programmes generally consists of national context of smoking cessation and why we have quit smoking services, nicotine addiction and withdrawal, readiness to change, NRT rationale, Champix rationale and Zyban rationale, treatment role play and reflection and evaluation. Each training course is adapted to meet the needs of different groups being taught, e.g. midwives, health professionals based in a prison setting, students and health professionals. The aim of these teaching and training programmes is to increase their knowledge of smoking cessation, gain an understanding of the difficulties faced when giving up smoking and to equip them with skills and expertise to help people giving up smoking in their healthcare working environment.

Attending teaching and training workshops has been beneficial in terms of improving my training and teaching style and being given the chance to record some of my teaching and training sessions has improved my skills at facilitating discussion between participants when engaging in group work. Additionally learning how to design and develop needs assessment of the audience has improved the structure and content of the teaching and the training sessions. Receiving feedback from participants on the training courses, Stage 2 and work colleagues has improved my confidence in being able to deliver training to a wide variety of audiences.

Since starting the Stage 2 course I have been involved with supervision for practice based staff completing smoking cessation work. The 5.2 case study (Direct the implementation of interventions) involved observing a health care assistant completing smoking cessation clinics each week for a period of three weeks. The health care assistant had previously completed a two-day training course on smoking cessation.

The main objective of this supervision was to give feedback to the health care assistant on her ability to deliver smoking cessation advice to smokers wishing to give up smoking. Since this first pilot supervision programme, it is now offered as part of our follow up assessment when completing the Level 2 smoking cessation training course. Feedback given from health care professionals has revealed that they feel much more positive in their role as a smoking cessation advisor if they have received assessment of their clinical skills when delivering smoking cessation interventions. I found the implementation of the intervention provided a learning experience for me in the ability to promote psychological knowledge and practices to health care professionals.

During my training for the consultancy competence I worked for a London-based primary care trust to interview participants exploring their attitudes and beliefs regarding salt consumption, salt consumption patterns and barriers to making changes to the level of salt consumed in their diet (pre-intervention study and post- intervention study) and analysed the data using qualitative research methods. This was a useful insight into how health psychologists can work for other primary care trusts on short-term contracts and use their expertise to work as a consultant on various consultancy projects.

The second consultancy project consisted of increasing awareness of a smoking cessation service based in a prison environment to prisoners and health care professionals. This involved designing a poster to increased awareness of the service to prisoners. In addition, the healthcare department has various staff working in the prison that does not refer prisoners to the smoking cessation service. It was felt that more general awareness of the service was needed. In partnership with the pharmacy department a training session was delivered on smoking cessation within a prison setting with the overall aim being to increase awareness of the service to health care professionals. The training sessions are now a regular part of my work and feedback from the pharmacy department has been positive with the overall aim of the project being achieved. Being able to work on various consultancy projects has increase my knowledge, skills and expertise for future consultancy work.

Section D of the portfolio is the systematic review on how women cope with a diagnosis of breast cancer and whether their coping response reflects their recovery, quality of life and adjustment to breast cancer. Coping strategies can be defined as engagement and disengagement. Engagement coping is characterised by responses which involve orienting toward the source of stress or one's emotions by attending to and processing threat-relevant information and developing plans of action to cope with the stress. Disengagement coping responses in contrast, are characterised by orienting away from the source of stress and one's emotional responses. From the findings of the review it revealed the type of coping strategy used by patients with breast cancer does determine adaptive and maladaptive outcomes. The findings imply that interventions teaching engagement coping strategies would be beneficial for breast cancer patients, while discouraging the use of disengagement coping strategies would be important for all patients. This has been useful for developing skills and expertise for evaluating and reviewing research studies.

The portfolio demonstrates how using theoretical knowledge has been put into practice and subsequently evaluated for the purpose of how they help people change their behaviour. Models such as Stages of Change, Biopsychosocial model of Addiction and the model of therapy, Motivational Interviewing illustrate how difficult it is to achieve behaviour change and maintain cessation; however knowledge of how these changes are implemented and maintained as lifelong cessation is scarce. The research gives an insight into how behavioural change is achieved and maintained and the rationale behind people relapsing back to smoking. Undertaking the doctoral programme has produced many opportunities to put skills such as designing research interview schedules, conducting research and evaluating the findings to the existing knowledge base into practice and has been essential for developing these fundamental skills and expertise needed to practice as a health psychologist.

Over the last two and a half years it has proven to be a proactive learning experience of growing in confidence as a health psychologist with particular emphasis on my skills as a researcher, teacher and consultant and my role as a primary care facilitator has allowed these skills to develop by undertaking the Stage 2 Doctoral course. I have always promote the role health psychology plays in smoking cessation and now understand in greater clarity how health psychology can be used in the workplace to achieved behaviour change, designing interventions, research, for consultancy, teaching and evaluating service set-up.

I feel much more self-confidence and competent as someone who has transferable skills to apply health psychology skills and knowledge into practice in new ventures working as a health psychologist. My professional development has been greatly enhanced by attending various workshops on the Stage 2 course, conferences on health psychology, smoking cessation and training courses over the last two and a half years. Additionally I have realised the impact consultancy has in the NHS and how this plays a part in becoming a confident and competent health psychologist. Therefore the course has afforded me the ability to put into practice the skills and the confidence I have gained as a result of having acquired health psychology skills and knowledge.

Nearing the end of Stage 2 poses many opportunities, exciting challenges and scope in applying for new jobs where I can practice as a health psychologist. The challenge will be a rewarding one in seeking out a new job hopefully in the field of palliative care and how people cope with chronic and terminal illnesses. In addition, I also plan to seek out new part time teaching opportunities on how to apply health psychology in the NHS and increase awareness of Stage 1 and Stage 2 health psychology courses by producing a DVD on the journey of becoming a health psychologist. In conclusion, this portfolio has shown the learning process of becoming a health psychologist by completing all the competencies in the areas of teaching and training, research, consultancy, directing the implementation of interventions and designing an intervention to elicit behaviour change.

Section B: Research

Smoking Cessation in pregnant and postpartum smokers and

why do pregnant and postpartum smokers relapse.

Acknowledgements

I extend a special thanks to all the participants who took part in the research study for all their thoughts and experiences as without their participation there would have been no research study. Also I would like to thank my supervisors, Dr Andrew Kucmierczyk and Dr Catherine Sykes for their patience, expertise and guidance throughout the duration of my professional development. Chima Olughlu, Alanna Molloy, Ana Shehu and Leila de-Schidt, thank you for the constant support and advice for the last two and half years in the working environment.

I am also very grateful to all the support from my Stage 2 colleagues on the course in particular, Vanessa Bogle. Above all I would like to offer special thanks to Amanda Pearson, Simon Brooks, Cheryl Collins and Maria Ashioti for their help and faith in believing it was possible to finish this thesis when the task seemed impossible. Lastly, I dedicate this thesis to my parents, late Kenneth Pearson, Elizabeth Pearson and Graeme Walsh whose patience and their belief in me have enabled me to succeed.

Declaration

I grant powers of discretion to the University Librarian to allow the thesis to be copied in whole or in part without further reference to the author. This permission covers only single copies made for study purposes, subject to normal conditions of acknowledgement.

Smoking Cessation in pregnant and postpartum smokers and why do pregnant and postpartum smokers relapse.

Abstract

Introduction

The purpose of the research was to explore coping and relapse strategies used by pregnant and postpartum women to avoid smoking and to investigate the process of lapses and why this leads to relapse with pregnant and postpartum women. The purpose was to evaluate service delivery by interviewing pregnant and postpartum women. Achieving behaviour change in pregnant women and maintaining cessation in postpartum remains a great challenge in the UK. Gaining a deeper understanding of service delivery may contribute to identification of the active component parts and mediators of successful interventions that elicit behavioural change.

Design

Semi-structured interviews were carried out with fourteen female participants. All of the interviews were conducted in the participant's home. The interviews lasted between twenty and forty minutes. Participants were six pregnant and eight postpartum clients who had access the service and set a quit date and the age range was from twenty- two to forty-one years of age. The clients were recruited as four distinct samples. The first sample (hereafter referred to as Group 4) consisted of postpartum women who had set a quit date during their pregnancy and had maintain cessation during pregnancy and in the postnatal period. Participants from the second sample (hereafter referred to as Group 3) included pregnant women who had maintained cessation for eight to twelve weeks or longer at any stage during their pregnancy. The third sample (hereafter referred to as Group 1) consisted of postpartum women who had managed to stop smoking during pregnancy and had relapsed back to smoking in the postpartum period within two months. Participants from the last sample (hereafter referred to as Group 2) were pregnant women who had set a quit date at any stage of their pregnancy and relapsed back to smoking.

Results

Twenty themes were identified. Some of the important themes included emotional aspects of smoking, identifying coping strategies, addiction, morals, support, being in control, preparation, adjustment period and postnatal period.

Conclusions

This study has shown that interventions designed to promote cessation during pregnancy and continue postpartum are effective. It has shown how interventions are sensitive to the needs of the pregnant smoker and take into account the psychological and social factors involved with smoking. It has given further insight into the psychological change processes underlying the effectiveness of these interventions and those changes that are important in successful giving up smoking. In addition, it has revealed coping strategies that pregnant and postpartum women utilised to maintain cessation and it explored the journey of lapses to becoming a smoker again and participants' experiences of service delivery.

Introduction

1.1 The History of Smoking Cessation

In 1962 a report was published on smoking and health which identified the need for a comprehensive strategy to reduce smoking, including advertising restrictions, price rises, education about the dangers of smoking and support for smokers when they attempt to stop (The Royal College of Physicians, 1962). In the years that followed however, various successive governments adopted a piecemeal approach to tobacco control (McNeill, Raw, Whybrow, & Bailey, 2005). During this time smoking was seen largely as a habit and not as an addiction (Raw and Heller, 1984).

In 1998 the UK government published a white paper on tobacco which set out the development of smoking cessation treatment services across England. The aim of the white paper “Smoking Kills” (Department of Health [DOH], 1998) was to reduce smoking among children and young people, helping adult smokers, particularly the most disadvantaged, to give up and offered particular help to pregnant smokers. This white paper recognised that smoking is an addiction. Other key documents were published around this time which discussed the implementation of smoking cessation services within the health service.

In 2000 a report entitled “Nicotine Addiction in Britain” highlighted the role of nicotine addiction in smoking and the implications of this for treatment and regulation (Royal College of Physicians, 2000). Another key document which subsequently emphasised the importance of smoking cessation services in the UK was the NHS Cancer Plan (DOH, 2000). The main focus of this report included implementing national and local targets to address inequalities in smoking rates between socio-economic groups.

1.1.2 Stop Smoking Pregnancy Services

Smoking cessation services were established in England in 1999, with pregnant smokers one of the main priority groups. The white paper “Smoking Kills” (DOH, 1998) set a specific target for reducing the number of women who smoke during pregnancy:

“To reduce the percentage of women who smoke during pregnancy from 23% to 15% by the year 2010, with a fall to 18% by the year 2005. This will mean approximately 55,000 fewer women in England who smoke during pregnancy”.

Smoking during pregnancy is the single most preventable cause of premature death and poor birth outcomes (Price, Jordan, & Drake, 2006), thus public health campaigns and stop smoking services should target this group as a priority. To support this quote, pregnant smokers in the UK tend to be dependent smokers often with limited socio-economic resources (Hajek et al., 2001). In the white paper “Smoking Kills” (DOH, 1998) this is one of the main reasons that there is a need for additional services dedicated specifically to pregnant smokers. As a result three million pounds was allocated for these services.

1.2 Ten years of progress

Following on from “Smoking Kills” (DOH, 1998) a report was published entitled “Beyond Smoking Kills” (Action on Smoking and Health [ASH], 2008). This was based on ten years progress of smoking cessation services in England. One of the key findings from this report was that nationally, smoking during pregnancy fell from 23% in 1995 to 19% in 2000. In 2005 the prevalence of smoking among pregnant women decreased to 17% (Infant Feeding Survey [IFS], 2005), this means that one in six babies continue to be exposed to toxins in the womb if the mother smokes throughout the gestation period. On current measures the Smoking Kills target has been met and the target for 2010, to reduce smoking prevalence during pregnancy to 15% is achievable. However, to achieve this target pregnant women need access to specialist stop smoking services. Recommendations from the “Beyond Smoking Kills” (ASH, 2008) are:

“Ensure all pregnant women are offered support from specialist stop smoking services as part of routine antenatal care”.

“Train midwives to provide appropriate stop smoking advice and referrals to all pregnant smokers”.

“Develop and evaluate new services and incentives to support the efforts of pregnant smokers to quit”.

Behavioural support has been shown to be successful for encouraging pregnant women to set a quit date and remain abstinent thorough out their pregnancy and pregnant smokers express a high level of interest in this support (Lumley, Oliver, Chamberlain, & Oakley, 2004). Taylor and Hajek (2001) found the level of uptake for this type of support is very low. Only 5% of pregnant smokers make use of stop smoking support which is available free in the UK (Taylor & Hajek, 2001). As pregnancy can trigger many behavioural changes, cessation programmes needs to be as routine part of antenatal care as the measurement of blood pressure (Lumley et al., 2004).

1.3 Evidence-based guidelines

In addition, evidence-based guidelines on smoking cessation in pregnancy should be developed. The paper, “Beyond Smoking Kills” (ASH, 2008) sets out a rationale for moving forward with decreasing smoking prevalence in pregnancy such as professionals being directly involved. Above all, midwives need a better understanding of the risks of smoking in pregnancy in order to give advice at the right time and make referrals to stop smoking services. When targeting specific groups such as pregnant women recommendations need to be applied when help is needed to give up smoking (National Institute for Health and Clinical Excellence [NICE], 2008).

1.3.1 Recommendations

At the first contact with the pregnant women, all those responsible for providing health and support services should discuss her smoking status and provide information about the risks of smoking to the unborn child and the hazards of exposure to second-hand smoke (NICE, 2008). The National Health Service (NHS) has a free support service and telephone helpline for smoking cessation during pregnancy that this specific group of people can access for advice on how to give up smoking.

All health care professionals should offer a brief intervention which should consist of advice and support on how to stop smoking and referring pregnant women to their local NHS Pregnancy Stop Smoking Service (West, McNeill, & Raw, 2000). Counselling from a smoking cessation specialist together with written support materials is effective in aiding cessation (Lumley, Oliver, & Oakley, 2004). This generally involves one-to-one counselling sessions in their home environment, risks and benefits of Nicotine Replacement Therapy (NRT), monitoring smoking status and support throughout the pregnancy and beyond (NICE, 2008).

1.4 [REDACTED] Smokers at a glance

In [REDACTED] 4 in 10 adults are estimated to be regular smokers; one of the highest rates in England and Wales. Age, level of deprivation of the area where people live and their social class are known key determinants of smoking behaviour (Health Development Agency [HDA], 2005). Deprivation is associated with increased risk of smoking and exposure to passive smoking (HDA, 2005). In [REDACTED] between 37% and 43% of deaths in people over the age of 35 are smoking related. Smoking prevalence is higher among men and women of low socio-economic classes, who are less likely to stop smoking (HDA, 2005).

1.4.1 [REDACTED] Prevalence of Maternities and Smoking at time of delivery (2006-2008)

To provide a more frequent and local breakdown of the percentage of mothers smoking at delivery, data is collected from Primary Care Trusts (PCTs). Each PCT is required to report to the Department of Health every three months the number of maternities, the number of mothers smoking at delivery and the numbers of mothers not smoking at delivery. Data collected from the Department of Health (2008) returns from [REDACTED] show the number of maternities per financial year in 2006/07 was 4,106 with 266 (6.5%) smoking at time of delivery and 50 (1.2%) not known whether they are smoking at time of delivery. The following year 2007/08, the number of maternities was 4,261 with 286 (6.7%) smoking at time of delivery and 95 (2.2%) not known whether they are smoking at time of delivery. This figure may be even higher for smoking at time of delivery as this data could be relying on self-report.

Various studies have shown pregnant women do tend to under-report their current smoking status (Owen & McNeill, 2001, & Lawrence, Aveyard, & Croghan, 2003). Also, smokers tend to be accurate about the amount of cigarettes they smoke, but once the anti-smoking environment becomes much more intense, a larger number of smokers falsely declare themselves to be non-smokers. (Patrick et al., 2001). Walsh, Redman, & Adamson, (1996) found that 25% of pregnant smokers falsely declare themselves non-smokers. It seems that pregnant women who are current smokers could deny smoking altogether because of the attitudes of those around them such as health care professionals, relatives or society in general.

1.4.2 [REDACTED] Stop Smoking Pregnancy Service

The [REDACTED] Stop Smoking Pregnancy service offers support to pregnant women and mothers with children five and under, primarily in their own homes in the Lambeth area. If the home environment is not convenient for the client then they can attend support sessions at the Health Clinic where the service is located. Alternatively clients can be seen in other locations such as coffee shops which are normally near their living environment.

The team consists of two pregnancy counsellors who share the workload which consists of home visits and mandatory training for midwives. Mandatory training in brief interventions for midwives consists of explaining what the local service can offer and how to raise the issue of smoking and refer on to the service. The main objective of the training is to teach midwives how to discuss smoking in a non-judgemental way and to make appropriate referrals. Where appropriate, midwives fax or post a referral form or leave referral details on the counsellors' answer phone. Due to the success of the training and qualitative feedback given on the evaluation sheets the counsellors have been allocated a regular session approximately one day every month to train midwives in brief interventions on smoking cessation.

All clients are assessed individually and the first line of treatment is behavioural support, psychological support and NRT. Once the service receives a referral, a letter is sent to the client advising them of the service and how to contact the service. Three attempts of contacting the client by phone are made. In addition, a text message is sent over a two week period offering the client an appointment. If contact is achieved, the initial assessment is arranged and at this assessment a convenient quit day is set up. After this, weekly support sessions with additional text messages and phone calls made in the interim period between weekly home visits.

Support sessions are offered for as long as the client needs help with her quit attempt and sessions become fortnightly and monthly as appropriate. Also the client is offered advice on staying quit after the birth of their baby. The health care professional who referred the client on to the service is informed of the outcome, i.e. whether the client has been successful or not successful at the end of the treatment. Additionally, self reports of abstinence are validated by using a carbon monoxide machine to check to see if the client has smoked or not.

1.5 Smoking during pregnancy

Smoking during pregnancy is an important cause of ill-health for the mother and the developing foetus. Pregnant smokers who continue to smoke during their pregnancy increase their risk for potentially serious complications. It is also the largest preventable cause of foetal and infant ill-health and death (Royal College of Physicians, 2000). The association between smoking and low birth-weight is causal. Nordstrom and Cnattingius (1994) identified women who smoked during their first pregnancy but quit smoking during their second pregnancy and found that the second birth weight was identical among women who never smoked.

In the report “Smoking and Reproductive Life” (British Medical Association [BMA], 2004), it was reported that the risk of having a low birth-weight baby increases with the amount smoked and smoking in the last three months of pregnancy is a particular risk for low-birth weight. Women who continue to smoke during their pregnancy need to reduce to very low levels of exposure to nicotine consumption (less than eight

cigarettes per day) to improve infant birth weight (Windsor, Boyd, & Orleans, 1998).

1.5.1 Placental complications

If the pregnant smoker continues to smoke they are at increased risk for placental abruption. This occurs when the placenta separates from the uterine wall and is one of the most common causes of maternal death and prenatal death, occurring at 28 weeks or later, or death within the first week of life (Kyrklund-Bloomberg, Gennser, & Cnattingius, 2001). Naeye (1980) found that women who stop smoking during pregnancy have a lower risk of placental abruption compared with women who continue to smoke. Smoking is also linked with preterm ruptures of the membranes, which increases the risk of placental abruption, (Kyrklund-Bloomberg et al., 2001).

The main role the placenta plays in pregnancy is supplying oxygen and nourishment to the developing foetus. Another risk of smoking during pregnancy is placenta praevia. This occurs when the placenta obstructs the opening at the neck of the womb, increasing the risk of maternal bleeding and of premature birth, which are dangerous for both mother and child. Smoking increases the possibility of placenta praevia by one and half to three times (Naeye, 1980). Women who smoke are at increased risk of having a premature baby and one cause of early labour is the rupture of the membranes that surround the developing foetus in the womb.

Thus babies born before 37 weeks are at greater risk of illness and death. The pregnant smoker has a two-to-three fold increased risk of the membranes breaking prematurely before 37 weeks of pregnancy (Naeye, 1980).

1.5.2 Ectopic pregnancy

Ectopic pregnancy occurs when the fertilised egg implants and begins to grow outside the uterus, usually in the fallopian tube. Saraiya (1998) found that in women who smoke there is a significant increased risk of ectopic pregnancy. Even when smoking one to five cigarettes a day the risk of ectopic pregnancy was 60% higher than non-smokers. This association remains the same even when controlling for other factors such as sexually transmitted infections and pelvic inflammation (US Department of

Health and Human Services, 2001).

1.5.3 Miscarriage

Miscarriage in England is defined as loss of pregnancy before 24 weeks gestation (BMA, 2004). It has been found that smoking during pregnancy increases the risk of miscarriage by 25% (Royal College of Physicians, 1992). An association between a clear dose response among 60,000 women in Canada was found with the risk of miscarriage increasing with the number of cigarettes smoked (Armstrong, McDonald, & Sloan, 1992). The risks became even greater when women smoked nine cigarettes or more daily (Armstrong et al., 1992).

1.5.4 Stillbirth

Stillbirth is defined as foetal death occurring at 20 weeks or later into the gestation period (Copper, Goldenberg, Dubard & Davis, 1994). One study found that smoking during pregnancy was associated with the risk of unexplained stillbirth (Froen et al., 2001). Similarly, another study found a link between smoking during pregnancy and stillbirth. A 40% increased risk of stillbirth was explained by the smoking-related risks of foetus growth restriction and placental complications. A Danish study reported that women who gave up smoking in early pregnancy reduced the risk of stillbirth to that of non-smokers (Wisborg, Kesmodel, Henriksen, Olsen, & Secher, 2001).

1.5.5 Mechanisms involved with the effects of smoking during pregnancy

The influence of the content of tobacco smoke that influence foetal growth is not clear. Nicotine narrows the blood vessels and may affect the function of the placenta, reducing the blood flow and the supply of nutrients and oxygen to the developing foetus (BMA, 2004). All of the other chemicals and poisons in a cigarette will pass to the foetus as they are in the mother's bloodstream, including carcinogens such as arsenic, cyanide and formaldehyde. Carbon monoxide in tobacco smoke inhaled by pregnant smoker replaces oxygen in the blood reducing the supply available to the baby (Nash and Persaud, 1988). Smoking also disrupts the growth and proliferation of blood vessels (Meyer and Tonascia, 1977).

Restrictions on the blood vessels and carbon monoxide left in the blood from smoking might increase the risk of hypoxia (lack of oxygen) which could lead to placental abruption (Voight, Hollenbach, Krohn, Daling, & Hickok, 1990). Hypoxia is also implicated in the enlargement of the placenta, which may cause it to extend over the cervix (Williams et al., 1991). Nicotine also targets the nicotinic receptors in the developing babies' brain to change the pattern of cell proliferation and differentiation. Being exposed to nicotine on a regular basis increases the risk of abnormalities in the development of synaptic activity (Slotkin, 1998). The result is cell loss and ultimately neuronal damage. In addition, concentrations of nicotine on the foetus side of the placenta are generally 15% higher than maternal levels as even low levels of cigarette smoking can exposed the foetus to harmful amounts of nicotine (Nau, Hansen, & Steldinger, 1985).

In conclusion, pregnancy provides numerous opportunities to help pregnant smokers stop smoking. It is never too late in pregnancy to stop smoking and the risks are reduced substantially if cessation occurs in the first trimester of pregnancy (BMA, 2004).

1.6 Profile of pregnant women who continue to smoke while pregnant

Pregnant smokers who continue to smoke during their pregnancy tend to be young with more psychological, emotional and family problems, less support, financial resources and less residential stability. They have low confidence in their ability to quit smoking, do not believe smoking may harm the unborn baby, are less educated, live in smoke filled environments with partners who smoke and they tend to be heavily addicted to nicotine (Diclemente, Dolan-Mullen, & Windsor, 2000). Women who still smoke for the duration of their pregnancy are often heavy smokers with high cigarette consumption. They have smoked for many years and hold an identity as a smoker at home and in their working environment.

1.6.1 Factors involved with continued smoking during pregnancy

In order to reduce maternal smoking, it is important to gain an understanding of the factors which contribute to smoking during pregnancy. One recent study found low and high levels of pregnancy-related anxiety, exposure to physical/sexual violence and high job strain were found to be associated with smoking during pregnancy (Goedhart, Van Der Wal, Cuijpers, & Bosel, 2009). Besides the physical and psychological addiction to cigarettes, psychosocial stress has been found to be one of the main reasons for continued smoking during pregnancy as participants rated stress as the highest trigger for them to smoke (Haslam and Draper, 2001).

An explanation for this could be how smoking operates as a coping mechanism for pregnant smokers who are feeling stressed (Haslam, Draper, & Goydner, 1997). In addition other mechanisms can explain the link between psychosocial problems and smoking, for example smoking enhances the sense of well-being and is used as a tool for negative mood and secondly, women with psychosocial problems are less confident about their chances of successfully quitting (Zhu and Valbo, 2002).

There seems to be an association between mood control and continued smoking during pregnancy. Research undertaken in Nottingham found the main reason for smoking during pregnancy was mood control; this was used for relaxing, feeling calm, experiencing enjoyment and to relieve boredom (Gillies, Madeley, Power, & Symonds, 1989). Gilles et al. (1989) found pregnant women were more likely to smoke if they were single, divorced or separated, from unskilled or semi-skilled occupational groups and if they had a partner who was unemployed. Penn and Owen (2002) results stated that women are also likely to continue smoking during pregnancy if they have a partner who smokes. Studies have shown the role of the partner's is very important in increasing cessation rates among pregnant women (McBride, Grothaus, Nelson, Lando, & Pirie, 1998, Wakefield, Reid, Roberts, Mullins, & Gillies, 1998). There is a strong correlation between the smoking habits of partners and the smoking habits of pregnant women (Owen and Penn, 1999).

One study reported a beneficial change in the maternal smoking behaviour of pregnant women whose partners had either offered support or had made some changes to their own smoking behaviour (Haug, Aaro, & Fugelli, 1992). Penn & Owen (2002) found that those women, whose pregnancy was unplanned, were more likely to be current smokers than women who had planned their pregnancy. Housing tenure was the most significant variable associated with maternal smoking during pregnancy. Pregnant women living in rented council properties were nearly twice as likely to be smokers compared to those buying their own home (Penn & Owen, 2002). Continued smoking during pregnancy is also linked to passive smoke in the home or working environment, with pregnant women who smoked being more likely than non-smokers to be exposed to passive smoking (Penn & Owen, 2002). This could be because pregnant smokers may have lots of work colleagues, peers and relatives in their social circle.

1.6.2 Personal immunity around the issue of smoking during pregnancy

In today's society most pregnant women seem to be aware of the risks of smoking during pregnancy, however awareness alone it is not enough for prompting pregnant women to give up smoking (Hymowitz et al., 2003). Most women demonstrate a variety of denials and rationalisations for smoking during pregnancy such as being disbelieving of the health risks involved for the developing foetus (Haslam & Draper, 2001).

Previous uncomplicated pregnancies experienced by themselves, their relatives and friends may imply that some women cope with the cognitive dissonance generated by smoking during pregnancy by believing they have some 'personal immunity' against the health risks (Haslam & Draper, 2001). A qualitative study explored social attitudes towards smoking and found pregnant smokers did not feel the health risks associated with smoking were personally relevant to them and were over-emphasised in an anti-smoking society (Bull, Burke, Walsh, & Whitehead, 2007). Pregnant smokers and their relatives should be informed of the risks, given encouragement to quit and be able to raise the issue with their peers.

1.6.3 Multiparous Women

Women expecting a second or subsequent child are less likely to quit during pregnancy or in the foreseeable future (Batten, Graham, High, Ruggiero, & Rossi, 1999). A longitudinal study of maternal smoking, social background and the family's development was analysed over twenty one years and found multiparous mothers continue to smoke during their pregnancy (Isohanni, Oja, Moilanen, Koironen, & Rantakallio, 1995).

1.6.4. Social attitudes towards smoking in pregnancy

As smoking during pregnancy is viewed in a negative way and associated with social stigma, pregnant women may feel reluctant to admit to health care professionals that they are smoking. Furthermore since the smoking ban was introduced in July 2007, there are restrictions in public places that may affect the smoking behaviour of pregnant smokers.

Research which focuses on socio-economic characteristics of communities where women live and raise their families, show individual differences in the social acceptability of smoking in pregnancy according to socio-economic status. One study showed that working-class communities are more accepting of smoking in pregnancy because smoking is associated with high levels of stress, with social attitudes where cigarette smoking is seen as the 'norm' and helps people cope with a difficult lifestyle (Pickett, Wakschlag, Rathouz, Bennett, & Abrams, 2002).

Bull et al. (2007) gave accounts of pregnant women using strategies to avoid detection of 'covert' smoking activity and how they had been verbally reproached for smoking and had tried to keep their smoking a secret from family, friends and health care professionals due to the perceived social stigma of smoking during pregnancy. Clearly there is a need for a non-judgemental approach when helping pregnant smokers give up smoking. Smoking cessation interventions should take into account the psychological, social and economic context in which smoking takes place in.

1.6.5 Addiction

Addiction to smoking is caused by nicotine. The physical dependence on nicotine is potentially strong as the physical dependence to heroin (US Department of Health and Human Services, 1988). In 2000 a report entitled “Nicotine Addiction in Britain” devised a definition for nicotine:

“A behaviour over which an individual had impaired control” (Royal College of Physicians, 2000).

Pregnant women find it very difficult to quit during pregnancy as nicotine is metabolised more quickly during pregnancy and its half- life is shorter despite the smoking habits remaining unaltered (Dempsey and Benowitz, 2002). A pregnant woman will therefore metabolise nicotine twice as fast than a female non-pregnant smoker and will smoke more cigarettes during pregnancy as physiological changes are taking place in pregnancy that increases their addiction to nicotine. This gives an idea of the problems pregnancy women face when trying to give up smoking.

Many women reduce their cigarette consumption once they learn they are pregnant. A Swedish study found that women reduce their cigarette consumption and change to lower tar brand cigarettes (Lendahls, Ohman, Liljestrand, & Hakansson, 2002). Women tend to use this harm reduction approach without realising and even though they are smoking less cigarettes and low- tar brands, they are increasing their nicotine intake by smoking those cigarettes more intensively. Another study reported that a pregnant women’s nicotine consumption and intake of toxins measured by urinary cotinine remained constant throughout pregnancy (Lawrence, Aveyard, & Croghan, 2003). From this research smoking cessation during pregnancy is the safest option for pregnant women.

1.6.6 Impact of smoking during pregnancy on healthcare costs

Smoking during pregnancy results in a significant economic burden to the healthcare system and society in general. Healthcare costs due to smoking during pregnancy can be avoided if pregnant smokers access NHS Stop Smoking Pregnancy Services.

Pregnant smokers with complicated deliveries use 66% more health care resources than do non-smokers (Adams, Solanki & Miller, 1995). It is estimated that the potential savings the NHS gained from cessation of smoking during pregnancy can be up to £4.00 for every pound spent on an intervention designed to help pregnant smokers give up smoking (Buck and Godfrey, 1994).

1.6.7 Adverse effects of smoking in the last two trimesters of pregnancy

Some of the adverse effects of maternal smoking can be avoided if pregnant smokers give up in the first trimester of their pregnancy. Results from one study indicated that 25% of all stillbirths and 20% of all infant deaths can be preventable in a population of 30% if all pregnant smokers stopped smoking by the sixteenth week of gestation (Wisborg, Kesmodel, Henriksen, Olsen, & Secher, 2001). The result emphasised that smoking exerts its influence on mortality after the first trimester. The adverse effects of smoking on birth weight occur during the second and third trimesters (Mullen, Richardson, Quinn, & Ershoff, 1997).

Advice given by health care professionals should be to stop smoking and should not recommend or condone cutting down, which may discourage people from taking the final step of complete cessation during pregnancy (Owen & Penn, 1999). Health care professionals should suggest protection strategies for those women who continue to smoke during the last trimester such as smoking reduction, abstinence during the birthing process, healthy eating and encouraging the adoption of a smoke-free house (Diclemente et al. 2000).

1.6.8 Guilt

One factor involved with smoking during pregnancy is guilt. Women who smoke during pregnancy often have strong feelings of guilt and try to rationalise and eliminate the health effects of smoking by explaining that smoking is their way of coping (Haywood, MacAskill, & Eadie, 1993). In this study women went on to described how smoking is perceived by them. It is seen as offering them a break, helping them cope with boredom and acting as a social prop (Haywood et al., 1993).

Feeling guilty led to some pregnant women smoking fewer cigarettes than they usually did (Haywood et al., 1993). Research with young pregnant smokers in Edinburgh had similar results; the most prominent aspect women had about their smoking was one of guilt (Copeland, 2003). Most of the women in the study were concerned about the effect smoking had on their health and on that of their children (Copeland, 2003). Nearly all of the women in the study had tried to give up smoking, failed and felt disgusted at themselves and their habit and felt powerless to change their behaviour (Copeland, 2003).

1.6.9 Barriers to accessing Stop Smoking Pregnancy Services

Despite the efficacy of behavioural support, pregnant women can access help in giving up smoking during their pregnancy. A low level of this support has been cited as a barrier of implementation of these programmes (Taylor & Hajek, 2001). One study explored the barriers of attending a stop smoking service during pregnancy and found pregnant women were afraid of disappointing themselves if they failed in their quit attempt and not tending to seek help for this type of thing (Usher, Etter, & West, 2006).

Lack of social support, not viewing quitting as being important, lack of childcare, work commitments and lack of access were given as barriers for seeking help in giving up smoking (Usher et al., 2006). Another barrier to quitting smoking during pregnancy could be a lack of understanding of pregnant women's levels of interest in, and preferences for different interventions (Usher, West, & Hibbs, 2004). Previous research has shown that pregnant smokers from lower socio-economic groups are more receptive towards behavioural interventions (Floyd, Rimmer, Giovino, Mullen, & Sullivan, 1993). Research needs to be explored to identify the barriers pregnant women face when accessing services set up to help them give up smoking and to then design interventions which address these barriers (Usher et al., 2004).

1.7. Nicotine Withdrawal in Babies

If a pregnant women smokes for the duration of the pregnancy there is a possibility that the baby will go through nicotine withdrawal.

One study found that newborns develop withdrawal symptoms from nicotine at 12 hours of life and last no more than 48 hours, with irritability and tremor being the prominent findings (Garcia-Algar et al., 2001). Another study found a possible link between maternal smoking and neonatal withdrawal from nicotine using a sample of twenty-seven nicotine exposed newborn infants, two to three days old (Law et al., 2003). Results indicated that tobacco-exposed infants were highly aroused, stressed and more hypertonic (Law et al., 2003). Measures used to validate maternal smoking for the duration of the pregnancy only reflect recent cigarette use in the last two or three days before delivery and not in early pregnancy (Law et al., 2003). These findings suggest that prenatal tobacco exposure may affect newborn neuro-behaviour (Law et al., 2003).

1.8 Cessation during pregnancy

1.8.1 Prevalence of smoking cessation during pregnancy

Graham and Der (1999) examined the patterns and predictors of smoking cessation in a cohort of British women and found that cigarette smoking among adult women is a stable dimension of identity and lifestyle. One other conclusion from this study was becoming pregnant was an important predictor of giving up smoking (Graham & Der, 1999). Pregnancy is seen as a lifestyle change and many women question why they are smoking. Many pregnant women are motivated to stop smoking at this time and relatives may be supportive in encouraging them to stop smoking and they have greater contact with the healthcare system.

In 2005 a third of mothers (33%) in England smoked before pregnancy or during pregnancy and among mothers who smoked immediately before or during pregnancy just under half (48%) managed to give up at some stage before the birth (IFS, 2005). Pregnant women who smoked in 2005 were more likely to give up before or during pregnancy compared with 2000 (48% and 44% respectively). The decrease could be attributed to the development of Stop Smoking Services in England during this period. Across England, pregnant women from managerial and professional occupations were least likely to have smoked before or during pregnancy (IFS, 2005).

Another factor involved with cessation during pregnancy is the age of the mother. Pregnant women aged 35 or over were more likely to have given up smoking than younger mothers (IFS, 2005).

1.8.2 Factors involved with cessation in pregnancy

Smoking can sometimes be seen as a negative aspect of people's lives and pregnancy may trigger this change in attitudes towards smoking. Research from Sweden has identified that smoking is no longer seen as something positive; rather as a constraint over which it is possible to attain control and this is linked as a prerequisite for smoking cessation (Abrahamsson, Springett, Karlsson, & Ottosson, 2005). These results are similar to previous research which found women need to have confidence in their ability to quit; this will then mature into interplay between reflections on success in maintaining abstinence that will be achieved and positive experiences of trying to maintain control over the smoking habit (Ershoff, Solomon, & Dolan-Mullen, 2000). The women exploring how to take control over her smoking may lead therefore onto the next stage of abstinence from cigarettes.

A woman's first pregnancy has been shown to have "an intervention effect" on smoking habits with a high number of primiparous women quitting during pregnancy (Batten, Graham, Ruggiero, & Rossi, 1999). Evidence from America suggests the "intervention effect" on the first-pregnancy may be most pronounced in the first trimester, underlying the importance of interventions to commence in the early stages of the pregnancy (Solomon, Secker-Walker, Skelly, & Flynn, 1996). Owen & Penn (1999) conducted a survey which found pregnant women tend to stop smoking in the first trimester of their pregnancy. Variables associated with quitting are education, marital status, social status, gestational age at entry into prenatal care and partners smoking status (Cnattingius, Lindmark, & Meriko, 1992).

External factors such as experiencing pregnancy nausea, loss of taste for tobacco, concerns for the baby's health, social stigma and pressure to give up are often involved in the decision to stop smoking and may contribute to the pregnant women's success at maintaining cessation (Stotts, Diclemente, Carbonari, & Dolan-Mullen,

1996). Coping strategies play a huge part in the pregnant smokers' determination to quit and they differ from those used by non-pregnant smokers. The pregnant smoker who quits during her pregnancy will engage in fewer cognitive or experiential strategies, such as consciousness raising, self-evaluation and modification of their home environment to modify their smoking behaviours (Stotts et al., 1996). Pregnancy quitters have been shown to rely more on external factors such as social stigma and the developing child (Stotts et al., 1996). By encouraging the pregnant smoker to focus on their external reasons for quitting such as pregnancy and also to think more about quitting for their own health, may have important implications for long term cessation from cigarettes (McBride, Pirie, & Curry, 1992). Addiction is associated with the pregnant smoker's ability to quit. Smoking history and smoking rate are important predictors in cessation during pregnancy. Smoking history is the measure of time an individual has been smoking, and smoking rate is seen as the measure of a person's daily smoking (usually given as number of cigarettes per day).

Research has shown that lighter smokers (with a mean rate of seven cigarettes per day) and those who had smoked for few years (a mean smoking history of five years) were more likely to quit smoking during pregnancy (Lesa et al., 1999). Self-efficacy is seen as a complex self-evaluation and self-belief expectations of an individual's ability to give up smoking (Lesa et al., 1999). In one study, the results show that self-efficacy emerged as a significant variable for cessation during pregnancy (Lesa et al., 1999).

A survey in Nottingham and Coventry was carried out comparing the characteristics of thirty-two women who quit smoking during pregnancy with 472 women who continued to smoke throughout pregnancy and found variables associated with cessation, such as one week of not smoking, having a non-smoking partner and believing the children of smokers were more likely to suffer from infections (Wakefield, Gillies, Graham, Madeley, & Symonds, 1993). Questions were asked such as whether children who live with smokers are more likely to contract conditions such as 'chesty cough', 'increased risk of infections' and 'wheezing' (Wakefield et al., 1993).

This knowledge is useful when designing and developing interventions for pregnant smokers to include the social and psychological factors which are involved with maternal smoking as a part of the intervention.

1.8.3 Motivation for Smoking Cessation among pregnant women

The type of motivation for smoking cessation during pregnancy may explain the relatively high rate of spontaneous cessation (30%) among pregnant smokers (Floyd, et al., 1993). The intrinsic and extrinsic model of motivation determines why women give up smoking during pregnancy (Curry, Grothaus, McBride, Lando, & Pirie, 2001). Research has shown that both general and pregnancy-specific motivation is important in maintaining cessation during pregnancy and relapse prevention (Curry et al., 2001).

Intrinsic motivation is when pregnant women are concerned about the health risks involved with continuing to smoke during pregnancy and will be motivated by these concerns to be abstinent from cigarettes during their pregnancy. There is also extrinsic motivation which is concerned with social pressure to quit, that is a result of pressure from relatives, family and health care professionals to quit and their acceptance of the risks involved to the foetus by continuing to smoke during pregnancy. If pregnant smokers are motivated to quit by the social consequences and pressure from society, then once they have had their baby they may be vulnerable to postpartum relapse. If they are motivated by their own health concerns and the need for a healthy pregnancy then they may be less likely to relapse during the postpartum period. Interventions which focus on the woman's health and the baby's health could be the link in maintaining lifelong cessation.

1.8.4 Spontaneous quitters

Spontaneous quitters are a unique group of pregnant women who are able to give up smoking upon confirmation of their pregnancy without any help from healthcare professionals. This has implications to consider, as even though they do not need the help of a stop smoking cessation intervention they may relapse during pregnancy and the first post-natal year.

The results from one study confirmed that 'spontaneous quitters' have definable characteristics which mark them out from other women smokers such as completing secondary education, higher-status employment and higher family income (Panjari et al., 1997).

1.8.5 Support during pregnancy

Research was undertaken, comparing a control and an experimental group of pregnant women who gave up smoking after being allocated into one of the two groups.

Women in the control group received standard care and those in the experimental group received counselling, tailored self-help materials, skills training and professional/social support. There were significantly more quitters among women in the experimental group than the control group (Windsor, Cutter, & Morris, 1985). Another study showed that a 'patient-centred approach, including knowledge of the patient's social situation and perspectives on smoking, is more successful in helping patients give up smoking, than telling patients to change their smoking behaviour (Arborelius, 1996).

A survey explored the different types of support pregnant women were interested in to help them give up smoking and found self-help materials and face-to-face individual behavioural support attracted the most interest (Ussher et al., 2004). As more women expressed an interest in individual appointments than group appointments, every effort should be made to offer women individual appointments and provide privacy for the pregnant women to discuss their smoking status (Ussher et al., 2004). Research therefore provides evidence that support is seen as a factor involved with cessation during pregnancy.

The living environment is associated with success of smoking cessation for the general population smokers (Cohen and Lichtenstein, 1990). Pregnant women who have quit smoking during pregnancy and have a non-smoking partner who provided social support, have a higher probability of remaining smoke-free than women whose partners supported them in their quit attempt but smoked (Pollak and Mullen, 1997).

In conclusion, this shows how important it is to target the partner's smoking behaviour as well and to implement a smoking ban in the home environment.

1.8.6 Success attributions for cessation during pregnancy

When pregnant women are maintaining cessation from cigarettes, they may view their quit attempts as a success quite differently.

One study explored the success attributions in a sample of 392 pregnant women who stopped smoking during their pregnancy and found quitting could be viewed as either temporary, as in the duration of pregnancy, or permanent cessation (Mullen, Pollak, & Kok, 1999). Additionally they found women who in late pregnancy viewed the reason for their quit attempts as stable, had significantly higher odds of remaining abstinent throughout the first year after the birth than did those who viewed their cessation as temporary (Mullen et al., 1999). Also seeing the cessation as more internal e.g. something about the individual women, rather than an external reason such as the pregnancy was a predictor of cessation during pregnancy (Mullen et al., 1999). One implication for an intervention that could be designed for helping pregnant women is to change their attitudes about smoking and to encourage them to think of quitting for the baby as a lifelong cessation plan.

1.8.7 The reality of the pregnancy

The acceptance of the reality of the pregnancy could be a trigger event (such as feeling the baby kick for the first time) to raise awareness for encouraging cessation. Qualitative research has shown that for some women smoking cessation is natural in the context of pregnancy; cessation just happened, while for others it was a gradual process that happened in the later part of the pregnancy (Abrahamsson, Springett, Karlsson, & Ottosson, 2005). Research from Sweden revealed that having the pregnancy confirmed by the pregnancy test, discussing it with a midwife, listening to baby heart sounds, feeling the foetus moving, and experiencing the ultrasound examination were emotional experiences for the participants and increased their motivation to give up/cut down on their smoking (Lendahls et al., 2002).

Visits to the doctor and ultrasound screening investigations are occasions that can be used for brief interventions on smoking cessation to encourage and help pregnant women give up and maintain abstinence from cigarettes for the duration of their pregnancy.

1.8.8 Advantages of cessation during pregnancy

Women who gave up smoking during pregnancy reported that advantages such as better taste and smell, better physical fitness, satisfaction and happy that they had not exposed their babies to the dangers of smoking, awareness of their own health and not being addicted to nicotine anymore, encouraged them to maintain cessation during their pregnancy (Lendahls et al., 2002). In addition their own health became important to them as being healthy was needed to support the growing baby and they also wanted to serve as a non-smoking model to their children (Lendahls et al., 2002). They did not want to be regarded as smokers by their own children and prevent their children from starting to smoke and referring back to their own childhood with smoking parents (Lendhals et al., 2002). In the paper, “Beyond Smoking Kills” (ASH, 2008) states:

“When these nicotine-addicted children become adults and then parents, the cycle begins again”.

Pregnant women from deprived backgrounds are more likely to smoke than more affluent peers, so babies will mature into children who take smoking for granted as part of everyday life, the likelihood of them starting to smoke is heightened (ASH, 2008). In conclusion, by encouraging pregnant smokers to maintain cessation during pregnancy and the postpartum period millions of children and young people can avoid being harmed by tobacco.

1.8.9 Attitudinal change for cessation

For many women, cigarette smoking is seen as part of their lifestyle and identity (Graham and Der, 1999).

One other study found that smoking becomes part of a woman's identity starting in childhood, for example both parents smoke and then they socialised with other smokers in their adulthood (Lendahls et al., 2002). Research has shown that experiential strategies are extremely important in leading onto the next stage; cognitive/attitudinal change an important precursor to cessation and maintenance (Diclemente, Prochaska, & Gibertini, 1985).

The decision to quit during pregnancy can be made without resolving their ambivalence about smoking and so not evaluating their own reasons for quitting, other than for the health of the baby (Stotts et al., 1996). The objective of the intervention would therefore be to encourage reflection on the meaning of smoking, identity as a smoker and benefits to their own health and the unborn child (when giving up smoking) enabling them to move forward to cessation and creating a new identity as a non-smoker. It is very important for pregnant smokers to learn how to cope with social circumstances without relapsing to smoking. These parts of the intervention would form the basis for smoking cessation.

1.9 Pregnancy-Specific Physiological changes on smoking behaviour

Research has not been completed on how features of pregnancy itself may impact on remaining abstinence from cigarettes for the duration of the pregnancy. It is unclear how hormonal changes during pregnancy affect cravings to smoke or the experience of withdrawal symptoms. Although research indicates that nausea and illness are key factors in cessation during pregnancy, it would be useful to know how other attributes of pregnancy may have an impact on cessation during pregnancy (Solomon and Quinn, 2004).

1.10 Incentives use in maintaining cessation during pregnancy

The paper "Beyond Smoking Kills" (ASH, 2008) recommends a scheme which offer food vouchers to pregnant women who quit, this is a good example of an innovation way to reduce the prevalence of smoking during pregnancy. Research from America has explored this innovative way of encouraging pregnant women to give up smoking and found cessation rates were higher for those receiving vouchers for each monthly

cotinine test showing non-smoking compared to those who in the control group who did not received any vouchers (Donatelle, Prows, Champeau, & Hudson, 2000). Cotinine is a metabolite of nicotine that can be detected in the blood, urine or saliva. More trials of incentives are needed, particular to see if there is any impact on whether this will help long-term abstinence.

More recent research has shown financial incentives can help individuals achieve their personal behaviour goals (Jochelson, 2007). Financial incentives may be most successful if offered as one part of the behaviour support programme, as incentives alone may not be sufficient to counteract the wider pulls of the social environment, habit and psychological dependency (Boyce, Roberston, & Dixon, 2008). NHS Tayside's 'Give it up for baby' programme (NHS Health Scotland, 2008) used this approach using financial incentives combined with personalised individual support to help pregnant women give up smoking, addressing the social, as well as individual, component of behaviour change.

Support was offered for three months as were weekly carbon monoxide breath tests and the women received a credit of fifty pounds a month to spend at their local Asda store. The reward was based on a clear breath test each month and continued throughout the pregnancy and three months after the birth. Results from this innovative way of helping pregnant smokers give up, found in the first nine months, fifty out of fifty-five women stopped smoking and financial incentives were successful because they were offered in addition to other support such as NRT and alternative social activities.

Also the pregnant women taking part in the programme felt it gave them the opportunity to say they were doing something different. Financial incentives may be most effective as one key component part of a smoking cessation programme that addresses the individual, social and economic factors that are influenced by people's lifestyle choices (Boyce et al., 2008).

1.10.1 Nicotine Replacement Therapy in pregnancy and lactating mothers

NRT and behavioural support increases a smoker's chances of successfully stopping by up to four times (West et al., 2000). There are six types of NRT, patch (twenty-four hr and sixteen hr), gum, lozenge, microtab, nasal spray and inhalator. Within the NHS, NRT is available free of charge to pregnant women and new mothers up to twelve months post-partum (Bull, Burke, Walsh, & Whitehead, 2008). The use of NRT in pregnancy remains controversial as the pharmacology of nicotine suggests that it may contribute to some of the damage to the foetus caused by smoking. Interestingly, an efficacy study found that the use of nicotine patches did not influence smoking cessation among pregnant women who were moderate smokers prior to pregnancy (Wisborg, Henriksen, Jespersen, & Secher, 2000). In contrast, one other study found different results such as patches (sixteen hour) were effective in cessation during pregnancy and the researchers support the use of NRT during pregnancy (Hackman, Kapur, & Koren, 1999). Nicotine gum has not been found to have any measurable negative impact on measures such as foetal heart rate or respiration (Oncken et al., 1996).

In conclusion, experience of NRT use in pregnant women has not so far been associated with significant problems (Dempsey & Benowitz, 2001). In lactating mothers nicotine does pass to the baby through the breast milk from NRT products, so there is a risk that it could cause harmful effects, however in practice no risks have been found (ASH, 2005). It is not clear how much nicotine is transferred into the breast milk from NRT products. There is insufficient evidence to date, on the efficacy of NRT during pregnancy and the postpartum period but the research for it's effectiveness overall and the need to stop smoking to protect the baby from harmful effects of smoking means that NRT should be offered to pregnant smokers who have not given up and who feel that they need to use NRT as an aid to give up and maintain cessation from smoking (ASH, 2005). NRT needs to be tested in clinical trials with behavioural support to determine whether it helps pregnant and postpartum women give up smoking and also to see if it has any effect on the foetus during pregnancy and the development of the child in the postnatal period.

1.10.2 Health Behaviour Change Techniques in implementing and maintaining cessation from smoking

When pregnant women and mothers with children aged five and under, access the  Stop Smoking Service and set a quit day, they are guided through their quit attempt using two approaches to assist them in giving up smoking. These are the Stages of Change Model (Prochaska and Diclemente, 1983) and Motivational Interviewing (Miller and Rollnick, 1991). These techniques are useful for learning to understand how a person is motivated to change behaviour such as giving up smoking. Motivational interviewing is concerned with two concepts, importance and confidence, which help to explain a client's degree of motivation or readiness to change. If a client feels that giving up smoking is important to them and they feel confidence in their ability to give up smoking, they are more likely to succeed in their quit attempt.

1.10.3 Motivational Interviewing and the rationale for use in smoking cessation interventions

Motivational interviewing (MI) is a technique which is concerned with increasing the likelihood of a client considering, initiating, and maintaining specific change strategies to change their harmful behaviour such as giving up smoking (Thyrian, Hannover, Grempler, Roske, John, & Hapke, 2006). MI is founded on principles of motivational psychology and patient-centred counselling style. The MI counselling style depends on the assumption that the responsibility and capability for change lies within the client. The facilitator guides the client through a series of conditions that will emphasise and enhance the client motivation and commitment to change their behaviour. This is achieved by guiding clients to work through their ambivalence about changing through five strategies:

- 1) expressing empathy,
- 2) reflective listening,
- 3) developing discrepancy,
- 4) providing personalised feedback,
- 5) supporting self-efficacy.

During the first part of the initial assessment, the counsellor will use open ended questions and reflective listening to express acceptance of the client's situation. Reflective listening is a process of listening to what the client has to say about her smoking and assisting her to emphasise and explore her feelings more in depth about the topic under discussion. A good example of this would be a pregnant women describing looking after her other children, as being stressful and taking 'time out' from the situation by smoking a cigarette.

The next step would be for the counsellor to agree with this statement and reflect that life is stressful and that the pregnant women need a break sometimes from the stressful event. After careful consideration and reflection of this statement the counsellor would ask if the woman can think of other ways to take 'time out' and relax. Developing discrepancy between current behaviour (smoking) and important personal goals helps the woman recognise and identify the 'good' and the not so 'good' aspects of her smoking. In taking this approach, the woman may be ambivalent about giving up smoking versus continuing to smoke for her own pleasure and relaxation. This is important in driving and motivating the woman towards the behaviour change. Within this technique of counselling it is very important that most of the talking is done by the woman and counsellors must avoid giving answers or solutions to the arguments.

One key aspect of this approach is resistance in the behaviour change and the counsellor needs to shift this approach, for example the woman may mention wanting "to stop smoking but I live with my partner who is a heavy smoker". Using the MI approach the counsellor might say "could you tell me a bit more about how your partner affects your smoking". The counsellor needs to increase the woman's self-efficacy in her belief to give up smoking or maintain cessation and this can be achieved by providing personalised feedback. By providing feedback and support this helps the pregnant woman recognise the links between smoking, and the personal consequences they experience or anticipate.

Two themes that are important constructs in MI are importance and confidence. Research has explored these constructs when talking to clients wanting to implement a behaviour change such as giving up smoking, smokers admitting it is very important but lacking the confidence to succeed in giving up smoking where as another smoker said “that it was not very important to her to quit, but she had no doubt about her ability to succeed, if she chose to quit smoking” (Rollnick, Butler, & Stott, 1997).

When assessing importance and confidence, the most direct way of approaching the subject is to ask,

1, How important is it for (or, how confident are) you to give up smoking? If 0 was ‘not importance’ or ‘not confident’ and 10 is ‘very important’ or ‘very confidence’ what number would you give yourself?

Using this technique of assessing importance, the practitioner is interested in exploring the client feelings and views about the costs and benefits of change, the personal value; will it lead to an improvement in their quality of life? To support the definition of self-efficacy, the practitioner is keen to explore confidence about mastering the various situations in which behaviour change will be challenged. After this assessment has been completed it is a matter of deciding which strategy will help this person, either to explore importance or build confidence. Health care organisations such as Pregnancy Stop Smoking services are an ideal setting for using MI to assist clients with giving up smoking.

1.10.4 Stages of Change Model

Interventions to reduce smoking prevalence have been influenced by the Stages of Change Model (Prochaska & Diclemente, 1983). This is a psychological model of behavioural change which maps the process individuals go through when making lifestyles changes such as giving up smoking. The model is focused around stages of change which represent the attitudinal, emotional and practical components of movement towards establishing enduring change in behaviour.

Prochaska, Diclemente, & Norcross (1992) identified a five-stage model of behavioural change in relation to smoking cessation: precontemplation, contemplation, preparation, action and maintenance. The client goes through a collection of stages starting with precontemplation, in this stage the person has no intention of changing their behaviour and probably does not even perceive they have a problem. Contemplation is the stage where the person is aware they have a problem and they are thinking of changing their behaviour.

Preparation is the next stage, and the person is intending to take action in the near future and may have already made some changes. In the action stage, people have changed their behaviour and their environment so that they can overcome their problem. The final stage is maintenance; the person has maintained the change for more than six months and is working towards preventing a relapse. The model also looked at how individuals weigh up the costs and benefits of giving up smoking, for example clients at different stages of change will focus on the costs of a behaviour (e.g. “stopping smoking will make me miserable”) or the advantages of the behaviour change (e.g. “stopping smoking will improve my health”). People in the maintenance stage will focus on the positive effects of giving up smoking such as “I lead a healthier lifestyle since I have stopped smoking” compared to those at the precontemplation stage will be thinking more about the negative attributes associated with their behaviour, “it will make me anxious if I give up smoking” (Diclemente et al., 1991).

Just as there are different stages of pregnancy, the pregnant woman who sets a quit date goes through a sequence of stages to quit smoking. Resources and interventions need to be adapted for each stage, such as leaflets which can be given out in the contemplation stage to increase awareness of the benefits of giving up smoking where as someone in the action stage may benefit from a leaflet on relapse prevention. The Stages of Change Model is useful because it considers the client’s needs and assesses which stage the individual is at to enable a personalised intervention for the pregnant smoker.

1.11 Postpartum relapse

Although many women are successful at stopping smoking during their pregnancy, quite a few tend to relapse during the year following childbirth. Within four months after giving birth, 50% of women have returned to smoking, and 60% to 70% will resume smoking by six months postpartum (Ratner, Johnson, Bottorff, Dahinten, & Hall, 2000). At six months postpartum many women will have return to work, begin to socialise more frequently, provide child care for increasingly active infants, wean from breast feeding and resume or expand the management of multiple roles (Nicolson, 1998). All of these changes increase the risk of postpartum relapse. Stotts et al. (1996) suggested that for many women during pregnancy, maintaining cessation is relatively easy and reported the extrinsic motivation of the foetus may develop an “artificially high sense of self-efficacy that quickly deteriorates when the real work of cessation begins following delivery of the infant”. Another explanation for high relapse rates in the post-natal period is that after delivery that women start employing the experiential and behavioural processes associated with action phase from the stages of changes model (Prochaska & Diclemente, 1983). Consequently when women enter the postpartum period, they may be unprepared to maintain their smoking cessation.

1.11.1 Factors involved with postpartum relapse

One prospective study asked postpartum women whether she took “puffs in late pregnancy” and found this to be a predictor of postpartum relapse back to smoking (Mullen et al., 1997). It is useful for practitioners to ask pregnant women whether they had puffs in late pregnancy as this could determine who are vulnerable and at risk for resuming smoking in the postpartum period. Coping strategies play a part in the return to postpartum smoking. Pregnant women who used frequent snacking (a negative coping strategy) and avoid situations in which they were most likely to be tempted to smoke, were most likely to smoke soon after the birth (McBride et al., 1992). Using coping strategies may be the reason that quitting is difficult to maintain and therefore relapse could happen in the post-natal period. Other findings reveal that women require coping strategies relevant to their particular circumstances and the coping strategies used during pregnancy may not be appropriate in the post-natal

period (McBride et al., 1992).

Earlier research has focused on postpartum smoking which is not seen as a typical relapse situation. Research has shown that participants who quit during their pregnancy “never intended to stop smoking for good” (Mullen, Quinn, & Ershoff, 1990; Bottorff, Johnson, Irwin, & Ratner, 2000). In conclusion these studies discuss the idea that many pregnant women make a decision, consciously or unconsciously, to “stop rather than to “quit”. Therefore cessation in pregnancy is viewed as “stopping” (giving up for a period of time) rather than “quitting” (giving up smoking for good).

Bottorff et al. (2000) research also gave an explanation why women who had quit during pregnancy might return to smoking after delivery: 1) controlling one’s smoking (starting with one puff, restrictions placed on the amount smoked) 2) being vulnerable to smoking, 3) nostalgia for former self (freedom and happier times) 4) smoking for relief (for management of emotions and stress) and 5) never really having quit (did not want to quit for themselves). The theme “nostalgia for one’s former self” might incorporate feelings such as freedom and happier times as a smoker rather than a new identity as a mother to a newborn infant.

Qualitative research undertaken in the late 1990’s found two themes related to postpartum relapse, specific events and stressors precipitated a return to smoking, and social influences on smoking behaviour (Edwards and Sims-Jones, 1998). Other factors involved returning to a non-pregnant state, social pressures, and high risk situations (Edwards & Sims-Jones, 1998).

1.11.2 Stages of Change in relation to postpartum relapse

Research has explored smoking cessation using the ‘Stages of Changes’ model (Prochaska & Diclemente, 1984) and more recently research has focused on the second dimension, processes of change and how these interact with different stages; for example, experiential processes being found to be used most in the contemplation stage and behavioural processes were being employed in the action and maintenance stages (Prochaska, Velicer, Diclemente, Guadagnoli, & Rossi, 1991).

Theoretically, according to the definition of the stages of change, pregnant quitters would be in the action stage of change since they have all quit smoking (Prochaska & Diclemente, 1984). However due to their high relapse rates postpartum, it may be plausible to suggest that these women may have not fully prepared themselves to quit and may use experiential and behavioural processes at levels similar to non-pregnant women in the earlier stage of preparation (Stotts et al., 1996). One credible outcome to avoid postpartum relapse could be to use processes associated with early stages as well as later stages of change to be included in an intervention to maintain cessation postpartum.

Research that investigated pregnant women in their twenty-eight week of pregnancy who had quit smoking during pregnancy were assessed for differential rates of returning to smoking postpartum on the basis of their classification into one of four stages; precontemplation (PC), contemplation (C), preparation (PA) and action (A) (Stotts, Diclemente, Carbonari, & Mullen, 2000). Results indicated that stage assignment at the twenty-eight week of pregnancy was differentially predictive of postpartum smoking prevalence at six weeks and three, six and twelve months postpartum (Stotts et al., 2000). The percentage of women who returned to postpartum smoking was highest in the PC stage and decreased with each subsequent stage at all of the postpartum follow-ups, women in the earlier stages for postpartum abstinence were not as advanced in the process of intentional behaviour change and returned to smoking in greater numbers earlier in the postpartum period in contrast to those in the later stages. (Stotts et al., 2000). Research is needed to increase our understanding of the processes involved with postpartum relapse and also to explore how temporary cessation can evolve into permanent cessation.

1.11.3 Smoking context

Having one or more smokers in the house, particularly a partner who smokes has been found to be the most important facilitator in the return to postpartum smoking and living with a smoker increases the odds up to four times that the new mother will return to smoking (Mullen, 2004 & Ratner et al., 2000).

However it is not just the influence of living with a partner who smokes but also the prevalence of smokers whose partners smoke (Valanis et al., 2001). Having just two or more friends who smoke has been found to be correlated with postpartum relapse (Mullen et al., 1997), therefore this could suggest that whatever smoking environment constraints were in place during the woman's pregnancy may be relaxed after the birth, possibly being exposed to a powerful cue to return to smoking and could increase the desire to smoke. Pollack & Mullen (1997) research findings reveal that smokers in the household play a major role in fostering smoking after pregnancy. As partners smoking has been shown to influence the return to postpartum smoking it would be interesting to explore partner's contextual smoking in the postpartum period to identify when relapse occurs postpartum.

1.11.4 Change in mood during the postpartum period

Many women experience an increase in depressive symptoms during the postpartum period (Hoffman and Hatch, 2000). An estimated 10% of new mothers suffer from major depression and the risk is increased among women who were smokers prior to pregnancy (Cooper and Murray, 1998). As mild levels of depressive symptoms have been associated with a resumption of smoking, depressive symptoms may increase a woman's desire to smoke postpartum (Levine and Marcus, 2004). Sleep deprivation and sleep interruption are so common in the first six months of becoming a parent that it is unclear why this source of stress has not been researched in the field of postpartum relapse (Mullen, 2004). Depressed mood should receive more study and techniques to manage infant sleep patterns and parental sleep deprivation should be included in an intervention designed to avoid postpartum relapse back to smoking.

1.11.5 Concerns over weight gain

One factor that may affect women's motivation to remain abstinent during the postpartum period are concerns over body shape and weight (Levine, Marcus, & Kalarchian, 2006). Earlier research has reported mixed findings whether weight gain in pregnancy is a predictor of relapse in the postpartum period. Carmichael and Ahluwalia, (2000) study found a pregnancy weight gain of thirty-five pounds or more was associated with postpartum smoking.

However two other studies found no link between weight concerns and the likelihood of smoking in the postpartum period (McBride et al., 1992 & Mullen, Richardson, Quinn, & Ershoff 1997). Another weight-related variable of the need to return to the desired weight six months after the birth predicted early postpartum smoking (McBride et al., 1992). One plausible explanation for this could be that smoking is used as a weight control tool.

More recent research explored the link between weight concerns and postpartum smoking. Results indicated that pregnant women who are highly motivated to remain abstinent postpartum are much more confident to control their weight and feel less hunger (Levine et al., 2006). Although this research indicates a relationship between weight concerns and motivation to remain abstinent postpartum there is one important limitation.

Specifically, concerns about eating and weight may be different during pregnancy compared to concerns in the postnatal period. In conclusion, interventions need to be designed to prevent postpartum smoking relapse and need to address women's concerns about eating and weight. Weight concerns are likely to be important in the postpartum period, helping postnatal women modify myths about how smoking is seen as a weight control tool and increase their acceptance about their shape and weight may minimise postpartum smoking relapse.

1.11.6 Postpartum intention to resume smoking

Little is known about the intention to resume smoking (IRS) after a period of cessation during pregnancy; therefore by identifying whether the resumption of smoking after delivery is planned or unplanned we can begin to prioritise these factors as being a causal link in smoking postpartum. Previous research has given us explanations on how women consciously or unconsciously make a decision to stop for the duration of the pregnancy rather than seeing cessation as a lifelong commitment (Bottorff et al., 2000). Research specifically explored IRS in the post partum period at six months and twelve months using a sample of 301 women and found thirty-nine (13%) intended to resume smoking with IRS proving to be the main predictor for

relapse. (Roske et al., 2006). In addition over half of the sample restarted smoking within 12 months of giving birth (Roske et al., 2006). These results have practical implications for those working with postpartum women as IRS might be seen as a marker and identifying an at-risk group that need support and guidance for remaining smoke free in the postpartum period.

1.11.7 Smoking-related behaviour change

Resuming old activities such as drinking alcohol or coffee have been shown to be associated with postpartum smoking. In a review focusing on postpartum relapse, drinking alcohol and coffee which had been suspended during pregnancy were shown to be cues for resuming smoking postpartum (Fang et al., 2004). Similarly resuming old habits after the birth could be seen as nostalgia for their life before becoming pregnant and this could fit one of the themes, ‘nostalgia for one’s old life’ from previous research (Bottorff et al., 2000).

1.12 Smoking relapse and early weaning in the postpartum period

Smoking in the postpartum period may be one of the factors involved with early weaning. However the relationship between smoking relapse and weaning is poorly understood (Ratner, Johnson, Joy, & Bottorff, 1999) for example, do woman wean because it is their intention to resume smoking or is it because of their return to smoking lead to early weaning? One common explanation for the association between smoking and weaning could be that the woman is returning to the work force or has low socioeconomic status or limited education.

Further findings from qualitative research reveal that weaning is associated with a return to a “normal or non-pregnant state” and in some participants a return to smoking (Edwards & Sims-Jones, 1998). Women who smoke are more likely to bottle-feed their babies and early weaning may be associated with inhibited milk production caused by the chemicals present in tobacco smoke (Counsilman and Mackay, 1985). Research conducted in the late 1990’s suggests the existence of a relationship between early weaning and smoking relapse precedes weaning for most women (Ratner et al., 1999).

There is also a correlation when controlling for intended duration of breast feeding, education and return to paid employment. Women who resumed daily smoking were almost four times more likely to wean early than those who remained abstinent or smoked occasionally (Ratner et al., 1999). Nonetheless how smoking and weaning are related is a mystery whether it is physiological or psychologically remains unclear. One plausible explanation could be that women whose infants are exposed to nicotine in breast milk may be more agitated and fretful and this could affect the quality of the milk being produced. This shows that adverse effects of maternal smoking continued in the postpartum period.

1.12.1 Variables associated with postpartum relapse

Further findings have also shown how certain factors are associated with post partum smoking such as, stress of caring for the newborn, social pressures, exposures to high-risk situations, general health of self and others need time for self, under pressure from children and trying to relax (Fang et al., 2004).

Certainly qualitative research seems to be similar to these findings, women in the postpartum period reported finding the maternal role stressful and smoking was seen as a way to pass the time and a means of relaxation (Edwards & Sims-Jones, 1998). Smoking could thus be seen for many women as a way of coping with the stress and managing the emotions they experienced in life and may be seen as their 'time out' away from their responsibilities.

A prospective study was designed to identify psychosocial predictors of relapse postpartum at six weeks and six months postpartum (McBride et al., 1992). Results indicated that those who relapsed back to smoking six weeks after the birth tended to smoke more prior to pregnancy and were younger than those who remained smoke-free (McBride et al., 1992). The majority of participants intended to be smoke-free in the postpartum period (96%), however about 40% relapsed back to smoking six months after giving birth with four months postpartum being the highest risk time to relapse back to smoking (McBride et al., 1992).

Additionally women who lived with a smoker were at a higher risk of relapsing back to smoking postpartum and similarly women who had lots of family members who smoked were more likely to relapse than those who had fewer family members who smoked (McBride et al., 1992). Avoidance of high risk situations and thinking about the money being saved indicated an increased risk of relapsing back to smoking postpartum (McBride et al., 1992).

1.12.2 Lapses to Relapses

The road from lapses to relapse is often a “dangerous” one for many smokers. Lapses are common and occur quickly after someone setting a quit date. Research which explored the lapsing-relapse process found in a sample of 214 smokers who quit for at least twenty-four hours while attending a smoking cessation clinic, 133 (62%) lapsed during the first twenty-six days of quitting (Shiffman, Perz, Gnys, Kassel, & Hickcox, 1997). The average length of time to the first lapse was five days, the majority of participants lapsed during the first four weeks after setting a quit date and the second lapse on average happened three to four days after the initial lapse (Shiffman et al., 1997). Slips increase the likelihood of relapse.

Similar results found that if a smoker smokes in the first two weeks of setting a quit date regardless of any NRT being used, was highly predictive of smoking 6 months later (Kenford et al., 1994). However the journey of first lapse to relapse is variable, most smokers have episodes of intermittent smoking rather than immediate progress back to full-time smoking (Shiffman et al., 1996). One lapse may not lead directly to relapse as results have shown the time separation between the two can be at least nineteen days after the first lapse (Shiffman et al., 1996).

There are also questions which may be drawn from this as many smokers in the process of cessation may smoke at times and “at what point is smoking a normal part of the cessation process rather than an indication of complete relapse?” (Johnson, Ratner, Botorff, Hall, & Dahinten, 2000). Is there a time in the quit attempt when relapse is unlikely? Research that exist on follow-ups beyond one year, support the notion that relapse continues to occur, although at a much slower rate, beyond one year of abstinence (Nides et al., 1995).

In conclusion, these findings reveal that support and guidance is needed on how to manage cessation and employ coping strategies to deal with high risk situations throughout the quit attempt to avoid lapses and relapsing back to smoking. As pregnancy can be seen as an opportunity for cessation, interventions can be strengthened if they continued postpartum.

1.12.3 Relapse Prevention in the postpartum period

A review on smoking in pregnancy found interventions in pregnancy facilitate smoking cessation and may postpone relapse (Lumley et al., 2004). Furthermore studies are needed to provide information about the efficacy of relapse prevention in the postpartum period especially for longer periods (Hannover et al., 2009). Relapse prevention strategies have been explored in randomized controlled trials. The skills approach has received the most attention. This is when smokers are encouraged to identify high risk situations for relapse and learn cognitive and behavioural strategies to cope with these potential situations (Marlatt and Donovan, 2008).

A recent review focused on postpartum relapse prevention interventions and found studies used various methods to avoid relapse such as MI, written materials, supportive phone calls and relapse prevention counselling sessions (Hajek, Stead, West, Jarvis, & Lancaster, 2009). Results indicated that the use of any behavioural component or relapse prevention intervention for helping postpartum women who quit during pregnancy to avoid relapsing back to smoking are ineffective for relapse prevention (Hajek et al., 2009).

The studies in this review used the traditional method of the skills-based approach with the main emphasis on identifying and resolving tempting situations, and minimal interventions using one-off sessions and written materials (Hajek et al., 2009). Nonetheless patients may still benefit from being taught how to cope with high risk situations and develop effective coping strategies. Until studies investigate relapse prevention interventions, it might be more productive to focus time and resources on supporting initial cessation attempts rather than relapse prevention intervention (Hajek et al., 2009).

1.13 Adverse effects of passive smoking on the developing child

Smoking after the birth is increasingly being recognised as a problem to tackle in parenting. Cot death or sudden infant death syndrome (SIDS) is the sudden unexplained death of infants aged one to twelve months. Cot death is more prominent among babies aged between two and four months, often when they are sleeping (BMA, 2004). The risk of cot death is trebled if the pregnant women smokes throughout the pregnancy and after the birth (DOH, 1998); furthermore the more cigarettes smoked, the greater the risk becomes to the infant (US Department of Health and Human Services, 2001).

How smoking increases the risk of cot death is not clear, however one proposal has been proposed. Smoking throughout the duration of the pregnancy increases the risk of premature birth and retards foetal development and this may in turn increase the risk of the baby being born before the brain systems that are involved with the regulation of the uptake of oxygen and heart function have been developed.

There is evidence that exposure of the foetus to nicotine may impair the normal development of these systems resulting in the response to lack of oxygen appears to be dampened down (Chang, 2003).

1.13.1 Respiratory illnesses

Second-hand smoke can cause asthma in children, and increases the severity of the condition in those who are already affected (Strachan and Cook, 1997), additionally children exposed to second-hand smoke also have an increased risk of respiratory symptoms, such as breathlessness, phlegm, coughing and wheezing (Strachan & Cook, 1997). Parental smoking is a cause of lower respiratory tract illnesses in infants and children, including croup, bronchitis and pneumonia (World Health Organisation [WHO], 1999).

1.13.2 Impaired growth and development

Reduced growth of the foetus can have long-term consequences that continue throughout childhood and adulthood. Low birth-weight is increased as well as the risk of diabetes, cardiovascular disease and obesity in adulthood (BMA, 2004).

Mothers who smoked for the duration of their pregnancy tend to have smaller and lighter children (Elwood, 1987).

1.13.3 Behavioural problems

Research has reported various findings of the impact of smoking during pregnancy on different aspects of infant and child behaviour, however studies can be difficult to interpret; nonetheless, interesting conclusions can be drawn from them. One study reported babies born to mothers who smoke during pregnancy have unexplained bouts of crying (infant colic) (Sondergaard, 2001).

In the WHO (1999) report research found that children of smokers have a poorer performance at school compared to their peers whose parents did not smoke and lower scores on tests of cognitive function including language. Children of smokers are also more likely to have behavioural problems such as hyperactivity and shorter attention spans (WHO, 1999). Some of the studies have shown dose-response effects, with greater levels of impairment with greater levels of exposure (WHO, 1999).

1.13.4 Adverse effects of infants and children living with smokers

Exposure to second-hand smoke in childhood is associated with increased hospitalisation. It is estimated that seventeen thousand children under the age of five are admitted to the hospital every year in the UK because of respiratory illness caused by exposure to passive smoking (Action on Smoking and Health, 2006). Infants and children being exposed to passive smoking in the home can have major adverse effects because they spend most of their time at home and indoors, further findings have concluded that 42% of children in the UK live in a smoky house (Action on Smoking and Health, 2006). Children are even more vulnerable because they have less developed immune systems than adults and cannot choose to be in a smoke-free house. Parental smoking behaviour has also been shown to be associated with smoking uptake by adolescents (Gillepsie, Milne, & Wilson, 2005). The benefits of having a smoke-free house will decrease the risks of children of smokers becoming smokers themselves when they grow up. Research has shown us that there is a lack of awareness on the effects of children being exposed to second-hand smoke.

In an Auckland survey, 1376 mothers of newborn infants were given a short description of SIDS and asked if they had heard of the ways parents could help prevent SIDS or cot death. Results indicated only 32% of the sample reported maternal smoking as a risk factor (Paterson, Tukuitonga, Butler, & Williams, 2002). Another survey found that only 50% of smokers reported not smoking in the company of children, in contrast to 78% of smokers agreeing that homes should be smoke-free, “when there are children around” (Thomson, Wilson, & Howden-Chapman, 2005). All of this research supports the need for children to be able to live in a smoke-free house as the adverse effects which may have started in pregnancy continued throughout their childhood and adulthood. There needs to be more awareness of the dangers of smoking in the postpartum period for the smoker and their children.

1.14 Maintaining cessation in the postpartum period

Although the area of smoking and cessation during pregnancy has been thoroughly researched and the area of postpartum cessation has been explored, there is still a lack of knowledge about long-term change which starts in pregnancy and continues longitudinally after the birth of the baby and through to the child’s early years. Giving up smoking and maintaining cessation is recognised as a difficult and complex process that involves long-term effort. Women who give up during pregnancy and maintain cessation faced many challenges postpartum such as returning to work, smoking behaviour of others may be more relaxed (people smoking near them now they are no longer pregnant), high risk situations for relapse and behaviours which may have been suspended during pregnancy may be resumed such as beverages with caffeine and alcohol. Research on postpartum relapse has clearly indicated a need for support to be continued postpartum as this could be seen as a vulnerable transition in their lives, for example coping with motherhood and adjusting to the new stage of their life.

1.14.1 Shift in motivation

For women who stop smoking for the baby during pregnancy, the motivation and coping activities for change needs to shift from simply protecting the baby to protecting their own health as preparing women to move from an awareness of

smoking on the developing baby to an effect on themselves is fundamental in maintaining cessation postpartum (Diclemente et al., 2000). Ideally to avoid postpartum relapse interventions should begin in late pregnancy when goals for postpartum cessation can be revised and plans can be made to manage postpartum issues. Starting before the birth of the baby is crucial as much of the return to smoking occurs after the birth. If possible the intervention should also include the well being of the whole family with the objective of creating a smoke-free house and family (Diclemente et al., 2000).

1.14.2 Interventions and support for postpartum

Tailoring interventions to populations to make the approach more 'client-centred' have been suggested to play a part in making smoking cessation interventions more relevant to the needs of the individual smoker (Murray, Bauld, Hackshaw, & McNeill, 2009). Interventions that are successful for cessation postpartum should include; the smoking habits of partners and others living in the home and close friends, support women with positive encouragement, encouragement and support from their families and friends, beliefs of maintaining cessation, incorporate stresses particular to postpartum women and the benefits of breast feeding (Fang et al., 2004).

Edwards & Sims-Jones (1998) qualitative research findings suggest helping women develop skills to deal with high-risk situations in the postpartum period such as handling cravings and development in the provision of social support by significant others can help them towards maintaining cessation. A study exploring the perspectives of practice nurses, midwives and health visitors gave reasons as to how postpartum relapse can be avoided, such as support services needed for new parents to prevent stress, more information on passive smoking for parents and more information on smoking health risks more generally for patients (Bull & Whitehead, 2006).

Recent research investigated the opinions of non-smokers, smokers and former smokers on who should deliver smoking cessation interventions and found the person in their view who would be a role model is a person who had quit without relapse for a long period of time and this person would demonstrate that it was possible to cope with life stressors without reaching for a cigarette (Bull et al., 2008). Smoking cessation interventions postpartum need to be personalised through one-to-one counselling sessions based on the needs of new parents. Further findings have focused on assigning postpartum women who stop smoking during pregnancy to intervention and control groups to test the effectiveness of a postpartum smoking cessation intervention (Roske et al., 2008). Postpartum women in the intervention condition received a counselling session four to six weeks after the birth of their baby and two telephone counselling sessions four and twelve weeks later (Roske et al., 2008).

In addition the women in both the intervention and control group received a manual addressing maternal smoking, smoking cessation and relapse prevention and a manual addressing the partner of the participants and women in the control group were assessed three times and received no intervention between measurement occasions (Roske et al., 2008). The findings reveal that postpartum smoking cessation interventions had an impact on smoking behaviour and self-efficacy, women in the intervention group were more likely to be non-smokers at six months and the intervention increased their level of self-efficacy (Roske et al., 2008). Self-efficacy (the confidence not to smoke in different challenging situations and the confidence not to smoke for the baby's sake) did not increase due to the intervention at twelve months and in turn did not influence smoking behaviour at twelve months postpartum (Roske et al., 2008).

This shows that interventions are effective in supporting change during the postpartum period but the effects disappear after the intervention had been completed five months postpartum. In conclusion smoking cessation interventions can be seen as an aid to avoid relapse and increase self efficacy not to smoke among mothers with newborn infants. It also highlights the need for interventions to continue longer than six months postpartum.

1.14.3 Recommendations for future practice

One review identified actions that could make a difference if integrated into routine health care practice such as increasing effectiveness of existing interventions, involving partners/families, maintaining postpartum cessation and promoting smoke-free families (DOH, 2007). A draft scope of new guidance on how to stop smoking during pregnancy and to maintain cessation post partum is being developed (NICE, 2009). Interventions will be assessed to see if they are effective and cost effective in helping women stay quit postpartum and quit for the duration of pregnancy (NICE, 2009).

Outcomes to be involved in maintaining cessation postpartum after publication of this review are; attitudinal changes regarding smoking after pregnancy for the postpartum non-smoker and her partner, support from partner, positive changes in their smoking-related knowledge and behaviour and elimination of exposure to tobacco smoke in the home (NICE, 2009). This guidance will provide recommendations for good practice for health care professionals working with women who are pregnant or who have an infant aged up to 12 months, as well as their partners and families.

1.14.4 Coping strategies

Coping strategies have demonstrated that they reduce the probability of relapse postpartum and the coping strategies used during pregnancy may not be appropriate for use postpartum, therefore coping strategies may need to change or develop new strategies for the postpartum period (McBride et al., 1992). Research has shown that smokers who engage in one or more coping strategies when confronted with a high risk situation are less likely to smoke (Bliss, Garvey, Heinold, & Hitchcock, 1989). Coping strategies are either cognitive or behavioural in their use (Curry & McBride, 1994). The outcome for maintaining abstinence in a given situation is highest when using both cognitive and behavioural strategies for example thinking and doing something when tempted to smoke (Curry & McBride, 1994).

Qualitative research explored smoking relapse postpartum and found a few participants had planned strategies to remain non-smokers such as “taking one day at a time and you do it for today” (Edwards & Sims-Jones, 1998). In terms of new mothers, coping strategies that provide time out for the postpartum women but do not conflict with the demands of caring for children have found to be most useful (Graham, 1989).

1.14.5 Breast feeding as a protective factor involved with cessation

Breast feeding and the provision of smoke-free home environments are seen as being very important in protecting the health of newborns. A beneficial relationship seems to exist between smoking abstinence and breast feeding, with women who abstain from smoking breast feeding longer (Bottorff et al., 1999).

Further findings found that breast feeding had protective effects in a sample of postpartum women who remained abstinence post partum (Ratner et al., 2000). Results also indicate that women were more likely to avoid daily smoking if they were breast feeding at twelve months (Ratner et al., 2000). Research also revealed that women who stopped smoking during pregnancy for the baby and not for themselves, breast feeding appeared to offer protective benefits for the child as it extended the cessation period further as the reason for being a non-smoker (the infant’s health) was still important (Edwards & Sims-Jones, 1998).

Breast feeding could be seen as an important incentive not to smoke as women may be worried about the transmission of nicotine through to the breast milk (Ratner et al., 1999). The two plausible strategies to include in an intervention for postpartum women could be to promote breast feeding for its value to the baby’s health and also to protect against postpartum smoking and secondly to increase and help improve rates of breast feeding (Ratner et al., 1999).

1.14.6 Factors involved with postpartum cessation

Previous research has shown that experiential strategies are most important in leading to cognitive/attitudinal change; an important precursor to cessation and maintenance (Prochaska et al., 1991). Research using qualitative research methods investigated postpartum relapse and found new mothers attitudes had changed in terms of their thoughts on smoking (Edwards & Sims-Jones, 1998). Women had certain perspectives of themselves as mothers that play a part in their decision to maintain their cessation, for example such as caring for a newborn infant and smoking were seen as being incompatible (Edwards & Sims-Jones, 1998), therefore motherhood makes smoking seem an unattractive habit for participants in this study. Interventions reflecting this key element need to be designed to reduce prevalence of postpartum smoking.

The Stages of Change model has been useful for understanding and determining which stage pregnant women are in during their pregnancy to predict who would maintain cessation in the postpartum period (Stotts et al., 2000).

Results indicated those in the later stages of the model were less likely to return to smoking at follow-ups of three, six and twelve months postpartum (Stotts et al., 2000). Most of the women in the action stage (stop smoking) reported abstinence for the entire one-year follow-up period. These results strongly support the notion that grouping pregnant women into stages of change during pregnancy may be useful for knowing in advance, whom are at risk of postpartum smoking and those who will maintain their cessation postpartum. Appropriate interventions, support and coping strategies, can be developed to turn temporary cessation into a permanent lifestyle change. Another research study investigated the effect of smoking cessation relapse prevention at twelve months follow-up and found; women were less likely to have relapsed back to smoking if they were breast feeding at twelve months, did not have a partner who smoked, had better mental health, and were lighter users of tobacco before setting a quit date (Ratner et al., 2000).

The important factor which has been shown to influence postpartum smoking is the partner's smoking behaviour. It is very difficult for the postpartum woman to remain abstinence from cigarettes if the partner is smoking. Interventions that target the family are more likely to be successful compared to those just focusing on the postpartum woman.

1.14.7 Smoke-free Home

Sensitivity and tact are needed when discussing the issue of smoking cessation postpartum. One way to overcome this is to bring up the topic of a smoke-free home is a non-confrontational way without affecting the relationship between patient and health care professional. Research has shown that for women whose partner is smoking in the postpartum period can increase the likelihood of them relapsing back to smoking, implementing a household smoking ban can be seen as a barrier to avoid relapse. Smokers living under a full smoking ban were four times more likely to make a quit attempt compared to smokers with no smoking restrictions (Farkas, Gilpin, White, & Pierce, 2000).

Furthermore research has shown that smokers living under a full ban were twice as likely to try and quit and to be abstinent at the two year follow-up compared to smokers living with a partial ban or no ban at all, in addition the results also found a full ban was associated with a lower relapse rate (Pizacani, Martin, Stark, & Koepsell, 2004). Because children tend to look at adults for role-models there is a chance that these children will become smokers themselves, therefore implementing a smoking ban in the living environment could be one way of discouraging these children from starting smoking. Results to date suggest that restrictions on smoking in the home protect the health of the occupants, increase quit attempts and reduces the uptake of smoking by young people (ASH, 2006).

Evidence has shown that experience before birth and early life has a significant impact on the life chances of each individual (DOH, 2004). It would seem improving the health and welfare of parents and children is one way that the prevalence of smoking postpartum can be reduced.

1.14.8 Conclusion

In England over two thirds of pregnant smokers have a partner who smokes. Only one in four (24%) men whose partners are pregnant reduce/or make any changes to their own smoking behaviour, and just one in twenty (20%) give up smoking (Melvin and Gaffney, 2004). Becoming parents often brings an adaptation of their prior lifestyle and of family needs, therefore offering an opportunity to engage the partner in a discussion of their thoughts and attitudes on how to protect their newborn infant and to encourage quit attempts, however few interventions include the partner.

Research has shown us that one way to decrease the chance of postpartum relapse is to impose a ban on smoking in the house. Often in households where smoking is seen as 'the norm' one way to approach the subject of restricting smoking is to encourage partial bans such as never smoking in front of children, or restricting one room in the house to be used for smoking.

Further studies which focus on postpartum relapse and cessation has shown the need for support to be continued in the postpartum period as there are so many transitions a woman will go through postpartum such as returning to work, weaning from breast feeding, high risk situations where smoking is acceptable, renewing old habits such as alcohol and beverages with caffeine, an increase in contact to a smoking social network and socialising with smokers. Research has also indicated that relapse is less likely after a year of abstinence, supporting the woman for up to a year after giving birth may reduce the high relapse rates that occur postpartum.

1.14.9 Study Rationale

Many studies have examined the link between continuing to smoke during pregnancy and the outcomes associated with this such as ectopic pregnancy, premature rupture of the membranes, pre-term delivery and low birth weight (US Department of Health and Human Services, 2001). The risks are not just associated with pregnancy; they continue throughout the infant's childhood. Chronic exposure of babies to environmental tobacco smoke (ETS) leads to infections of the lower respiratory tract, asthma exacerbations and sudden infant death (Cook and Strachan, 1999).

Interventions which target smoking behaviour in women during pregnancy and postpartum can be effective in obtaining abstinence during pregnancy and delaying postpartum relapse (Lumley et al., 2004). Unfortunately little is known about the coping strategies associated with successful quitting and how these strategies may change during the quit attempt, such as how cessation is maintained during the pregnancy and after the birth of the baby. There is a lack of research on when these coping strategies are used for certain situations during pregnancy and postpartum.

There is also a lack of knowledge about how women who quit during pregnancy maintain their initial quit attempt in the postpartum period. The majority of pregnancy quitters return to smoking within one year postpartum (Mullen et al., 1990). The area of postpartum cessation has been explored (Roske et al., 2008) with women maintaining cessation at six months postpartum, however at twelve months postpartum results indicated that the majority of women had relapsed back to smoking.

This demonstrates the lack of knowledge about long-term change which starts in pregnancy and continues longitudinally after the birth of the baby and through to the child's early years. Previous research has also focused on the determinants of cessation and relapse during pregnancy and after the birth of the baby. Little is known about the journey of returning to smoking during pregnancy and postpartum, such as how often episodes of intermittent smoking occurs before relapsing back to smoking full-time. There is a lack of research investigating whether the behaviour of the smoker, family members or friends changed, for example implementing a ban in the living environment during the pregnancy and postpartum period. There is limited research on attitudinal changes towards smoking during pregnancy and postpartum.

Several variables have been found to be predictive of pregnancy and postpartum smoking, these include dose and duration of smoking, partner's smoking habit, level of addiction and breast feeding, (McBride et al., 2000, & Tong et al., 2001). Little attention has been directed towards the clients' perception of service delivery.

One study focused on pregnant smokers' interest in different types of smokers cessation support and found the majority of women were interested in most types of support, such as face-to-face behavioural support and self-help materials (Ussher et al., 2004), however these women had not set a quit date with a Smoking and Pregnancy Stop Smoking Service. No previous studies have examined pregnant and postpartum women's perceptions of service delivery.

1.14.10 Research Question

The purpose of the present study was to:

- 1) explore coping and relapse strategies used by pregnant and postpartum women to avoid smoking
- 2) investigate the process of lapses and why this leads to relapse with pregnant and postpartum women
- 3) evaluate service delivery interviewing pregnant and postpartum women.

2.0 Method

2.1 Design

Semi-structured interviews were carried out with fourteen female participants. All of the interviews were conducted in the participant's home. The interviews lasted between twenty and forty minutes. The purpose of the research was to explore coping and relapse strategies used by pregnant and postpartum women to avoid smoking and to investigate the process of lapses and why this leads to relapse with pregnant and postpartum women, as well as to evaluate service delivery interviewing pregnant and postpartum women.

2.1.1 Groups

Participants were six pregnant and eight postpartum clients who had accessed the service and set a quit date. The clients were recruited as four distinct samples. The first sample (hereafter referred to as Group 4) consisted of postpartum women who had set a quit date during their pregnancy and had maintain cessation during

pregnancy and in the postnatal period. Participants from the second sample (hereafter referred to as Group 3) included pregnant women who had maintained cessation for eight to twelve weeks or longer at any stage during their pregnancy.

The third sample (hereafter referred to as Group 1) consisted of postpartum women who had managed to stop smoking during pregnancy and had relapsed back to smoking in the postpartum period within two months. Participants from the last sample (hereafter referred to as Group 2) were pregnant women who had set a quit date at any stage of their pregnancy and relapsed back to smoking.

2.1.2 Participants

Fourteen Participants were recruited from the Smoking and Pregnancy Service database. This is an established service at the Primary care trust to help and support pregnant women and mums with children five and under.

Group 4 consisted of five women who had set a quit date in their pregnancy and who had a year or longer of not smoking in the postpartum period. The participants ranged in age from twenty-eight years to thirty-nine years ($M = 32.5$ years.). Ethnicity was as follows: Black-British ($n=2$), Japanese ($n=1$), White-British ($n=1$) and White & Black African ($n=1$). Three of the group are multiparous women and two of the group are primiparous women.

Group 3 consisted of four women who had set a quit date in various stages of their pregnancy and had not smoked for two months or longer. The women ranged in age from twenty-one years to thirty-six one years ($M= 26.3$). Ethnicity was as follows White-British ($n=3$), and White & Black African ($n=1$). Three of the group are multiparous women and one participant is primiparous.

Group 1 consisted of three women who had a set a quit date at any stage during their pregnancy and had relapsed back to smoking in the postpartum period. The women ranged in age from twenty-two years to forty-one years ($M= 31$). Ethnicity was namely White-British ($n=3$). All of the group are multiparous women.

Group 2 consisted of two women who had set a quit date in the last trimester of their pregnancy and had relapsed back to smoking within two weeks. The women age range was as follows twenty-four to twenty-eight years (M= 26). Ethnicity was as follows Black-British (n=1) and White-British (n=1). All of the participants in this group are multiparous women.

2.1.3 Exclusion criteria

Participants were recruited from the database if they met the inclusion criteria for the group being investigated. Participants were excluded from the research if they met the following criteria:

- Participants not setting a quit date with service/or not setting a quit day.
- Participants not being smoke free for 2-3 months and over one year (only for groups 3 & 4).
- Participants accessing the service before July 2006.
- Participants who are not pregnant or have children over five years.
- Participants over child bearing age (non-parous females) and under sixteen years.

2.2 Procedure

2.2.1 Ethics

Ethical approval was given by the Local Ethics Committee. At first a provisional decision was given on the basis that patient information and consent sheets were amended to guidelines set by the local ethics board. These amendments were completed and sent back to the committee who gave a favourable opinion.

2.2.2 Patients Information Sheets

The information sheets were designed using the guidelines as requested by the Central Office for Research Ethics Committees (COREC). The information sheet covered topics such as, reasons for research, why they have been invited, procedure for taking part in the study, benefits of taking part in the study, explanation given of the results for the study and how to make a complaint.

Additionally the information sheet also included contact details for the researcher, how to withdraw from the study without affecting the standard of care they are receiving and also how their information will be stored securely and kept confidential (see Appendix A1). One information sheet was produced for all the groups of participants taking part in the research.

The information sheet was posted out with a letter inviting the participants to take part in the study. Before the interview took place participants were given one other information sheet and a consent sheet. Participants also had the chance to ask questions about the study and were given a verbal explanation about the aims of the research.

2.2.3 Consent Forms

Consent forms were also produced in adherence with the protocol set out by the COREC guidelines. Consent sheets were distributed prior to inclusion in the study. The researcher and the participant signed two consent forms.

One consent form was left with the participant and the researcher kept one for her own records. The consent form included four questions; asking if the client has read the information sheet, had the opportunity to ask questions, participation is entirely voluntary and they can withdraw at any time, consent to the interview being recorded and agreement to take part in the study (see Appendix A2). Once they had looked at the questions they had to initial the box beside each question and sign and date the consent form. All the consent forms were collected by the researcher and are stored separately from the participants' raw data in a locked draw to ensure anonymity.

2.3 Interview Schedules

Four semi-structured interview schedules were designed by the researcher and grouped into questions by the related theoretical area and the aims of the study. Each interview schedule had a total of six to nine questions to ask the participants. The interview schedules were reviewed by the researcher supervisor and three smoking and pregnancy counsellors, this was to ensure participants could understand and comprehend the schedules easily. Feedback consisted of rewording some of the

questions and one extra question was included to the schedule for pregnant smokers who have relapsed back to smoking.

2.3.1 Interview Format

Throughout the interview schedule there was a range of different topics covered by the researcher. The topics included understanding the journey of going back to smoking, coping, service improvement, returning to smoking, change of lifestyle, coping strategies, lifestyle and environment, behaviour change, being near smokers and benefits of giving up smoking.

Group 4 (Participants who maintain cessation during pregnancy and the postpartum period) interview schedule covered the following:

Coping Strategies

- 1. Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?
- 2. Can you think of situations when you have felt the need to smoke, but you did not smoke?
- 3. When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?
- 4. Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

.....

Service improvement

- 5. What do you think of the pregnancy service?
- 6.Can it be improved in any way to help people like you give up smoking?

.....

Lifestyle and environment

7. What other factors besides being pregnant/or having young children around contributed to you giving up smoking?
8. How supportive were your family and friends about you still not smoking after you had your baby?

Group 3 interview schedule (Participants who had maintained cessation during their pregnancy for eight weeks or longer) included the following topics:

Behaviour change

1. How did you manage to give up smoking?
2. When did it become easier not to smoke?
3. What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

.....

Being near smokers

4. What was it like being in situations where you would normally smoke?
5. What is it like being with a partner and any friends who smoke?

.....

Benefits of giving up smoking

6. How do you feel about your health since giving up smoking?

Group 1 this schedule covered the following: (Postpartum women who had managed to stop smoking during pregnancy and relapsed back to smoking in the postpartum period).

Returning to smoking

1. Can you think back to why you started smoking again?
2. By giving up for a long time, has this changed your smoking at all?
3. What factors to do with having a baby made you think more about going back to smoking cigarettes.
4. Was your return to smoking planned or unplanned?

.....

Change of lifestyle

5. Can you tell me if any smoking behaviour changed in your household once you had your baby?
6. What were the main reasons that you gave up smoking for?
7. What made you not smoke after you had your baby?

The interview schedule for Group 2 (Pregnant smokers who relapsed back to smoking during their pregnancy) included the following:

Understanding the journey of going back to smoking

1. Can you think why you had your first few cigarettes after you set a quit day?
2. How did that make you feel?
- 2B. At this stage what could have help you not go back to smoking?
(Probe - What coping strategies had you been using?)
3. Can you tell me when you realised that you had gone back to smoking?
4. How do you feel about your smoking now?

5. What was it that made you go back to smoking?

.....

Coping

6. What others factors may have helped you not to smoke?

7. Could you identify situations where you felt most tempted to smoke?

.....

Service improvement

8. What do you think about the advice and support you got from the Stop Smoking Pregnancy Service?

9. What other information, or improvements to the Stop Smoking Pregnancy Service would you like to see to help future clients give up smoking?

10. What would make you quit now?

The researcher used open-ended, neutral questions to allow participants to speak about and reveal associated thoughts and feelings, with as little prompting from the interviewer as possible to avoid leading the participant in any direction.

2.3.2 Recruitment process

All participants were recruited from the database. The researcher used the flow charts for each group to see if clients were eligible to take part in the research. If they met the study inclusion criteria they were sent an introductory letter (see Appendix A3) explaining why they were contacted along with an information sheet. Participants were contacted after two weeks by telephone to see if they would like to participate in the research. If participants needed additional time to decide whether to take part in the study extra time was given. If they agreed to take part, the researcher agreed a suitable time for the interview to be completed in their own home.

2.3.4 Interview process

All participants were interviewed in their home. The duration of the interview lasted

twenty to forty minutes and participants were asked a series of questions relating to the aims of the study. A brief induction was given about the study and the information and consent sheets were given out. Participants were asked whether they minded their interview being taped. Consent for recording the interviews was asked for on the participant consent sheet. This was explained to the participants in terms of making sure the data is an accurate representation of their feelings and attitudes. Participants were given the option not to have their interview recorded. All participants consented to their interview being recorded.

The researcher also assured participants that participation or withdrawal from the study would not affect their treatment now or in the future and only the researcher and her supervisor would have access to the raw data and they will be anonymous on inclusion into the study. At all of the interviews the participant and the researcher were present, once the consent form was signed the interview commenced. The participant held the dicta-phone and the researcher asked a question, allowing time for the participant to answer.

There was minimal intervention on the part of the researcher, except for affirmations and the occasional use of probing questions when the participant's response was not sufficient, in order to receive a satisfactory response. At the end of the interview participants were thanked for their time, participation in the study and were debriefed. Participants also had the chance to ask additional questions about the study and were asked if they would like a letter to be sent to them about findings of the study once the research was completed. Participants had the option to say yes or no to receiving this letter.

2.3.5 Adverse events

The main ethical issues in regard to the design of the study, is giving up smoking and being pregnant/or having a new baby can be a stressful time for the participant. Strict protocol was design and developed to ensure the safety of the participants' emotional well-being. Participants were made aware they could withdraw from the study at any given time and not answer any questions that may be of a sensitive nature to them.

None of the participants felt embarrassed about discussing their smoking. The researcher had a list of appropriate agencies that participants could have requested such as counselling services, cannabis services and Patient Advisory service (PALS) that they may have needed to be signposted to.

2.3.6 Participant's response rate

Contacting participants to take part in the study proved to be quite challenging. At first participants were identified from the database using the inclusion criteria and then sent out an information sheet about the study and introduction letter (see Appendix A1 & A3). Participants were then contacted again by telephone a week later and asked if they would like to take part in the study. This procedure was successful with the first and last group of participants (Groups 2 and 4). However for the last two groups being interviewed (Groups 3 and 1) this format proved to be the wrong approach. Numerous letters were sent and the response rate was very low.

After careful revision of how participants could be recruited it was decided after a meeting with the two pregnancy counsellors that they would ask their existing clients whether they would like to participate in the study. This was time-consuming because of the inclusion criteria for (Group 3) participants who had quit during their pregnancy and not smoked for two to three months.

For the next group (Group 1) this was a challenge as the majority of these participants are no longer in contact with the service. When contacting participants by letter and calling them they did seemed unwilling to take part in the study. A few months into the study two participants who had quit during their pregnancy and relapsed back to smoking in the postpartum period contacted the service wanting to try and give up smoking. The researcher then contacted them to ask if they would like to take part in the study. Participants were then interviewed just before they set their new quit date. Overall recruiting participants for the study took seven months.

2.3.7 Revision in sample size

This group of smokers and ex-smokers were targeted to explore their thoughts, feelings and ideas around the subject of cessation and relapse. Originally four to six participants were to be recruited in each group, due to difficulties with recruiting participants it was not possible for groups 1 and 2. When closely examining the interviews transcripts for these groups, key themes are frequently mentioned by each participant. This can be seen as accurate in terms of internal validity for the topic studied for this group of smokers.

2.4 Procedure for analysis

The interviews were audio-taped with the participants consent. Predetermined open-ended questions were developed into an interview guide. The data from each interview was transcribed verbatim from a tape recorder and then typed up and stored on a computer. Data was analysed using Interpretative Phenomenological Analysis (IPA). Overall the main aim of the analysis was to identify themes as described by the participants and to describe the range of issues and experiences within each theme. Qualitative research methods were chosen as it was seen as an accurate representation of the research under investigation.

2.4.1 Format for analysis of data

Stage 1: Interview transcripts were read several times and a list of key words was produced. In addition notes were made about any statements that seem significant to the aims of the study.

Stage 2: Themes were produced from each interview transcript. This was achieved by using a master list for the first interview to begin analysis of the second interview, for example looking for examples of the themes identified from interview one, but being prepared to identify new themes that emerge.

Stage 3: The themes identified in stage two were examined further to identify connections between them, which if found were then clustered together and re-labelled creating a master theme.

Stage 4: A summary table (see Appendices A4, A5, A6 & A7) of the themes for each interview was produced, detailing in the transcript where it is located.

Stage 5: The summary tables for each interview transcript were then examined as a whole data set, and a consolidated list of themes for the fourteen transcripts was achieved.

Another independent researcher became involved with study to discuss emerging themes and to reach a conclusion about the interpretation of the data. This was to make sure that the data was grouped into appropriate themes and to check for validity and clarity of the data. The researcher supervision checked the final outcome of the study.

2.5 Interpretative Phenomenological Analysis (IPA)

Interpretative Phenomenological Analysis (cited in Smith, Harre, & Langenhove, 1996) is becoming a popular method used in psychology to produce knowledge of what and how people think about the phenomena being investigated within their particular social, cultural and historical contexts.

IPA does not attempt to produce an objective record of an event or state, it is phenomenological in that it wishes to explore an individual's personal perception or an account of their experiences. The method recognises that access to these thoughts is dependant on the researchers own perceptions, which are required to make sense of the participants' personal world through a process of interpretative activity.

2.6 Results

In total, twenty master themes were identified from all the different groups of participants. The interview transcripts produced rich data which detailed how pregnant and postpartum women maintain their quit attempt. In contrast it explored the process of how pregnant and postpartum women relapse back to smoking, additional accounts were also given of their experiences of service delivery and how this can be improved.

2.6.1 Group 4 (Postpartum Women who had set a quit date during pregnancy and had maintain cessation during pregnancy and postpartum). Six master themes were identified such as morals, addiction, maintaining cessation, support, coping strategies and being in control.

Master tables of themes for Group 4 (Postpartum women who had set a quit date during pregnancy and maintain cessation during pregnancy and postpartum).

1. Morals	P1	P2	P3	P4	P5
Moral obligation	1.1		4.35		
Judging other people's behaviour					4.36
Being considerate	3.29			6.85	
Dangers of smoking around young children	7.67			6.86	
Implications	2.14				
Personal experiences of smoking	1.8				
Awareness of the dangers of smoking	1.11			1.2	
2. Addiction					
Cravings	2.24			2.14	
	P1	P2	P3	P4	P5
Associations with cigarettes	2.25	2.13			
Unawareness of how addictive smoking is				6.84	2.18
Identity as a smoker				5.79	
3. Being in control					
Personal choice				3.31	
Change of attitudes				3.38	
Not conscious of smoking				3.42	
Been aware of smoking as a drug				4.44	
4. Coping strategies					
Coping	4.41	1.1			3.21
Thoughts changing about smoking			3.24	3.26	

Using resources	4.45				
5. Maintaining cessation					
Change in lifestyle	3.32	1.7		5.66	4.39
Implications for health	6.57		6.53	5.68	
Smoke-free-house		2.24	6.60		5.41
Sense of taste/smell		4.52	1.4		
Whether you want to give up smoking		4.57	1.2		
Guilt			3.28		
Triggers to smoke			2.18	5.76	
Influencing factors involved with cessation	2.16	2.16	2.12	1.1	2.7
6. Support					
Working in partnership	3.36	3.38	4.40	4.49	4.28
Disappointment	5.52				
Legislation	6.61				
External support	7.68	5.60	6.57	5.70	
Group support			5.44	4.52	

Morals

Participants were asked how they managed not to smoke when they were pregnant and after they had their baby. The participants' accounts suggest that they had a moral obligation towards their unborn child and to protect the infant postpartum from the dangers of smoking.

Two participants gave examples of this,

“You always know or hear that it is not good to smoke when you are pregnant or have a child..... Yes, I could smoke when it was just my health I was concerned with, but when it was my child's health I had to stop.”

(Participant 1, Group 4)

“The thought of passive smoking, even if you are walking by in the street, and someone is smoking, within those 50 seconds you are taking in some of what they are blowing out. I really hate that because I am walking my little boy too. So passive smoking as well because that’s a killer as well.”

(Participant 3, Group 4)

These quotes illustrate how since having young children participants perceptions, thoughts and feelings about smoking have changed and influenced their decision to remain non-smokers as the need to protect the infant from passive smoking is seen as a priority. Within the theme ‘Morals’ participants also mentioned how other people’s smoking behaviour had an impact on their morals such as people smoking outside of their living environment. One participant thought that people smoking within close proximity was unacceptable as they could still smell the cigarette smoke. Perhaps this could be because the participant did not want to have a reminder of cigarettes and may have been feeling vulnerable about relapsing back to smoking after the birth of her child.

When participants were asked how supportive their family and friends were about not smoking near them, it seems to produced mixed feelings, one of the participants thought her father and one friend were conscientious not to smoke around her newborn infant without being asked to do so. This would explain how other people are aware of the dangers of smoking around young children and even trying to protect the participant from relapsing back to smoking. In contrast one other participant observed how other people are judgemental if they see mothers smoking in front of their children in the school playground. It appears from this description that other people’s opinions are important to this participant. Not wanting to be judged negatively by other parents for smoking could be seen as a factor for influencing her decision to give up smoking.

One of the participants mentioned how since giving up smoking it has made her more aware that smoking is an addiction and people do not understand the seriousness of giving up smoking. From this statement it could be concluded that family and friends were not supporting the participant with her quit attempt and did not see their own smoking behaviour as an addiction. Seeing smoking as an addiction rather than a habit could be instrumental in achieving attitudinal change about smoking and may influence people to give up smoking. Another factor involved with maintaining cessation experienced by one participant, was experiencing parental smoking throughout her childhood and reflecting back on how she used to suffer from lots of colds while growing up. This rationalisation could imply that the participant is aware of how smoking around young children can affect their health as they are growing up and the participant not wanting this outcome for her child.

Addiction

Addiction to cigarettes was discussed in terms of experiencing cravings, identify as a smoker, associations with cigarettes, triggers to smoke and adjusting to new behaviour.

“Figuring out where on earth that comes from, at what age and what point.....I think this will be the key in me not smoking in the future, is the fact I know a bit more about that side of..... I would have not understand why I smoked, and who my triggers were, and why they were triggers, therefore would not have known how to avoid it.”

(Participant 4, Group 4)

“I might see a cigarette in the ashtray and I would just go have it and then I would remember.....for the craving I deal with it more than.....I find myself going for the cigarette that scares me.”

(Participant 1, Group 2)

These statements capture how strong the addiction to cigarettes is even after participants have successfully maintained their cessation and how it is linked to lots of behaviours. Smoking is described as a psychological need to smoke and to satisfy that intense craving for a cigarette. One participant felt that by identifying why she smokes and her triggers to smoke, was beneficial in maintaining cessation. Developing a rationale for why people smoke and identifying their triggers could be seen as a process for implementing the behaviour change, e.g. giving up smoking. It could also lead to a greater awareness of the participant's confidence and self-belief in maintaining the behaviour change postpartum.

One participant reflected back on why she smoked and explained how smoking was used as a way of coping with stress in her life. Associating smoking with stress can be seen as a negative aspect in the participant life. Teaching people how to use alternative methods of coping with stressors could be seen as a way to avoid relapsing back to smoking. Smoking was linked to drinking alcohol for one of the participants. This shows how complex smoking really is and gives an understanding of how it is linked to other behaviours. Also it shows that participants have to learn to break all habits associated with smoking.

Maintaining cessation

All of the participants gave reasons as why they had maintained their quit attempt and discussed the benefits of giving up smoking. Participants also gave reasons besides being pregnant why they wanted to give up smoking such as wanting better health outcomes, guilt, thoughts changing about smoking and the expense of smoking. Nearly all of the participants implemented ground rules in their living environment that no-one would be allowed to smoke in their house which then had an impact on changing other people smoking behaviour.

“I would have the baby.....and go outside and have a cigarette. I guess the reality of having a baby did not allow that to happen.”

(Participant 1, Group 4)

“I explained that there are 4,000 chemicals in a cigarette and then he understood..... it is not good for baby and then he changed.....it is like our rule.....no smoking in the house.”

(Participant 5, Group 4)

Four of the participants mentioned they wanted to give up smoking for health reasons as well. This shows that the unborn child is not the sole motivator for wanting to give up smoking. Giving up smoking for themselves and not just for the baby, there could be a decreased risk for relapse postpartum and this cessation could evolve into life-long cessation. One of the participants perceived after the birth of her baby that she would relapsed back to smoking but found the reality of having a baby did not allow this to happen. Despite many months of cessation this clearly identified the vulnerability this participant was feeling about relapsing back to smoking.

This also shows how unique pregnancy quit attempts are compared to the general population of smokers. Three of the participants imposed a full ban on cigarettes and noticed the benefits of this ban. Implementing this ban helped them maintain their cessation and may have even reduced their partners' cigarette consumption. It also shows that participants are aware of the implications of others smoking around young children and their children's health is the ultimate priority for them. Two of the women in this group identified smoking as a part of their social network consisting of family and friends. The participants avoided smokers in the early days of their quit attempts. One interpretation of this could be that the participants were aware that if they socialise with smokers they may have relapsed back to smoking. By understanding more in depth their triggers to smoke they had formulated a plan of action to maintain cessation.

Two of the participants mentioned that it has to be the right time and deciding whether you want to give up smoking to determine whether or not the quit attempt will be successful.

Besides being pregnant, these participants had reached a time in their lives where they were ready to embrace a new stage of their life and self-belief would enable them to give up smoking. Most of the participants in this group were able to explain the benefits of maintaining cessation such as no longer smelling like a smoker and saving money. These findings show how the advantages of cessation are helping them stay smoke-free and how they have noticed positive aspects of giving up smoking.

Support

The theme 'Support' emerged as an important issue for all participants. Support was described in terms of support from your family, advisor and friends. Participants also felt resources such as text messages, NRT and the smoking ban were all effective in making them feel supported with maintaining their behaviour change.

"The pregnancy counsellor came every time she was supposed to come.....she would text me every now and again in between visits.....when she was coming fortnightly or monthly she would send a text message every week and that was quite nice."

(Participant 2, Group 4)

"I thought it was very good and I think I could not have stopped smoking without that service. I did not really ask the GP, I just mention that I was smoking and I cannot stop and they sent me a letter about the service, it was very easy and quick. It was very good and I very glad."

(Participant 5, Group 1)

The participants conveyed that support from the counsellor helped them with their quit attempt; in particular if they experienced any problems they could contact the counsellor for any aspects of their quit attempt. From reading the transcripts it shows that a rapport was developed between each of the participants and their counsellor.

Three of the participants mentioned the benefit of receiving text messages from their counsellor which they found helpful as a way of keeping in touch with their counsellor besides one-to-one counselling sessions. Participants commented on the service being informal, non-judgemental and how the counsellor was influential in helping them give up smoking and maintaining their quit attempt. As this group of participants were supported during their pregnancy and postpartum it gives an insight into how long-term support for this group of women may have helped maintain their quit attempt.

Four of the participants commented on how external support was instrumental in helping them succeed with their quit attempt such as receiving support from their partners, family members and friends. For this group of participants it shows that they felt supported in their quit attempt from a wide variety of sources and felt encouraged to maintain their behaviour change. Two of the participants explored the idea of group support such as attending a group and been able to sharing their experiences of giving up smoking with other mothers who have given up smoking.

These two participants may have felt that giving up smoking needs to be shared with others in a similar situation to themselves. This could be a novel idea for future interventions with pregnant women to introduce them to someone else who is pregnant and giving up smoking.

Coping Strategies

Participants were asked how they managed not to smoke when they were pregnant and postpartum. In addition one other question asked was if they could pass on any ideas they found useful when giving up smoking to pregnant women. The theme 'Coping Strategies' explained how participants cope with not smoking by using NRT, receiving supportive text messages, eating a healthy diet, breast feeding, ban on smoking in the house and stages of their quit attempt.

"Well first I banned smoking in the house, so that was good and with newborns you cannot smoke around them.....Breast feeding as well because you end up in the other

room. So you are not around people when they are smoking.....realised that you used to smell like that. So that was probably one of the main reasons I continued not to smoke.”

(Participant 2, Group 4)

“So at first I transfer it over too breast feeding, can’t do it because I am breast feeding. Then because it was other six months then it was kind of I have been doing it for this long you can manage other day, other week.....just kind of pushing it along. It was a big fear..... because it had been longer enough, so it was finding little kind of excuses to give myself so I could just extend it.....I give myself one other stage to go through.....In my head now.....you have got pregnant, had the baby, done the breast feeding....it is other two years.....why would you smoke.”

(Participant 4, Group 4)

Three of the postpartum women described how breast feeding was a confounding factor in remaining abstinence from smoking. The participants openly explained how breast feeding helped them not to smoke. This could be because breast feeding may have been seen as an extension of wanting to protect the baby from smoking. This could indicate that by encouraging women to breast feed it could delay a relapse back to smoking. In addition it shows that the coping strategies which are developed in pregnancy may need to change in the postpartum period.

The analysis of the data indicated that coping strategies which are developed at the start of a quit attempt are maintain in the postpartum period. Two of the participants mentioned that their house is still smoke-free. Participants may have felt that this was a good coping strategy to continue with postpartum as their partners smoking may have increase the likelihood of them relapsing back to smoking shortly after the birth of the baby. One participant felt that by receiving information about the dangers of smoking during pregnancy and postpartum was enough to implement the behaviour change and maintain the quit attempt postpartum.

Receiving information in a non-judgemental way can enabled people to start the behaviour change. Three of the participants described how they employed several different coping strategies to avoid relapsing back to smoking such as using NRT, chewing lots of gum, trying to be distracted, eating a healthy diet, different stages of a quit attempt, drinking copious amounts of Red bull and do anything but smoke. By employing several different coping strategies participants may have felt more confidence in their ability not to smoke. Using cognitive and behavioural coping strategies for this group of participants helped them maintain their abstinence from cigarettes.

Being in control

One of the participants talked about how first of all wanting to be in control of not smoking and smoking. Control was discussed in terms of it being her choice to give up smoking and labelling it as a drug rather than a thing you do.

“My biggest reasons in having difficulty stopping, was control.....I was in control of not smoking and I was trying to give up smoking. I get to make these choices when ever I want.....I can stop whenever I want..... I can have a cigarette when ever I want but its my control that was really important.”

(Participant 4, Group 4)

“Seeing it as a drug, rather than a thing you do made a big difference.....I found just looking at the last few I was smoking.....and thinking why I am doing this.....you don’t notice a cigarette, you don’t notice it, that it is lit, you don’t really pay attention what you are doing.”

(Participant 4, Group 4)

The theme, 'Being in control' was only mentioned by one participant who felt quite strongly about needing to be in control of her quit attempt. This could be seen as wanting to take charge of her quit attempt and not wanting to be controlled by her addiction to nicotine. The participant then experienced attitudinal change towards her smoking and saw smoking as a drug. This shows that the participant's cognitive/attitudinal change was important for the next stage, implementing the behaviour change and maintaining cessation. For this participant working out why she used to smoke and seeing smoking as a drug helped her reflect on the meaning of smoking, her identity as a smoker and benefits of her own health and the unborn child.

2.6.3 Cessation during pregnancy (Group 3).

This group consisted of four women who were pregnant and had two to three months or longer of not smoking. Six themes were identified for this group of women such as preparation, support, adjustment period, advantages of giving up, emotions, and developing coping strategies.

Master table of themes for Group 3 (Pregnant women who had set a quit date during pregnancy and maintain cessation for 2 months or longer).

	P6	P11	P13	P15
1.Preparation				
Gradual Process	1.1	1.2	4.63	7.141
Preparing for quit day			2.34	6.127
Identifying when I smoke				1.1
Behavioural aspect of smoking	2.13			1.8
Setting a quit date				7.158
2.Support				
Feeling supported in your quit attempt	1.5		3.52	3.47
Action plan for giving up smoking				7.148
Motivational tool	1.6			

3.Adjustment period				
Difficult thing to do	2.9			2.38
Adapting to behaviour change	2.12			2.39
Motivation			4.70	
Using medication			4.71	2.35
Ambivalence			4.75	
Change of routine				3.60
Making house smoke free				4.70
4.Advantages of giving up				
Sense of smell becoming more acute	3.24	4.37	5.87	
Losing smokers cough	4.28	5.42		
Health benefits of giving up		5.44	6.102	5.102
Self improvement		4.36	6.104	
5.Emotions				
Situations becoming real		1.5		
Main priority is the baby		5.46	3.56	
Awareness of the dangers				7.159
Wanting a healthier lifestyle			5.49	
Guilt	1.7		2.28	2.22
Achievement			3.47	3.49
Losing desire to smoke			2.21	
Ambivalence			3.51	
Not wanting to be different			4.79	
Unattractive			5.93	
Change – thoughts			5.100	2.28
Concerns over relapsing			6.107	
Using smoking				3.62
Different approach				6.126
Deadline date				7.154
No visible changes				5.91
6.Developing coping strategies				
Coping strategies	P6	P11	P13	P15
Replacement activities		2.10		1.14
Habitual associations		2.8		3.57
Quit attempt becoming easier				1.11
				1.16

Preparation

The theme 'Preparation' was explained in terms of preparing for quit day, identifying when they smoke, harm reduction, setting a quit date, behavioural aspect of smoking, different approach to quitting and gradual process of quitting.

All of the participants in this group gradually reduced their cigarette consumption working towards the aim of complete cessation with the majority of participants giving up smoking using this approach.

“Basically I cut it down to like 5 a day, then one a day, and then tomorrow, I just thought, this was over two weeks, and I thought I would stop completely and I just did and that was that.”

(Participant 6, Group 3)

“My experience of giving up smoking was we set a quit date, which I then fail to actually give on that particular day, then I felt really bad about it and set another one. I think the counsellor the counsellor came around about three times and we would have this quit day, then she came around and I said I had not managed too. My experience was I just did it on the day itself. Like I said I had to go to hospital that weekend and that scared me a bit anyway.”

(Participant 15, Group 3)

All of the participants in this group reduced their cigarette consumption gradually. However this approach was only successful for three participants who then went on to quit smoking. The last participant in this group found herself smoking more in the first trimester of her pregnancy. The interpretation of this could be all the physiological changes that took place during pregnancy could have increased the tolerance level of addiction for the participant. Participants in this study could have been smoking their cigarettes more intensively which would then increase their nicotine intake.

Two of the participants discussed the importance of preparing for quit day such as removing all cigarettes, lighters and ashtrays from the house and smoking their last cigarettes. Developing an action plan for giving up smoking may have increased the participants' confidence to be able to do so.

One of the participants reflected on her success of managing to give up smoking. This is useful for the participant to reflect back on her success as it could have been seen as a factor involved with maintaining cessation from cigarettes. In contrast one other participant found preparing for quit day quite stressful and eventually just quit one day without any preparation towards her quit day. This shows the emotions involved with giving up smoking such as anxiety and stress. The participant mentioned that she had to go into hospital as she experienced some bleeding during her first trimester of pregnancy. From the analysis of the data it reveals this was the trigger that influenced the participant to give up smoking.

Two of the participants identified that you need to have a goal when giving up smoking. The initial part of their goal was developed by identifying when they smoked. The participants could then identify their triggers to smoke and learn how to employ coping strategies for when they felt that intense desire to smoke. Identifying the behavioural aspect of their smoking gave participants an insight into why they smoked. One of the participants had a plan to quit before she was fourteen to sixteen weeks pregnant. This shows that the participant had an awareness of how dangerous it is to continue smoking in the last two trimesters of pregnancy.

Support

The theme ‘Support’ was discussed in terms of being supported in your quit attempt by your counsellor, using NRT and validating carbon monoxide readings (CO) to verify self-report of cessation.

“Support from the counsellor. Afterwards when she said she was going to come back after so many weeks and test your thing again. (Carbon monoxide test to validate self report of no smoking) I thought if I have smoked I am going to feel like I have let myself down when she does the reading.”

(Participant 6, Group 3)

“I think the support, it helps to talk about it a lot before I actually did it with the

counsellor.....It was the NRT and the counsellor was coming once a week....I think the best thing is just talked through it, you know have your counselling sessions..... Then do (not) make it into a big deal and just do it and get empowered from doing it.”

(Participant 15, Group 3)

Receiving support from the counsellor was seen as a positive aspect of the intervention. Using a patient-centred approach to help participants give up smoking and developing a rapport can be seen as an important part of an intervention in helping pregnant women give up smoking. The participants received counselling sessions once a week, this enabled them to have trust in their counsellor’s ability to help them with their quit attempt. One of the participants mentioned how using the carbon monoxide (CO) machine each week was a factor involved with helping her abstain from smoking. This shows how the machine became a motivational tool in verifying her self-report non-smoking status.

The last participant in this group to be interviewed felt that discussing with the counsellor, your smoking and how you feel about giving up is useful for preparing yourself for your quit attempt. For these participants receiving face-to-face individual behavioural support unique to their personal circumstances helped them give up smoking and maintain abstinence from smoking. Other sources of support included using NRT and their children supporting them with their quit attempt. For these participants it seems the more support mechanisms they had in place and how they felt supported in their quit attempt help them maintain the behaviour change.

Adjustment period

This theme was interesting as all of the participants gave descriptive accounts of how they adjusted to the new behaviour change. Therefore this theme was described in terms of changing their routines, experiencing cravings and feeling isolated when socialising with smokers.

From the accounts given participants felt giving up smoking was seen as a lifestyle change as they had to learn new habits and cope with stress in their life without smoking.

“I think probably the first three or four weeks were the hardest.....It was just making the changes and I think that is also you have the time when the nicotine is clearing out of your system. Nicotine is a drug, but then you also become aware you don’t smoke anymore. It takes three or four weeks to get into your head, “I do not smoke anymore.”

(Participant 15, Group 3)

“When I be out, I still have a drink, a wine or something and when you are having a drink, you feel like a cigarette. That was another thing that was hard.”

(Participant 11, Group 3)

Two of the participants felt that the first four to six weeks of their quit attempt was stressful as this was when they had to adapt to new behaviour changes being developed and become used to them. This showed that participants were used to their old behaviour (smoking) and it takes time for them to adjust being a non-smoker. All of the participants identified situational cues where they felt most tempted to smoke and changed their routine to avoid relapsing back to smoking. This showed they were aware of how smoking was part of their everyday routine. One of the participants in this study mentioned that due to her children breaking up from school for the summer holidays it was easier to give up smoking as her routine had changed. Perhaps this was a way of making a fresh start and not being reminded of associations with smoking such as being around other mums who smoke.

Three of the pregnant women found it difficult to socialise with other smokers and experienced cravings to smoke in the earlier stages of their quit attempt. This could be perceived as the participants feeling vulnerable at the start of their quit attempt and struggling to adapt to their new identity as a non-smoker. One of the participants had to work out why she smoked, as a prerequisite for cessation, and worked through her ambivalence to become a non-smoker. By the participant not just focusing on the internal reason for giving up smoking (the unborn child) and exploring why she smokes she may less likely to relapse back to smoking after the birth of her child. Also the quit attempt could evolved in to lifelong abstinence from cigarettes.

Two of the participants felt that using NRT was beneficial in making their quit attempt easier. One of the key aspects of a quit attempt is using medication to help people give up smoking. Listening to the advice from their counsellor about using NRT increased their chance of success in becoming a non-smoker and it was perceived as a positive aspect of the intervention. One participant implemented a non-smoking ban in her living environment. This could be because she may have thought how difficult it would be to giving up smoking while being reminded of smoking in her living environment. By banning smoking in the house it may increased her chances of not relapsing back to smoking.

Advantages of giving up

Since all of the participants had given up they had noticed benefits of cessation such as losing their smokers cough, their sense of smell becoming acute, their breathing becoming easier and a feeling of self-improvement in their overall health.

“The smell, I did not realise.....Because you do not realised when you smoke how bad it smells after you have stopped smoking. It stinks. That was the main thing.”

(Participant 6, Group 3)

“I feel like I don’t smell, although I used to. I feel like I am starting to get my breath and energy back. I realised how yellow my teeth are and I am trying to get my teeth

white again.”

(Participant 13, Group 3)

All of the participants expressed that they had noticed benefits of giving up smoking such as no longer smelling of cigarette smoke. This showed their sense of smell had become much more acute since giving up smoking and how they noticed improvements to their health in general. All of the participants mentioned various positive attributes of giving up smoking such as losing their smokers cough, feeling their breathing was easier and not feeling dehydrated as they were previously. Reading through the transcripts for all the participants showed that the withdrawal symptoms they had were only experienced for a short time and after a few weeks they started to notice the advantages of giving up smoking in terms of their own health.

Two of the younger participants in this group explained that they feel healthier compared to people who continue to smoke. When these participants see people who smoke it may have remind them of how they used to feel before they gave up smoking and by not smoking they have a greater awareness of the detrimental effects of smoking.

One of the participants reflected that due to a change in her personal circumstances (such as being pregnant and implementing a no-smoking ban in the living environment) and the UK smoking ban in public places it was easier to maintain her quit attempt with all of these restrictions implemented. By not having all these associations with smoking removed it may have increased the likelihood of the participant relapsing back to smoking. The participant may have thought ahead of how to cope in certain situations when exposed to cigarette smoking and this may have been the reason why a smoking ban was implemented in the living environment for example not wanting to be reminded of smoking.

Emotions

The master theme 'Emotions' was discussed by all of the participants as the unborn child being their ultimate priority and this was one of the main reasons for giving up smoking; to protect their unborn child. One of the participants also voiced their concerns over not wanting her children to start smoking when they were older. Three of the participants seemed very knowledgeable about the adverse effects of passive smoking during pregnancy and postpartum. One participant reported that it became easier to give up smoking when she felt her unborn child move. In addition other people's smoking behaviour had an impact on their own thoughts and attitudes about smoking. Also participants reflected on how they cope with life without using smoking as a coping mechanism and feeling 'a sense of euphoria' when they did managed to give up smoking.

"When I started feeling her moving, because I thought it not fair on her and I was worried that she would get asthma or something.....Because I thought more about her than me, I need a cigarette, but she doesn't."

(Participant 11, Group 3)

"I knew how much they (children) wanted me to stop smoking as well. So I did feel guilty when my son was hiding my cigarettes and I would be getting frustrated with him because he would think it was a joke and I really want a cigarette and then I realised it was not a nice pattern to be getting into."

(Participant 13, Group 3)

All of the participants seemed aware about the dangers of continuing to smoke during their pregnancy and once their situation became a reality to them, for example reaching the end of their first trimester of pregnancy or feeling their unborn child move, influenced their decision to give up smoking to protect their child from the detrimental effects of smoking.

Two of the participants thought about the consequences of smoking long-term, such as the dangers of smoking around young infants and not wanting their children to smoke. Protecting their child from the detrimental effects of smoking became a priority for them. The participant who did not want her children to smoke, (the decision could have been based on not wanting her children to grow up thinking that smoking is the 'norm' and a way of life for everyone). This was seen as the catalyst which made her want to give up smoking. This group of participants seem to possess knowledge about the harmful effects of smoking during pregnancy and postpartum which could have influenced their decision to give up smoking. Also thinking about their health as well explains that they are giving up for two reasons, one being to protect their unborn child from the dangers of smoking and secondly for protecting their own health by not smoking.

Giving up smoking for these participants was a very emotional experience. Participants felt a wide range of emotions such as guilt, attitudinal change, anger, concerns of relapse and being stressed. Three of the participants felt their attitudes about smoking had to change before they took that step in giving up smoking for example realising that is bad for the baby to be exposed to smoking and learning how to cope with stressful situations without smoking.

Two of the participants discussed how upset they became when socialising with smokers and felt they needed to avoid being near smokers. This could be because they felt they were being reminded of cigarettes and finding it hard to avoid not smoking. It could also explain how vulnerable they may have been feeling at the start of their quit attempt. They have also experienced feeling isolated from their family and friends who are smokers for example they are not part of that group anymore.

Two of the participants revealed feeling proud of managing to give up smoking. This comment described how it has been a journey of giving up smoking for these two participants, first they had to experience attitudinal change as a precursor to cessation and secondly implement the new behaviour change and last, maintain their quit attempt and think of themselves as a non-smoker.

Feeling proud of giving up smoking is something they can build on as the quit attempt progresses.

Developing coping strategies

Participants expressed how they had managed not to smoke, a few of the participants employed coping strategies to avoid relapse. Two of the participants described this as having to learn new behaviour to avoid being tempted by cigarettes. One participant felt that socialising with non-smokers helped her cope with not smoking in the earlier stages of her quit attempt.

“When I need a cigarette I suck on a boiled sweet. Something to replace the cigarette.....These are the main things. If I felt like a cigarette, probably eat and do one of these things.”

(Participant 11, Group 3)

“I don’t know I supposed after I had actually quit I just noticed very gradually over the weeks I was not having to come into the kitchen and having time out anymore. I was maybe just taking deep breaths or I was becoming kind of less stressed anyway.....I presume the patches were helping me and working. Obviously I was using my inhalator as recommended which is once an hour you are supposed to use it.

I was also finding I would use this at the exact times I would have smoked as well for that first month, which was first thing in the morning and in the evenings and walking down the road, even sometimes if I did feel stupid with it.”

(Participant 15, Group 3)

The theme ‘Developing coping strategies’ involved the participants identifying high risks situations and developing coping strategies for such situations. Employing one or more coping strategies helped the participants not relapse back to smoking.

Some of the coping strategies were either cognitive or behavioural in their use for example thinking and doing something when tempted to smoke. One participant felt that by not socialising with smokers in the early days of her quit attempt was helpful until she felt able to be around smokers and not smoke. The interpretative of this comment could be the participant no longer felt threatened to be near smokers and experience an intense desire to smoke.

One of the participants felt using NRT was a substitute for smoking as her use of the NRT was used at exactly the same times as when she used to smoke cigarettes, for example taking five minutes out in the kitchen and using NRT where as before the participant would smoke in the kitchen when taking a break from the demands of being a mother. This shows how the coping strategies evolved as the quit attempt progresses such as using NRT and taking time out in the kitchen and then taking deep breaths when feeling stressed, this gives an insight into how coping strategies may develop over a certain period of time during the quit attempt. This may also give an overview of how certain coping strategies are appropriate for different situations participants have experienced. When designing interventions for pregnant smokers in how to help them give up smoking this could be used as a component part of an intervention.

2.6.3 Group 1 (postpartum women who set a quit date during pregnancy and maintained cessation and relapsed in the postpartum period). In this group four master themes were identified, addiction, postnatal period, behaviour changes and emotional aspects of smoking.

Master tables of themes for Group 1 (Postpartum women who had set a quit date during pregnancy and maintain cessation and relapsed postpartum).

1. Addiction	P14	P8	P12
Enjoyment	2.17		
Habitual	1.2		
Cravings	1.3		1.5
Triggers to smoke	4.51		3.28
Not being in control		3.21	
Stressful time			4.43
Gradual return to smoking			2.17
Wanting to smoke			1.2
Fear of failing		3.29	
2. Postnatal Period			
Being in control	1.5		
Time out	2.26	1.4	1.8
Freedom	2.11		
Novel behaviour		2.12	
Smoke-free house		3.22	
Personal achievement		4.37	
Partial smoke-free house		2.15	2.16
Deceptions			2.21
Support postpartum			5.53
Reasons not to smoke		4.40	5.58
93			

3. Behaviour changes	P14	P8	P12
Behaviour changes in pregnancy	2.20		
Making house smoke-free	3.29		
Personal circumstances	3.40	2.18	
Implications		4.38	4.46
4. Emotional aspects of smoking			
Inevitable		2.17	
Sense of mortality		3.24	
Responsibilities		3.31	
Coping with life by smoking			3.30
Influencing others			3.34
Dishonest			3.37
Protecting their well-being		4.34	

Addiction

The first theme Addiction, revealed key findings such as how vulnerable the postpartum period is for increasing the likelihood of returning back to smoking. Participants reported experiencing cravings even though they had many months of cessation during pregnancy. Participants also admitted to having episodes of intermittent smoking which then increased their desire to smoke again. Addiction was associated with enjoyment of smoking, triggers to smoke, not being in control, being reminded of smoking and tolerance level of nicotine increasing.

“It was just, if I walk down the street and I smelt a cigarette, I would get the craving to go into the shop and buy one. As soon as the craving would come, I did not think about anything else apart from the cigarette so I just had to have it.....when I finally had my son I just wanted to smoke really and truly so I just went back to smoking again.”

(Participant 12, Group 1)

“Also I started to smoke one every other day and then it went to twenty a day, thirty a day.....I have said when you start taking one, you do kind of like, especially if you do a little and then you go back and have the one, it makes you feel like you need it again. You are determined to have it again.”

(Participant 12, Group 1)

All of the participants discussed how smoking was seen as an ‘addiction’ despite many months of remaining abstinence. One of the participants described how smoking was enjoyable, a personal pleasure to be savoured shortly after the birth of her baby. Within this account there appears to be a subtle change of identity occurring, (the participant gave up smoking during her pregnancy and relapsed back to smoking shortly after the birth of her baby) such as linking her smoking behaviour to consuming alcohol beverages, social situations and relaxing occasionally. This could be interpreted as the participant thinking of herself as a social smoker and someone who is less addicted than a smoker who smokes every day. Once the internal motivation for maintaining cessation was removed (birth of the infant) the participant no longer saw smoking as a risk to her child and relapsed back to smoking.

Two of the participants identified they experienced intensive cravings to smoke in the postpartum period and how habitual associations they had with smoking before they became pregnant returned postpartum, such as consuming alcoholic beverages and the smell of cigarettes prompting them to smoke. Despite many months of cessation this revealed these participants were as vulnerable postpartum as smokers who had recently set a quit date as they relapsed. Perhaps one of the reasons the participants in this group relapsed was they never intended to quit for good, for example seeing themselves as temporary non-smokers only for the duration of the pregnancy rather than quitters.

One of the participants described her partner as a smoker with cravings and felt he has to limit his smoking and smoke outside as there was less time to smoke since becoming a father. This could be because the participant is aware of the dangers of smoking around young children in the living environment. The participant may well be aware of this as there is increasing societal concern over parental smoking and the effects of environmental tobacco smoke (ETS), particularly on children, which may caused people to reducing their smoking and limit it to designated or appropriate areas. A couple of the participants explained that they did not feel in control of their smoking postpartum and by having intermittent episodes of smoking it was seen as the start of their relapse back to smoking. This shows how powerful nicotine addiction truly is, as once the participants had smoked one cigarette they experienced an intensive desire to smoke again. Postpartum smoking was associated with stressful experiences such as trying to establish a sleeping routine for the newborn infant, from this it appears that smoking was used as a coping mechanism for the disruption in their sleeping patterns.

Postnatal Period

This theme was identified as how changes occurred postpartum such as relapsing back to smoking, novel smoking behaviour, sense of freedom, time out and socialising with smokers. Some of the participants discussed their reasons to not to return back to smoking in the postpartum period. For the participants in this group, motherhood was seen as a stage in their life where they may have felt nostalgia for their old life and seeing cigarettes as a break away from looking after their children.

“Yes, I did not buy roll ups, I was buying single cigarettes out of the local shops. They sell singles their. So I was buying one or two of those when normally I would not have smoked those kinds of cigarettes at all. It was my way of saying I am not really going back to smoking.”

(Participant 8, Group 1)

“It was just when he was born, I assume he was healthy, I just thought, well I gave up while I was pregnant, and then he was born, I thought he is healthy so I don’t know just start again really. As I have said before I was just missing my cigarettes.”

(Participant 12, Group 1)

All of the participants mentioned how they relapsed for example, with restrictions placed on the amount smoked each day. Smoking was seen as an activity where participants enjoyed time on their own. This could be interpreted as ‘nostalgia’ for their life before becoming pregnant and they might have thought of happier times as a smoker, rather than a new identity as a mother to newborn infants. Participants discussed how they had made changes in their smoking behaviour such as only smoking one or two cigarettes a day and only smoking in the kitchen. The road from lapses to relapse is often a ‘dangerous one for many smokers’. It shows how vulnerable this group of participants were shortly after the birth of their infants.

For two of the participants it was a gradual journey of relapsing back to smoking such as smoking one or two cigarettes a day. Having several lapses meant that participants were at risk of relapsing. Participants could have felt that this was their way of being in control of their smoking and denial of becoming a smoker again. One of the participants mentioned how her smoking was restricted to the kitchen in her living environment; an explanation for this could be trying to protect the infant from the dangers of passive smoking and implementing a partial ban in the living environment.

One participant noticed that her child was often coughing but did not realise this may have been because of the exposure to passive smoking in the household. This explains how the participant was not aware of how dangerous smoking is around young children. However the participant then discussed at a later stage in the interview how her child developed asthma due to her smoking in the living environment. One conclusion of this could be how asthma may have highlighted to her the dangers of smoking around young children.

Smoking cessation interventions are generally successful in changing people's knowledge of the effects of ETS but changes in smoking behaviour or a reduction in exposure may be difficult to implement in the living environment. Two of the participants discussed reasons not to go back to smoking, with one of the participants seeing smoking as a negative factor in your life and giving up smoking as a positive thing to do. Despite having relapsed, the participant still viewed smoking as being negative.

This shows that there has been a change of attitudes towards her smoking behaviour and perhaps this can be developed as part of a new quit attempt. The other participant mentioned how receiving support from an advisor postpartum is instrumental in maintaining your quit attempt. From this we could conclude that the participant viewed the service and support received from her advisor as successful in helping her give up smoking. This highlights the importance of providing stop smoking services to pregnant women as the participant may be a powerful advocate in promoting the service to other pregnant women wishing to give up smoking.

All of the participants discussed how relapsing back to smoking was seen as resuming an old activity such as socialising with smokers, not being pregnant anymore and missing smoking. This could again be seen as nostalgia for their old life and wanting to feel free from the pressures of everyday life. For these participants' factors such as taking time to relax, socialising with smokers, missing cigarettes and exposure to high risk situations were involved with their relapse. Smoking for these participants could be a way of coping with stress and managing the emotions they experienced in life and may be seen as their 'time out' away from their responsibilities of caring for young infants.

Behaviour changes

This theme explored behavioural changes that took place during pregnancy and the postpartum period such as giving up smoking, relapsing back to smoking, living in a smoke-free house. Personal circumstances such as becoming pregnant and after the birth of their babies made the participants reflect on their smoking behaviour.

“Yep sure, I think when I gave up so successfully while pregnant I did not imagine that I would ever smoke again and all the time I was pregnant I never crave it, so the thought never really crossed my mind. So it was not until I had a proper drink if you like after the baby was born and my partner smokes so they were in the house (cigarettes) they were their and I thought why not.”

(Participant 14, Group 1)

“Because at night-time when I could not sleep, I just used to come downstairs and puff away. It was kind of because I had my baby that I was smoking more.”

(Participant 12, Group 1)

One of the participants reflected that her smoking behaviour had changed because of giving up smoking during the pregnancy and no longer seeing herself as a smoker, experiencing that intense desire to smoke. The participant did relapse back to smoking shortly after the birth of her child. Upon reflection of the transcript smoking is associated with relaxing and consuming alcohol. Perhaps this participant views herself as a part-time smoker and feels in control of her smoking behaviour. Two of the participants discussed how implementing a full and partial smoking ban in their living environment was developed in the postpartum period. Participants are therefore aware of societal concerns over protecting young children from the dangers of parental smoking.

Sleep deprivation in the postpartum period was a factor involved with postpartum relapse for one of the participants. The participant felt that since the birth of her infant she smoked more, thus the participant was using smoking as a coping mechanism to manage sleep deprivation. If the participant was taught techniques to manage infant sleep patterns and sleep deprivation it may have decreased her chances of relapsing postpartum. A few of the participants revealed how their motivation to stop smoking was purely for the health of themselves during the pregnancy and their developing child.

These participants were motivated by internal factors to give up smoking (being pregnant) and may have not experienced attitudinal change over their smoking behaviour. Their quit attempt might have been seen as temporary in its duration, for example only giving up while they were pregnant. After the birth of their infants, it may have become difficult to maintain cessation as this event could have given them the consent to start smoking again as smoking was no longer seen as a danger for their children. One of the participants mentioned the advantages of giving up during pregnancy such as the financial aspects. Despite this, the participant still relapsed back to smoking. Awareness of the benefits of giving up smoking is something that could be used in future quit attempts for this group of participants.

Emotional aspects of smoking

The theme 'Emotional aspects of smoking' highlighted the emotions involved with smoking such as guilt, feeling unwell, responsibilities and using smoking as a coping mechanism.

“Mainly because I was pregnant and because I am older now and I smoked for a long time and I was having twins and I was frightened that I would not be able to cope with the birth or with the babies. I felt really depleted of energy and just saturated. Saturated myself with smoking for years and years and I felt really low in energy. I felt really terrible, and I started to feel really ill. So it was all these things.”

(Participant 8, Group 1)

“And the thought of that as well, that ten seconds is a lot and then they show those adverts on TV when you smoke the baby blows out the smoke. He had asthma when he was younger and I don't want this child (2nd pregnancy), to be honest I feel a lot healthier with this pregnancy and I want my baby to be healthy as well.”

(Participant 12, Group 1)

One of the participants reported experiencing guilt and anxiety over her smoking and felt ready to give up smoking. Factors that influenced her decision were feeling ill from smoking and trying to be responsible. This explains how her beliefs and attitudes around the topic of smoking had changed and she wanted to take the next step in giving up smoking. It clearly explains that the participant no longer viewed smoking as a pleasurable activity and saw it as a negative factor in her life. All of the participants expressed concerns over how if they continued to smoke during their pregnancies it would harm the unborn child.

These participants may have given up smoking during pregnancy and not thought how to avoid smoking after the birth of their infant. They may have quit purely because they were pregnant and not explored other reasons for wanting to give up smoking such as their own long-term health and they may have not employed coping strategies on how to avoid high risk situations such as socialising with smokers. Once the internal motivation was removed (birth of infant) it may have increased their risk of relapsing back to smoking.

Two of the participants mentioned the emotions involved with postpartum smoking such as feeling free from no longer being pregnant and being able to smoke. This could be interpreted as once the participant was no longer pregnant her smoking was no longer seen as affecting the health of the newborn infant. Being able to smoke again may have been the start of indulging in other behaviours suspended during pregnancy such as consuming caffeine and alcoholic beverages. The participant may have needed some 'time out' away from her responsibilities as a mother and smoking may have been seen as a relaxing activity to do.

One of the participants mentioned how smoking was used as a coping mechanism for when she felt stressed; this shows if the participant is feeling stress then she will smoke. By exploring why the participant feels that smoking is helping her cope with the stress, suitable alternatives on how to manage stress could be developed and used in situations instead of smoking.

Another interpretation could be how smoking is seen as part of her lifestyle and personality, exploring how to manage stress without smoking could be the start of trying to change the participant's attitudes about her smoking behaviour. Two of the participants were aware of the dangers of smoking around young children in the postpartum period. Despite this they did relapse postpartum but restricted their smoking to designated areas away from their young children. This suggests that the stop smoking advice and support received from the counsellor had an impact on their smoking habit and may have influenced their decision to smoke away from their children.

2.6.4 Group 2 (Pregnant women who set a quit date and then relapsed back to smoking during their pregnancy). In this group four master themes were identified; emotional aspects of smoking, relapse, identifying coping strategies and support from the pregnancy stop smoking service.

Master table of themes for Group 2 (Pregnant women who have relapsed back to smoking).

1. Emotional aspects of smoking	P7	P9
Journey of going back to smoking	1.1	
Thoughts/ feelings around smoking	2.10	3.26
Social Aspects of smoking	2.13	
Ambivalence	2.25	3.28
Not changing smoking behaviour		5.47
Implications	3.32	5.48
Determination	3.34	
Emotions		1.1
Conflict		4.32
Habit/part of my life	2.23	4.37
Financial and health gains	2.21	
Worst case scenario		6.65
2. Relapse		
Stressful situations	2.15	

Unable to quit		3.30
Needing more intensive support		4.45
Identifying when I smoke	3.36	5.54
3. Identifying coping strategies		
Being occupied	2.12	3.20
Isolation		2.10
4. Support from the pregnancy service		
Being supported in your quit attempt	4.39	4.43
Support	4.46	
Personal choice		5.57

Emotional aspects of smoking

This theme explored how participants felt about continuing to smoke during their pregnancy. Smoking was seen as a habit, social activity and used as a coping mechanism. Participants thought becoming pregnancy would give them the incentive to give up smoking. Initially participants did give up smoking for a few weeks but relapsed after a short time and felt guilty for smoking during their pregnancy.

“Felt I let myself down, because at first I did quite well at the beginning so obviously to go back it was just like starting all over again. A bit disappointing really and also a bit low in yourself because obviously you do want to give up because it is not healthy for you. When you get that knock-back and when you start again and then you start again you feel like you have let yourself down really.”

(Participant 7, Group 2)

Erm, I don't think really badly of it. I have cut down a lot from what I used to smoke, because I decided to carry on smoking that is the reason I have cut down so much, erm I probably smoke a average of four a day now, I was smoking a lot more before..... “So I don't really feel bad but on the other hand, I do because there is a baby inside me, and you know it is not like the baby asked to smoke. I have put it there, so I don't know how to express it really, the baby did not ask for it, but why am

I doing it. It is still hard to, you know even though the baby is their, why can I not stop?”

(Participant 9, Group 2)

Participants were asked why they relapsed and gave reasons such as being stressed and still enjoying smoking. The participant who explained how she still enjoys smoking may have not felt ready to give up smoking. Not being fully committed and motivated to her quit attempt may have been the confounding factors involved with her journey of relapsing. The other participant believed smoking was a way of feeling calmer and used it as a coping mechanism to cope with the stress in her life.

This shows the strong association between stress and smoking. Perhaps if the participant explored different ways of coping with the stress in her life it may have decreased the likelihood of relapsing. It could be interpreted as the participant needing to change her thought processes and attitudes around smoking and stress for any future quit attempts. All of the participants experienced a wide range of emotions over their experiences of relapsing such as being upset and disappointed in themselves. Relapsing was seen as a negative aspect in their life by the participants, this could be because of their own perceptions and society's on continuing to smoke during pregnancy.

One of the participants explained how difficult it was to be near smokers when you have given up smoking and experience cravings of wanting to smoke; this shows how difficult it is to give up smoking and how people can feel isolated from their friends who smoke. It also revealed the participant may still be thinking about cigarettes and perhaps was struggling to learn the new behaviour (not smoking) in the early days of her quit attempt. Two of the participants discussed how they thought being pregnant would help them not to smoke, it did initially help them start a quit attempt but due to the stress and enjoyment of cigarettes it was not enough to maintain the quit attempt.

One of the participants then went on to explain how she protects her other child from the dangers of passive smoking by smoking outside or in another room. Within this account appear to be a subtle change of the smoking behaviour; this could be due to societal concern over parental smoking and the effects of environmental tobacco smoking on young children. One of the participants' quotes in this group indicated that to initiate and maintain a quit attempt you need motivation and support to help you give up smoking. From this account it shows that the participant has reflected on her past experience of giving up smoking and felt that being motivated and supported in a quit attempt are crucial for maintaining the behaviour change of giving up smoking.

The last participant in this group gave a rationale for continuing to smoke during pregnancy such as reducing her cigarette consumption. With this approach of trying to give up smoking the participant may have smoked her cigarettes much more intensively which would have increased her nicotine intake and enjoyed them more than if she had smoked her normal amount of cigarettes before she became pregnant. The participant also felt ambivalence towards continuing to smoke during the pregnancy and feeling guilty for exposing the unborn child to her smoking habit. One reason why the participant found it difficult to give up smoking could be because of the physiological changes that take place in pregnancy that increases addiction to nicotine. Pregnant women metabolise nicotine more quickly than a female non-pregnant smoker, this gives an idea of the struggle this participant had in trying to give up smoking.

Relapse

The theme 'Relapse' involved participants discussing their journey back to smoking. Participants experiences included stressful situations and coping with this by smoking. The participants relapse back to smoking took place within a few weeks of setting a quit date.

"I had a few ups and downs where I was just having a couple and then erm, I ended up liking the taste. I had a few problems in picking up my patches, that threw me out a

bit and I only had a few left. My doctors were a bit slow at giving me my prescription. There would be a delay, and this was what made me start having a few fags.”

(Participant 7, Group 2)

“I actually only had about one week of not smoking. It was really quick for me, the return to smoking.”

(Participant 9, Group)

One of the participants had a stressful time with her son and cope with this stress by smoking. Relapsing back to smoking for this participant was a gradual process of intermittent episodes of smoking and enjoying the pleasurable association with cigarettes. The participant then went onto to explain how a delay in receiving her NRT patches from her GP practice acted as a barrier for maintaining cessation. Not being able to access NRT on a regular basis could have hampered the participant’s ability to maintain the behaviour change of giving up smoking. This participant’s decision to place restrictions on the amount she smoked may have left her with a memory of enjoying the cigarettes and wanting to smoke more. Her cigarette consumption therefore gradually increased and she relapsed back to smoking full-time.

The stressors experienced by the participant could have been the trigger to relapse. Another interpretation of the link between smoking and stress could be how smoking enhances the sense of well-being and is used as a tool with negative mood. The participant may have experienced feeling calmer and might have been able to cope with the stress in her life after smoking a cigarette. The last participant in this group to be interviewed relapsed after one week of not smoking; this could be because the participant still enjoyed smoking and may have used smoking to relieve boredom and to relax.

The participant mentioned that it was hard to resist smoking cigarettes once the counsellor had left the house, this could be for several reasons one being she may have needed more intensive behavioural support, for example to be quitting with other pregnant women wishing to give up smoking in a group environment.

Secondly the participant may have also felt the need to give up smoking during the pregnancy but was not motivated enough to maintain the behaviour change and may have not believed in the health risks involved for the unborn child by continuing to smoke. Two of the participants discussed their triggers to smoke in terms of situational cues when they felt most tempted to smoke such as being stressed, being bored and having a cigarette after waking up.

Asking participants when they are likely to smoke may reveal all the habitual associations they have with smoking. It may also encourage them to think about their smoking habit such as the good and bad parts of their smoking, this can be useful when planning a quit attempt for smokers wishing to give up.

Identifying coping strategies

Within this theme, participants revealed how they had managed not to smoke and factors that could have helped them not go back to smoking.

“Maybe if I was working, when you are working you are keeping yourself busy, so it is basically keeping yourself occupied and I find I don’t smoke as many as I do if I am not busy. When you are not doing anything, I seem to have one after the other.”

(Participant 7, Group 2)

“Keeping busy and something I enjoyed doing as well because if I don’t enjoy it I will just leave it and think okay let me go back to the cigarettes. Because if it is something I enjoy doing it will take up my time and I don’t realise I feel the craving for the cigarette while I am doing something like that.”

The participants identified factors associated with them not smoking and also how to maintain the quit attempt, these included keeping busy and participating in an enjoyable activity. This was discussed in terms of, if they kept themselves busy it would be easier to give up smoking or smoke less. Keeping busy and enjoying any activity would help them forget about cigarettes and not experience the intense desire to smoke. These participants believed these factors would be influential in affecting the outcome of any future quit attempt and one way of reducing their cigarette consumption.

One of the participants mentioned the idea of going into a rehabilitation centre for giving up smoking as she felt that her living environment and social circle can be one of her triggers to smoke, for example, the smell of cigarettes is often associated with experiencing that intensive desire to smoke. The participant felt it would be easier for her to give up smoking and not to be near shops where she could buy cigarettes. In order to be able to give up smoking the participant may need a period of isolation from her normal environment. The perception of this comment could be the participant realised how difficult she would find giving up smoking in her normal environment and if she wanted to quit in the future would have to implement a new routine such as avoiding socialising with smokers, not visiting shops where she can buy cigarettes and perhaps banning cigarettes from her living environment for the quit attempt until she commenced and maintained the behaviour change.

Being supported with your quit attempt

The participants discussed the advantages of receiving support from the service and how beneficial it was in terms of encouraging and not feeling pressurised into giving up smoking.

“They were really good, the lady I had, she did encourage me and I felt good in myself. When I did manage to give up for a few weeks and did not have none, she come and she would say, “write a little diary about how you are feeling” and I did feel

really proud of myself basically. They do encourage you because they want you to give up smoking. I think the service is really good, they do help and they do understand if you have a problem while you are trying to give up smoking they will help.”

(Participant 7, Group 2)

“Their advice was good actually, they try their best to help you, and even though they want you to give up they don’t pressure you to give up. They also advise to still try and give up so I think their advice is good. I think the service is good. They do their best really. It is just up to that individual if they have the willpower and the mind-power to give up.”

(Participant 9, Group 2)

The participants felt that motivation and will-power were essential to facilitate a quit attempt and maintain abstinence from smoking. Having a positive attitude was also believed to be influential in wanting to give up smoking. This is something the participants could use in a future quit attempt to develop an action plan for giving up smoking with the help of their counsellor. Receiving social support from the counsellor was described as being positive, non-judgemental and not feeling pressurised to give up smoking. This interpretation shows that a rapport was established between the participant and the counsellor, it also revealed the participants belief in the validity of the information being given to them by the counsellor.

The participants felt the service was beneficial in helping them give up smoking and even when they relapsed they still felt the counsellor was supporting them. Using a patient-centred and non-judgemental approach to counselling suggests that the participants felt at ease with their counsellor, it shows how supportive the participants thought the counsellor was in helping them with their quit attempt. One of the participants mentioned feeling proud for managing to give up smoking for a short time and then revealed stress was the prominent variable associated with her relapse.

Working in partnership with a counsellor for a future quit attempt to cope with stress without smoking could be a way forward for this participant in achieving the behaviour change of giving up smoking. In conclusion, this theme reveals how for these participants receiving behavioural support from the counsellor is essential in facilitating the quit attempt and helping them to try and maintain abstinence from their smoking habit.

2.6.5 Duplication of Master themes across the groups

There were quite a few differences in themes for all of the participants in the study. Most participants from all of the groups discussed subjects such as support, addiction, emotional aspects of smoking, emotions and coping strategies.

Table of master themes which were evidenced in different participant groups

1. Addiction Group 1: P14, P8 & P12. Group 4: P1, P2, P3, P4 & P5.
2. Support Group 2: P7 & P9. Group 3: P6, P13 & P15. Group 4: P1, P2, P3, P4 & P5.
3. Coping strategies Group 2: P7 & P9. Group 3: P11 & P15. Group 4: P1, P2, P3, P4 & P5.

4. Emotions

Group 1: P14, P8 & P12.

Group 2: P7 & P9.

Group 3: P6, P11, P13 & P15.

2.6.6 Support

Receiving support from a variety of sources such as the Pregnancy Stop Smoking Service, family and friends was discussed quite frequently by the majority of the participants in this study. Participants reflected that support was crucial in maintaining cessation, identifying reasons why you smoke and developing a rapport with your advisor. It was interesting to see this topic area was discussed in the group who had relapsed back to smoking during their pregnancy. This shows how crucial support is in terms of helping people give up smoking.

2.6.7 Addiction

The majority of participants in this study experienced physical cravings for nicotine. Addiction was discussed in terms of being near smokers, situational cues, the smell of cigarettes and feeling isolated from friends when not smoking. Participants reported not feeling in control of their smoking and postpartum women who relapsed were very vulnerable to relapsing despite many months of abstinence during their pregnancy. These results clearly show how powerful the addiction to nicotine truly is.

2.6.8 Coping Strategies

Coping strategies were mentioned by all of the groups apart from those who gave up during pregnancy and relapsed postpartum. When examining the transcripts for this group it appears their main reasons for giving up smoking during pregnancy was to protect the baby and it may suggest that they did not employ coping strategies to maintain cessation postpartum. In conclusion, once the internal motivation was removed (birth of baby) relapse occurred.

Participants who employed coping strategies maintained cessation. These coping strategies consisted of doing anything but smoking, using NRT and taking time out, taking each day as it comes, change in beverages, chewing gum, taking deep breaths and eating. These coping strategies were used when participants found themselves in high risk situations and when they felt the intense desire for a cigarette.

2.6.9 Emotions

The majority of the participants revealed how emotional smoking is to them and all the emotions they feel about smoking. Participants discussed how guilty they felt smoking during pregnancy and how for some this was a factor involved with increasing the likelihood of maintaining cessation during pregnancy and postpartum. In conclusion, it reveals how emotions are linked to why women smoke and reasons for giving up, maintaining cessation and relapsing back to smoking.

2.7 Reflective analysis of results

Overall the results indicate that smoking and cessation is reinforced at three levels; physiological, psychological and social with this group of smokers and ex-smokers. The findings revealed that the pregnancy itself was the trigger in encouraging these women to give up smoking. However for a small group of women psychosocial stress and enjoyment of smoking was associated with relapsing back to smoking. All of the participants who relapsed, live with or socialise with smokers. In contrast, pregnant and postpartum women who maintain their quit attempts implemented a smoking ban in their living environment to avoid relapsing and to protect their children from the dangers of passive smoking. Based on the findings of the current study, as part of an intervention to help pregnant smokers give up, an important part could focus on implementing a ban in the living environment. The majority of participants mentioned that receiving support from a pregnancy counsellor was beneficial in helping them give up smoking. This current study has suggested the level of support needed to give up smoking during pregnancy and provides support for these interventions to be continued postpartum. Examining participants' perception of service delivery and how interventions are tailored to pregnant smokers' characteristics, may aid in increasing the effectiveness of services currently being provided.

Coping strategies were discussed by the majority of participants in the present study as a way of avoiding smoking. With the help of their counsellor, participants were able to develop these coping strategies and use them in high risk situations such as socialising with smokers and habitual triggers for smoke. Exploring in depth how coping strategies are used for certain situations has increased our knowledge of the determinants of cessation. The results also revealed how coping strategies changed over a period of time from the initial quit attempt and then after the birth of the baby.

Participants discussed aspects such as maintaining a ban on smoking within their living environment, taking each day as it comes, stages of quitting and breastfeeding as influential factors in how they managed not to smoke. These accounts of how pregnant and postpartum women used coping strategies to maintain cessation should be considered in the development and evaluation of future smoking cessation interventions for this group of smokers. Previous research has explored how pregnant smokers managed to abstain from cigarettes during pregnancy and relapsed back to smoking shortly after the birth of the baby. From the accounts of the participants it suggests that their main reason for quitting appears to be, to protect the developing foetus. Not employing coping strategies and wanting to give up smoking for their own health they could be as vulnerable to relapse postpartum as people who have just started their quit attempts despite many months of cessation. Working through why you smoke and reasons for giving up smoking, identifying triggers to smoke and developing coping strategies could be seen as factors involved with lifelong cessation.

The findings revealed that relapse occurred after several episodes of intermittent smoking and was linked to stress, enjoyment of smoking and socialising with smokers. One novel finding was that three participants' smoking behaviour had changed since relapsing postpartum, for example they smoked outside of their living environment. For these participants, since receiving support for their quit attempt, they are more aware of the implications of passive smoking around young children.

This study highlights the challenges pregnant smokers go through in giving up smoking and in maintaining cessation and how addictive smoking is during pregnancy and the postpartum period. The findings of this study should be used to design future interventions for pregnant smokers.

2.8 Discussion

Research participants in the present study were able to report a variety of reasons on why they gave up smoking and how they maintain cessation during pregnancy. Pregnant smokers and postpartum women constructed narratives to explain their relapse back to smoking.

2.8.1 Postpartum women who gave up in pregnancy and maintain cessation postpartum (Group 4).

Postpartum women who gave up during pregnancy and maintained cessation postpartum discussed how becoming pregnant was a trigger event in which to give up smoking. Their own morals would not allow them to continue smoking during pregnancy. These results are similar to previous research where the rationale for giving up smoking was found to originate either from their own reasons for giving up smoking or because of becoming pregnant and concerns for the baby's health (Stotts et al., 1996). Practical implications to include in interventions when helping pregnant women give up smoking should focus both on the intrinsic reasons for stopping smoking such as "why they want to give up smoking now" and extrinsic factors such as the "actual pregnancy" as both of these play a important part in giving up smoking.

Other peoples' morals seem to be important for some of the participants in this group on smoking for example, "if you smoke around your children in the school environment you will be criticise." Participants voiced how other peoples' smoking behaviour had an effect on them, such as family members smoking outside the home environment and how this was seen as unacceptable. This shows the huge impact smoking has on the person's social context. The model, Stages of Change reflects on how people move through various cognitive processes such as contemplation and maintenance, which implies the social and the living environment is not considered.

Therefore the social context and the living environment where people are exposed to other people's smoking behaviour should be considered in the initial consultation of a smoking cessation intervention. One participant expressed how smokers do not understand the seriousness of giving up smoking and the addictive nature of smoking. From this statement it poses many arguments, should smokers be made aware of their nicotine addiction, will this have an impact on reducing the prevalence of smoking.

A few of the participants reported on the effectiveness of receiving counselling sessions in increasing their knowledge of the dangers of smoking during pregnancy and around young children. One participant commented on her own personal childhood experiences of passive smoking. This has important clinical implications as people will develop a rapport and trust with the pregnancy counsellor over a period of time. Research has revealed the reliability of the source of information they receive is important when deciding how truthful the facts are (Arborelius, 1996). If both the person's and the counsellor's perspective is of equal importance and opportunities are given for reflection on personal experiences and anecdotal accounts as well as on evidence-based knowledge, a rapport can be developed and health information may be processed and used as a focal point for action in achieving cessation (Abrahamsson et al., 2005).

Postpartum women in this study recalled their experiences of giving up smoking and felt that it had to be the right time to give up smoking as otherwise it could be a fruitless attempt at changing their smoking behaviour. This has been found in previous research where midwives identify that individual patients must be 'ready to change' their smoking behaviour before seeking any professional help (Bull & Whitehead, 2006). Habitual cues and being stressed was found to be strongly associated with smoking. It is important to emphasise how to cope with stress and habitual cues without resorting to smoking. Similar sentences were used to illustrate the difficulties faced in giving up smoking and not wanting to smoke one cigarette as this would be seen as a failed attempt at giving up smoking. This shows how powerful the nature of nicotine addiction is. Addiction and the habitual nature of cigarettes were discussed by all of the participants in this group.

Postpartum women explored the meaning of smoking held for them and understanding their triggers to smoke such as stress, reaching for a lit cigarette and drinking alcoholic beverages. If people can identify their cues involved in pushing them towards smoking, then coping strategies can develop and be used instead of relapsing back to smoking. With regards to recognising the meaning of smoking, the goal here is to focus on the woman's movement towards reflection on the meaning of smoking, and feelings of control (Abrahamsson et al., 2005). Attitudinal/cognitive change has been recognised as an important precursor to cessation and maintenance (Diclemente et al., 1985).

It is crucial that participants first identify why they smoke e.g. is it enjoyment, addiction, peer pressure or seen 'as the norm' to smoke and then changed their thoughts/attitudes on smoking and the final stage would be to explore their reasons for giving up smoking as they would stand a better chance at becoming a non-smoker and maintaining cessation. This captures the true essence of how addiction is related to the cognitive and social aspects of smoking.

All of the participants had maintained their cessation attempt during pregnancy and in the postpartum period for the duration of a year or longer. Coping with cessation was explained in terms of wanting and needing to be healthy. Participants could see the advantages of giving up smoking such as enjoying better health outcomes and protecting your health by not smoking. This may be one of the important parts to include in an intervention as smokers may want to see immediate health effects of giving up smoking for example, what are they gaining by giving up smoking.

One participant felt very vulnerable after the birth of her child and was worried about relapse but soon discovered her time was taken up with adjusting to becoming a mother for the first time. Four of the participants noticed the effects of implementing a full no smoking ban in the living environment extending this ban to family and friends visiting them at home.

This is seen as crucial as having one or more smokers in the house; particularly a partner has been researched frequently and found it to predict the return to smoking after the birth (Dolan-Mullen, 2004). Making the house smoke-free, smokers are four times more likely to make a quit attempt compared with living in a house with no smoking restrictions (Farkas et al., 2000). Results suggest that restrictions on smoking in the home protect the health of the occupants, increase quit attempts and reduces the uptake of smoking by young people (ASH, 2006). Participants discussed the benefits of living in a smoke-free house such as protecting their children from second-hand smoke and the house smelling fresher. Banning it in the house once they give up smoking is seen as a protective measure as most of the relapse postpartum occurs directly after the birth.

Interventions that shift the focus on the woman's health in late pregnancy and also include the dangers of smoking postpartum around infants should be included in counselling sessions when helping pregnancy women maintain their cessation in the postpartum period. Two of the participants cope with not smoking in the early days of their quit attempt by avoiding high risk situations such as being near smokers and avoiding all people they knew that smoked. One of them mentioned how the UK legislation of the smoking ban had just come into effect; these findings are in contrast to previous findings where avoidance of high risk situations was associated with high risk of relapse postpartum (McBride et al., 1992). The differences in the findings could be a number of reasons such as greater awareness of the dangers of smoking during pregnancy in the last fifteen years and support being continued to be offered to the ex-smokers in this current study postpartum.

Benefits of cessation included the following acute sense of smell and being aware of the smell of smoke on smokers and how this contributed to maintaining cessation. Other influencing factors were thinking about how much money is saved by not smoking and how smoking is seen as a waste of money. One novel finding from this research was how one participant was made to feel guilty by her son in the early stages of her pregnancy and this guilt made her give up smoking and maintain her cessation in the postpartum period.

This shows how children today are much more aware of the dangers of smoking and hopefully these thought process may encourage youngsters from taking up smoking. Recent research has shown how living in a smoke-free house has reduced the probability of young people starting to smoke (ASH, 2006). In recent years various Department of Health campaigns have been instrumental in increasing awareness of the adverse effects smoking contributes to people's health. There have been a lack of campaigns directed at mothers with young children apart from one poster quote as saying "if you smoke I smoke" showing a baby breathing smoke. This does not show the psychological and physical aspects of smoking, the meaning of smoking involved for the woman. It just increases the guilt and anxiety they may feel by continuing to smoke during pregnancy. A few of the participants experienced guilt so it can be beneficial in achieving behavioural change.

Support from the counsellor emerged as a promising theme, participants felt comfortable with the counsellor and during the sessions problems were solved. In the interim period between visits participants would receive text messages which they all found helpful in boosting motivation at maintaining cessation. The quotes from the participants illustrate they felt supported in their quit attempt and felt the service was very informal and could contact the counsellor if they had any concerns over any aspects of their quit attempt. A recent study revealed the majority of pregnant women and mothers with young children felt that smoking cessation interventions for pregnant women were clinically effective (Bull et al., 2008). Previous research has found smoking cessation interventions for pregnant women are effective in achieving cessation during pregnancy (Lumley et al., 2004).

One reason why these women maintained cessation could be because the interventions were conducted in an open, friendly and non-judgemental way that allowed them to apply the information to their personal circumstances and quit with the aid of the counsellor using evidence-based information. Counselling sessions for pregnant and postpartum women needs to be personalised through one-to-one consultation.

All of the participants felt they received support from their partner, family and friends to give up smoking. Their family and friends would smoke in another room or smoke outside in the garden. Another novel finding which supports previous results of how vulnerable women feel in the postpartum period is the need for a support group that they could attend after the birth of their baby, this was expressed by two participants for example somewhere you go and talk to people in similar circumstances and feel that you could discuss the topic of smoking and not be looked at strangely for doing so.

This shows how support needs to be continued in the postpartum period as there are many transitional stages women go through after the birth of their infants such as establishing a routine for the child, smoking behaviour of others may be more relaxed (smoking in the same room as the postpartum woman), old habits returning such as drinking alcohol and consuming beverages with caffeine, breast feeding, socialise with friends who are smokers which could possible increase the likelihood of postpartum relapse.

A draft scope of new guidance on how to stop smoking during pregnancy and to maintain cessation post partum is being developed (NICE, 2009). Interventions will be assessed to see if they are cost effective in helping women stay quit postpartum and quit for the duration of pregnancy (NICE, 2009). Coping strategies used in pregnancy by the participants in this study were; becoming aware of the dangers of smoking during pregnancy, using NRT, and eating a healthy diet. Three of the participants discussed how breast feeding was used as a protective measure to maintain cessation in the postpartum period. One novel finding was, one of the participants mentioned how finding excuses not to smoke was instrumental in maintaining cessation such as becoming pregnant, having the baby, breast feeding and finally it is nearly two years why would you start smoking again? The participant then went onto say how she always thought of the expression do anything but smoke when she craved a cigarette. Findings such as these revealed how cognitive coping strategies can be used in decreasing the likelihood of relapsing back to smoking in the postpartum period.

Further research has shown that smokers who employ more than one coping strategy when confronted with a high risk situation are less likely to smoke (Curry, Marlatt, Gordon, & Baer, 1988). The last theme in this study was identified by one participant as the need to take charge of the smoking and then ultimately giving up smoking. The participant reflected it was her choice to give up smoking. Smoking became a necessity that needed to be taken charge of as a prerequisite for cessation. This is in line with previous research where smoking is seen as a constraint that needs to be taken control of and linked to smoking cessation (Abrahamsson et al., 2005).

As attitudinal change increases the likelihood of cessation, another novel finding from this study revealed smoking cigarettes became re-labelled as a drug rather than a habit. The participant observed people on the street smoking and thought of it as a drug they are taking there and then on the street. One conclusion from this statement could be, before the UK smoking ban was established smoking could have been seen as a socially acceptable drug however now restrictions are in place to protect people from the adverse effects of second hand smoke. It shows how the participant has become more conscious of her smoking and observed her reasons as to why she smokes. This is an important stage people need to go through to reach the ultimate goal of becoming a non-smoker.

2.8.2 Cessation during pregnancy (Group 3)

This group consisted of pregnant women who set a quit date in pregnancy and had two to three months or longer of not smoking. This group of participants felt they needed to prepare themselves for their quit day such as gradually reducing their cigarette consumption. Participants used this approach 'cutting down' during their pregnancy and the majority of them managed to give up smoking using this approach. This was a useful way for one participant who reported losing the desire to smoke as the taste of cigarettes became unpleasant. Health education surveys have asked women to rate the importance of lifestyles changes during pregnancy and found stopping or cutting down on smoking was consistently seen as the most important lifestyle change (Owen & Penn, 1999).

Fortunately for these three participants, this approach worked as a prerequisite to cessation. The one remaining participant in this group felt that reducing her cigarette consumption was not effective in achieving cessation and experienced intense cravings to smoke in the first trimester of her pregnancy. Two other participants also felt the intense desire to smoke. As the participants experienced cravings to smoke this could be because during pregnancy nicotine is metabolised more quickly during pregnancy and its half life is shorter during pregnancy despite the smoking habits remaining unaltered (Dempsey & Benowitz, 2002). Pregnant women will metabolise nicotine twice as fast than a female non-pregnant smoker and will smoke more cigarettes during pregnancy as physiological changes are taking place in pregnancy that increases their addiction to nicotine. Implications of these findings revealed how difficult it is to give up smoking during pregnancy.

Participants talked about the concept of preparing for quit day such as identifying why they smoked, cues/triggers to smoke and developing an action plan to quit smoking. This involved clearing the house of any smoking paraphernalia such as lighters, matches and ashtrays, replacing smoking with other activities and making the decision not to buy any more cigarettes. One participant specifically wanted to quit before being fourteen to sixteen weeks pregnancy as the adverse effects of smoking during pregnancy are increased after this gestation period. Research has indicated that smoking in utero is the single most preventable risk factor for still-birth and infant death, with cessation by sixteen weeks gestation reducing the incidence of still-birth by one-fourth and infant death by one-fifth (Wisborg et al., 2001).

Practical implications for this could be, asking pregnancy smokers when they would like to be quit by, then explaining the benefits of giving up smoking in their first trimester of pregnancy. Participants also felt that support from the counsellor and family was one of the contributing factors involved with maintaining cessation. Participants then mentioned the motivational aspects of using the carbon monoxide (CO) machine to verify self-reports of cessation and the benefits of using NRT. Carbon monoxide monitoring is currently the most cost-effective method of validating four-week quitters and verified self-reports of cessation (West et al., 2000).

In addition combining behavioural support with pharmacotherapy such as NRT increases a smoker's chances of successfully stopping by up to four times (West et al., 2000). All of the participants perceived that giving up smoking was a huge adjustment in their life and felt isolated when socialising with smokers and learning to cope with life without smoking, changing their routine and developing new habits. This has practical relevance when designing interventions for this group of women as it shows how crucial support is needed in the early days of giving up smoking.

It clearly reveals that smoking has become part of their life in terms of their social environment; attitudes and how habitual cues are associated with the desire to smoke for example drinking tea and smoking. Previous research has identified that pregnant women who avoid high risk situations are likely to return to smoking postpartum (McBride et al., 1992). Socialising with smokers may increase their chances of maintaining cessation after the birth of their baby and any health behaviour change may take up to six months to become routine (from pre-contemplation to change through to maintenance) and it may take several attempts before this behaviour is maintained over time (Prochaska et al., 1984).

It is crucial that interventions are on-going to enable cessation to be continued. One of the participants had to work through her ambivalence to identify why she was a smoker and to identify that smoking is not seen as the 'norm' where everyone is a smoker. Previous research has focused on the need for cognitive/attitudinal change to occur in order for the behavioural change to be successful (Diclemente et al., 1985). If ambivalence is not resolved then the main focus may be quitting for the baby and not seeing the health benefits they will gain from giving up smoking. Identifying their own needs to reflect on their smoking will enable them to move forward to life as a non-smoker.

One of the participants implemented a no smoking ban in her house and felt this was beneficial for herself and her children by not breathing in smoke in the living environment. All of the participants were able to vocalise the advantages of giving up smoking such as experiencing an acute sensitivity of the smell of smoke, easier to breathe and losing their smoker's cough.

One novel finding emerged such as three of the participants discussed how healthier they felt compared to smokers. When smokers give up they want to see how their health is improved by maintaining cessation for example, what are they gaining by giving up smoking. Sometimes when smokers give up smoking and experience nicotine withdrawal symptoms such as headaches, feeling depressed and gaining weight they may relapse. Including the positive advantages of cessation in an intervention and looking upon negative effects such as experiencing headaches once they have given up smoking as a short term side-effect it may be a useful first step in encouraging health behaviour change. Their own well-being was important and the well-being of the unborn child was also prominent although this happened gradually, for example when one of the participants felt her baby moved for the first time cessation became easier to maintain.

Also one of the participants was concerned about the dangers of smoking postpartum with relation to cot death. Research undertaken a few years ago found similar results where smoking cessation is natural in the context of pregnancy because of the need to protect the baby from the adverse effects of smoking during pregnancy (Abrahamsson et al., 2005). The aspect of not wanting your children to follow in your footsteps and start smoking was instrumental in wanting to give up smoking for one participant. The participant then reflected on how looking up to your parents as role models who smoke influenced the participant herself to start smoking and did not want this to happen to her own children.

Previous research identified the widespread effects of smoking has on the family as smokers face a 50% chance of premature death and they present a risk to the health of their children through passive smoking and role-modelling a extremely dangerous habit (Stanton, Martin, & Henningfield, 2005). There was a general consensus from all the participants that it is a very emotional experience when trying to give up smoking such as feeling guilty for smoking in the early stages of their pregnancies. Similar results that occurred in Group 4 such as participants' children making you feel guilty for smoking were experienced by one participant in this group. One of the participants did not feel supported in her quit attempt by her friends smoking around her after she had given up smoking.

This illustrates that the participant was very motivated to continue maintaining her quit attempt even though socialising with smokers. One of the participants discussed how setting a quit date was becoming a bit of issue for her and she did not find this conducive to giving up smoking. After a few quit dates had been set, a new option was tried just to quit on the day itself instead of seeing this date looming and becoming convinced that it was impossible to give up smoking. This approach to giving up smoking is something that all health care professionals need to bear in mind; that some people may quit smoking using a different technique to achieve the behaviour change. A sense of feeling proud of giving up smoking was experienced by two participants who then went on to classify themselves as non-smokers. When smokers give up there is often the initial novelty of becoming a non-smoker, it is something they can build on for maintaining cessation throughout the pregnancy.

Pregnant smokers are more prone to experiencing more complications with their pregnancies than pregnant non-smokers such as bleeding and miscarriage (BMA, 2004). The last participant to be interviewed in this group had a bleed in her pregnancy which was a wake up call in needing to quit smoking and gave her the incentive to give up smoking. One participant was concerned with relapsing and wished not to be in the same situation again. In this group of participants the topic of moods was discussed by one participant who observed changes in her moods since giving up smoking.

Several underlying mechanisms could perhaps explain the association of how emotions are involved with cessation such as pregnancy being seen as an exciting and emotional time in a woman's life where quitting smoking is often embedded in a context of other life changes. Smoking enhances the sense of well-being and is used as a tool to cope with negative mood or stressful experience (Zhu & Valbo, 2002). The change in moods discussed by the participant could be because her stress levels have decreased since giving up smoking or another valid reason could be because of the physiological and psychological changes taking place during pregnancy.

Similar findings occur in this group as well as occurring in Group 4 such as employing coping strategies to avoid smoking. Participants were able to give descriptive accounts of how they managed not to smoke such as eating and chewing gum, using NRT, socialising with non-smokers, taking deep breaths and taking time out. Research conducted with pregnant women and new mothers have indicated that strategies which provide time out for the women but do not conflict with the demands of caring for children are most appropriate (Oakley, 1989).

2.8.3 Postpartum women who set a quit date during pregnancy and maintain cessation and relapsed in the postpartum period (Group 1).

Pregnancy is a time when many women give up smoking with the goal of having a healthy baby. Unfortunately the majority of women resumed smoking after six months and about 80% one year postpartum (Colman & Joyce, 2003). Three to six months of abstinence for the typical non-pregnant quitter, when temptation to smoke decreases and relapse becomes less likely. Pregnant women in this study who stopped smoking during pregnancy appear to be as vulnerable to relapse postpartum as newly quit smokers. Participants mentioned they had always enjoyed smoking, experiencing cravings, episodes of intermittent smoking and triggers to smoke. From the quotes given by the participants it could be interpreted the return to smoking was because of feeling free to resuming an old activity such as smoking as it was suspended during pregnancy.

In addition it could be similar to the experiences of participants in one other qualitative study, nostalgia for one's old life (Bottorff et al., 2000). Reactivity to smoking related cues such as drinking alcohol and being reminded of cigarettes and socialising with smokers increased the likelihood of relapsing for this group of participants. Research has indicated the possibility of reactivity to smoking related cues may have been classically conditioned (Lazev, Herzog, & Brandon, 1999). Attention to cues that were suspended during pregnancy and may return postpartum need to be identified to see who is at risk of postpartum relapse. Caring for a newborn infant can be seen as a stressful time as factors involved with becoming a mother may increase the probability of postpartum smoking such as sleeplessness, stress and concern about losing the weight gained during pregnancy.

One participant experienced stress at night and cope with this by smoking more cigarettes at night than during the day. All of the participants said that the journey of going back to smoking started with intermittent episodes of smoking and two of the participants did not feel in control of their smoking as one cigarette turned into wanting to smoke again. Previous research has found similar results that most smokers have episodes of intermittent smoking rather than immediate progress back to full-time smoking (Shiffman et al., 1996). One finding which has implications of identifying who is at-risk of postpartum relapse has explored whether the return to smoking was planned or unplanned. All of the participants in this group returned back to smoking was unplanned. Participants gave reasons such as taking time out for themselves, novelty of becoming a non-smoker had worn off and returning to smoking a natural occurrence.

Therefore by identifying whether the resumption of smoking after delivery is planned or unplanned we can begin to prioritise these factors as being a causal link in smoking postpartum. Previous research specifically explored intention to resume smoking (IRS) in the post partum period using a sample of 301 women and found 39 (13%) intended to resume smoking with IRS proving to be the main predictor for relapse. (Roske et al., 2006).

These results are relevant as IRS might be seen as a marker for identifying postpartum women that need support and guidance for remaining smoke free in the postpartum period. All of the participants reflected that by relapsing there had been a change in their smoking behaviour such as not wanting to go back to smoking full-time, only smoking one or two a day and implementing a partial or full smoking ban in the living environment, restricting smoking to one room and not smoking one cigarette after another. Similarly other differences in their smoking behaviour postpartum was buying single cigarettes and not smoking roll-up cigarettes and creating a new identity as a smoker without cravings. Interpretation of these results could be denial of becoming a smoker again and trying to control their new smoking behaviour. These results are quite novel in the sense that not much is known about the journey of going back to smoking postpartum.

A quote from one participant revealed how giving up smoking was seen as a positive factor in your life and this was seen as the incentive to build on creating a new lifestyle. One of the participants felt quite strongly for support to be continued postpartum as she had relapsed after the birth of her first child and since becoming pregnant for the second time had realised the benefits of support in achieving cessation. The participant who gave birth to twins felt giving up smoking was an achievement to feel proud of and was disappointed that she had return to smoking postpartum. All of these statements show how support is still needed in the postpartum period as there are many triggers, cues and transitions occurring postpartum that could increase the probability of returning to smoking.

These findings highlight how there is an awareness of the dangers of smoking during pregnancy but not so much knowledge is known about the adverse effects of smoking around young children. This was revealed by one participant who felt that after the birth of her son he was healthy and she felt less worried about smoking near him. Unfortunately the infant developed asthma and the participant attributed it to smoking. This clearly shows how much is not known of the dangers of smoking around young children.

Interventions that include the dangers of passive smoking may give new parents an incentive not to return to smoking as cessation may be extended as a protective measure to protect infants from the dangers of smoking in the living environment. Health promotion campaigns need to focus on how dangerous it is to smoke around young children. Participants also reflected on how giving up during pregnancy had changed their smoking behaviour postpartum and how they never imagined they would smoke again. It was not until resuming an old activity such as consuming an alcoholic beverage that smoking a cigarette became a regular occurrence. The participant also mentioned that being exposed to her partner's cigarettes was a factor involved with relapsing.

Two of the participants revealed that they started smoking again when family members came to visit them. Living with one or more smokers in the household, in particular a partner has been thoroughly researched and found to facilitate the return to smoking after the birth and increases up to four times the odds that the new mother will return to smoking (Dolan-Mullen, 2004).

One participant explained giving up smoking during the pregnancy changed her smoking behaviour in the sense that she did not crave cigarettes during the pregnancy and postpartum and thought of herself as a social smoker, thus smoking only on rare occasions and being in control of her smoking habit. A few of the participants revealed motivation to stop smoking was because of their health and being pregnant. Research has shown how pregnancy and external factors such as social pressure, nausea and the baby's health are involved with achieving and maintaining cessation during the pregnancy however after the birth of the baby, attitudes and motivation may change. One possible way to avoid postpartum relapse is to test ways to strengthen women's intrinsic motivation and to frame quitting as a success that reflects a continuing cause (Dolan-Mullen, 2004).

Similar findings that occurred in the other groups were mentioned by one participant in this group, the benefits of not smoking such as the financial aspects of smoking. A participant in this group experienced a lot of guilt by smoking in the early stages of her pregnancy and in the postpartum period such as feeling frightened with not being able to cope with the birth or the babies and that smoking would make her life shorter. This was mentioned by one of the participants in Group 4 how guilt is associated with smoking during pregnancy, thus it shows how emotions are involved with smoking and the prospect of returning to smoking could affect their emotional well-being.

Experiencing a sense of freedom after giving birth was one aspect of a participant return to smoking and how smoking is used as a coping mechanism to cope with life stressors were revealed by two of the participants. The emotional aspects of smoking during pregnancy and post partum merits more investigation as many new mothers may feel overwhelmed in the postpartum period to cope with all the changes involved with caring for a newborn infant. Participants also expressed their points of views on wanting to protect their child during pregnancy and the postpartum period such as not wanting people to smoke near their children because they were so small and vulnerable.

Participants seem knowledgeable on the dangers of smoking during pregnancy and one participant felt it was easy to give up smoking knowing she had a baby developing and growing inside her. In conclusion how to evolve pregnancy cessation into lifelong cessation must be address in interventions and research for postpartum women. The findings from this study gave an insight into the journey of postpartum relapse back to smoking.

2.8.4 Pregnant women who set a quit date and then relapsing back to smoking during their pregnancy (Group 2).

Physical, psychological addiction to cigarettes and psychosocial stress are the main motives for continuing to smoke during pregnancy (Haslam & Draper, 2001). Two of the participants felt stress; the pressure of giving up and the pleasurable affects of smoking were involved with relapsing back to smoking during their pregnancies.

Research in the 1990's found relapse is often associated with particular situations where the behaviour has been enacted in the past or with situations involving stress (West, 1991). One of the participant's quotes may illustrate that they did not really want to give up smoking but may have because of pressure from others. The participant discussed still enjoying cigarettes and smoking to relieve boredom. Previous research has identified women smoke to relieve boredom (Bauld, Wilson, Kearns, & Reid, 2007). Becoming upset, disappointment in yourself and finding it hard to give up during pregnancy were commonly cited experiences. Participants felt that they had let themselves down by continuing to smoke during their pregnancies. These results are similar to previous findings in this study experienced by other participants such as showing how emotions are involved with all aspects of smoking. Facing the difficulties of trying to stop and meeting up with friends who smoked was experienced by one of the participants.

One participant who was pregnant with her second child thought pregnancy would motivate her into giving up smoking and one interesting finding from her revealed her concern for her other child and how the smoking behaviour had changed such as smoking near a window or outside and not smoking in the house with closed windows after the birth of her first child.

Previous research identified similar results where postpartum women took active steps towards to reduce or prevent smoking in the presence of the baby (Bauld et al., 2007). Will-power and motivation was identified by all of the participants in this group as factors involved with giving up smoking. Similar findings from another qualitative research study indicated that 'willpower' was needed to quit (Hotham, Atkinson, & Gilbert, 2002). One of the participants was aware of her relapse and discussed how she smoked throughout her first pregnancy and expressed ambivalence over whether she really wanted to give up smoking. Research has identified that ambivalence towards giving up smoking needs to be worked through to achieve the behaviour change as otherwise cessation may not be achieved. Reducing cigarette consumption was used as a rationale for continuing to smoke during pregnancy by one participant in this group.

Furthermore the participant revealed how guilt was involved with continuing to smoke as awareness of the adverse effects of smoking during pregnancy is known. The participants in this study used smoking as a way of coping with stress and boredom and smoking was seen as a pleasurable activity. In some of the quotes it illustrates that smoking was seen as being separate from their pregnancies. This has practical implications for those working with pregnant women who stop smoking temporarily, such as helping them shift their reasons for stopping from the baby to themselves. Focusing on how to develop skills to deal with high-risk situations such as experiencing stress is crucial to avoid relapsing back to smoking.

This would include how to handle cravings, and normalizing and assisting women to handle 'slips' (smoking one or two cigarettes on separate occasions) successfully. High risk situations that warrant attention could be learning how to cope with the physiological aspects of giving up smoking and developmental transitions experienced during pregnancy. The general consensus of the participants in this group identified that coping strategies that helped them not to smoke and factors that may have prevented them not relapsing, such as keeping busy and something they enjoy doing.

One participant mentioned how if she was worked, she may have reduced her cigarette consumption and gradually achieved cessation. These results are similar to previous findings in this study and have practical relevance when designing any interventions as women can identify high risk situations relevant to their personal and social circumstances. One of the participants explained relapse occurred which involved episodes of smoking intermittently before eventually liking the taste and it was a few weeks before going back to smoking full-time.

Another participant managed to give up for a week and then relapsed back to smoking full-time and mentioned going into rehab would be beneficial. Perhaps this is one unique approach of giving up cigarettes; a period of isolation away from all the triggers and cues involved with smoking.

The participants discussed how many cigarettes were lit in certain situations and how these situations acted as triggers for them to smoke. Even though participants had relapsed, they were useful informants on how support from their counsellors had helped them not smoke such as being encouraged and receiving praise, thus emphasising the benefits of support when giving up smoking.

Benefits of short-term cessation included feeling proud for giving up and feeling supported in their quit attempt, this finding was identified by participants in different groups in this study. Participants were asked to think of reasons to quit and one participant wanted to give up smoking to feel healthier and for her children and went onto to say smoking is an expensive habit. In contrast the remaining participant in this group explained how being diagnosed with cancer would be the incentive needed to give up smoking. In conclusion, these findings illustrate how guilt plays a part in continuing to smoke during pregnancy and facing the difficulties of trying to stop and stay stopped while other friends and family continued to smoke around them.

2.9 Limitations of this study

There are certain limitations of this study. The sample of ex-smokers, pregnant smokers and postpartum women who relapsed cannot be representative of these groups of women in the UK. Nonetheless, the aim was not to study prevalence of smoking and cessation but rather to explore their thoughts, feelings and attitudes around cessation and smoking and additionally to explore their experiences with service delivery. The semi-structured interviews schedules employed in this study may inform the design and development of quantitative questionnaires to explore this topic with bigger sample sizes.

After reflecting back on the results, one limitation of the study is that it does not measure the partners' smoking behaviour as this is the most important facilitator that has bearing on women relapsing during pregnancy and postpartum. It would be interesting to research how support may change after the birth of the infant and whether smoking constraints that were implemented for the duration of pregnancy change postpartum.

While there are many positive features to this study, results should be viewed with a degree of caution as replication of these findings in other populations are needed.

2.9.1 Conclusion

This study has shown that interventions designed to promote cessation during pregnancy and continue postpartum are effective. It has shown how interventions are sensitive to the needs of the pregnant smoker; take into account the psychological and social factors involved with smoking. The intervention and counselling the women received, identifying triggers and cues to smoke, developing coping strategies and understanding why they smoke was a useful way in developing attitudinal change as a precursor involved with commencing the behaviour change and maintaining cessation. It has given further insight into the psychological change processes underlying the effectiveness of these interventions and those changes that are important in successful giving up smoking. These results could be used as a guideline for designing theory-based interventions and this may improve effectiveness and cost effectiveness for pregnant women and postpartum women who wish to give up smoking.

Additionally women who smoke during pregnancy or reduce their cigarette consumption may be receptive towards to quitting in the postpartum period and this might be an opportunity to encourage cessation. Other results reveal how women experienced guilt when smoking and how for some this influenced them to give up smoking. Findings of the study have been replicated in previous research however there are some novel findings such as participants' children making them feeling guilty during the early stages of the pregnant.

Results have shown how participants are aware of the dangers of smoking during pregnancy and postpartum and how participants feel that support is still needed in the postpartum period in terms of a support group where they can discuss their experiences of giving up smoking.

Novel findings such as maintaining cessation postpartum by working through various stages to continue life as non-smoker, reveals the struggle involved with maintaining cessation and how the stages such as breast-feeding, taking each day as it comes can be useful when designing any interventions for this group of women. Consulting with fourteen women from all different stages of cessation and pregnant and postpartum smokers has given a valuable insight into smoking, relapsing back to smoking and cessation.

2.10

References

Abrahamsson, A., Springett, J., Karlsson, L., & Ottosson, T. (2005). Making sense of the challenge of smoking cessation during pregnancy: a phenomenographic approach. *Health Education Research*, 20, (3), 367-378.

Action on Smoking and Health. (2005). *Nicotine Replacement Therapy: Guidance for Health Professionals on changes in the licensing arrangements for nicotine replacement therapy*. London. Action on Smoking and Health.

Action on Smoking and Health. (2006). *Second-hand smoke: The impact on children*. London. Action on Smoking and Health.

Action on Smoking and Health (2008) *Beyond Smoking Kills: Protecting Children, Reducing Inequalities*. London: Action on Smoking and Health.

Adams, E., Solanki, G., & Miller, I. (1995). Medical care expenditures attributable to cigarette smoking during pregnancy. *JAMA*, 278, 2058-2059.

Arborelius, E. (1996). Using doctor-patient communication to affect patients' lifestyles: theoretical and practical implications. *Psychology and Health*, 11, 845-855.

Armstrong, B.G., McDonald, A.D., & Sloan, M. (1992). Cigarette, alcohol and coffee consumption and spontaneous abortion. *American Journal of Public Health*, 82, 85 - 87.

Batten, L., Graham, H., High, S., Ruggiero, L., & Rossi, J. (1999). Stage of change, low income and benefit status: a profile of women's smoking in early pregnancy. *Health Education Journal*, 58, 378-388.

Bauld, L., Wilson, M., Kearns, A., & Reid, M. (2007). *Exploring reduction in smoking during pregnancy in Glasgow*. University of Glasgow.

Bliss, R. E., Garvey, A. J., Heinold, J. W., & Hitchcock, J. L. (1989). The influence of situation and coping on relapse crisis outcomes after smoking cessation. *Journal of Consulting and Clinical Psychology*, 57, (3), 443-449.

Bottorff, J. L., Johnson, J. L., Irwin, L. G., & Ratner, P.A. (2000). Narratives of smoking relapse: the stories of postpartum women. *Research in Nursing and Health*, 23, 126-134.

Boyce, T., Roberston, R., & Dixon, A. (2008). Commissioning and Behaviour Change: Kicking bad habits final report. London: The King's Fund.

British Medical Association. (2004). *Smoking and Reproductive Life: The impact of smoking on sexual, reproductive and child health*. London: British Medical Association Tobacco Control Resource Centre.

Buck, D., & Godfrey, C. (1994). *Helping smokers quit: guidance for purchasers on cost-effectiveness*. London: Health Education Authority.

Bull, L., Burke, R., Walsh, S., & Whitehead, E. (2007). Social attitudes towards pregnancy in East Surrey: A qualitative study of smokers, former smokers and non-smokers. *Journal of Neonatal Nursing*, 13, 100-106.

Bull, L., Burke, R., Walsh, S., & Whitehead, E. (2008). The perceived effectiveness of smoking cessation interventions aimed at pregnant women: A qualitative study of smokers, former smokers and non-smokers. *Journal of Neonatal Nursing*, 14, 72-78.

Bull, L & Whitehead, E. (2006). Smoking cessation intervention with pregnant women and new parents: A survey of health visitors midwives and practice nurses. *Journal of Neonatal Nursing*, 12, 209-215.

- Carmichael, S. L., & Ahluwalia, I. B. (2000). Correlates of postpartum smoking relapse: Results from the pregnancy risk assessment monitoring system. *American Journal of Preventive Medicine*, 19, 193-196.
- Chang, A. B. (2003). Altered arousal response in infants exposed to cigarette smoke. *Archives of Disease in Childhood*, 88, 30-33.
- Colman, G. J., & Joyce, T. (2003). Trends in smoking before, during and after pregnancy in ten states. *American Journal of Preventative Medicine*, 24 (1), 29-35.
- Cohen, S., & Lichtenstein, E. (1990). Partner behaviours that support quitting smoking. *Journal of Consulting and Clinical Psychology*, 58, 304-309.
- Copeland, L. (2003). An exploration of the problems faced by young women living in disadvantage circumstances if they want to give up smoking: can more be done at general practice level. *Family Practice*, 20, 393-400.
- Copper, R. L., Goldenberg, R. L., Dubard, M. B., & Davis, R.O. (1994). Risk factors for foetal death in white, black and Hispanic women. *Obstetrics and Gynaecology*, 84 (4), 490-495.
- Cooper, P. J., & Murray, L. (1998). Postnatal Depression. *British Medical Journal*, 316, 1884-1886.
- Counsilman, J. J., & Mackay, E. V. (1985). Cigarette smoking by pregnant women with particular reference to their past and subsequent breast feeding behaviour. *Australia and New Zealand Journal of Obstetrics Gynaecology*, 25, 101-107.
- Curry, S. J., Grothaus, L., McBride, C., Lando, H., & Pirie, P. (2001). Motivation for Smoking Cessation among Pregnant Women. *Psychology of Addictive Behaviours*, 15, (2), 126-132.

Curry, S. J., Marlatt, G. A., Gordon, J., & Baer, J. S. (1988). A comparison of alternative theoretical approaches to smoking cessation and relapse. *Health Psychology*, 7 (6), 545-556.

Curry, S. J., & McBride, M. (1994) Relapse prevention for smoking cessation: Review and evaluation of concepts and interventions. *Annual Review of Public Health*, 15, 345-366.

Dempsey, D.A., & Benowitz, N. L. (2001). Risks and benefits of nicotine to aid smoking cessation in pregnancy. *Drug Safety*, 24, 277-322.

Dempsey, D., Jacob, P., & Benowitz, N. L. (2002). Accelerated Metabolism of nicotine and cotinine in pregnant smokers. *The Journal of Pharmacology and Experimental Therapeutics*, 301, 594-598.

Department of Health (1998) *Smoking Kills: A White Paper on Tobacco*. London: Stationery Office.

Department of Health (2000) *The NHS Cancer Plan. A Plan for Investment*. London: Stationery Office.

Department of Health (2004). *National service framework for children, young people and maternity services*. London: Department of Health.

Department of Health, Social Services and Public Safety (2006) *Infant Feeding Survey 2005: Early Results*. London: The Information Centre.

Department of Health. (2007). *Reducing smoking pre-conception, during pregnancy and postpartum: Integrating high impact actions into routine healthcare practice*. London, Stationery office.

Department of Health (2008). *Smoking at time of delivery 2008/09*. London:

Diclemente, C., Dolan-Mullen, P., & Windsor, R. (2000). The process of pregnancy smoking cessation: implications for interventions. *Tobacco control*, 9, 16-22.

Diclemente, C. C., Prochaska, J. O., Fairhurst, S. K., Velicer, W. F., Velasquez, M. M., & Rossi, J. S. (1991). The process of smoking cessation: An analysis of precontemplation, contemplation, and preparation stages of change. *Journal of Consulting and Clinical Psychology*, 59, 295-304.

Diclemente, C. C., Prochaska, J. O., & Gibertini, M. (1985). Self-efficacy and the stages of self change of smoking. *Cognitive Therapy and Research*, 5, 181-200.

Dolan-Mullen, P. (2004). How can more smoking suspension during pregnancy become lifelong abstinence? Lessons learned about predictors, interventions, and gaps in our accumulated knowledge. *Nicotine and Tobacco Research*, 6 (2), 217-238.

Donatelle, R. J., Prows, S. L., Champeau, D., & Hudson, D. (2000). Randomised controlled trial using social support and financial incentives for high risk pregnant smokers: Significant other supporter (SOS) programme. *Tobacco Control*, 9, (3), 11167-11169.

Edwards, N., & Sims-Jones, N. (1998). Smoking and smoking relapse during pregnancy and postpartum: results of a qualitative study. *Birth*, 25, 94-100.

Elmwood, P. C. (1987). Growth of children for 0-5 years: with special reference to mothers smoking in pregnancy. *Annals of Human Biology*, 14, 543-557.

Ershoff, D. H., Solomon, L. J., & Dolan-Mullen, P. (2000). Predictors of intentions to stop smoking early in prenatal care. *Tobacco Control*, 9, 41-45.

Fang, W. L., Goldstein, O. A., Butzen, A. Y., Hartsock, S.A., Hartmann, K.E., Helton, M., . . . Lohr, J. A. (2004). Smoking cessation in Pregnancy: A review of postpartum relapse prevention strategies. *The Journal of the American Board of Family Practice*, 17, 264-275.

Farkas, A., Gilpin, E., White, M., & Pierce, J. (2000). Association between household and smoking restrictions and adolescent smoking. *JAMA*, 284, 717-722.

Floyd, R. L., Rimer, B. K., Giovino, G. A., Mullen, P. D., & Sullivan, S.E. (1993). A review of smoking in pregnancy: Effects on pregnancy outcomes and cessation efforts. *Annual Review of Public Health*, 14, 379-411.

Froen, J. F., Arnstead, M., Frey, K., Vege, A., Saugstad, O. D., & Stray-Pedersen, B. (2001). Risk factors for sudden intrauterine unexplained death: Epidemiologic characteristics of singleton cases in Oslo, Norway, 1986-1995. *American Journal of Obstetrics and Gynaecology*, 184 (4), 694-702.

Garcia-Algar, O., Puig, C., Mendez, C., Vall, O., Zuccaro, P., Pacifici, R., . . . Pichini, S. (2001). Neonatal nicotine withdrawal syndrome. *Journal of Epidemiology and Community Health*, 55, 687-688.

Gillepsie, J., Milne, K., & Wilson, N. (2005). Second-hand smoke in New Zealand homes and cars: exposure, attitudes, and behaviours in 2004. *Journal of the New Zealand Medical Association*, 118, (1227).

Gillies, P. A., Madeley, R. J., Power, L., & Symonds, E. M. (1989). Nottingham Mothers Stop Smoking Project: Baseline survey of smoking in pregnancy. *Community Medicine*, 11, 124-130.

Graham, H. (1989). Women's smoking and family health. *Social Science and Medicine*, 25, 47-56.

Graham, H., & Der, G. (1999). Patterns and predictors of smoking cessation among British Women. *Health Promotional International*, 14, 3, 231-240.

Goedhart, G., Van der Wal, M., Cuijpers, P., & Bonsel, G. (2009). Psychosocial problems and continued smoking during pregnancy. *Addictive Behaviours*, 34, 403-406.

Hackman, R., Kapur, B., & Koren, G. (1999). Use of the nicotine patch by pregnant women. *New England Journal of Medicine*, 341, 1700.

Hajek, P., Stead, L. F., West, R., Jarvis, M., & Lancaster, T. (2009) Relapse prevention interventions for smoking cessation (Review). *The Cochrane Database of Systematic Reviews*, Issue 1. Art No: CD003999.

Hajek, P., West, R., Lee, A., Foulds, J., Owen, L., & Eiser, J. R. (2001) Randomized controlled trial of a midwife-delivered brief smoking cessation intervention in pregnancy. *Addiction*, 96 (3), 485-494.

Hannover, W., Thyrian, J. R., Roske, K., Grempler, J., Rumpf, H. J., John, U., . . . Hapke, U. (2009). Smoking cessation and relapse prevention for postpartum women: Results from a randomized controlled trial at 6, 12, 18 and 24 months. *Addictive Behaviours*, 34, 1-8.

Haslam, C., & Draper, E. S. (2001). A qualitative study of smoking during pregnancy. *Psychology, Health and Medicine*, 6, (1) 95-99.

Haslam, C., Draper, E. S., & Goyner, E. (1997). The pregnant smoker: a preliminary investigation of the social and psychological influences. *Journal of Public Health Medicine*, 19, 187-192.

Haug, K., Aaro, L. E., & Fugelli, P. (1992) Smoking habits in early pregnancy and attitudes towards smoking cessation among pregnant women and their partners. *Family Practice*, 9, 494-499.

Haywood, A., MacAskill, S., & Eadie, D. (1993). Smoking in pregnancy. Centre for Social Marketing, Strathclyde University.

Health Development Agency (2005). Smoking Low Income and Health Inequalities.

Hoffman, S., & Hatch, M. (2000). Depressive symptomatology during pregnancy: Evidence for an association with decreased foetal growth in pregnancies of lower social class women. *Health Psychology*, 19, 535-543.

Hotham, E. D., Atkinson, E. R., & Gilbert, A. L. (2002). Focus groups with pregnant smokers: barriers to cessation, attitudes to nicotine patch use and perceptions of cessation counselling by care providers. *Drug and Alcohol review*, 21, 163-168.

Hymowitz, N., Schwab, M., McNerney, C., Schwab, J., Eckholdt, H., & Haddock, K. (2003). Postpartum relapse to cigarette smoking in inner city women. *Journal of the National Medical Association*, 95, 461-474.

Isohanni, M., Oja, H., Moilanen, I., Koironen, M., & Rantakallio, P. (1995). Smoking or quitting during pregnancy: association with background and future social factors. *Scandinavian Journal of Social Medicine*, 23, 32-38.

Jochelson, K. (2007). *Paying the patient: Improving health using financial incentives*. London: The King's Fund.

Johnson, J. L., Ratner, P. A., Bottorff, J. L., Hall, W., & Dahinten, S. (2000). Preventing Smoking Relapse in Postpartum Women. *Nursing Research*, 49, (1), 44-52.

Kenford, S. L., Fiore, M. C., Jorenby, D. W., Smith, S. S., Wetter, D., & Baker, T. B. (1994). Predicting smoking cessation: Who will quit with and without the nicotine patch. *Journal of the American Medical Association*, 27, 589-594.

Kyrklund-Bloomberg, N.B., Gennser, G., & Cnattingius, S. (2001). Placental abruption and perinatal death. *Paediatric and Perinatal Epidemiology*, 15 (3), 290-297.

Law, K. L., Stroud, L. R., LaGasse, L. L., Niaura, R., Liu, J., & Lester, B. M. (2003). Smoking during pregnancy and Newborn Neurobehaviour. *Pediatrics*, 111, 6, 1318-1323.

Lawrence, T., Aveyard, P., & Croghan, E. (2003). What happens to women's self-reported cigarette consumption and urinary cotinine levels in pregnancy. *Addiction*, 98, 1315-1320.

Lazev, A. B., Herzog, T. A., & Brandon, T. H. (1999). Classical conditioning of environmental cues to cigarette smoking. *Experimental and Clinical Psychopharmacology*, 7, 56-63.

Lendahls, L., Ohman, L., Liljestrand, J., & Hakansson, A. (2002). Women's experiences of smoking during and after pregnancy as ascertained two to three years after birth. *Midwifery*, 18, 214-222.

Lesa, L., Woodby, R. A., Windsor, R., Scott, W., Synder, C. L., Kohler, S., . . . Diclemente, C. (1999). Predictors of smoking cessation during pregnancy. *Addiction*, 94, 283-292.

Levine, M. D., & Marcus, M. D. (2004). Do changes in mood and concerns about weight relate to smoking relapse in the postpartum period? *Archives of Women's Mental Health*, 7, 155-166.

- Levine, M. D., Marcus, M. D., & Kalarchian, M.A. (2006). Weight concerns affect motivation to remain abstinent from smoking postpartum. *Annals of Behavioural Medicine*, 32, (2), 147-153.
- Lumley, J., Oliver, S., & Oakley, L. (2004). Interventions for promoting smoking cessation during pregnancy. *The Cochrane Database of Systematic Reviews*, Issue 4. Art. No.: CD001055.
- Marlatt, A., & Donovan, D.M. (2008). *Relapse prevention: maintenance strategies in the treatment of addictive behaviours*. New York: Guildford Press.
- McBride, C. M., Grothaus, L. C., Nelson, J. C., Lando, H., & Pirie, P. L. (1998). Partner smoking status and pregnant smoker's perceptions of support for and likelihood of smoking cessation. *Health Psychology*, 17, 63-69.
- McBride, C. M., Pirie, P. L., & Curry, S. J. (1992). Postpartum relapse to smoking: A prospective study. *Health Education Research*, 7, 381-390.
- McNeil, A., Raw, M., Whybrow, J., & Bailey, P. (2005). A national strategy for smoking cessation treatment in England. *Addiction*, 100, 1-11.
- Meyer, M.B., & Tonasica, J. A. (1977). Maternal smoking, pregnancy complications and perinatal mortality. *American Journal of Obstetrics and Gynaecology*, 128, 494-502.
- Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: preparing people to change addictive behaviour*. New York: Guildford Press.
- Mullen, P.D. (2004). How can more smoking suspension during pregnancy become lifelong abstinence? Lessons learned about predictors, interventions, and gaps in our accumulated knowledge. *Nicotine & Tobacco Research*, 6, (2), 217- 238.

Mullen, P.D., Pollak, K. I., & Kok, G. (1999). Success attributions for stopping smoking during pregnancy, self-efficacy, and postpartum maintenance. *Psychology of Addictive Behaviours*, 13, 198-206.

Mullen, P., Richardson, M., Quinn, V., & Ershoff, D. (1997). Postpartum return to smoking: who is at risk and when. *American Journal of health Promotion*, 11, 323-330.

Mullen, P. D., Quinn, V. P., & Ershoff, D.H. (1990). Maintenance of non-smoking postpartum by women who stopped smoking during pregnancy. *American Journal of Public Health*, 80, 992-994.

Murray, R. L., Bauld, L., Hackshaw, L. E., & McNeill, A. (2009). Improving access to smoking cessation services for disadvantaged groups: a systematic review. *Journal of Public Health*, 10, 1-20.

Naeye, R. L. (1980). Abruptio placenta and placental previa: Frequency, perinatal mortality, and cigarette smoking. *Obstetrics and Gynaecology*, 55 (6), 701-704.

Nash, J. E., & Persaud T. N. (1988). Embryopathic risks of cigarette smoking. *Experimental Pathology*, 33, 65-73.

National Institute for Health and Clinical Excellence (2008). *Smoking Cessation Services*.

Nau, H., Hansen, R., & Steldinger, R. (1985). Extent of nicotine and cotinine transfer to the human foetus, placenta and amniotic fluid of smoking mothers. *Developmental Pharmacology Therapy*. 8, 384-395.

Nice Institute for Health and Clinical Excellence (2009). *How to stop smoking in pregnancy and following childbirth: Quitting smoking in pregnancy and following childbirth (Draft Scope)*. London.

Nides, M., Rakos, R., Gonzales, D., Murray, R., Tashkin, D., Bjorn-Benson, B., Lindgren, P., . . . Connett, J. (1995). Predictors of initial smoking cessation and relapse through the first two years of the Lung Health Study. *Journal of Consulting and Clinical Psychology*, 63, 60-69.

NHS Health Scotland (2008). *Smoking Cessation Support in Pregnancy in Scotland*. Edinburgh: Health Scotland.

Nordstrom, M. L., & Cnattingius, S. (1994). Smoking Habits and birth-weights in two successive births in Sweden. *Early Human Development*, 37 (3), 195-204.

Oakley, A. (1989). Smoking in Pregnancy: smokescreen or risk factor? Towards a materialist analysis. *Society, Health and Illness*, 11, 311-335.

Oncken, C., Hatsukami, D. K., Lupo, V. R., Lando, H., Gibeau, L. M., & Hansen R.J. (1996). Effects of short-term use of nicotine gum in pregnant smokers. *Clinical Pharmacology and Therapeutics*, 59, (6), 654-661.

Owen, L., & McNeill, A. (2001). Saliva cotinine as indicator of cigarette smoking in pregnant women. *Addiction*, 96, 1001-1006.

Owen, L., & Penn, G. (1999). *Smoking and pregnancy: a survey of knowledge, attitudes and behaviour 1992-1999*. Health Education Authority. London.

Panjari, M., Bell, R. J., Astbury, J., Bishop S. M., Dalais, F., & Rice, G.E. (1997) Women who spontaneously quit smoking in early pregnancy. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 39, 312-317.

Paterson, J., Tukuitonga, C., Butler, S., & Williams, M. (2002). Awareness of sudden infant death syndrome risk factors among mothers of pacific infants in New Zealand. *New Zealand Medical Journal*, 115, 33-5.

Patrick, D.L., Cheadle, A., Thompson, D. C., Diehr, P., Koepsell, T., & Kinne, S. (1994). The validity of self-reported smoking: a review and meta-analysis. *American Journal of Public health*, 84, 1086-1093.

Penn, G., & Owen, L. (2002). Factors associated with continued smoking during pregnancy: analysis of socio-demographic, pregnancy and smoking-related factors. *Drug and Alcohol Review*, 21, 17-25.

Pickett, K., Wakschlag, L., Rathouz, P., Bennett, L., & Abrams, B. (2002). The working class context of pregnancy smoking. *Health and Place*, 8, (3), 167-175.

Pizacani, B., Martin, D., Stark, M., & Koepsell, T. (2004). A prospective study of household smoking bans and subsequent cessation related behaviour. *Tobacco Control*, 13, (1), 23-28.

Pollack, K. I., & Mullen, P. D. (1997). An exploration of the effects of partner smoking, type of social support, and stress on postpartum smoking in married women who stopped smoking during pregnancy. *Psychology of Addictive Behaviours*, 11, 182-189.

Price, J., Jordan, T., & Drake, J. (2006) Perceptions and use of smoking cessation in nurses-midwives practice. *Midwifery and Women's Health*, 3, 208-215.

Prochaska, J., & Diclemente, C. (1983). Stages and processes of self-change of smoking: towards an integrated model of change. *Journal of Consulting and Clinical Psychology*, 51, 390-395.

Prochaska, J., & Diclemente, C. (1984). *The transtheoretical approach: Crossing traditional boundaries of therapy*. Illinois: Dow Jones- Irwin.

Prochaska, J., Diclemente, C., & Norcross, J.C. (1992). In search of how people change: application to addictive behaviours. *American Psychologist*, 47, 1102-14.

Prochaska, J., Velicer, W. F., Diclemente, C., Guadagnoli, E., & Rossi, J. S. (1991). Patterns of change: Dynamic typology applied to smoking cessation. *Multivariate Behavioural Research*, 26, 83-107.

Ratner, P. A., Johnson J. L., Bottorff, J. L., Dahinten, S., & Hall, W. (2000). Twelve-month follow-up of a smoking relapse prevention intervention for postpartum women. *Addictive Behaviours*, 25, 81-92.

Ratner, P. A., Johnson, R. N., Joy, J., & Bottorff, J. L. (1999) Smoking relapse and early weaning among postpartum women: Is there an association? *Birth*, 26, (2), 76-82.

Raw, M., & Heller, J. (1984) *Helping People to Stop Smoking: The Development, Role and Potential of Support Services in the UK*. London: Health Education Council.

Rollnick, S., Butler, C.C., & Stott, N. (1997). Helping smokers make decisions: the enhancement of brief intervention for general practice. *Patient Education and Counselling*, 31, 191-203.

Roske, K., Hannover, W., Grempler, J., Thyrian, J. R., Rumpf, H. J., John, U., . . . Hapke, U. (2006). Post-partum intention to resume smoking. *Health Education Research Theory and Practice*, 21, (3), 386-392.

Roske, K., Schumann, A., Hannover. W., Grempler, J., Thyrian, J. R., Rumpf, H. J., John, U., . . . Hapke, U. (2008). Postpartum smoking cessation and relapse prevention intervention: A structural equation modelling application to behavioural and non-behavioural outcomes of a randomized controlled trial. *Journal of Health Psychology*, 13 (4) 556-568.

Royal College of Physicians (1962). *Smoking and Health*. London: Pitman Medical Publishing.

Royal College of Physicians (1992). Smoking and the young. London: Royal College of Physicians.

Royal College of Physicians Tobacco Advisory Group (2000). Nicotine Addition in Britain. London: Royal College of Physicians.

Saraiya, M. (1998). Cigarette smoking as a risk factor for ectopic pregnancy. American Journal of Obstetrics Gynecology. 178, 493-498.

Shiffman, S., Hickcox, M., Paty, J., Gnys, M., Kassel, J., & Richards, T. (1996). Progression from a smoking lapse to relapse: Prediction from abstinence violation effects, nicotine dependence and lapse characteristics. Journal of Consulting and Clinical Psychology, 64, 993-102.

Shiffman, S., Hickcox, M., Paty, J., Gnys, M., Kassel, J., & Richards, T. (1997). The abstinence violation effect following smoking lapses and temptations. Cognitive Therapy and Research, 21, 497-523.

Slotkin, T.A. (1998). Foetal nicotine or cocaine exposure: Which one is worse? Journal of Pharmacology Experimental Therapy. 285, 931-945. Solomon, L. J., & Quinn, P. J. (2004). Spontaneous quitting: Self-initiated smoking cessation in early pregnancy. Nicotine and Tobacco Research, 6, 2, 203-216.

Solomon, L. J., Secker-Walker, R. H., Skelly, J. M., & Flynn, B. (1996). Stages of change in smoking during pregnancy in low-income women. Journal of Behavioural Medicine, 19, 4, 333-344.

Sondergaard, C. (2001). Smoking during pregnancy and infantile colic. Pediatrics, 108, 342-346.

Stanton, H., Martin, J., & Henningfield, J. (2005). The impact of smoking on the family. Current Paediatrics, 15, 590- 598.

Strachan, D. P., & Cook, D. G. (1998). Health effects of passive smoking: parental smoking and childhood asthma: longitudinal and case-control studies. *Thorax*, 53, 204-212.

Stotts, A. L., Diclemente, C., Carbonari, J. P., & Dolan-Mullen, P. (1996). Pregnancy Smoking Cessation: A case of mistaken identity. *Addictive Behaviours*, 21, 4, 459-471.

Stotts, A. L., Diclemente, C. C., Carbonari, J. P., & Mullen, P. D. (2000). Postpartum Return to Smoking: Staging a “Suspended” Behaviour. *Health Psychology*, 19, 324-332.

Taylor, T., & Hajek, P. (2001) Smoking cessation services for pregnant women. London: Health Development Agency.

Thyrian, J. R., Hannover, W., Grempler, J., Roske, K., John, U., & Hapke, U. (2006). An intervention to support post-partum women to quit smoking or remain smoke-free. *Journal of Midwifery & Women’s Health*, 51, 45-50.

Thomson, G., Wilson, N., & Howden-Chapman, P. (2005). Smoky homes: a review of the exposure and effects of second-hand smoke in New Zealand homes: *Journal of the New Zealand Medical Association*, 118: 1213-1220.

UK Department of Health (1998). Report of the scientific committee on tobacco or health. London: Her Majesty’s Stationery Office.

US Department of Health and Human Services. (1988). Nicotine addiction: a report of the Surgeon General. Washington DC: USDHHS.

US Department of Health and Human Services (2001). Smoking and women’s health. A report of the Surgeon General. Rockville: USDHHS.

Ussher, M., West, R., & Hibbs, N. (2004). A survey of pregnant smokers' interest in different types of smoking cessation support. *Patient Education and Counselling*, 54, 67-72.

Valanis, B., Lichtenstein, E., Mullooly, J. P., Labuhn, K., Brody, K., Severson, H. H., . . . Stevens, N. (2001). Maternal smoking cessation and relapse prevention during health care visits. *American Journal of Preventive Medicine*, 20, 1-8.

Voight, L., Hollenbach, K. A., Krohn, M. A., Daling, J. R., & Hickok, D. E. (1990). The relationship of abruption placentae with maternal smoking and small for gestational infants. *Obstetrics and Gynaecology*, 75, 771-774.

Walsh, R., Redman, S., & Adamson, L. (1996). The accuracy of self-report of smoking status in pregnant women. *Addiction Behaviours*, 21, 675-679.

Wakefield, M., Gillies, P., Graham, H., Madeley, R., & Symonds, M. (1993). Characteristics associated with smoking cessation during pregnancy among working class women. *Addiction*, 88, 1423-1430.

Wakefield, M., Reid, Y., Roberts, L., Mullins, R., & Gillies, P. (1998). Smoking and smoking cessation among men whose partners are pregnant: a qualitative study. *Social Science and Medicine*, 47, 657-664.

West, R. Psychological theories of addiction. In: Glass IB, *The international handbook of addiction behaviour*. London: Routledge, 1991.

West, R., McNeill, A., & Raw, M. (2000). Smoking Cessation guidelines for health care professionals: an update. *Thorax*, 55: 987-999.

Williams, M. A., Mittendorf, R., Lieberman, E., Monson, R. R., Schoenbaum, S. C., & Genest, D. R. (1991). Cigarette smoking during pregnancy in relation to placenta previa. *American Journal of Obstetrics and Gynaecology*, 165, 28-32.

Windsor, R., Boyd, N., & Orleans. (1998). A meta-evaluation of smoking cessation intervention research among pregnant women. *Health Education Research*, 13, 419-438.

Windsor, R.A., Cutter, G., & Morris, J. (1985). The effectiveness of smoking cessation methods for smokers in public health maternity clinics: a randomized trial. *American Journal of Public Health*, 75, 1389-1392.

Wisborg, K., Henriksen, T. B., & Secher, N. J. (2000). Nicotine patches for pregnant smokers: a randomized controlled study. *Obstetrics and Gynaecology*, 96, (6): 967-971.

Wisborg, K., Kesmodel, U., Henriksen, T. B., Olsen, S.F., & Secher, N. J. (2001). Exposure to tobacco smoke in utero and the risk of stillbirth and death in the first year of life. *American Journal of Epidemiology*, 154 (4), 322-327.

World Health Organisation (1999). International consultation on environmental tobacco smoke and child health: consultation report: Retrieved on 14th December, 2008, from www.who.in/toh/consult.htm.

Zhu, S. H., & Valbo, A. (2002). Depression and pregnancy. *Addictive Behaviours*, 27, 649-658.

2.11 Appendices for Section B

Patient Information Sheet for Smoking Cessation in pregnant and postpartum smokers and why do pregnant and postpartum smokers relapse (Appendix A1)

We would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully and discuss with others if you wish.

Reason for research?

Sometimes in order for us to find out about stopping smoking and going back to smoking we need to interview patients about their experiences they may have had. Also to see how we can improve the service for future clients who access the service.

Why have I been invited?

You have been invited as you have used the service to help you give up smoking.

Do I have to take part?

If you decide to take part in the study we will ask you to sign a consent form to show you have agreed to take part. You are free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.

What will happen to me if I take part?

- You will be involved in the research for the duration of the interview, which will take a maximum of one hour in total.
- You will only be involved with one part of the study.
- You will only be asked/contacted once to see if you would like to take part. Once the consent sheet has been signed, the interview will take place at a time convenient for you in your own home.
- Present at the interview will be you and the principal investigator only.

Procedure

- You will be asked if you mind the use of taping your answers onto a tape recorder. You have the right to refuse this, without it affecting any part of your treatment received in giving up smoking. Recording of the data will not identify you in any way, once you have agreed to take part in the study, you will be made anonymous (e.g. client 1, client 2.) By recording your answers it will help give us an accurate representation of the topic under investigation.
- You will be asked six to nine questions about giving up smoking, with the chance to explore any other unanticipated issues. We can stop the interview at any time and you have the right to refuse to answer any questions you do not want to answer.
- After the interview you will be thanked for your time and given a debriefing sheet which will have extra details on about the study.

What are the possible benefits of taking part?

We cannot promise the study will help you but the information we get from this study will help improve the treatment of this group of people wanting to give up smoking in the future. It may help you stay motivated in your quit attempt.

What happens when the research study stops?

If you are still being helped in your quit attempt by the service that will carry on as normal. Due to the nature of the study, a letter explaining the results of the study will not be able to be sent to you until September 2008 if you requested this letter.

What will happen if I do not want to carry on with the study?

If you withdraw from the study, you have the right for your data not to be used in the study.

What is there is a problem?

If you have a concern about any aspect of the study, you should speak to the Principal Investigator (Julie Pearson) who will do her best to answer your question. If you remain unhappy and wish to complain formally you can do this through the NHS Complaints Procedure. This will be through the PALS (Patient Advisory Liaison Service). The normal National Health Service complaints mechanism will still be available to you (if appropriate).

Will my taking part in this study be kept confidential?

All information which is collected during the course of the research will be stored securely and kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognised from it.

What will happen to the results of the study?

A copy of the research results will be sent to you in September 2008. You will be told which arm of the study you were in. You will not be identified in any report or publication.

Who is organising and funding the study?

The research is organised and funded by a London Primary Care Trust.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee to protect your safety, rights, wellbeing and dignity.

Contact for further information?

For general information about the research project: -
Julie Pearson.

CONSENT FORM

Appendix 2 2.11.2

Smoking Cessation in pregnant and postpartum smokers and why do pregnant and postpartum smokers relapse

Researcher: Julie Pearson

Please initial box

1, I confirm that I have read and understand the information sheet dated 26/7/07 (version 3) for above the study and have had the opportunity to consider the information, ask questions and these have been answered satisfactorily.

☐

2, I understand that my participation is entirely voluntary and that I am free to withdraw at any time without giving any reason, or without my medical care or legal rights being affected.

☐

3, I consent to the use of audio taping to record the interview.

☐

4, I agreed to take part in above study.

☐

Name of Client

Signature

Date

Name of person taking
consent

Signature

Date

When completed, 1 signed copy for patient, 1 for researcher site file; 1 (original).

2.11.3 Appendix 3



Lambeth Stop Smoking Service
65 Sancroft Street
London,
0207 411 5685

11th June 2007

Dear.....

Lambeth Primary Care Trust is constantly improving the service you receive from us. We are aware that you access the Lambeth Stop Smoking Pregnancy Service in 2006/2007. You have been contacted as you access the service to help you with your quest in giving up smoking. We would like to invite you to take part in a research study.

The study is being conducted to investigate how the Lambeth Stop Smoking Pregnancy Service can be improved for future populations of this group of smokers. Before you decide to take part, included with this letter is a Patient Information Sheet please take time to read the following information carefully and discuss with others if you wish.

If there is anything that is not clear or you would like more information please feel free to give me a call on the above number. I will be contacting you in one week time to see if you would like to take part in the research study. Thank you for reading this.

Yours Sincerely,

Julie Pearson

2.12 Appendix A4 Clustering themes for Postpartum women who have given up

Group 4

Master theme: *Morals*

Theme/label (Cluster/label 1)	Brief quote	Page and Line Numbers
Well-informed	You always know or you hear that it is not good to smoke when you are pregnant or have a child	Participant 1 Page 1/lines 1-2
Moral obligation	Think of the health of the baby	Participant 3 Page 4/line 35
Lack of empathy	I don't think apart from my partner anyone else understood	Participant 4 Page 6/line 85
Lack of awareness	A lot of people would go outside and have a cigarette and not see that as something you should not really do	Participant 4 Page 6/lines 85-87
Moral obligation	My child's health I had to stop	Participant 1 Page 2/line 14
Being considerate	So in a way it is removed from me	Participant 1 Page 3/line 29
Dangers of smoking around children	He will smoke away from the baby	Participant 1 Page 7/line 67
Admirable	You will be respected more	Participant 5 Page 4/line 34
Judging other people's behaviour	Front of the school they are criticise	Participant 5 Page 4/line 36

Group 4

Master theme: *Knowledgeable*

Theme/label (Cluster/label 2)	Brief quote	Page and Line Numbers
Personal experiences of smoking	I had a cold throughout my whole childhood	Participant 1 Page 1/line 8
Passive smoking	To get the cigarette off, basically take a shower.	Participant 1 Page 1/line 11

Awareness of the dangers of smoking during pregnancy	If you smoke it affects your health	Participant 5 Page 1/line 2
--	-------------------------------------	--------------------------------

Group 4

Master theme: Personal experiences of giving up

Theme/label (Cluster/label 3)	Brief quote	Page and Line Numbers
Not wanting to fail	I going to have to admit failure, guess I am going to have said I had a cigarette	Participant 1 Page 2/line 16
Unbearable	The idea of going through that again for the sake of one cigarette	Participant 1 Page 2/line 19
Normality	I did not think about it. Not at all, just carry on as normal	Participant 2 Page 2/line 16
Short-term thinking	I just carry on and took every day as it came	Participant 2 Page 2/line 18
Being ready to quit	I was quite ready to give up smoking	Participant 2 Page 3/line 28
Association with cigarettes	Yes, about hundred of them	Participant 4 Page 2/line 10

Group 4

Master theme: Addiction

Theme/label (Cluster/label 4)	Brief quote	Page and Line Numbers
Cravings	For the craving I deal with it more	Participant 1 Page 2/line 24
Adjustment to new behaviour	Than when I find myself going for the cigarette that scares me	Participant 1 Page 2/lines 24-25
Associations with cigarettes	I think they go hand in hand, you have a drink, you have a cigarette	Participant 2 Page 2/line 13
Unawareness of how addictive nicotine is	Understand that smoking can be an addiction in the exact same way as everything else	Participant 4 Page 6/line 84
Identity as a smoker	Figuring out where on earth that comes from	Participant 4 Page 5/line 79

Cravings	I really really wanted one, but I just decided not too	Participant 5 Page 2/line 14
Trying not to think about smoking	I just tried to forget about cigarettes	Participant 5 Page 2/line18

Group 4

Master theme: Maintaining cessation

Theme/label (Cluster/label 5)	Brief quote	Page and Line Numbers
Change in lifestyle	Go outside and have a cigarette. I guess the reality of having a baby did not allow that to happen.	Participant 1 Page 3/lines 32-33
Motherhood overtaking need for cigarette	I had a few cravings for a cigarette, but having a new baby took over I guess	Participant 1 Page 3/lines 34-35
Implications for health	Also I am not the healthy person that you are going to meet and I am getting older	Participant 1 Page 6/line 57
Benefits of giving up	I was quite pleased that I did not smell that way anymore	Participant 2 Page 1/line 7
Thoughts/feelings changing about smoking	Now I don't like the taste and I am not used to it anymore	Participant 2 Page 1 /line 10
Benefits of giving up	You wash your curtains and they don't stink	Participant 2 Page 2/line 24
Smoke-free house	No one is smoking in the house and that is better for everyone really	Participant 2 Page 2/lines 26-27
Sense of taste/smell	Choice and smell. I can't emphasise it enough....my taste-buds have changed	Participant 2 Page 4 /line 52
Making the decision whether you want to give up smoking	If you are not going to do it then you will not	Participant 2 Page 4/line 57
Isolation period	I would do would be to remove myself from that circle	Participant 3 Page 1/line 2
Sense of smell	I cannot stand the smell of smoke	Participant 3 Page 1/line 4
Making the decision whether you want to give up smoking	Until I set my mind that I did not want to do it anymore	Participant 3 Page 1/line 9
Not socialising with smokers	I am very close with my neighbour and she noticed that I was not coming over so often and she is a smoker herself	Participant 3 Page 1/line 11

Pressure from children	I [was] made to feel guilty by my son	Participant 3 Page 2/line 12
Guilt	Where you blow into it and that made me feel guilty in itself	Participant 3 Page 2/line 15

Group 4

Master theme: Maintaining cessation

Theme/label (Cluster/label 5)	Brief quote	Page and Line Numbers
Deciding if it is the right time to quit	I knew in myself what I wanted and I did not want to smoke anymore.	Participant 3 Page 2/ line 16
Triggers to smoke	Mainly times when like there is stress	Participant 3 Page 2/ line 18
Determination	I knew I would.....If I continue to do smoking it [is] going to make me ill	Participant 3 Page 3/lines 27-28
Guilt	My son made [me] feel bad, he would say "the little baby"	Participant 3 Page 3/line 28
Thoughts/feelings changing about smoking	Yes, waste of money..... rather spending it on cigarettes	Participant 3 Page 3/lines 30-31
Guilt	Not original, but guilt does work	Participant 3 Page 4/line 32
Thoughts/feelings changing about smoking	It is something we choose to do....it is not worth it in the end	Participant 3 Page 4/lines 38-39
Dangers of smoking around children	The thought of passive smoking.	Participant 3 Page 6/line 53
Smoke-free house	I let them know you cannot come into my house smoking	Participant 3 Page 6/line 60
Isolation period	I just stop being around anyone at all that would smoke	Participant 4 Page1/lines 1-2
Avoidance	Just really trying to avoid people	Participant 4 Page 1/line 5
Legislation	The ban had come into effect	Participant 4 Page 1/line 8
Reasons for giving up smoking	Money and health, just really expensive	Participant 4 Page 5/line 66

Expensive habit	When you are continuing to quit once you realise how much money you have	Participant 4 Page 5/lines 66-67
Wanting better health outcomes	Been able to run for a bus, and not having like chest infections	Participant 4 Page 5/lines 68-69
Identifying and understanding triggers why you smoke	I would have not understand why I smoked, and who my triggers where and why they where triggers	Participant 4 Page 5/lines 76-77
Determination	Just to remember the bad things of smoking and try to make myself strong	Participant 5 Page 2/lines 7-8

Group 4

Master theme: Maintaining cessation

Theme/label (Cluster/label 5)	Brief quote	Page and Line Numbers
Change of routine/behaviour	Yes I drank some herbal tea and earl grey tea because it is not normal tea to make my routine different	Participant 5 Page 2/lines 9-10
Using medication to help with quit attempt	I used the gum and it helped a lot	Participant 5 Page 3/line 25
Feeling secure	Knowing you are protecting your health by not smoking	Participant 5 Page 4/line 39
Smoke-free house	He would go outside to smoke	Participant 5 Page 5/line 41
Changing people's behaviour	Then he changed and he always goes to the garden and reduces the amount of smoking	Participant 5 Page 5/line 43
Awareness of the dangers of smoking	I explained..... and then he understood and it is not good for baby	Participant 5 Page 5/lines 44-46

Group 4

Master theme: Support

Theme/label (Cluster/label 6)	Brief quote	Page and Line Numbers
Working in partnership	Erm you see the funny thing is I felt so well supported by my pregnancy counsellor	Participant 1 Page 3/lines 36-39

Working in partnership	In every way, it does what it said on the tins	Participant 1 Page 5/line 50
Disappointment	When I first sign up for the text messages I did not get [them] at first and when I got them I found them really helpful	Participant 1 Page 5/lines 52-53
Legislation	The smoking ban was coming in, that kind of help as well.	Participant 1 Page 6/lines 61-62
External support	He will smoke away from the baby.....only one friend smoke and she goes into other room	Participant 1 Page 7/lines 67-69
Working in partnership	The pregnancy counsellor came every time she was supposed to come.	Participant 2 Page 3/line 38

Group 4

Master theme: Support

Theme/label (Cluster/label 6)	Brief quote	Page and Line Numbers
Maintaining support	She would send a text message every week and that was quite nice	Participant 2 Page 3/ lines 41-42
Positive feedback	I definitely tick the very good boxes the whole way down on the paper	Participant 2 Page 4/lines 47-48
Developing a rapport	She was not over the top quite genuine about things and it was like having a chat	Participant 2 Page 4/lines 48-49
External support	Fine, fantastic, really supportive....No they have all been really good	Participant 2 Page 5/lines 60-64
Maintaining smoke-free house	Yeah I mean he (husband) has to go in the garden every time and he has not tried not too	Participant 2 Page 5/line 61
Feeling supportive in your quit attempt	She made me feel that if at any time I could contact you guys, and yeah it was brilliant	Participant 3 Page 4/lines 40-41
Group support	Trying to meet with other parents or people that want to give up	Participant 3 Page 5/lines 44-48
External support	Some were supportive, you know well done...	Participant 3 Page 6/line 57
Feeling supportive in your quit attempt	Absolutely brilliant, really non-judgemental...I could have text or phone...Exactly what I needed.	Participant 4 Page 4/lines 49-51

Group support	Was there a group...mum and toddlers, but you never feel like that you can talk about smoking.....	Participant 4 Page 4/lines 52-58
Shared experiences	Not be looked at if you where the devil just for wanting a cigarette	Participant 4 Page 5/lines 63-65
Support group	Have it as a mothers and toddlers group....but you know walking in everyone has been their...	Participant 4 Page 5/lines 59-60
External support	Support from my partner, he quit just before-hand...	Participant 4 Page 5/ line 70
Using medication to help with quit attempt	The patches and everything they were helpful	Participant 4 Page 5/lines 71-72

Group 4

Master theme: Support

Theme/label (Cluster/label 6)	Brief quote	Page and Line Numbers
Feeling supported in your quit attempt	I thought it was very good and I think I could not have stopped smoking without that service	Participant 5 Page 4/ lines 28-29
Working in partnership	I did not really ask the GP, I just mention that I was smoking and I cannot stop and they sent me a letter about the service	Participant 5 Page 4/lines 29-30

Group 4

Master theme: Coping Strategies

Theme/label (Cluster/label 7)	Brief quote	Page and Line Numbers
Changing behaviour	Obviously the inhalator thing helped and chewing lots of gum I guess and trying to be distracted	Participant 1 Page 4/lines 41-42
Using resources to increase motivation with quit attempt	Would come from the text messages	Participant 1 Page 4/line 45

Thoughts/feelings changing about smoking behaviour	My thoughts where get food in the house girl.....to get fruit like juicy watermelon, to get the buds going	Participant 3 Page 3/lines 24-26
Stages of quit attempt	Yes I give myself one other stage to go through.	Participant 4 Page 3/line 26
Thoughts/feelings changing about smoking behaviour	In my head now, "if I can just get pregnant then it will be other six months to I get pregnant..... and why would you smoke after five years	Participant 4 Page 3/lines 26-30
Thoughts/feelings changing about smoking behaviour	Because I had not smoked for a long time, I did not think about it.	Participant 5 Page 3/line 20
Coping	Breast feeding, forgetting about cigarettes and the smell of the house	Participant 5 Page 3/lines 21-22

Group 4

Master theme: Coping Strategies

Theme/label (Cluster/label 7)	Brief quote	Page and Line Numbers
Smoke-free house	My husband not to smoke inside and all the guests who smoke, so they go outside to smoke.	Participant 5 Page 3/lines 23-25
Coping	I banned smoking in the house.... With newborns you cannot smoke around them...breast feeding as well	Participant 2 Page 1/lines 1-4

Group 4

Master theme: Being in control

Theme/label (Cluster/label 8)	Brief quote	Page and Line Numbers
--	--------------------	------------------------------

Personal choice	My biggest reasons in having difficulty stopping was control.....So it was a constant, I get to make these choices when ever I want but it is my control that was really important	Participant 4 Page 3/lines 31-36
Change of attitudes towards smoking	Seeing it as a drug rather than a thing you do make a big difference	Participant 4 Page 3/lines 38-39
Losing desire to smoke	The last few I was smoking actually really looking at them and thinking why I am doing this	Participant 4 Page 3/lines 39-41
Not conscious of smoking	You don't notice a cigarette, you don't notice it, that it is lit....	Participant 4 Page 3/lines 42-43
Been aware of smoking as a drug	So paying attention to the actually thing.....that is actually a drug their taking their and then on the street	Participant 4 Page 4/lines 44-47

2.12.1 Appendix A5 Group 3

Master theme: Preparation

<i>Theme/Label (Cluster Label 1)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Gradual Process	Basically I cut it down to like 5 a day, then to one a day.	Participant 6 Page 1/line 1
Gradual Process	I went from smoking twenty, then to Ten.	Participant 11 Page 1/line 2
Gradual Process	I cut down, it started to the point.	Participant 13 Page 4/ line 63
Preparing for quit day	Kind of just trying to create a kind of plan.	Participant 13 Page 1/ line 17.
Preparing for quit day	Clearing my house of any smoking paraphernalia.	Participant 13 Page 2/ lines 34-35.

Preparing for quit day	Where I had identified certain things.	Participant 13 Page 3/ line 44
Preparing for quit day	I was not going to buy any more.	Participant 15 Page 6/lines 133-134.
Identifying when I smoke	The times that I smoked.	Participant 15 Page 1/ line 1
Identifying when I smoke	There was a lot of times If I walked down the street	Participant 15 Page 2/ line 43
Time out	I would come in the kitchen and smoke.	Participant 15 Page 1/ line 6
Behavioural aspect of smoking	The behaviour bit to it when I would actually do it.	Participant 15 Page 1/ line 8
Different approach to quitting	I just did it on the day itself	Participant 15 Page 6/ line 127.
Harm reduction	I cut down for about a month	Participant 15 Page 7/ line 141
Setting a quit date	When would you like to quit by	Participant 15 Page 7/ line 158.

Group 3

Master theme: Support

Theme/Label (Cluster Label 2)	Brief quote	Page and Line numbers
Feeling supported in your quit attempt	Support from the counsellor	Participant 6 Page 1/ line 5
Feeling supported in your quit attempt	So it was nice to have support	Participant 13 Page 3/ lines 52-53
Feeling supported in your quit attempt	I think the support	Participant 15 Page1/ line 20

Feeling supported in your quit attempt	It was the NRT and the pregnancy counsellor coming once a week	Participant 15 Page 3/ line 47
Feeling supported in your quit attempt	Just talked through it, you know have your counselling sessions, identifying your triggers and think about what you are going to do instead.	Participant 15 Page 7/ lines 148-149
Motivational tool	Test your thing again	Participant 6 Page 1/ line 6

Group 3

Master theme: Adjustment period

Theme/Label (Cluster Label 3)	Brief quote	Page and Line numbers
Difficult thing to do	I don't think it ever became easier	Participant 6 Page 2/line 9
Difficult thing to do	I think probably the first three or four weeks were the hardest.	Participant 15 Page 2 /line 38
Adapting to behaviour change	I did not think about it as much	Participant 6 Page 2/line 12
Identifying triggers	Not drinking tea because I associated that with having a cigarette	Participant 6 Page 2/ line 13
Change of routine	My routine had changed anyway	Participant 15 Page 2/line 31

Group 3

Master theme: Adjustment period

Theme/Label (Cluster Label 3)	Brief quote	Page and Line numbers
Motivation	Just my own willpower and determination	Participant 13 Page 4/ line 70
Using medication to help with quit attempt	Nicotine patches were a big help	Participant 13 Page 4/line 71
Using medication to help with quit attempt	Basically what I did was took the patches from what they say	Participant 15 Page 2/line 35

Ambivalence	Kind of makes you think why am I giving up, they are not giving up	Participant 13 Page 4/lines 75-76
Implementing behavioural changes	It was just making the changes	Participant 15 Page 2/line 39
Journey of becoming a non-smoker	It takes three or four weeks to get into your head	Participant 15 Page 2/line 41
Change of routine	Also my change of routine, it was the end of the school term	Participant 15 Page 3/lines 60-61
Making house smoke-free	Obviously if I give up then I don't expect to have cigarettes in my house	Participant 15 Page 4/line 70
Consideration for others	They would just blow the smoke away from me anyway	Participant 15 Page 4/line 80

Group 3

Master theme: Advantages of giving up

Theme/Label (Cluster Label 4)	Brief quote	Page and Line numbers
Sense of smell becoming more acute	When you smoke how bad it Smells until after you have stopped smoking	Participant 6 Page 3/line 24
Sense of smell becoming more acute	I can smell it a lot more.	Participant 11 Page 4/line 37
Sense of smell becoming more acute	I realised how much it stinks.	Participant 13 Page 5/line 87
Losing smokers cough	I have not got that horrible cough you have when you smoke	Participant 6 Page 4/line 28
Losing smokers cough	At first you feel erm (coughing sound)	Participant 11 Page 5 /line 42

Group 3

Master theme: Advantages of giving up

Theme/Label (Cluster Label 4)	Brief quote	Page and Line numbers
Tightness in chest	After a few weeks it felt a lot easier to breathe.	Participant 11 Page 5/line 43
Health benefits of giving up	When I run I don't feel so out of breath.	Participant 11 Page 5/lines 44-45

Health benefits of giving up	I am starting to get my breath and energy back	Participant 13 Page 6/line 102
Health benefits of giving up	I think maybe my skin does not seem to be dry on my face.	Participant 15 Page 5/line 102
Health benefits of giving up	I am definitely not as dehydrated as I was.	Participant 15 Page 5/line 105
Sense of euphoria	Sometimes when I feel happy, because I would think at least I am healthy now.	Participant 11 Page 4/ line 36
Self-improvement	I felt a lot healthier so when I see them in the morning I would think at least I am not like that.	Participant 11 Page 4/line 37
Self-improvement	Compares to someone who does smoke, I do feel like I am doing a bit better than that person in terms of their health.	Participant 13 Page 6/lines 104-105

Group 3

Master theme: First priorities

Theme/Label (Cluster Label 5)	Brief Quote	Page and Line numbers
Situation/pregnancy becoming real	When I started feeling her moving, because I thought it not fair on her	Participant 11 Page 1/line 5
Thinking ahead	I was worried that she would get asthma or something	Participant 11 Page 1/line 6

Group 3

Master theme: First priorities

Theme/Label (Cluster Label 5)	Brief Quote	Page and Line numbers
Incentive not to smoke	Because I thought more about her than me.	Participant 11 Page 2 /line 9

Main priority is the baby	But because I thought of her	Participant 11 Page 3/line 24
Main priority is the baby	Just do it for the baby	Participant 11 Page 5/line 46
Main priority is the baby	Being pregnant and harming the baby	Participant 13 Page 3/line 56
Awareness of the dangers of smoking	When I see adverts	Participant 11 Page 5/line 48
Awareness of the danger of smoking	The stage where it is beginning to deprive the baby	Participant 15 Page 7/line 162
Not wanting history to repeat itself	I did not want my kids to smoke	Participant 11 Page 5/line 49
Wanting a healthier lifestyle	Wanting to be able to run up the road without feeling like I am about to collapse	Participant 11 Page 5/lines 52-53
Knowledgeable	I am helping baby's health by not doing this thing	Participant 15 Page 4/line 86
Personal goal	I think you have got to have some kind of goal	Participant 15 Page 7/line 158
Knowledgeable	That's when the baby starts to get less oxygen	Participant 15 Page 7/lines 159-160
Knowledgeable	I started to realise how much negative's there is	Participant 13 Page 5/lines 87-88

Group 3
Master theme: Emotions

<i>Theme/Label (Cluster Label 6)</i>	<i>Brief Quote</i>	<i>Page and Line numbers</i>
---	-------------------------------	-------------------------------------

Guilt	I thought if I have smoked I am going to feel like I have let myself down	Participant 6 Page 1/lines 7-8
Guilt	I knew how much they wanted me to stop smoking	Participant 13 Page 2/line 28
Inconsiderate	They still smoke around you and stuff	Participant 11 Page 4/line 27
Frustrated	It would get on my nerves, seeing him sitting their smoking	Participant 11 Page 4/line 35
Change in thoughts and attitudes around smoking	I had to change my way of thinking	Participant 13 Page 1/line 1
Social aspects of smoking	Everyone is smoking	Participant 13 Page 1/line 4
Seen as the 'norm'	I have always had in my mindset that this is a normal way of life	Participant 13 Page 1/line 4
Change in thoughts and attitudes around smoking	Changing my attitudes when I had bad circumstances	Participant 13 Page 1/line 12
Coping with life without smoking	Getting situations like that and realising that I have not smoked all week	Participant 13 Page 1/line 14
Contemplation	I don't actually think I was registering that for myself	Participant 13 Page 2/line 18
Ambivalence	Oh I want to stop smoking, but I didn't really want to stop.	Participant 13 Page 2/line 20

Group 3

Master theme: Emotions

<i>Theme/Label (Cluster Label 6)</i>	<i>Brief Quote</i>	<i>Page and Line numbers</i>
Not wanting history to repeat itself	So obviously they are going to follow what I did	Participant 13 Page 2/line 25
Losing desire to smoke	Really having enough of smoking	Participant 13 Page 2/line 21
Feeling proud of not smoking	I realised I had become a non - smoker	Participant 13 Page 3/line 47
Ambivalence	I was going back to it and I was unsure about why I was stopping smoking	Participant 13 Page 3/line 51
Self-efficacy	Then you have to identify your own needs	Participant 13 Page 4/line 77
Not wanting to be different	It is hard not following your parents	Participant 13 Page 4/line 79
Deceptive outlook of smokers	My parents have been smoking for twenty years and they are fine	Participant 13 Page 4/line 82
Change of status	I do class myself as a non-smoker	Participant 13 Page 5/lines 85-86
Smoking seen as being unattractive	Repulsed because your breath smells or your hair smells	Participant 13 Page 5/lines 93-94
Wanting other people to give up	Cannot see that it is for the best	Participant 13 Page 5/line 99
Change/attitudes and thoughts around smoking	In the early days I would just want to have a cigarette with friends.	Participant 13 Page 5/lines 100-101
Concerns over relapsing	I just really like not to be in the same situation that I am smoking again	Participant 13 Page 6/line 107
Experiencing life as a non-smoker	I prefer being a non-smoker	Participant 13 Page 6/line 109

Group 3

Master theme: Emotions

Theme/Label (Cluster Label 6)	Brief Quote	Page and Line numbers
Change/thoughts/attitudes around smoking	To actively make the decision that it was bad for the baby	Participant 15 Page 2/line 22
Feeling guilty	I had a lot of guilt around smoking	Participant 15 Page 2/line 23
Wake up call	I had a bit of bleed	Participant 15 Page 2/line 28
Motivation to quit	"I am going to quit now"	Participant 15 Page 2/line 29
Achievement	Quite proud you managed to do something	Participant 15 Page 3/line 49
Euphoria	Then you actually get a 'buzz' out of it	Participant 15 Page 3/line 53
Using smoking as a way of coping with life	It was kind of keeping me going	Participant 15 Page 3/line 62
Emotional aspects of pregnancy	I am a little bit more level than I was mood-wise	Participant 15 Page 6/line 119
Guilt	I felt really bad about it	Participant 15 Page 6/line 124
Different approach to quitting	I just did it on the day itself	Participant 15 Page 6/line 126
Pessimistic	I would think oh no I cannot give up	Participant 15 Page 6/line 138
Optimism	Let's spin it around and say yes I can	Participant 15 Page 7/line 151
Deadline date	If you gave up before you are fourteen to sixteen weeks	Participant 15 Page 7/line 154

Group 3**Master theme: Developing coping strategies**

Theme/Label (Cluster Label 7)	Brief Quote	Page and Line numbers
Coping strategies	Something to replace the cigarette	Participant 11 Page 2/line 10
Not losing all habitual associations with smoking	Use the inhalator and still come into the kitchen to have my five minutes time out.	Participant 15 Page 1/line 11
Coping strategies	Know other ways that I was going to use that as a crutch at those times	Participant 15 Page 1/line 14
Quit attempt becoming easier	I just noticed very gradually over the weeks I was not having to come in to the kitchen	Participant 15 Page 1/ line 16
Change in coping strategies	I was maybe just taking deep breaths	Participant 15 Page 1/line 18
Different coping strategies	I might have a bag of crisps now	Participant 15 Page 2/line 44
Replacement activities	I would use this at exact times I would have smoked	Participant 15 Page 3/lines 57-58
Acquiring new habit	Eating and chewing gum	Participant 11 Page 2/line 8

Group 3**Master theme: Self-interest**

Theme/Label (Cluster Label 8)	Brief Quote	Page and Line numbers
Not developing any smoking related illness	I mean I am not going wow....I did not have major detrimental effects	Participant 15 Page 5/lines 91-92
Clearing out toxins	I mean I had a slight burning in my chest	Participant 15 Page 5/line 93
Physical changes during pregnancy	I am breathless anyway	Participant 15 Page 5/line 94

2.12.2 Appendix A6 Clustering themes for postpartum women who have relapsed

Group 1

Master theme: Addiction

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Enjoyment	Erm, yes because I always enjoy smoking	Participant 14 Page 1/line 1
Habitual	It was probably something simple like having a glass of wine	Participant 14 Page 1/line 2
Cravings	I cannot remember the exact occasion...it just made me fancy a cigarette	Participant 14 Page 1/line 3
Habitual	I would say it is limited to the partnership with alcohol and social situations or relaxing occasionally	Participant 14 Page 1/lines 7-8
Enjoyment	Why not if I enjoy it, (smoking). It is not putting anyone else in danger....	Participant 14 Page 2/lines 17-18
Definition of a smoker	He is still a smoker with cravings...	Participant 14 Page 2/line 35
Triggers to smoke	I don't know in my mind they have always gone hand in hand...	Participant 14 Page 4/lines 51-52
Not being in control	Because it was something that I did not want to do and I was doing in a way	Participant 8 Page 3/line 21

Stressful time	Because when nights are stressful, the first thing I would go for would be a cigarette	Participant 12 Page 4/lines 43-44
----------------	--	--------------------------------------

Group 1

Master theme: Addiction

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Fear of failing	I did not think I could stop as I had smoked for so long....	Participant 8 Page 3/line 29
Wanting to smoke	When I finally had my son I just wanted to smoke....	Participant 12 Page 1/lines 1-2
Cravings	I just kept really craving for that cigarette	Participant 12 Page 1/line 5
Gradual return to smoking	Also I started to smoke one every other day and then it went to twenty a day again, thirty a day	Participant 12 Page 2/lines 17-18
Relapse	When you start taking one....it makes you feel like you need it again...	Participant 12 Page 2/lines 23-25
Being reminded of smoking	I smelt a cigarette I would get the craving to go into the shop and buy one.....	Participant 12 Page 3/lines 28 -32
Tolerance level increasing	I would also say I smoked more	Participant 12 Page 4/lines 40-41
Change in personal circumstances	It makes it that little bit more difficult to smoke when there are babies that need things	Participant 14 Page 3/lines 38-39

Group 1

Master theme: Postnatal Period

<i>Theme/Label (Cluster Label 2)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Being in control	Would not say I was a smoker with cravings	Participant 14 Page 1/line 5
Freedom	Erm I had my body back....therefore I was free to do what ever I like...	Participant 14 Page 2/line 11
Change in smoking behaviour	It is not with a view to going back....	Participant 14 Page 2/lines 12-15
Time out	I am going to have five minutes on my own with a glass of wine and have a cig	Participant 14 Page 2/line 26
Spontaneous	So it was definitely unplanned, spur of the moment	Participant 14 Page 2/lines 27-28
Relapse	The novelty had kind of worn off and I had a few spare minutes you know...	Participant 8 Page 1/lines 1-4
Socialising with smokers	My sister coming she would have her cigarettes here.....seeing old friends.....	Participant 8 Page 1/lines 5-7
Novel behaviour	It was my way of saying I am not really going back to smoking	Participant 8 Page 2/lines 12-13
Becoming a smoker again	I was only having one or two a day	Participant 8 Page 2/line 15
Change in smoking behaviour	Before I use to sit in the kitchen and chain smoke.....	Participant 8 Page 2/lines 15-16

Group 1

Master theme: Postnatal Period

<i>Theme/Label (Cluster Label 2)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Smoke-free house	I was not smoking at all in my house after I had the babies.....	Participant 8 Page 3/line 22
Personal achievement	I was feeling quite proud of myself that I had give up smoking....	Participant 8 Page 4/lines 37-38
Relapse	I just said let me just have the cigarette. So now it is time to start again and then he caught asthma....	Participant 12 Page 1/lines 8-10
Partial smoke-free house	Yeah, just used to smoke in the kitchen	Participant 12 Page 2/line 16
Deceptions	I thought he is healthy, so I don't know just start again	Participant 12 Page 2/line 21
Support in postpartum period	They have time for you. They will sit down and talk to you	Participant 12 Page 5/lines 53-54
Products being available	Also if everyone got patches, gum, inhalator.....	Participant 12 Page 5/lines 57-58
Reasons not to return to smoking	Just think about your children and your health.	Participant 12 Page 5/lines 58-59
Enjoying better quality of life	The benefits of stopping...you end doing more for yourself.....	Participant 8 Page 4/lines 40-42

Group 1

Master theme: Behaviour changes in pregnancy and postpartum

<i>Theme/Label (Cluster Label 3)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
---	---------------------------	-------------------------------------

Behaviour changes in pregnancy	Yep sure I think I gave up successfully while pregnant...so the thought never really....	Participant 14 Page 2/lines 20-22
Making house smoke-free	It was prior to having the baby....if I ever had a cigarette it always been outside.	Participant 14 Page 3/lines 29-31
Time to give up	I don't think it is healthy for either of you during pregnancy.	Participant 14 Page 3/line 40
Benefits of giving up	Such as the financial side of things.....	Participant 14 Page 3/line 43
Personal circumstances prompting behaviour change	The babies made me stop more than going back to it.	Participant 8 Page 2/lines 18-19
Implications for children's health	If I started smoking around them, it would lead to other things.	Participant 8 Page 4/lines 38-39

Group 1

Master theme: Emotional aspects of smoking

<i>Theme/Label (Cluster Label 4)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Inevitable	Maybe it was something that was meant to happen	Participant 8 Page 2/lines 17-19
Sense of mortality	Because I am older now and I have smoked for a long time....	Participant 8 Page 3/lines 24-26

Group 1

Master theme: Emotional aspects of smoking

<i>Theme/Label (Cluster Label 4)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Unwell	I felt really depleted of energy.....started to feel really ill.	Participant 8 Page 3/lines 24-28
Responsibilities	For the health of the babies.....	Participant 8 Page 3/lines 31-33
Guilt	I should not do this if I have children	Participant 8 Page 3/line 33
Coping with life by smoking	If I got stress out I would go and have a cigarette.	Participant 12 Page 3/lines 30-31
Influencing others	She would smell the smoke on me and it would make her want to smoke.	Participant 12 Page 3/line 34
Dishonest	We got so many days to get it out of our system	Participant 12 Page 3/line 37

Group 1

Master theme: Being protective

<i>Theme/Label (Cluster Label 5)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Protecting their wellbeing	I did not like the smell of cigarettes near them....	Participant 8 Page 4/line 34
Vulnerable	Just because they were so small....	Participant 8 Page 4/line 36
Knowledgeable	When the child is inside your belly.....	Participant 12 Page 4/line 46

2.12.3 Appendix A7 Clustering themes for pregnant women who have relapsed back to smoking

Group 2

Master Theme: Emotional Aspects of smoking

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Stressful situations	Bit of stress, my son was mis-behaving. Just having a cigarette makes feel calmer	Participant 7 Page 1/lines 1-3
Journey of going back to smoking	Felt I let myself down.....Also a bit low in yourself... When you get that knock-back and when you start again	Participant 7 Page 1/lines 5- 8
Needing to change attitudes about smoking	I think maybe just trying to control it a bit more in myself. Not thinking cigarettes will calm me down	Participant 7 Page 2/ lines 10-11
Social aspects of smoking	You would meet up with your friends and then they would be smoking, and you would think god I love a cigarette	Participant 7 Page 2/lines 13-14
Feeling left out	You feel left out when you are not smoking.....you get in that group and you feel odd... Sometimes when I get a bit stress out, it calms me down	Participant 7 Page 2/lines 25-28

Not changing smoking behaviour	Knowing that I am pregnant would help me stop smoking but it has not.....	Participant 9 Page 5/line 47
Implications for children's health	I don't actually smoke around him.....for his health as well...just a little bit still come in and he would still inhaling it.	Participant 9 Page 5/lines 48-53

Group 2

Master Theme: Emotional Aspects of smoking

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Giving up because of pregnancy	Being pregnant that was why I wanted to try and give it up, obviously with all the downfalls it just sent me back to smoking	Participant 7 Page 3/ lines 32-33
Determination	I just need to have that willpower you know....	Participant 7 Page 3/line 34
Emotions	Erm mainly because of the pressure of giving up and also because I did not cut down... Boredom, nothing doing really	Participant 9 Page 1/lines 1-4
Emotions	Upset a bit....still made me feel more relax...upset because I had not given up	Participant 9 Page 1/lines 5-7
Past experiences	Because I smoked with my first son throughout my whole pregnancy.....	Participant 9 Page 3/lines 26-27
Ambivalence	I do want to give up smoking, but I don't if you know what I mean	Participant 9 Page 3/lines 28-29
Happy to continue smoking	Erm I don't think really badly of it....I have cut down so much.....	Participant 9 Page 4/lines 32-34

Ambivalence	Really feel bad but on the other hand, I do because there is a baby...it is not like the baby asked to smoke	Participant 9 Page 4/lines 35-36
Addiction	It is still hard to, you know even though..... why can I not stop	Participant 9 Page 4/lines 37-39
Habit/Part of my life	That I am used to doing.....so it quite a habit and the routine that I do as well.	Participant 9 Page 4/lines 40-42

Group 2

Master Theme: Relapse

<i>Theme/Label (Cluster Label 2)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Stressful situations	I had a few ups and downs where I was just having a couple.....	Participant 7 Page 2/lines 15-16
Gradual process	This was what made me start having a few fags.	Participant 7 Page 2/line 18
Unable to quit	It was really quick for me, the return to smoking.	Participant 9 Page 3/lines 30-31
Needing more intensive support	The encouragement had gone so it was a bit harder to maintain	Participant 9 Page 4/lines 45-46

Group 2

Master Theme: Identifying coping strategies

<i>Theme/Label (Cluster Label 3)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Coping	I kept myself busy and always found something to do	Participant 7 Page 2/line 12

Isolation	Going into rehab.... Because where I am still immune and open to the outside world...breathing and smelling cigarettes and then start thinking I want some	Participant 9 Page 2/lines 10-14
Unavailable	I would find it hard to get to a shop.....	Participant 9 Page 2/lines 14-16
Being occupied	Keeping busy and something I enjoyed doing as well	Participant 9 Page 3/line 20-21

Group 2

Master Theme: Triggers

Theme/Label (Cluster Label 4)	Brief quote	Page and Line numbers
Identifying when I smoke	When I was socialising or when I was indoors, or with nothing to do,.....also when I feel a bit fed up and a bit stress out.	Participant 7 Page 3/ lines 36-37
Identifying when I smoke	When I wake up in the morning.....when I eat...when I am bored...	Participant 9 Page 5/lines 54-55

Master Theme: Support from the pregnancy service

Theme/Label (Cluster Label 5)	Brief quote	Page and Line numbers
Being supported in your quit attempt	She did encourage me and I felt really good in myself	Participant 7 Page 4/lines 39-40

Support	Things that they do is good and they encourage you.... Need to be motivate and positive yourself	Participant 7 Page 4/lines 46-49
Being supported in your quit attempt	The encouragement of the Stop Smoking Team...	Participant 9 Page 4/lines 43-44
Personal choice	Even though they want you to give up they don't pressure you to give up. It is just up to that individual if they have the willpower and the mind-power to give up	Participant 9 Page 5/lines 57-61

Master Theme: Reasons to quit

<i>Theme/Label (Cluster Label 6)</i>	<i>Brief quote</i>	<i>Page and Line numbers</i>
Financial and health gains	It is expensive and it does take a toll on you	Participant 7 Page 2/line 21
Using smoking as a way to cope with life	Sometimes I do not enjoy it, just smoking for something to do, just if I am bored	Participant 7 Page 2/lines 23-24
Implications for children's health	I don't actually smoke around him.....for his health as well...just a little bit still come in and he would still inhaling it.	Participant 9 Page 5/lines 48-53
Worst case scenario	If I told I had cancer or something probably	Participant 9 Page 6/line 65

2.13 Appendix 8 Summary table of Master Themes (Group 4)

<i>Participant Number</i>	<i>P1</i>	<i>P2</i>	<i>P3</i>	<i>P4</i>	<i>P5</i>
<i>Master themes</i>					
<i>Morals</i>	X		X	X	X
<i>Knowledgeable</i>	X				X
<i>Personal experiences of Giving up</i>	X	X		X	
<i>Addiction</i>	X	X		X	X
<i>Maintaining cessation</i>	X	X	X	X	X
<i>Support</i>	X	X	X	X	X
<i>Coping strategies</i>	X	X	X	X	X
<i>Being in control</i>				X	

2.13.1 Appendix 9 Summary table of Master Themes for Group 3

<i>Participant Number</i>	<i>P6</i>	<i>P11</i>	<i>P13</i>	<i>P15</i>
<i>Master Themes</i>				
<i>Preparation</i>	X	X	X	X
<i>Support</i>	X		X	X
<i>Adjustment Period</i>	X	X	X	X
<i>Advantages of giving up</i>	X	X	X	X
<i>First Priorities</i>		X	X	X

<i>Emotions</i>	X	X	X	X
<i>Developing coping strategies</i>		X	X	X
<i>Self-interest</i>				X

2.13.2 Appendix 10 Summary table of Master Themes for Group 1

<i>Participant number</i>	<i>P1 4</i>	<i>P8</i>	<i>P12</i>
<i>Master themes</i>			
<i>Addiction</i>	X	X	X
<i>Postnatal Period</i>	X	X	X
<i>Behaviour changes in pregnancy and postpartum</i>	X	X	
<i>Emotional aspects of smoking</i>		X	X
<i>Being protective</i>		X	X

2.13.3 Appendix 11 Summary table of Master Themes for Group 2

<i>Participant number</i>	<i>P7</i>	<i>P9</i>
<i>Master themes</i>		
<i>Emotional aspects of smoking</i>	X	X
<i>Relapse</i>	X	X
<i>Identifying coping strategies</i>	X	X
<i>Triggers</i>	X	X
<i>Supportive</i>	X	X
<i>Reasons to quit</i>	X	X

2.14 Appendix 12 **Participant 1 (interview transcript)**

Group 4

Interview schedule

Clients who have over a year of not smoking

Coping Strategies:

1, Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 1:

Erm, I think basically you always know or you hear that it is not good to smoke when you are pregnant or when you have a child. The facts that the counsellor came with, the facts that, it was shocking enough, you would not go their, because you knew, you have been irresponsible but when it is not even your own life that you are dealing with, but someone else you have to kind of not smoke. The facts and the figures that you told me and also other stuff.

Interviewer:

And was it different when you had your baby?

Participant 1:

Erm, No.

Interviewer:

Was there any sort of shift in your behaviour, or any change in your attitudes because you had your baby because it was out of you, because it was not someone else's life that you just talked about?

Participant 1:

But then it still is, because I grew up with my dad smoking all during my childhood and I constantly had a cold throughout my whole childhood. So erm, I would still get

the urge to want to smoke, but the counsellor said to me that erm to get the cigarette off basically take a shower, change your clothes, every time you had one for it not to be passed onto him. So it is not just possible.

Interviewer:

So it was more just looking at your own childhood and not wanting this for your child?

Participant 1:

Yes, I could smoke when it was just my health I was concerned with, but when it my child's health I had to stop.

Interviewer:

Anything else that you could draw on that make you managed not to smoke?

Participant 1:

Erm, Again I think it is the thing that you know that you are coming around and if I do smoke and I going to have to admit failure, guess I am going to have said I had a cigarette. For me starting all over again, I found it really hard, I mean I had an eye infection on the day that I gave up smoking, so I just spent the whole day in bed and I had to do that way. I could not move and the idea of going through that again for the sake of one cigarette, I don't think I could give up again that the point I am making. So I rather not go their.

2, Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 1:

Erm a few times I have seen my dad smoke and I would look at my dad and I might see a cigarette in the ashtray and I would just go to have it and then I would remember, also a craving would come. For the craving I deal with it more I think. Than when I find myself going for the cigarette that scares me. The craving as I said before, I can't do it, it is simple as that.

Interviewer:

Any other situations?

Participant 1:

No not really. My close friend gave up smoking around the same time as me and has started again. When I go to her house I thought I would find it really hard but I don't because she only smokes in her kitchen. So in a way it is removed from me.

Interviewer:

Any other situations?

Participant 1:

No not really, but I have yet to have a drink. So that's going to be a challenge.

3, When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 1:

I was petrified, because I just had visions of that I would have the baby and run straight down the stairs and go outside and have a cigarette. I guess the reality of having a baby did not allow that to happen. Anyway it did not. Until I guess when I came home and everything started to settle, I had a few cravings for a cigarette, but having a new baby took over I guess.

Interviewer:

Any other thoughts?

Participant 1:

Erm, You see the funny thing is I felt so well supported by the counsellor, that I felt that it could be thrash out if I kind of had any fears or problems I could ask the counsellor. I knew it would not happen, trying to gear my head with the counsellor's help of course to know that it is not an option for me anymore.

4, Thinking back to how you cope with not smoking, is there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 1:

I think for me it was just hearing the facts. I don't think there is anything I think it just came from, obviously the inhalator thing helped and chewing lots of gum I guess and trying to be distracted.

Interviewer:

When you say gum, do you mean the nicorette gum?

Participant 1:

No, just chewing gum, I was constantly chewing gum.

Interviewer:

So was that replacing the cigarette, every-time you wanted a cigarette you chew gum?

Participant 1:

Yes.

Interviewer:

Any other ideas that you pass on to other people?

Participant 1:

No, not really everything I would pass on would come from the text messages and that kind of stuff, so it was stuff that was kind of provided for me. I cannot think of anything.

Interviewer:

So it was what was provided by the service.

Participant 1:

Yes.

.....

Service improvement

5, *What do you think of the pregnancy service?*

Participant 1:

I think it is brilliant.

Interviewer:

In what way?

Participant 1:

In every way, it does what it said on the tins, that is basically it.

Interviewer:

Any other thoughts about the pregnancy service?

Participant 1:

No.

6, Can it be improved in any way to help people like you give up smoking?

Participant 1:

There is just one thing and it's a really small tiny thing, when I first sign up for the text messages I did not get at first and when I got them I found them really helpful, so that is the only thing. Nothing, I know it won't work for everyone, but I do think it really worked for me.

Interviewer:

Any other thoughts about how the pregnancy service can be improved?

Participant 1:

No, I think that is it.

.....

Lifestyle and environment

7, What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 1:

Also I am not the healthy person that you are going to meet and I am getting older. I know that smoking does not really help; it does mix so that was one of the other reasons.

Interviewer:

So being aware of getting older and you cannot get away with it for much longer.

Participant 1:

Yes.

Interviewer:

Any other things?

Participant 1:

No. Erm, the smoking ban was coming in, that kind of help as well I guess as it was more in the public eye.

8, How supportive were your family and friends about you still not smoking after you had your baby?

Participant 1:

Very supportive.

Interviewer:

Going back to your dad, has his smoking behaviour relax at all?

Participant 1:

He still smokes, he gave up, initially he gave up when he found out that I was going to give up, to kind of help me I guess. I keep trying to talk him into giving up.

Just every now and then he will be in the same room as the baby with a cigarette and he will forget for that split second, apart from that, he will smoke away from the baby.

With my friends only one friend smoke and she goes into other room, but she is doing that by herself, I have not asked her to do this.

2.14.1 Appendix 13

Participant 2

Group 4

Interview schedule

Clients who have over a year of not smoking

Coping Strategies

Interviewer:

1, Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 2:

Well first I banned smoking in the house, so that was good and with newborns you cannot smoke around them. So people tend to make the effort to go out of the room and you just don't go with them. So it was not too difficult, breastfeeding as well because you end up in other room. So you are not around people when they are smoking.

Interviewer:

Any other thoughts?

Participant 2:

Erm the thing I noticed most was the smell, once I stop smoking in the house and I stop smoking, people what did smoke really smell of smoke and I was quite pleased that I did not smell that way anymore. Then you realised that you used to smell like that. So that was probably one of the main reasons I continued not to smoke.

Interviewer:

So the smell, having a newborn and being ready to stop.

2, Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 2:

Only when I have been drunk. Now I don't like the taste and I am not used to it anymore that has turn me right off it. So that has kind of reinforced the fact I don't like it anymore, so that is quite good.

Interviewer:

So it is mainly when you have a drink?

Participant 2:

Yes, just because I think they go hand in hand, you have a drink; you have a cigarette, breaking the monotony of it you know.

Interviewer:

Anything else?

Participant 2:

No.

3, When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 2:

I did not think about it. Not at all, just carry on as normal. For me it was a natural process, the more you think about it, the more you find yourself wanting a cigarette. It is harder to ignore the fact that you are not doing it anymore I think. I just did not smoke I just carry on and took every day as it came. I tried not to think about going

back to it, and tried not to think of doing it, you know what ever happens happened.

4, Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 2:

The first one is ban smoking in the house straight away. Which means can you be bothered, especially in the winter, can you be bothered to go and stand outside the door when it is pouring down with rain and it is freezing cold and also you noticed the smell straight away, within days. You wash your curtains and they don't stink. That to me makes such a difference. That would be my first port of call, right I am not smoking, out of the house, no one is smoking in the house and that is better for everyone really.

Interviewer:

Anything else?

Participant 2:

I was quite ready to give up smoking and I think if you are not, it could be, if you don't want to you are going to lying to yourself and I also think having the advisor come round and testing you breath, every-time it was good, it was like well done me you know it was a big thumbs up so that I enjoy as well. The positive feedback of it you know.

Interviewer:

So to recap, ban it from the house, Advisor coming round, CO reading and being the right time to quit.

Participant 2:

Yeah, if you don't want too, you are not going to do it. Same for every thing, losing weight as well, if you are not interested in it you are not going to half heartily do it. For me these are my reasons that I gave up smoking.

.....

Service improvement

5, What do you think of the pregnancy service?

Participant 2:

What do you mean?

Interviewer:

Just in general, Advisor coming round to visit you?

Participant 2:

I thought the no smoking pregnancy service was fantastic, but midwifery, the other side of it was diabolical for me both times. Advisor came every time she was supposed to come. If she was going to be late, or I was going to be late, common courtesy of a phone call or a text. She would text me every now and again in between visits, e.g. when she was coming fortnightly or monthly she would send a text message every week and that was quite nice. So it felt like you were being watched. The no smoking side of it fantastic.

Interviewer:

Did you not get much support over the midwife side of it? Did they refer you onto the pregnancy service?

Participant 2:

B did. No that was a lie, A did. She was my original midwife, she booked me in and then I never saw her again because they changed the system, you know what I mean.

6, Can it be improved in any way to help people like you give up smoking?

Participant 2:

Well I had a fantastic time so I am more than pleased with it. I definitely tick the very good boxes the whole way down on the paper.

Not for me personally she was brilliant, she was not too in your face, she was not over the top, quite genuine about things, and it was like having a chat rather than being barked [at] you know. It was very informal and very nice.

.....

Lifestyle and environment

7, What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 2:

Choice and the smell. I can't emphasis it enough and also now that I have stop smoking my taste-buds have changed, and it has been a while, it has been a year, but my taste buds, I am tasting curries, these are getting hotter and things like that. So that is quite nice, I have realised this. I mean I am eating beetroot before I would have never touch it, but now I can taste it.

I think it has to be about choice, if you are not going to do it then you will not. It is all about personal choice. If you don't want to do it, you are not going to do it, no matter how people will try and enforced it on you and you have to be motivated to do it.

8, How supportive were your family and friends about you still not smoking after you had your baby?

Participant 2:

Fine, fantastic, really supportive, yeah I mean he (my husband) has to go in the garden every time and he has not tried not too and I have a couple of friends that don't smoke as well so that helps as well and the rest of them do.

Interviewer:

So their smoking behaviour did not relax once you had the baby?

Participant 2:

No, with newborns you go out of the room anyway. No they have all been really good.

2.14.2 Appendix A14

Participant 3

Group 4

Interview schedule

Clients who have over a year of not smoking

Coping Strategies

Interviewer:

1, Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 3:

The first part of that, how I managed not to smoke when surrounded by smokers?
What I would do would be to just remove myself from that circle.

Interviewer:

Anything else, did you just take yourself away from that situation?

Participant 3:

Since I gave up I really, really, really and I did tell this to Advisor too, I cannot stand the smell of smoking neither, I can't do it. I just removed myself from those people.

Interviewer:

So that was when you had your baby, what about when you were pregnant?

Participant 3:

Even before I gave up I was trying to give up, but I was easily sway until I set my mind that I did not want to do it anymore, not for me then I even started to back off. I mean I am very close with my neighbour and she noticed that I was not coming over so often and she is a smoker herself.

Interviewer:

Again so removing yourself from the situation and also a change of attitude within you?

Participant 3:

Yes.

Interviewer:

Is there anything else you can think of?

Participant 3:

I [was] made to feel guilty by my son, he would remind me just to make sure he does that. Doing the tests with Advisor as well, you know she does, the breathing test, where you blow into it and that made me feel guilty in itself.

Interviewer:

So it is these four things really, so the CO machine, son making you feel guilty, the taste and just removing yourself away from the situation.

Participant 3:

I knew in myself what I wanted and I did not want to smoke anymore? It did not make me feel good.

2, Can you think of situations when you have felt the need to smoke, but you did not

smoke?

Participant 3:

Mainly times when like there is stress, when you feel stress. Depending on your character, me I am a strong person and I knew what I was aiming for, I did not want to smoke.

Interviewer:

So it was when you were in a stressful situation?

Participant 3:

Yes, most of the time.

Interviewer:

Is there any other situation what springs to mind?

Participant 3:

Not really, just when I was feeling like overwhelm or stress really. That it was it really.

3, When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 3:

My thoughts where get food in the house girl.

Interviewer:

So just to get some food in the house? Was this a replacement thing for cigarettes?

Participant 3:

Yes definitely, I would rather anything else than put a cigarette in my mouth. My thing was to get fruit like juicy watermelon, to get the buds going. That kind of thing.

Interviewer:

How did you think you would cope with it once you had your baby?

Participant 3:

I knew I would because at the end of the day, If I continue to do smoking it going to make me ill. My son made feel bad, he would say “the little baby” when I was pregnant I was not very well and my son put this on me so bad.

Interviewer:

So your cope with it all by thinking of your health?

Participant 3:

Definitely. Yes, waste of money, I rather put electric on, you know something on the house, rather spending it on cigarettes and killing myself.

4, Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 3:

Not original, but guilt does work. When people tell you that not a good thing to do when you are pregnant. Even know we know it and to be told this you might get annoy someone saying this to you, but it is the truth, that’s why we feel this way.

Interviewer:

Is there any other good ideas that you think you could pass on?

Participant 3:

Think of the health of the baby, and of yourself because without you your baby cannot live.

Interviewer:

Anything else?

Participant 3:

I think it is selfish, I mean we where not born with cigarettes in our mouths, it is something we choose to do, no matter how old we were when we picked up the first cigarette. It is not worth it in the end.

Service improvement

5, What do you think of the pregnancy service?

Participant 3:

The non- smoking service, I think it is really good support. She made me feel that if at any time I could contact you guys, and yeah it was brilliant. I recommended it to people.

I have even spoken to my neighbour as she is actually pregnant as well and I have been on her case as well. We will see, I mean I can't make her, I can only tell her.

6, Can it be improved in any way to help people like you give up smoking?

Participant 3:

I was even wondering if you do classes as well. You know. I think the service in itself is brilliant, but you know just to like, I know pregnant mums some people might think all they do is sit at home and stuff, sometimes they get bored and I am talking about from myself as well, somewhere to go as well. Trying to meet with other parents or people that want to give up.

Interviewer:

So more like a group?

Participant 3:

Yes, pregnant women and women who have children too.

Interviewer:

During the time you are pregnant? Or during the time you are smoking?

Participant 3:

Both.

Interviewer:

So more like a support group.

Participant 3:

Apart from that I believe you guys have been everything that is possible within your powers.

Lifestyle and environment

7, What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 3:

The thought of passive smoking, even if you are walking by in the street, and someone is smoking, within those 50 seconds you are taking in some of what they are blowing out. I really hate that because I am walking my little boy too. So passive smoking as well because that's a killer as well. It is shortening my lifespan.

8, How supportive were your family and friends about you still not smoking after you had your baby?

Participant 3:

Some were quite sceptical. Some were supportive, you know well done, I know if I was to say give me a fag, they would be giving me a fag. Most of them have been good.

Interviewer:

Did their smoking behaviour changed at all once you had your baby?

Participant 3:

It relaxed before this, because I let them know you cannot come into my house smoking, not that I let them do it before, they know for a fact that they would not be allowed to smoke in my house.

2.14.3 Appendix A15 Interview transcript

Participant 4**Group 4*****Interview schedule***

Clients who have completed over a year of not smoking

Coping Strategies

1, Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 4:

Erm, pretty much from the day I stop, I just stop being around anyone at all that

would smoke.

Interviewer:

So just removing yourself away from that situation?

Participant 4:

Yes, completely.

Interviewer:

Was there anything else that you did?

Participant 4:

Afterwards there would have only been one or two occasions around people. Just really trying to avoid people I think. It was helpful because the ban had come into effect so when I went out where ever I was it would not be a problem.

Interviewer:

So just removing yourself from the situation and obviously the smoking ban helped as well?

Participant 4:

Yes just those two things.

2, Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 4:

Yes, about hundred of them. Every-time I am around my mum. Anytime I was stressed or doing things that I always used to smoke when doing these things. So all of those are quite difficult. The hardest one is in this flat for some reason, when they smoke upstairs, it comes straight through these windows and you can smell it really strongly. So that is horrible.

Interviewer:

So mainly those situations, being around your mum, when you can smell the smoke. Can you think how you cope with this?

Participant 4:

One of the best things that, I cannot remember if it was A or J said [who] said do anything but, so whether it being chewing my nails or copious amounts of Red Bull or eating sweets, in my head as long as I had that going around anything but that, but that, so that was fine. Again removing myself from whatever was bothering me. Just avoidance.

3, When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 4:

I was terrified of that, I constantly had that thing of what happens when he is born, because when he is born he is not inside, not directly it was kind of a excuse, being pregnant thing, I can't do it because of this. So at first I transfer it over too breast feeding, can't do it because I am breast- feeding. Then because was other six months then it was kind of I have been doing it for this long you can manage other day, other week, and just kind of pushing it along. It was a big fear.

Interviewer:

So it was more like a process, you cope with it when you had your baby by breast – feeding and then once you finished breast feeding it was the next stage?

Participant 4:

Yes, because it had been longer enough, so it was finding little kind of excuses to give myself so I could just extend it and extend it.

Interviewer:

So has that worked throughout the last year and a half?

Participant 4:

Yes I give myself one other stage to go through. In my head now, "If I can just get pregnant then it will be other six months to I get pregnant, why on earth would I smoke before that, then it is like by the time you have got pregnant, had the baby, done the breast feeding, it is other two more years, then it will be four years, five years, and why would you smoke after five years. This is all in my head. Just keep pushing it away.

4, Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 4:

My biggest reasons in having difficulty stopping was control. I had this kind of it is my last thing that I am in control of by being pregnant. It was important to me to understand that I was still in control, I was in control of not smoking, and I was trying to give up smoking. So it was a constant, I get to make these choices when ever I want, I can stop whenever I want, I can have a cigarette when ever I want but it is my control that was really important. I needed to be in control of something and knowing that it was a choice to give up smoking. Control for me was a big factor I think. Seeing it as a drug, rather than a thing you do made a big difference, changing what it is. I found just looking at cigarettes, the last few I was smoking actually really looking at them and thinking why I am doing this.

Because after awhile you just avoid it, you don't notice a cigarette, you don't notice it, that it is lit, you don't really pay attention what you are doing. So paying attention to the actually thing, when you are walking past people in the street actually if you are avoiding it, sometimes just looking at people and thinking that is actually a drug their taking their and then on the street, you know what I mean and just kind of re-label it in a way in your head.

Interviewer:

So having a change of attitude to smoking?

Participant 4:

Yes.

Service improvement

5, What do you think of the pregnancy service?

Participant 4:

Brilliant, Absolutely brilliant, really non-judgemental, really supportive. Did not feel like, I could have text or phoned literally 24 hours a day and I would have not felt bad to do that. Exactly what I would have needed. I did not realise I needed it. It was really supportive and really positive.

6, Can it be improved in any way to help people like you give up smoking?

Participant 4:

Not really. The only thing I asked A about was, after he was born was there a group or a random not necessarily every week, but maybe once a month or what have you of the local area, because you have a lot of groups of mums and baby, mums and toddlers, but you never feel like that you can talk about smoking, it is like a taboo subject, so if there was a place where once a month or once every six weeks, you could have gone and said “ I really want one too but I am not going too”. Just that kind of not all the time but perhaps once a month.

Interviewer:

“So when you say a group, do you mean like a mother and toddlers group where you can talk about smoking?”

Participant 4:

Where it is okay to actually say this. Have it as a mothers and toddlers group so it is not smoking, but you know walking in everyone has been there, you can talk about if

you want too, but it does not have to be the focus. You don't have to go feeling like, I am going to go, that all they are going to be talking about it and then I am going to want one and it going to remind me and I don't want one. Somewhere you could, there would be a mum their, that you could say that terrible word and you would not be looked at it if you where the devil just for wanting a cigarette.

Lifestyle and environment

7, What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 4:

Money and health, just really expensive, which is actually a massive bonus when you are continuing to quit once you realise how much money you have it is quite [a] scare, you don't realised this before-hand and just standard health issues, being able to run for a bus, and not having like chest infections. Support from my partner, he quit just before-hand and did not start again without having any kind of therapy and stuff that I had. The patches and everything they where helpful. Actually more to the point was understanding triggers which I would not have had without the support system, because I done quite a lot of counselling training and things like that and even with that background I would have not put two and two together.

I would have not understood why I smoked, and [what] my triggers were, and why they where triggers, therefore would not have known how to avoid it. Do you know what I mean? So I think the actually counselling of it.

Interviewer:

Having identity as a smoker?

Participant 4:

Yes and figuring out where on earth that comes from, at what age and what point, you know all of that stuff, you cannot do this by yourself. You can, but is very ridiculous. I think this will be the key in me not smoking in the future, is the fact that I know a bit more about that side of it.

Interviewer:

So understanding all of your triggers and how to cope with them?

Participant 4:

Yes.

8, How supportive were your family and friends about you still not smoking after you had your baby?

Participant 4:

I don't think apart from my partner anyone else understood, I think very few people understand that smoking can be an addiction in the exact same way as everything else. So I don't think anyone understood the seriousness of it what I was trying too do and I don't think anyone outside of my own house was very helpful at all. A lot of people would go outside and have a cigarette and not see that as something you should not really do, because we can still smell it and it is really strong. So yes I think family wise they could have smoked away from the house.

Interviewer:

Where they doing this when you were pregnant?

Participant 4:

Yes, when I was pregnant I would just not see them, just too completely avoid them. Then once he was born people do relax a lot and they think it is not a problem anymore.

2.14.4 Appendix 16 Interview transcript

Participant 5

Group 4

Interview schedule

Clients who have completed over a year of not smoking

Coping Strategies

1, Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 5:

I try to remember things that A said about [how] bad smoking is and try to remember, if you smoke it affects your baby's health, yes something like that.

Interviewer:

"So just to do with your baby's health, and do anything but not smoke?"

Participant 5:

Yes.

Interviewer:

And was that when you were pregnant as well?

Participant5:

Yes.

Interviewer:

Is there anything that stopped you from smoking?

Participant 5:

Just to learn this knowledge I learnt by counselling. She suggested to move the order of the kitchen where I used to be smoking. The order of the electronic things, but I have not changed anything, just to remember the bad things of smoking and try to

make myself strong.

Interviewer:

Can you remember anything else?

Participant 5:

Yes, I drank some herbal tea and earl grey tea because it is not normal tea to make my routine different and the flavour of the tea. I used to drink normal tea and coffee when I smoked. I tried not to drink coffee and drink earl grey tea.

2, Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 5:

Yes when I got frustrated when I was pregnant when I had an argument with my husband and my husband would go out to the garden and light a cigarette and I really really wanted one, but I just decided not to. So then I just did not have one.

Interviewer:

Was there any other situations when you wanted to have a cigarette?

Participant 5:

Yes my husband, and after I had my baby I was frustrated with my other two children, they were very noisy and the house was so messy, no-one helped me, oh my god and I wanted one. Obviously I did not have any cigarettes, I did not have any life, and I just tried to forget about cigarettes.

3, When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 5:

I was breast-feeding and this helped me not to smoke.

Interviewer:

How did you think you would not cope with it?

Participant 5:

I was alright. Because I had not smoked for a long time, I did not think about it. The breast feeding helped me with not smoking. Breast feeding, forgetting about cigarettes and the smell of the house. Since I have stopped smoking I have asked my husband not to smoke inside and all the guests who smoke, so they go outside to smoke, so the house does not smell anymore.

4, Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 5:

I used the gum and it helped a lot. With the patch I felt really sick, feeling drowsy, it was too strong for me. The gum I was taking the 2mg gum, every time I wanted a cigarette, I used a piece of gum. That is all I can think of.

.....

Service improvement

5, What do you think of the pregnancy service?

Participant 5:

I thought it was very good and I think I could not have stopped smoking without that service. I did not really ask the GP, I just mention that I was smoking and I cannot stop and they sent me a letter about the service, it was very easy and quick. It was very good and I very glad.

6, Can it be improved in any way to help people like you give up smoking?

Participant 5:

I think it already very good, so I don't think it is okay as it is.

Lifestyle and environment

7, What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 5:

My own health as well. Not sure how to explain but socially, whole world is getting a bit like everyone is trying to stop smoking. If you stop smoking you will be respected more. Since I have stopped smoking when other mums are smoking are smoking in front of the school they are criticise. They are not very good mums, so social stigma, people will look at you. As smoking is damaging the environment, the air and the ground we should all stop smoking. Security as well, in knowing you are protecting your health by not smoking.

8, How supportive were your family and friends about you still not smoking after you had your baby?

Participant 5:

They did not really support me. My husband tried to not smoke too often and he would go outside to smoke. Before he did not care about passive smoking, I explained That there are 4,000 chemicals in a cigarette and then he understood and it is not good for baby and then he changed and he always goes to the garden and reduces the amount of smoking.

Interviewer:

Is that still taking place now?

Participant 5:

Yes it is still taking place and it is already settled and it is like our rule, no smoking in

the house.

2.15 Appendix A17

Participant 6

Group 3:

Interview schedule

Questionnaire for pregnant clients who have completed 8-12 weeks of not smoking.

Behaviour change

1, How did you managed to give up smoking?

Participant 6:

Basically I cut it down to like 5 a day, then to one a day, and then tomorrow, I just thought, this was over two weeks, and I thought I would stop completely and I just did and that was that.

Interviewer:

So that was your technique for giving up smoking?

Participant 6:

Yes.

Interviewer:

Was there anything other techniques that you used to give up smoking?

Participant 6:

Support from the counsellor. Afterwards when she said she was going to come back

after so many weeks and test your thing again. [Carbon monoxide to validate self report of no smoking] I thought if I have smoked I am going to feel like I have let myself down when she does the reading.

2, When did it become easier not to smoke?

Participant 6:

I don't know. I don't think it ever became easier.

Interviewer:

Did it become easier after one week?

Participant 6:

No.

Interviewer:

Is it still on your mind a lot?

Participant 6:

Yes, I have quit now for six months, it did get easier after about a month and a half, I did not think about it as much.

3, What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

Participant 6:

The only thing that really helped me was not drinking tea because I associated that with having a cigarette. The CO machine, because if I have smoked I would have been wasting her time, you know what I mean. That was a really good thing.

.....

Being near smokers

4, What was it like being in situations where you would normally smoke?

Participant 6:

Horrible.

Interviewer:

In what way?

Participant 6:

I don't know I think I was missing out. I don't know I would normally be their holding a cigarette and smoking with them. You know what I mean. I just felt like I was getting left out.

5, What is it like being with a partner and any friends who smoke?

Participant 6:

With him it is alright I am used to it now. In the first few months I suffered from morning sickness the smell, I did not realise, have you smoked before?

Interviewer:

Yes.

Participant 6:

Do you still smoke?

Interviewer:

No.

Participant 6:

Because you do not realised when you smoke how bad it smells until after you have stopped smoking. It stinks. That was the main thing.

Interviewer:

What about when you were with your friends?

Participant 6:

The same thing really. Although not as bad as I would not get close to them as my husband.

Interviewer:

Anything else?

Participant 6:

No.

.....
Benefits of giving up smoking

6, How do you feel about your health since giving up smoking?

Participant 6:

A lot better, I have not got that horrible cough you have when you smoke. Smokers cough when you have to cough a lot. Because of my pregnancy I feel I cannot say at the moment.

2.15.1 Appendix 18

Participant 11

Group 3:

Interview schedule

Questionnaire for pregnant clients who have completed 8-12 weeks or longer of not smoking.

Behaviour change

1, How did you managed to give up smoking?

Participant 11:

I just cut down, and then eventually did not smoke again.

Interviewer:

“Was it over a certain amount of time that you did smoke?”

Participant 11:

Yeah it was over a couple of months, that I went from smoking twenty, then to ten, five and then have one in the morning and one at night. Then none at all.

Interviewer:

So gradually reducing it? Was that easy?

Participant 11:

Erm, sometimes it was alright, it was hard at times.

2, When did it become easier not to smoke?

Participant 11:

When I started feeling her moving, because I thought it not fair on her and I was worried that she would get asthma or something.

Interviewer:

“So it got easier once you felt your baby move?” “How did it get easier?”

Participant 11:

Because I thought more about her than me, I need a cigarette, but she doesn't.

3, What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

Participant 11:

Eating (laughs) and chewing gum.

Interviewer

Is that normal chewing gum?

Participant 11:

When I needed a cigarette I suck on a boiled sweet. Something to replace the cigarette.

Interviewer:

Is there anything else you can think of?

Participant 11:

No not really, those are the main things. If I felt like a cigarette, probably eat and do one of these things.

.....

Being near smokers

4, What was it like being in situations where you would normally smoke?

Participant 11:

Hard.

Interviewer:

In what way?

Participant 11:

Erm, if I was having my friends round and something, and they would be having a cigarette, then I would find it really stressful, because I would feel like I wanted one and you can smell it. I fancy one then and that would make it hard.

Interviewer:

Anything else?

Participant 11:

When I was out, because when I was pregnant I still have a drink, a wine or something and when you are having a drink, you feel like a cigarette. That was other thing that was hard.

Interviewer:

Any other situations?

Participant 11:

If I had an argument with my boyfriend I automatically want a cigarette that is when I did have one, a few times when I was pregnant. Also after you eat as well, yeah after dinner.

Interviewer:

How did that make you feel?

Participant 11:

It was not too bad; I think it would have been hard if I was not pregnant. If I was not pregnant then it would have been harder, but because I thought of her, it was not about me.

5, What is it like being with a partner and any friends who smoke?

Participant 11:

Hard, because they are not considerate.

Interviewer,

In what way?

Participant 11:

They still smoke around you and stuff, so it is hard and they even offer you a cigarette, because they forget, they are used to seeing you smoke, so you sit there and they are like do you want a cigarette, and you like no. It is hard because you really want to take one and you got to think no, I am okay, thanks. When you really want one, yeah no one is really considerate. My friends still come round and have a cigarette, and I am like, can you not smoke please.

Interviewer:

“What is it like being around your partner?”

Participant 11:

He tried to cut down with me and tried to give up. He always carry on, he could not stop all together. I was not happy when he was smoking; I tended to go out, because it would get on my nerves, seeing him sitting there smoking. Sometimes I feel happy, because I would think oh yeah at least I am healthy now. When I gave up I felt a lot healthier so when I see them in the morning I would think at least I am not like that. Most of the time it was stressful, I can smell it a lot more, when lots of people are smoking, where as when you are smoking you don't realise that. When I would be sitting on the bus, if someone who smokes would get on, the smell it was horrible. They would stink.

.....

Benefits of giving up smoking

6, How do you feel about your health since giving up smoking?

Participant 11:

I feel a lot healthier, at first you feel erm (coughing sound) in the mornings when you give up. I felt really chesty and stuff. After a few weeks it felt a lot easier to breathe, and it was nice to wake up. I breathe easier and when I run I don't feel so out of breath. It is a lot better.

Extra question**Interviewer:**

If you were to think of anything that would help other people in a similar situation to you, what would it be?

Participant 11:

Just do it for the baby, because if you wanted to start afterwards then it is up to you, innit, but for them you want to give them a good start in life and you don't want to give them any breathing problems. When I see them adverts, where it is, if you smoke I smoke and stuff like that, I think like that is not fair on them, because it's harder enough for them to breathe anyway. They do not need anything added on top of that. Also cot death is a worry; I want to make sure that my baby does have this. So by not smoking, she won't be exposed to smoking in the house.

2.15.2 Appendix 19**Participant 13****Interview schedule****Questionnaire for pregnant clients who have had 8-12 weeks of not smoking.*****Behaviour change***

1, How did you managed to give up smoking?

Participant 13:

I had to change my thought process. My way of thinking, I had to identify the main

causes of why I smoked and erm for me that was sociable because I have grown up with all of my family, my parents, my grandparents, aunts and uncles. Everyone is smoking. So I have always had in my mindset that this is a normal way of life. So I had to kind of separate my ideal lifestyle from that which was a bit difficult but once I had identified that not everyone smokes, that was a bit easier, erm being around friends that smoke I had to really separate myself for a little while. Because even though I was giving up smoking I would be around people that smoke and then I would have a lapse.

So realising that it was not peer pressure, they were not forcing me but it was kind of the thing where everyone else is doing it, so why should I not. Erm changing my attitude when I had bad circumstances like something was going wrong, like a argument, I was upset, I was stressed, or like I said about being flooded and stuff like that. Getting situations like that and then realising that I have not smoked all week, so now this situation that's made me want to give up and just think I need a cigarette.

So it was about changing my thought process and realising, identifying why I smoked, when I smoked and kind of just trying to create a kind of plan for myself from that.

Interviewer:

"Is there anything else you can think of?"

Participant 13:

Obviously I wanted to give up, and before I was saying that I wanted to give up, but I don't actually think I was registering that for myself, I think I was just saying that because it sounded good, Oh I want to stop smoking, but I didn't really want to stop smoking. So it had to come from me, really having enough of smoking and caring about my health. A lot of it had to do with my children to be honest because I realised that from my parents, seeing me smoke and they did not care about not smoking, it made me smoke because I thought it was absolutely normal and I don't want my children to smoke, so obviously they are going to follow what I did as I follow what my parents did, because your parents are your role models, so my children did have very big impact.

I knew how much they wanted me to stop smoking as well. So I did feel guilty when my son was hiding my cigarettes and I would be getting frustrated with him because he would think it was a joke and I really want a cigarette and then I realised it was not a very nice pattern to be getting into.

2, When did it become easier not to smoke?

Participant 13:

Erm seeing the stop smoking lady that helped an awful lot because erm, it just helped me have more of a goal. Which then helped me to make it a little bit easier, erm it got easier as time went by, the less I smoked the easier it got. Clearing my house of any smoking paraphernalia what so ever, ashtrays, lighters, everything did help. I did not think it would, well what the point of that you can grab a cup or plate or something and use it as an ashtray.

Then I actually realised it does help when you cannot find a lighter and the craving, I did not understand that six seconds thing, but I realised if I was identifying time where I was stress and thought right that's it I am going to smoke, and I couldn't find a light or I couldn't find a ashtray or I did not have a cigarette in the house by the time you have gone to the effort to do all of that you don't even want a cigarette.

So little things were helpful to me, I started to like the fact erm as time went on I got a bit stronger, and where I had identified certain things and tried to create a plan for stopping smoking, I started to like the fact that when people offered me a cigarette, I was able to say no, that made it easier, the more I said no, the more I realised I had become a non-smoker. Then it started to dawn on me that was actually what my aim was.

So it just got easier like that really. I must say it was about six weeks before it started to get easier. That first six weeks I was going back to it, and I was unsure about why I was stopping smoking. If I really wanted to. As I said seeing the counsellor, kind of

made me feel guilty when I did see her and I had a cigarette. So it was nice to have support and the support from the kids as well.

Interviewer:

“How long have you given up for now?”

Participant 13:

Three months of not smoking. After six weeks of understanding why I smoke, it became easier as I was determined not to smoke.

3, What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

Participant 13:

Being pregnant and harming the baby. Having children that would follow in my footsteps and smoke. Also knowing how much I did not want my kids to smoke and thinking about why I smoke. So it is kind of like, if I don't want my children to do something why am I doing it was a big strong hold. Erm then there is just the health aspects of it, wanting to be healthy, wanting to be able to run up the road without feeling like I am about to collapse and have a heart attack. I was starting to get shortness of breath and stuff like that and it is very expensive.

I think when I got through the first six weeks, the first month and a bit had gone past, and I cut down, it started to to the point where I was actually taking a cigarette from someone and it genuine taste like I was poisoning myself. Where I had cut down so much I could actually sense the difference erm and just trying to be around people that don't smoke instead of people that do smoke. This was really helpful, now I can be around my friends that smoke and not be influence me. While I was trying to give up it was not helpful.

Interviewer:

“Anything else you can think of?”

Participant 13:

Erm, just my own willpower and determination. Oh of course nicotine patches as well. Nicotine patches were a big help. They got me through the first six weeks, they got me through and on and off after that I might have had one on a bad day (using patches) or something. Now I don't use anything at all.

.....

Being near smokers

4, What was it like being in situations where you would normally smoke?

Participant 13:

It was really really difficult as I have said, knowing that I am trying to give up smoking and seeing someone else smoking, kind of makes you think why am I giving up, they are not giving up, so I mean you see people smoking and you think it can't be that bad their doing it, but then you have to kind of identify your own needs and your own, you really have to separate yourself from following, even if it is like from my case it was my parents who smoke. It is hard not to follow your parents, you don't have anyone else not to follow, so if you see your parents doing something and you think, I used to say to myself they say, you get really sick with cancer and stuff like that, but my parents have been smoking for twenty years and they are perfectly fine. It is really about kind of getting away from those kinds of thoughts and just trying to change your way of thinking and knowing what you want really. It was difficult and as time went on, it started to become frustrating because now I do class myself as a non-smoker and I get really quite irritated when people are smoking, because it is only becoming a non-smoker, I realised how much it stinks, it does not taste nice, it does not do anything for you, erm I started to realise how much negative's there is to it.

5,What is it like being with a partner and any friends who smoke?

Participant 13:

None of my partners have smoke. It is always been me, that's been told I cannot be kissed because my breath smells. So I know how it is for the other person when you are with a smoker and it is not nice for a smoker, if you want to give your boyfriend a kiss and a cuddle and he is just repulsed because your breath smells or your hair smells so I have kind of experienced that. Now erm I just came back from holiday with my mum and my dad, and they smoke so much while we were away, and I was really disappointed that they don't want to quit.

I know everyone is different and as I have said you got identified for yourself, and you got to want to quit. It is really quite, disappointment, kind of frustrating, you have stopped and you think, why I don't can't you and you cannot you see that it is for the best. Obviously that's makes you continue not to be a smoker as well. In the early days I would just want to have a cigarette with my friends.

.....

Benefits of giving up smoking

6, How do you feel about your health since giving up smoking?

Participant 13:

I feel like I don't smell, although I used to. I feel like I am starting to get my breath and energy back. I realised how yellow my teeth are and I am trying to get my teeth white again.

Erm, it not a kind of superior feeling, but compares to someone who does smoke, I do feel like I am doing a bit better than that person in terms of my health. Because I now see smoking as quite a self-loading thing. I just really like not to be in the same situation that I am smoking again or anything like that. Before I did not know the difference between non-smoking and smoking, now I do. I can honestly say I prefer being a non-smoker.

2.15.3 Appendix A20

Participant 15 Group 3

Interview Schedule

Questionnaire for pregnant clients who have had 8-12 weeks of not smoking

Behaviour change

1, How did you managed to give up smoking?

Participant 15:

Erm, when, myself and L talked about it at length, the times that I smoked you know my main kind of times which were basically when I first woke up in the morning before I get the kids up for school. That's was what was getting me out of bed and that was going to be the most important time of the day for me and then in the evening for me as well. I think when I got tired. It seems to be something that, I would come in the kitchen and smoke and then go off and do their bath and then come back and have other one. I seem to increased my smoking in the evening as well.

So it was identifying the kind of key time's erm, the key, the behaviour bit to it when I would actually do it. Erm, once I had sort of, we discussed what else I could do instead. Which was actually use the Nicotine Replacement Therapy, the inhalator, have the patches anyway, use the inhalator and still come into the kitchen to have my five minutes time out as it were and just smoke, sorry, puff on that instead of a cigarette.

Erm gradually may be think of other things, you know other ways that I was going kind of use that as a crutch at those times, but still have the time I needed for myself. Erm and then, I don't know I supposed after I had actually quit I just noticed very gradually over the weeks I was not having to come into the kitchen and having time out anymore. I was maybe just taking deep breaths or I was becoming kind of less

stressed anyway because I think nicotine actually makes you more stressed and you don't actually realised it. I think the support, it helps to talk about it a lot before I actually did it with L.

I think to actively make the decision that it was bad for the baby and I had a lot of that kind of being pregnant the same time, I had a lot of guilt around smoking when I was at the beginning of my pregnancy as well. I found particularly the last four weeks that I was actually smoking it became a fact that every-time I had a cigarette I was feeling awfully about it. So that was a huge component to it really, the guilt actually.

2, When did it become easier not to smoke?

Participant 15:

I think really, I think, I kind of what I did was I had the, I gave up at the beginning of the school summer holidays which was not an active choice. I had a bit of a bleed in my pregnancy and that was the thing that really spur me to think "I am just going to quit now". You know it was a bit of a scare really. Erm it correspond with the beginning of the summer holidays which meant that my routine had changed anyway as a mother I did not have to get up at six o'clock and get the children up and have that two hours rushing around getting them ready to go to school. I was able to lie in and take the day more slowly.

Erm, so I think that help. Basically what I did was took the patches down from what they say, the strength, 3, 2 and 1. I think I had strength 3 for about three weeks, for the first four or three weeks with the inhalator thing. Erm then I went down to step two as well. I think probably the first three or four weeks were the hardest.

Interviewer:

"After three or four weeks it became easier"?

Participant 15:

It was just making the changes and I think that is also you have the time when the nicotine is clearing out of your system. Nicotine is a drug, but then you also become

aware you don't smoke anymore. It takes three or four weeks to get into your head, "I do not smoke anymore". So the times that I would normally smoke, there was a lot of times if I walked down the street for example and I was quite aware I don't smoke when I walk down the street now, I might have a bag of crisps instead now. So there was a lot of behavioural changes going on in that first month and I think it took that long for them to become easier.

3, What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

Participant 15:

It was the NRT and L was coming once a week as well. I think I felt there was a initial euphoria as well I think in that first week to four weeks where you feel quite proud you have managed to do something that you have heard so many people say so many times, including myself. Erm I could not ever give up and then suddenly you kind of realise after five or six or seven days. Then you suddenly realise that you have given up and then you feel quite comfortable with that and then you actually get a 'buzz' out of it, wow I actually don't smoke, it's been a week or it has been two weeks and I haven't even had the urge to go and buy a packet of cigarettes.

So I think it was a combination of self-praise and being proud plus I presume the patches were helping me and working. Obviously I was using my inhalator as recommended, which is once an hour you are to suppose to use it. I was also finding I would use this at the exact times I would have smoked as well for that first month. Which was first thing in the morning and in the evenings and walking down the road, even sometimes if I did not feel too stupid with it? Also my change of routine, it was the end of the school term, it was very much I am tired, the kids are tired, it was kind of keeping me going. That thought of I will open my eyes in the morning and come into the kitchen and have a coffee and a cigarette before I wake them up.

Then that was not happening. So it was I can get up at nine, if I want too and the kids are going to get up and we are going to do this today. So I think the fact that it

corresponds with the change in my routine did help.

.....

Being near smokers

4, What was it like being in situations where you would normally smoke?

Participant 15:

Well I don't actually go anywhere and obviously since they have had the smoking ban anyway even if I did go anywhere it would not really be an issue. I meant my partner, boyfriend he smokes, he just went outside. He still does now, he just goes outside. That was one change I had to say, "There will be no cigarettes in the house what so ever. Erm other than that, well some of the mums at school smoke, but I was not seeing them because we were not at school. Other than that watching people on the street really, that's the only time I have encountered smoking. Obviously if I give up then I don't expect to have cigarettes in my house. Simple as that really. So other than that the only time I would see it, was when I was out of the house. If it had happened before the smoking ban and I was still going to pubs then it would have been totally different. That was not an issue.

5, What was it like being with a partner and any friends who smoke?

Participant 15:

I think initially it was quite difficult and then it was not. As I have said I would not have it in the house (smoking) because I am not doing it. So it is something I did not sit and actively watch. I would not put myself through a situation where I would sit next to someone and I am watching them, that never really happened. A couple of the mums that I met at school in the morning I might have a chat with outside the gate and they might be smoking, it is an outdoor situation. I think I said straight away I had given up and they would just blow the smoke away from me anyway.

At that point what I had to remember is you know being pregnant is such a huge part

of it. I am quite aware that I am helping my baby's health by not doing this thing. So regardless whether I am standing next to one of the mums that is smoking or not anyway I am still consciously aware that there is a baby inside my stomach which will be breathing this stuff in.

Benefits of giving up smoking

6, How do you feel about your health since giving up smoking?

Participant 15:

It quite interesting really because I have discussed this with L a couple of times as well. Erm, you are not aware of the health benefits. I mean I am not going wow; I am initially aware, erm from what I can see I did not have major detrimental effects, so far touch wood. I did not have smokers' cough, I mean I had a slight burning in my chest in the mornings and obviously that has now gone to be replaced by a little bit of heart burn. Also interestingly enough I am breathless anyway and I have been for quite a long time ago. I noticed I was huffing and puffing walking up the hill to school and I am still am now. So I think it will be interesting to see once I had my baby the difference. I went to the gym once when I was about 4 months pregnant or something. I did a little bit of work their, but obviously you are doing cardio like you used to be if you are not pregnant.

So you are not going to see if you can run for longer, because that is not a issue so it is kind of really hard to tell. I think maybe my skin does not seem to be as dry on my face. I was getting a bit aware of lots of wrinkles and that's does not seem so bad anymore. So I don't know if that's due to giving up smoking. I did not think this was reversible, so it seems to have gone back. So you know I think I am definitely not as dehydrated as I was. I don't seem to be drinking as much coffee either which probably helps, that's either the pregnancy or because coffee and cigarettes for me go hand in hand.

Since I have given up, I will have a coffee in the morning and that's it. Where as when I was smoking I was tending to have them all day, hand in hand. So I would say that was a couple of the benefits. Taste –wise not a huge amount of difference I thought. Not as dramatic as I would have thought. Erm smell, yeah you know I cannot smell it on my hair anymore. I cannot smell it on my coat anymore. This is quite nice. I always smoked in the kitchen other than last minute at night I might have had one in the bedroom. I never noticed the house smelt that bad, now I think it definitely smells fresher.

Yes, I just think it will be interesting to see after I have had the baby whether I feel any difference then, but what I will say is that I feel less stressed actually. That took a while, about a month or so. Now I just think I am a little bit more level than I was mood-wise. Again as myself and L discussed when you are pregnant you are not to sure whether the mood swings are coming from anyway. Yes definitely I do not seem to get so irate as I was. I think you cal down towards the latter, last trimester anyway.

My experiences of giving up smoking was we set a quit date, which I then fail to actually give up on that particular day, then I felt really bad about it and set other one. I think L came around about three times and we would have this quit day, then she came around and I said I had not managed too. My experience was I just did it on the day itself. Like I said I had to go to hospital that weekend and that scared me a bit anyway.

Interviewer:

Was that when you had the bleeding?

Participant 15:

I had a little bit of the bleed and I came out after a couple of hours. That was the Sunday actually. Monday I still smoked and I went and had the scan. Then Tuesday I gave up and what I actually did was I did not do it in the morning. I smoked my normal one's and got the kids to school. I think I had about four left in the box and

then I made the decision that was going to be the end of it. I was not going to buy any more. I put the patch on about two or three in the afternoon and carry on from there. I think my advice would be not to think about it too much.

I think that was becoming a bit of an issue for me, this is the quit date and I got in my diary and then something would happen and I would think oh no I cannot give up. I did try to cut down and I managed, and what I would find would be I would cut down from when I would find out I was pregnant which was about five weeks. I cut down for about a month then, so ten weeks pregnant erm then I just seem to smoke more again. So I smoked more again for about three weeks and then thought this is ridiculous, because what happens then is you become more of a slave to the cigarettes. You sit and you count them and I am only allowed this, then you sort of look at the clock and think my next one is going to be in an hour then or I won't have the four I need for tonight and it becomes a little bit of an obsession. So cutting down does not really work or not for me.

I think the best thing is just talked through it, you know have your counselling sessions, identifying your triggers and think about what you are going to do instead. Then do not make it into a big deal and just do it and get empowered from doing it. I was sick of thinking this is something I cannot achieve. Let's spin it around and say yes I can and that's what I did that Tuesday. I think it is important have a date in your mind as I had read a couple of things on the net, if you gave up before you are fourteen to sixteen weeks pregnant you will effectively have a smoke-free baby. I had this in the back of my head as well.

So I had this discussion with L, that was when I definitely be quit by, was the fourteen-sixteen time period. Erm so maybe that would be part of the initial session, when would you like to quit by? I think you have got to have some kind of goal. I think that is quite a good thing to say, as once you go over that time that's when the baby starts to get less oxygen. So if you are pregnant it obviously makes sense to try and stop before that time. Other-wise you are going into the stage where it is beginning to deprive the baby. I stop at thirteen weeks, so it kind of worked out quite well for me.

2.16 Appendix A21

Participant 8:

Interview guide

For the second part of the study, exploring post partum relapse within one month to one year.

Returning to smoking:

1, Can you think back to why you started smoking again?

Participant 8:

What when I had a relapse,

Interviewer:

Yes.

Participant 8:

Erm, I think it was because the babies were, I got used to having them home and they were three months and the novelty had kind of worn off and I had a few spare minutes you know, and my sister also came to stay and she is a smoker. So it was a combination of things, having a few spare minutes, having got used to the babies and wanting to take a few minutes away really and also my sister coming she would have her cigarettes here, combination really, seeing old friends that I had not seen for a while.

Interviewer:

Anything else?

Participant 8:

Just taking that five minutes to myself really I think time out.

2, By giving up for a long time, has this changed your smoking at all?

Participant 8:

Yes, I did not buy roll ups, I was buying single cigarettes out of the local shops. They sell singles their. So I was buying one or two of those when normally I would not have smoked those [brand] of cigarettes at all. It was my way of saying I am not really going back to smoking. Also I used to smoke a lot of marijuana. I did not go back to this.

Interviewer:

Did it changed in any other way?

Participant 8:

I was only having one or two a day, before I use to sit in the kitchen and chain smoke. I was not chain smoking when I went back to it.

3, What factors to do with having a baby made you think more about going back to smoking cigarettes.

Participant 8:

Maybe it was not really having the babies; maybe it was something that was meant to happen. I probably had more chance in giving up with the babies. The babies made me stop more than going back to it.

4, Was your return to smoking planned or unplanned?

Participant 8:

Unplanned.

Interviewer:

In what way?

Participant 8:

Because it was something that I did not want to do and I was doing in a way.

.....

Change of lifestyle

5, Can you tell me if any smoking behaviour changed in your household once you had your baby?

Participant 8:

Erm, well I was not smoking at all in my house after I had the babies. I was smoking in the kitchen before.

6, What were the main reasons that you gave up smoking for?

Participant 8:

Mainly because I was pregnant and because I am older now and I smoked for a long time and I was having twins and I was frightened that I would not be able to cope with the birth or with the babies. I felt really depleted of energy and just saturated.

Saturated myself with smoking for years and years and I felt really low in energy. I felt really terrible, and I started to feel really ill. So it was all these things and then A called me. I did not think I could stop as I had smoked for so long, but I was able to.

Interviewer:

Any other reasons?

Participant 8:

For the health of the babies, energy levels to be okay when they were born and just

trying to be responsible, having children. Also it would make my life shorter and I have children. I should not do this if I have children.

7, What made you not smoke after you had your baby?

Participant 8:

I was quite protective of them. I did not like the smell of cigarettes near them. I just did not want them to be near it [smoking]. Also I was worried about cot death and I was breast feeding. Just because they were so small and very vulnerable and I thought the smoking would be very harmful for them.

I was feeling quite proud of myself that I had give up smoking, so really I wanted to carry this on. I was quite fearful that if I started smoking around them, it would lead to other things.

8, If you can think of any reasons why women should not go back to smoking after they have had their baby what would this be?

Participant 8:

Yes, the benefits of stopping, you feel really good and it is something you can build on. You end doing more for yourself if you give up smoking. It is a negative factor in your life.

2.16.1 Appendix A22

Participant 14

Interview guide

For the second part of the study, exploring post partum relapse at six months to one year.

Returning to smoking

1, Can you think back to why you started smoking again?

Participant 14:

Erm, yes because I always enjoy smoking and never tried to give up before I was pregnant, erm and it was probably something simple like having a glass of wine. I cannot remember the exact occasion and it just made me fancy a cigarette.

Interviewer:

“Is there any other reason for going back to smoking?”

Participant 14:

Nope, that's the reason.

2, By giving up for a long time, has this changed your smoking at all?

Participant 14:

Erm, yes I don't, would not say I was a smoker with cravings. I would not say I craved smoking anymore erm as I said before I have always enjoyed it and erm I would say it is limited just to the partnership with alcohol and social situations or relaxing occasionally. Because I went so long without smoking during both pregnancies, that's the only reason the habit has changed. I got out of the craving while I was pregnant I think. This happened quite early on in the pregnancy.

3, What factors to do with having a baby made you think more about going back to smoking cigarettes?

Participant 14:

Erm, none really I had the baby so I knew it was not a danger to the baby anymore. Erm so I had my body back. Therefore I was free to do what ever I like and I erm enjoy the cigarette so that's why on occasions I still have one. It is not with a view to going back, or going further or going back to it full time. I don't want to do it full time. Also I did not have another human being inside, so I was not responsible for that

health of the child. Well I was but in a completely different way. So I just had me and myself back in my body, and I thought why not if I enjoy it, (smoking). It is not putting anyone else in danger except me.

4, Was your return to smoking planned or unplanned?

Participant 14:

Unplanned.

Interviewer:

“In what way?”

Participant 14:

Yep sure, I think when I gave up so successfully while pregnant I did not imagine that

I would ever smoke again and all the time I was pregnant I never crave it, so the thought never really crossed my mind. So it was not until, and of course I never drank alcohol when I was pregnant either, very very lightly and very rarely. So it was not until I had a proper drink if you like after the baby was born and my partner smokes so they were in the house (cigarettes) they were their and I thought why not, I am going to have five minutes on my own with a glass of wine and have a cig. So it was definitely unplanned, spur of the moment, I feel like one right now (laughter) so I am going to have one.

.....

Change of lifestyle

5, Can you tell me if any smoking behaviour changed in your household once you had your baby?

Participant 14:

Erm, yes it was prior to having the baby, my other half smoked outside the house, outside the front door if that counts as changing your smoking behaviour. Therefore if

I have ever had a cigarette it always been outside. After the baby was born he continued to smoke but outside. On the rare occasions that I do it is outside as well. Erm can I talk about my other half, that's part of the household.

Interviewer:

"Yes."

Participant 14:

I think because family life means he spends more time at home, erm he smokes a little less than he did before. He is still a smoker with cravings and things I think. Also he does not smoke much at work, he goes to the pub which he always did before and smokes in their, but because we are so busy and he has to go outside I think his smoking has reduced a little bit because it makes it that little bit more difficult to smoke when there are babies that need things.

6, What were the main reasons that you gave up smoking for?

Participant 14:

Erm because I don't think it is healthy for either of you during pregnancy. I don't think it is fair on the baby and in addition whether this is psychological or not, incredible easy to give up knowing that I had a baby growing inside me. Also all the other benefits of not smoking such as the financial side of things, it is cheaper, you know there are so many benefits to giving up smoking, it is common sense that it is better to give up. It was so easy, but the main, the primary reason was because of the health of the baby and for myself.

7, What made you not smoke after you had your baby?

Participant 14:

There was a period when I did not smoke, because I had already given up and lost the majority of the cravings, 99% percent. I did not say to myself it had been so long that I wanted a cigarette. Once I started to have that evening drink and make it more

regularly, erm that was when I think I don't know in my mind they have always got hand in hand, so I thought why not.

Interviewer:

“Can you pinpoint a time when you went back to it?”

Participant 14:

I can't no, but it was probably only 2 or 3 weeks after I had given birth.

2.16.2 Appendix A23

Interview guide for

For the second part of the study, exploring postpartum relapse within six months to one year

Returning to smoking

1, Can you think back to why you started smoking again?

Participant 12:

I was just missing it really and I think the patches as well. When I was pregnant, the patches I could not take to them, I kept been sick. So I did not use the patch at all. I just kept really craving for that cigarette. The woman who I had last time she stop coming round, so in the end I just said let me just have the cigarette. I had one and then the one lead into how many more.

Interviewer:

“Any other reasons?”

Participant 12:

At the time I thought I gone through my pregnancy now, my son is here. He came out okay, so now it is time to start again and then he caught asthma and he was really young. I put it down to me smoking, even though I did not exactly smoke around him.

I used to smoke in the kitchen, it was still on my clothes, and on my hair when I lie down and that. He started getting bad coughs and that and I still did not think anything of it. I still carry on smoking up until now really.

2, By giving up for a long time, has this changed your smoking at all?

Participant 12:

I think so.

Interviewer:

“Do you know in what way?”

Participant 12:

I am not even sure, because, erm I don't know.

Interviewer:

“You mentioned you used to smoke in the kitchen?”

Participant 12:

Yeah, just used to smoke in the kitchen and the rest of the house was smoke-free apart from that place. Also I started to smoke one every other day and then it went to twenty a day again, thirty a day.

3, What factors to do with having a baby made you think more about going back to smoking cigarettes.

Participant 12:

It was just that when he was born, I assume he was healthy, I just thought, well I gave up while I was pregnant, and then when he was born, I thought he is healthy, so I don't know just start again, really. As I have said before I was just missing my

cigarettes and with the patches I did not really take to them and as I have said when you start taking one, you do kind of like, especially if you do a little while, and then you go back and have the one, it makes you feel like you need it again. You are determined to have it again.

4, *Was your return to smoking planned or unplanned?*

Participant 12:

I think it was unplanned. It just, I would say it just happened. Really.

Interviewer:

“In what way?”

Participant 12:

I did not wake up that day and say, today I am going to smoke. It was just, if I walk down the street and I smelt a cigarette, I would get the craving to go into the shop and buy one. As soon as the craving would come, I did not think about anything else apart from the cigarette so I just had to have it. If I got stress out I would go and have a cigarette.

.....

Change of lifestyle

5, *Can you tell me if any smoking behaviour changed in your household once you had your baby?*

Participant 12:

Well it was just me and my sister, we started smoking together again. We tried to give up together, and then every time, that's a other thing when I would go and smoke, she was not still smoking and I would come back and she would smell the smoke on me and it would make her want to smoke. So then you would say to each other, this one cigarette is not going to hurt, and then when the smoking counsellor would come,

obviously we would say, we got so many days to get it out of our system. After that we started trying to avoid her and then she obviously gave up on us. Which I don't blame her.

Interviewer:

"How did the smoking behaviour changed once you had your baby?"

Participant 12:

Yeah, the house was smoke-free apart from the kitchen and outside. I would also say I smoked more.

Interviewer:

"How did you smoke?"

Participant 12:

Because at night times when I could not sleep, I just used to come downstairs and puff away. It was kind of because I had my baby that I was smoking more, because when nights are stressful, the first thing I would go for would be a cigarette, so that would mean I would smoke more in the night time.

6, What were the main reasons that you gave up smoking for?

Participant 12:

Basically it was because it is right for, when the child is inside your belly and your smoking, the counsellor said to me, that it takes ten seconds of the oxygen?

Interviewer:

"Yes."

Participant 12:

And the thought of that as well, that ten seconds is a lot and then they show those adverts on TV when you smoke the baby blows out the smoke. He had asthma when he was younger and I don't want this child (2nd pregnancy), to be honest I feel a lot healthier with this pregnancy and I want my baby to be healthy as well. That all I can say really.

7, What made you not smoke after you had your baby?

Not applicable (Participant started smoked the next day after giving birth)

8, If you can think of any reasons why women should not go back to smoking after they have had their baby what would this be?

Participant 12:

I think still be in touch with your counsellor. They have time for you. They will sit down and talk to you, it is not even about just the smoking, yeah she will talk to you about your pregnancy, how's the baby and things like that. The last counsellor was a nice person, it was partly my fault because I started to smoke straight away after having my baby. Also if everyone got patches, gum, inhalator and we have it when we need it, then I think they will be okay. Basically just think about your children and your health.

2.17 Appendix A24

Participant 7 (group 2)

Interview guide for

Understanding the process of a blip (smoking a few cigarettes) to a relapse (return of smoking full-time)

We are interested in exploring the process of lapses and why this leads to relapse with pregnant smokers.

Understanding the journey of going back to smoking

1, Can you think why you had your first few cigarettes after you set a quit day?

Participant 7:

Bit of stress, my son was like miss-behaving, so we had a few problems and it set me back a bit. I just find that it calms me down.

Interviewer:

So it was mainly stress?

Participant 7:

Yes mainly the stress and just having a cigarette makes feels calmer. Maybe that's just the nicotine.

2, How did that make you feel?

Participant 7:

Felt I let myself down, because at first I did quite well at the beginning so obviously to go back it was just like starting all over again. A bit disappointing really and also a bit low in yourself because obviously you do want to give up because it is not healthy for you. When you get that knock- back and when you start again and then you start again you feel like you have let yourself down really.

2B, At this stage what could have helped you not go back to smoking?

Participant 7:

I think maybe just trying to control it a bit more in myself and not thinking cigarettes will calm me down. Been more positive I supposed.

Interviewer:

What coping strategies had you been using?

Participant 7:

I kept myself busy and always found something to do. That helped me not too smoke. But when you have done everything and you would meet up with your friends and then they would be smoking, and you would think god I love a cigarette.

3, Can you tell me when you realised that you had gone back to smoking

Participant 7:

I had a few ups and downs where I was just having a couple and then erm; I ended up liking the taste. I had a few problems in picking up my patches, that threw me out a bit and I only had a few left. My doctors were a bit slow at giving me my prescription. There would be a delay, and this was what made me start having a few fags.

Then obviously I just ended up getting back into it. It was a few weeks before I went back to smoking it was only a couple here and their.

4, How do you feel about your smoking now?

Participant 7:

I am not really happy with it, it is expensive and it does take a toll on you. I am not fit and healthy as I could be if I was not smoking.

I think I would like to try again soon to give it up because I do feel better in myself. Sometimes I do not even enjoy it, just smoking for something to do, just if I am bored. It is a dirty habit really.

5, What was it that made you go back to smoking?

Participant 7:

I think being around friends and that and you feel left out when you are not smoking, because obviously where I used to do it before [smoking] it is just you get in that group and you feel odd because obviously when they are smoking, you want one. Sometimes when I get a bit stress out, it calms me down.

.....

Coping

6, What others factors may have helped you not to smoke?

Participant 7:

Maybe if I was working, when you are working you are keeping yourself busy, so it is basically keeping yourself occupied, so keeping yourself occupied and I find I don't smoke as many as I do if I am not busy. When you are not doing anything, I seem to have one after the other. Being pregnant that was why I wanted to try and give it up, obviously with all the downfalls it just sent me back to smoking. I just need to have that will power you know, keep saying to yourself, "I am going to do this". Or someone trying to encouraging you, you can do it.

7, Could you identify situations where you felt most tempted to smoke?

Participant 7:

When I was socialising or when I was indoors, or with nothing to do, that would be hardest times not to smoke. Also when I feel a bit fed up and a bit stress out. They would be the main one's where I would end going back to smoking.

.....

Service improvement

8, What do you think about the advice and support you got from the Stop Smoking

Pregnancy Service?

Participant 7:

They were really good, the lady I had, she did encourage me and I felt good in myself. When I did managed to give up for a few weeks and did not have none, she come and she would say, write a little diary about how you are feeling, and I did feel really proud of myself basically. They do encourage you because they want you to give up smoking. I think the service is really good, they do help and they do understand if you have a problem while you are trying to give up smoking they will help.

9, What other information, or improvements to the Stop Smoking Pregnancy Service would you like to see to help future clients give up smoking?

Participant 7:

I think the things that they do is good and they encourage you, but the person obviously yourself like you need to be motivated and positive yourself, because if the stop smoking service do all they can and they are really helpful and they do support you in giving up smoking, I don't think there is not that much they need to improve.

10, What would make you quit now?

Participant 7:

It would be for my children really. Obviously it is not nice to be smoking around them. Also thinking of my future.

2.17.1 Appendix A25

Participant 9 (group 2)

Interview guide for

Understanding the process of a blip (smoking a few cigarettes) to a relapse (return of smoking full-time)

We are interested in exploring the process of lapses and why this leads to relapse with pregnant smokers.

Understanding the journey of going back to smoking

1, Can you think why you had your first few cigarettes after you set a quit day?

Participant 9:

Wow, that is quite a hard question. Erm mainly because of the pressure of giving up and also because I did not cut down. I have tried to cut down but it does not work and I think it because I enjoy smoking. It is a weird thing to say.

Interviewer:

So two things really, the pressure of giving up and because you enjoy cigarettes?
Can you think anything else?

Participant 9:

Boredom. Nothing doing really.

2, How did that make you feel?

Participant 9:

Upset a bit because I did want to stop. I still do but I find it really hard too. Also it still made me feel more relaxed as well at the same time, but also upset because I had

not given up.

2B, At this stage what could have helped you not go back to smoking?

Participant 9:

The only thing I could suggest is, which I did suggest to the last person when they did set me a quit day, was going into rehab and I know it sounds really weird, because a lot of people go to rehab just for you know alcohol and drugs, but I actually feel it would help me with a rehab because where I am still immune and open to the outside world still into that living and breathing and smelling cigarettes and then I start thinking I want some. I feel rehab would be a very good place for me because their would be no one their that would do the same thing as me. I would find it hard to get to a shop, and even though it would mean more boredom for me it; I think I would find it much easier to quit then than having the ability to be able to just go and buy it really.

Interviewer:

So removing yourself away from the situation?

Participant 9:

Yes.

Interviewer:

When you say rehab could you just explain more about this?

Participant 9:

Either being with other people or being on my own, because if you give up smoking you do it on your own really.

Interviewer:

What coping strategies had you been using?

Participant 9:

I don't really know. Probably if I had to do a lot of housework throughout the day. Something that had to keep my hands active and my mind occupied. Keeping busy and something I enjoyed doing as well because if I don't enjoy it I will just leave it and think okay let me go back to the cigarettes. Because if it is something I enjoy doing it will take up my time and I don't actually realise I feel the craving for the cigarette while I am doing something like that.

3, Can you tell me when you realised that you had gone back to smoking?

Participant 9:

I realised as soon as I did it, because I smoked with my first son throughout my whole pregnancy, you know it is not a thing where I did not know I was smoking, I do know that I am smoking and that because I do want to give up smoking, but I don't if you know what I mean.

Interviewer:

So was it a gradually stage, you said you set a quit date, and did you have any days where you did not smoke?

Participant 9:

I actually only had about one week of not smoking. It was really quick for me, the return to smoking.

4, How do you feel about your smoking now?

Participant 9:

Erm, I don't think really badly of it. I have cut down a lot from what I used to smoke, because I decided to carry on smoking that is the reason, I have cut down so much erm I probably smoke a average of four a day now. I was smoking a lot more before. So I don't really feel that bad but on the other hand, I do because there is a baby inside me, and you know it is not like the baby asked to smoke. I have put it their, so I

don't know how to express it really, the baby did not ask for it, but why am I doing it. It is still hard to, you know even though the baby is their, why can I not stop?

5, What was it that made you go back to smoking?

Participant 9:

As I said before being bored and enjoying smoking because I have done it for such a long time now. Not even enjoying it, probably say use to it, something that I am used to doing. I have smoked now for more than five years, no more than seven years actually so it is quite a habit and the routine that I do as well.

.....

Coping

6, What others factors may have helped you not to smoke?

Participant 9:

The encouragement of the Stop Smoking Team, when I see them come around I don't want to tell them that I am smoking again, so that encouragement helped a little bit, but once they had left the house, the encouragement had gone so it was a bit harder to maintain.

Interviewer:

"So mainly the encouragement, do you think there is anything else that may have helped you not smoke?"

Participant 9:

Knowing that I am pregnant would help me stop smoking but it has not which is a funny thing to say and probably having my other son, I don't actually smoke around him, I do actually go outside or if he is in the other room, I will smoke out of the window. I would never smoke in the house with closed windows or anything. He would be another reason why I would stop as well. For his health as well, even though I am smoking outside of the window or outside the door, maybe just a little bit could

still come in and he would still be inhaling it.

7, Could you identify situations where you felt most tempted to smoke?

Participant 9:

When I wake up in the morning and I have a cup of tea. When I eat. When I am bored, and before I go to bed as well or when I go to the toilet. I like smoking when I go to the toilet. Those are the really main factors.

.....

Service improvement

8, What do you think about the advice and support you got from the Stop Smoking Pregnancy Service?

Participant 9:

Their advice was good actually, they try their best to help you, and even though they want you to give up they don't pressure you to give up. They also advise [you] to still try and give up so I think their advice is good.

9, What other information, or improvements to the Stop Smoking Pregnancy Service would you like to see to help future clients give up smoking?

Participant 9:

Not really, I think the service is good. They do their best really. It is just up to that individual if they have the willpower and the mind-power to give up.

10, What would make you quit now?

Participant 9:

If I was told I had cancer or something probably. Something so dramatic that would make me quit. I know it sounds horrible to say that, but I think that would be the most one you know that would be worst than rehab, I would think had enough, give it up really, I would not want it to get to that point. If it did I would.

Eight master themes were identified.

2.11.3 Appendix 3

11th June 2007

Dear.....

The Stop Smoking Service is constantly improving the service you receive from us. We are aware that you accessed the Stop Smoking Pregnancy Service in 2006/2007. You have been contacted as you accessed the service to help you with your quest in giving up smoking. We would like to invite you to take part in a research study.

The study is being conducted to investigate how the Stop Smoking Pregnancy Service can be improved for future populations of this group of smokers. Before you decide to take part, included with this letter is a Patient Information Sheet please take time to read the following information carefully and discuss with others if you wish.

If there is anything that is not clear or you would like more information, please feel free to give me a call. I will be contacting you in one week's time to see if you would like to take part in the research study. Thank you for reading this.

Yours sincerely,

Julie Pearson

2.12 Appendix A4 Clustering themes for Postpartum women who have given up

Group 4

Master theme: Morals

Theme/label (Cluster/label 1)	Brief quote	Page and Line Numbers
Moral obligation	You always know or you hear that it is not good to smoke when you are pregnant or have a child	Participant 1 Page 1/lines 1-2
Moral obligation	Think of the health of the baby	Participant 3 Page 4/line 35
Being considerate	I don't think apart from my partner anyone else understood	Participant 4 Page 6/line 85
Danger of smoking around children	A lot of people would go outside and have a cigarette and not see that as something you should not really do	Participant 4 Page 6/lines 85-87
Implications	My child's health I had to stop	Participant 1 Page 2/line 14
Being considerate	So in a way it is removed from me	Participant 1 Page 3/line 29
Dangers of smoking around children	He will smoke away from the baby	Participant 1 Page 7/line 67
Judging other people's behaviour	Front of the school they are criticise	Participant 5 Page 4/line 36
Personal experiences of smoking	I had a cold throughout my whole childhood	Participant 1 Page 1/line 8
Awareness of the dangers of smoking	To get the cigarette off, basically take a shower.	Participant 1 Page 1/line 11
Awareness of the dangers of smoking	If you smoke it affects your health	Participant 5 Page 1/line 2

Group 4

Master theme: Addiction

Theme/label (Cluster/label 2)	Brief quote	Page and Line Numbers
Cravings	For the craving I deal with it more	Participant 1 Page 2/line 24
Associations with cigarettes	Than when I find myself going for the cigarette that scares me	Participant 1 Page 2/lines 24- 25
Associations with cigarettes	I think they go hand in hand, you have a drink, you have a cigarette	Participant 2 Page 2/line 13
Association with cigarettes	Yes, about hundred of them	Participant 4 Page 2/line 10
Unawareness of how addictive nicotine is	Understand that smoking can be an addiction in the exact same way as everything else	Participant 4 Page 6/line 84
Identity as a smoker	Figuring out where on earth that comes from	Participant 4 Page 5/line 79
Cravings	I really, really wanted one, but I just decided not too	Participant 5 Page 2/line 14
Unawareness of how Addictive nicotine is	I just tried to forget about cigarettes	Participant 5 Page 2/line18

Group 4

Master theme: Maintaining cessation

Theme/label (Cluster/label 3)	Brief quote	Page and Line Numbers
Change in lifestyle	Go outside and have a cigarette. I guess the reality of having a baby did not allow that to happen..... I had a few cravings for a cigarette, but having a new baby took over I guess	Participant 1 Page 3/lines 32- 35
Implications for health	Also I am not the healthy person that you are going to meet and I am getting older	Participant 1 Page 6/line 57
Influencing factors involved with cessation	I going to have to admit failure, guess I am going to have said I had a cigarette. The idea of going through that again for the sake of one cigarette	Participant 1 Page 2/lines 16- 19

Group 4

Master theme: Maintaining cessation

Theme/label (Cluster/label 3)	Brief quote	Page and Line Numbers
Change in lifestyle	I was quite pleased that I did not smell that way anymore..... Now I don't like the taste and I am not used to it anymore	Participant 2 Page 1/line 7
Smoke-free house	You wash your curtains and they don't stink..... No one is smoking in the house and that is better for everyone really	Participant 2 Page 2/lines 24-27
Sense of taste/smell	Choice and smell. I can't emphasise it enough....my taste-buds have changed	Participant 2 Page 4 /line 52
Whether you want to give up smoking	If you are not going to do it then you will not	Participant 2 Page 4/line 57
Whether you want to give up smoking	I was quite ready to give up smoking	Participant 2 Page 3/line 28
Influencing factors involved with cessation	I did not think about it. Not at all, just carry on as normal. I just carry on and took every day as it came	Participant 2 Page 2/lines 16-18
Whether you want to give up smoking	I would do would be to remove myself from that circle..... Until I set my mind that I did not want to do it anymore.....I am very close with my neighbour and she noticed that I was not coming over so often and she is a smoker herself	Participant 3 Page 1/lines 2-11
Sense of smell	I cannot stand the smell of smoke	Participant 3 Page 1/line 4
Influencing factors involved with cessation	I [was] made to feel guilty by my son.... Where you blow into it and that made me feel guilty in itself	Participant 3 Page 2/lines 12-15
Triggers to smoke	Mainly times when like there is stress	Participant 3 Page 2/ line 18
Guilt	My son made [me] feel bad, he would say "the little baby". Yes, waste of money.. rather spending it on cigarettes. Not original, but guilt does work.	Participant 3 Page 3/lines 28-32
Implications for health	The thought of passive smoking.	Participant 3 Page 6/line 53
Smoke-free house	I let them know you cannot come into my house smoking	Participant 3 Page 6/line 60
Influencing factors involved with cessation	I just stop being around anyone at all that would smoke..... Just really trying to avoid people... The ban had come into effect	Participant 4 Page1/lines 1-8

Group 4

Master theme: Maintaining cessation

Theme/label (Cluster/label 3)	Brief quote	Page and Line Numbers
Implications for health	Been able to run for a bus, and not having like chest infections	Participant 4 Page 5/lines 68-69
Triggers to smoke	I would have not understand why I smoked, and who my triggers where and why they where triggers	Participant 4 Page 5/lines 76-77
Influencing factors involved with cessation	Just to remember the bad things of smoking and try to make myself strong. Yes I drank some herbal tea and earl grey tea because it is not normal tea to make my routine different	Participant 5 Page 2/lines 7-10
Influencing factors involved with cessation	I used the gum and it helped a lot	Participant 5 Page 3/line 25
Change in lifestyle	Knowing you are protecting your health by not smoking	Participant 5 Page 4/line 39
Smoke-free house	He would go outside to smoke. Then he changed and he always goes to the garden and reduces the amount of smoking. I explained..... and then he understood and it is not good for baby.	Participant 5 Page 5/line 41-46
Change in lifestyle	Money and health, just really expensive. When you are continuing to quit once you realise how much money you have	Participant 4 Page 5/line 66-67

Group 4

Master theme: Support

Theme/label (Cluster/label 4)	Brief quote	Page and Line Numbers
Working in partnership	Erm you see the funny thing is I felt so well supported by my pregnancy counsellor	Participant 1 Page 3/lines 36-39
Disappointment	When I first sign up for the text messages I did not get [them] at first and when I got them I found them really helpful	Participant 1 Page 5/lines 52-53

Legislation	The smoking ban was coming in, that kind of help as well.	Participant 1 Page 6/lines 61-62
External support	Only one friend smoke and she goes into other room	Participant 1 Page 7/lines 68-69
Working in partnership	The pregnancy counsellor came every time she was supposed to come. She would send a text message every week	Participant 2 Page 3/lines 38-42
Working in partnership	I definitely tick the very good boxes the whole way down on the paper. She was not over the top quite genuine about things and it was like having a chat	Participant 2 Page 4/lines 47-49
External support	Fine, fantastic, really supportive....No they have all been really good... Yeah I mean he (husband) has to go in the garden every time and he has not tried not too	Participant 2 Page 5/lines 60-64
Working in partnership	She made me feel that if at any time I could contact you guys, and yeah it was brilliant	Participant 3 Page 4/lines 40-41
Group support	Trying to meet with other parents or people that want to give up	Participant 3 Page 5/lines 44-48
External support	Some were supportive, you know well done...	Participant 3 Page 6/line 57
Working in partnership	Absolutely brilliant, really non-judgemental...I could have text or phone...Exactly what I needed.	Participant 4 Page 4/lines 49-51
Group support	Was there a group...mum and toddlers, but you never feel like that you can talk about smoking..... Have it as a mothers and toddlers group....but you know walking in everyone has been their... Not be looked at if you where the devil.....	Participant 4 Page 4/lines 52-65

External support	Support from my partner, he quit just before-hand...	Participant 4 Page 5/ line 70
Working in partnership	I thought it was very good and I think I could not have stopped smoking without that service. I did not really ask the GP, I just mention that I was smoking and I cannot stop and they sent me a letter about the service	Participant 5 Page 4/ lines 28-30

Group 4

Master theme: Support

Theme/label (Cluster/label 6)	Brief quote	Page and Line Numbers
Working in partnership	Erm you see the funny thing is I felt so well supported by my pregnancy counsellor	Participant 1 Page 3/lines 36-39
Working in partnership	In every way, it does what it said on the tins	Participant 1 Page 5/line 50
Disappointment	When I first sign up for the text messages I did not get [them] at first and when I got them I found them really helpful	Participant 1 Page 5/lines 52-53
Legislation	The smoking ban was coming in, that kind of help as well.	Participant 1 Page 6/lines 61-62
External support	He will smoke away from the baby.....only one friend smoke and she goes into other room	Participant 1 Page 7/lines 67-69
Working in partnership	The pregnancy counsellor came every time she was supposed to come.	Participant 2 Page 3/line 38

Group 4

Master theme: Coping Strategies

Theme/label (Cluster/label 5)	Brief quote	Page and Line Numbers
Coping	Obviously the inhalator thing helped and chewing lots of gum I guess and trying to be distracted	Participant 1 Page 4/lines 41-42

Using resources to increase motivation with quit attempt	Would come from the text messages	Participant 1 Page 4/line 45
Thoughts/feelings changing about smoking behaviour	My thoughts where get food in the house girl.....to get fruit like juicy watermelon, to get the buds going	Participant 3 Page 3/lines 24-26
Thoughts/feelings changing about smoking behaviour	Yes I give myself one other stage to go through..... In my head now, "if I can just get pregnant then it will be other six months to I get pregnant..... and why would you smoke after five years	Participant 4 Page 3/lines 26-30
Coping	Because I had not smoked for a long time, I did not think about it. Breast feeding, forgetting about cigarettes and the smell of the house.....My husband not to smoke inside and all the guests who smoke, so they go outside to smoke.	Participant 5 Page 3/lines 20-25
Coping	I banned smoking in the house.... With newborns you cannot smoke around them...breast feeding as well	Participant 2 Page 1/lines 1-4

Group 4

Master theme: Being in control

Theme/label (Cluster/label 6)	Brief quote	Page and Line Numbers
Personal choice	My biggest reasons in having difficulty stopping was control.....So it was a constant, I get to make these choices when ever I want but it is my control that was really important	Participant 4 Page 3/lines 31-36
Change of attitudes towards smoking	Seeing it as a drug rather than a thing you do make a big difference... The last few I was smoking actually really looking at them and thinking why I am doing this	Participant 4 Page 3/lines 38-41
Not conscious of smoking	You don't notice a cigarette, you don't notice it, that it is lit....	Participant 4 Page 3/lines 42-43
Been aware of smoking as a drug	So paying attention to the actually thing.....that is actually a drug their taking their and then on the street	Participant 4 Page 4/lines 44-47

2.12.1 Appendix A5 Group 3

Master theme: Preparation

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Gradual Process	Basically I cut it down to like 5 a day, then to one a day.	Participant 6 Page 1/line 1
Gradual Process	I went from smoking twenty, then to ten.	Participant 11 Page 1/line 2
Gradual Process	I cut down, it started to the point.	Participant 13 Page 4/ line 63
Preparing for quit day	Clearing my house of any smoking paraphernalia.	Participant 13 Page 2/ lines 34-35.
Preparing for quit day	I just did it on the day itself..... I was not to buy any more.	Participant 15 Page 6/lines 127-134.
Identifying when I smoke	The times that I smoked..... I would come in the kitchen and smoke.	Participant 15 Page 1/ lines 1-6
Behavioural aspect of smoking	The behaviour bit to it when I would actually do it.	Participant 15 Page 1/ line 8
Behavioural aspect of smoking	Not drinking tea because I associated that with having a cigarette	Participant 6 Page 2/line 13
Gradual process	I cut down for about a month	Participant 15 Page 7/ line 141
Setting a quit date	When would you like to quit by	Participant 15 Page 7/ line 158.

Group 3

Master theme: Support

Theme/Label (Cluster Label 2)	Brief quote	Page and Line numbers
Feeling supported in your quit attempt	Support from the counsellor	Participant 6 Page 1/ line 5
Feeling supported in your quit attempt	So it was nice to have support	Participant 13 Page 3/ lines 52-53

Feeling supported in your quit attempt	It was the NRT and the pregnancy counsellor coming once a week	Participant 15 Page 3/ line 47
Action plan for giving up smoking	Just talked through it, you know have your counselling sessions, identifying your triggers and think about what you are going to do instead.	Participant 15 Page 7/ lines 148-149
Motivational tool	Test your thing again (CO machine)	Participant 6 Page 1/ line 6

Group 3

Master theme: Adjustment period

Theme/Label (Cluster Label 3)	Brief quote	Page and Line numbers
Difficult thing to do	I don't think it ever became easier	Participant 6 Page 2/line 9
Difficult thing to do	I think probably the first three or four weeks were the hardest.	Participant 15 Page 2 /line 38
Adapting to behaviour change	I did not think about it as much	Participant 6 Page 2/line 12
Motivation	Just my own willpower and Determination	Participant 13 Page 4/ line 70
Using medication to help with quit attempt	Nicotine patches were a big help	Participant 13 Page 4/line 71
Using medication to help with quit attempt	Basically what I did was took the patches from what they say	Participant 15 Page 2/line 35
Ambivalence	Kind of makes you think why am I giving up, they are not giving up	Participant 13 Page 4/lines 75-76
Adapting to behaviour change	It was just making the changes... It takes three or four weeks to get into your head	Participant 15 Page 2/lines 39-41
Change of routine	Also my change of routine, it was the end of the school term	Participant 15 Page 3/lines 60-61
Making house smoke-free	Obviously if I give up then I don't expect to have cigarettes in my house	Participant 15 Page 4/line 70

Group 3

Master theme: Advantages of giving up

Theme/Label (Cluster Label 4)	Brief quote	Page and Line numbers
Sense of smell	When you smoke how bad it smells until after you have stopped smoking	Participant 6 Page 3/line 24
Sense of smell	I can smell it a lot more.	Participant 11 Page 4/line 37
Sense of smell	I realised how much it stinks	Participant 13 Page 5/line 87
Losing smokers cough	At first you feel erm (coughing sound)	Participant 11 Page 5 /line 42
Losing smokers cough	I have not got that horrible cough you have when you smoke	Participant 6 Page 4/line 28
Health benefits of giving up	After a few weeks it felt a lot easier to breathe. When I run I don't feel so out of breath.	Participant 11 Page 5/lines 43-45
Health benefits of giving up	I am starting to get my breath and energy back	Participant 13 Page 6/line 102
Health benefits of giving up	I think maybe my skin does not seem to be dry on my face..... I am definitely not as dehydrated as I was.	Participant 15 Page 5/lines 102-105
Self-improvement	Sometimes when I feel happy, because I would think at least I am healthy now. I felt a lot healthier so when I see them in the morning I would think at least I am not like that.	Participant 11 Page 4/lines 36- 37
Self-improvement	Compares to someone who does smoke, I do feel like I am doing a bit better than that person in terms of their health.	Participant 13 Page 6/lines 104-105

Group 3

Master theme: Emotions

Theme/Label (Cluster Label 5)	Brief Quote	Page and Line numbers
Situation/pregnancy becoming real	When I started feeling her moving, because I thought it not fair on her..... I was worried that she would get asthma or something	Participant 11 Page 1/lines 5-6
Main priority is the baby	Being pregnant and harming the baby..... Because I thought more about her than me.	Participant 13 Page 3/line 56
Awareness of the dangers of smoking	Just do it for the baby....when I see adverts	Participant 11 Page 5/lines 46- 48
Awareness of the danger of smoking	That's when the baby starts to get less oxygen.... The stage where it is beginning to deprive the baby	Participant 15 Page 7/lines 159- 162
Wanting a healthier lifestyle	I did not want my kids to smoke..... Wanting to be able to run up the road without feeling like I am about to collapse	Participant 13 Page 5/lines 49-53
Personal goal	I think you have got to have some kind of goal	Participant 15 Page 7/line 158
Guilt	I thought if I have smoked I am going to feel like I have let myself down	Participant 6 Page 1/lines 7-8

Guilt	I knew how much they wanted me to stop smoking	Participant 13 Page 2/line 28
Losing desire to smoke	Oh I want to stop smoking.....Really having enough of smoking	Participant 13 Page 2/lines18- 21
Achievement	I realised I had become a non – smoker	Participant 13 Page 3/line 47
Ambivalence	I was going back to it and I was unsure about why I was stopping smoking	Participant 13 Page 3/line 51
Not wanting to be different	Then you have to identify your own needs.... It is hard not following your parents.... My parents have been smoking for twenty years and they are fine	Participant 13 Page 4/lines 77-82
Smoking seen as being unattractive	Repulsed because your breath smells or your hair smells	Participant 13 Page 5/lines 93-94
Change/attitudes and thoughts around smoking	I started to realise how much negative's there is..... Cannot see that it is for the best In the early days I would just want to have a cigarette with friends.	Participant 13 Page 5/lines 87-101
Concerns over relapsing	I just really like not to be in the same situation	Participant 13 Page 6/lines 107-109

Guilt	To actively make the decision that it was bad for the baby.... I had a lot of guilt around	Participant 15 Page 2/lines 22-23
Change/thoughts/attitudes around smoking	I had a bit of bleed....“I am going to quit now”	Participant 15 Page 2/lines 28-29
Achievement	Quite proud you managed to do something.... Then you actually get a ‘buzz’ out of it	Participant 15 Page 3/lines 49-53
Using smoking as a way of coping with life	It was kind of keeping me going	Participant 15 Page 3/line 62
Different approach to quitting	I just did it on the day itself.....I would think oh no I cannot give up..... Let’s spin it around and say yes I can...	Participant 15 Page 6/lines 126- 151
Deadline date	If you gave up before you are fourteen to sixteen weeks..... I think you have got to have some kind of goal	Participant 15 Page 7/lines 154-158
No visible changes	I mean I am not going wow....I did not have major detrimental effects...	Participant 15 Page 5/lines 91-94

Group 3
Master theme: Developing coping strategies

Theme/Label (Cluster Label 6)	Brief Quote	Page and Line numbers
Coping strategies	Something to replace the cigarette	Participant 11 Page 2/line 10
Not losing all habitual associations with smoking	Use the inhalator and still come into the kitchen to have my five minutes time-out.	Participant 15 Page 1/line 11
Different coping strategies	Know other ways that I was going to use that as a crutch at those times	Participant 15 Page 1/line 14
Quit attempt becoming easier	I just noticed very gradually over the weeks I was not having to come in to the kitchen..... I was maybe just taking deep breaths	Participant 15 Page 1/ lines 16-18
Replacement activities	I might have a bag of crisps now.... I would use this at exact times I would have smoked	Participant 15 Page 3/lines 57-58
Replacement activities	Eating and chewing gum	Participant 11 Page 2/line 8

2.12.2 Appendix A6 Clustering themes for postpartum women who have relapsed

Group 1

Master theme: Addiction

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Habitual	It was probably something simple like having a glass of wine..... I would say it is limited to the partnership with alcohol and social situations or relaxing occasionally	Participant 14 Page 1/lines 2-8
Cravings	I cannot remember the exact occasion...it just made me fancy a cigarette	Participant 14 Page 1/line 3
Enjoyment	Why not if I enjoy it (smoking). It is not putting anyone else in danger....	Participant 14 Page 2/lines 17-18
Triggers to smoke	I don't know in my mind they have always gone hand in hand...	Participant 14 Page 4/lines 51-52
Not being in control	Because it was something that I did not want to do and I was doing in a way	Participant 8 Page 3/line 21
Stressful time	I would also say I smoked more Because when nights are stressful, the first thing I would go for would be a cigarette	Participant 12 Page 4/lines 40-44

Group 1

Master theme: Addiction

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Fear of failing	I did not think I could stop as I had smoked for so long....	Participant 8 Page 3/line 29
Wanting to smoke	When I finally had my son I just wanted to smoke....	Participant 12 Page 1/lines 1-2
Cravings	I just kept really craving for that cigarette	Participant 12 Page 1/line 5
Gradual return to smoking	Also I started to smoke one every other day and then it went to twenty a day again, thirty a day..... When you start taking one....it makes you feel like you need it again...	Participant 12 Page 2/lines 17-25
Triggers to smoke	I smelt a cigarette I would get the craving to go into the shop and buy one.....	Participant 12 Page 3/lines 28 -32

Group 1

Master theme: Postnatal Period

Theme/Label (Cluster Label 2)	Brief quote	Page and Line numbers
Being in control	Would not say I was a smoker with cravings	Participant 14 Page 1/line 5
Freedom	Erm I had my body back....therefore I was free to do what ever I liked... It is not with a view to going back....	Participant 14 Page 2/lines 11-15
Time out	I am going to have five minutes on my own with a glass of wine and have a cig..... So it was definitely unplanned, spur of the moment	Participant 14 Page 2/lines 26-28
Time out	The novelty had kind of worn off and I had a few spare minutes you know... My sister coming she would have her cigarettes here.....seeing old friends.....	Participant 8 Page 1/lines 1-7
Novel behaviour	It was my way of saying I am not really going back to smoking..... I was only having one or two a day	Participant 8 Page 2/lines 12-16

Group 1

Master theme: Postnatal Period

Theme/Label (Cluster Label 2)	Brief quote	Page and Line numbers
Smoke-free house	I was not smoking at all in my house after I had the babies.....	Participant 8 Page 3/line 22
Personal achievement	I was feeling quite proud of myself that I had give up smoking....	Participant 8 Page 4/lines 37-38
Time out	I just said let me just have the cigarette. So now it is time to start again and then he caught asthma....	Participant 12 Page 1/lines 8-10
Partial smoke-free house	Yeah, just used to smoke in the kitchen	Participant 12 Page 2/line 16
Deceptions	I thought he is healthy, so I don't know just start again	Participant 12 Page 2/line 21
Support in postpartum period	They have time for you. They will sit down and talk to you... Also if everyone got patches, gum, inhalator.....	Participant 12 Page 5/lines 53-58
Partial smoke-free house	Before I use to sit in the kitchen and chain smoke	Participant 8 Page 2/lines 15/16
Reasons not to return to smoking	Just think about your children and your health.	Participant 12 Page 5/lines 58-59
Reasons not to return to smoking	The benefits of stopping...you end doing more for yourself.....	Participant 8 Page 4/lines 40-42

Group 1

Master theme: Behaviour changes in pregnancy and postpartum

Theme/Label (Cluster Label 3)	Brief quote	Page and Line numbers
Behaviour changes in pregnancy	Yep sure I think I gave up successfully while pregnant...so the thought never really....	Participant 14 Page 2/lines 20-22
Making house smoke-free	It was prior to having the baby....if I ever had a cigarette it always been outside.	Participant 14 Page 3/lines 29-31
Personal circumstances prompting behaviour change	It makes it that little bit more difficult to smoke when there are babies that need things.....I don't think it is healthy for either of you during pregnancy..... Such as the financial side of things.....	Participant 14 Page 3/lines 38-43
Personal circumstances prompting behaviour change	The babies made me stop more than going back to it.	Participant 8 Page 2/lines 18-19
Implications for children's health	If I started smoking around them, it would lead to other things.	Participant 8 Page 4/lines 38-39
Implications for children's health	When the child is inside your belly.....	Participant 12 Page 4/line 46

Group 1

Master theme: Emotional aspects of smoking

Theme/Label (Cluster Label 4)	Brief quote	Page and Line numbers
Inevitable	Maybe it was something that was meant to happen	Participant 8 Page 2/lines 17-19
Sense of mortality	Because I am older now and I have smoked for a long time.... I felt really depleted of energy.....started to feel really ill.	Participant 8 Page 3/lines 24-28
Responsibilities	For the health of the babies. I should not do this if I have children	Participant 8 Page 3/lines 31-33
Coping with life by smoking	If I got stress out I would go and have a cigarette.	Participant 12 Page 3/lines 30-31
Influencing others	She would smell the smoke on me and it would make her want to smoke.	Participant 12 Page 3/line 34
Dishonest	We got so many days to get it out of our system	Participant 12 Page 3/line 37
Protecting their wellbeing	I did not like the smell of cigarettes near them.... Just because they were so small....	Participant 8 Page 4/lines 34-36

2.12.3 Appendix A7 Clustering themes for pregnant women who have relapsed back to smoking

Group 2

Master Theme: Emotional Aspects of smoking

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Journey of going back to smoking	Bit of stress, my son was mis-behaving. Just having a cigarette makes feel calmer.... Felt I let myself down.....Also a bit low in yourself... When you get that knock-back and when you start again	Participant 7 Page 1/lines 1-8
Thoughts and feelings around smoking	I think maybe just trying to control it a bit more in myself. Not thinking cigarettes will calm me down	Participant 7 Page 2/ lines 10-11
Social aspects of smoking	You would meet up with your friends and then they would be smoking, and you would think God I love a cigarette	Participant 7 Page 2/lines 13-14
Ambivalence	You feel left out when you are not smoking.....you get in that group and you feel odd... Sometimes when I get a bit stressed out, it calms me down	Participant 7 Page 2/lines 25-28
Not changing smoking behaviour	Knowing that I am pregnant would help me stop smoking but it has not.....	Participant 9 Page 5/line 47
Implications	I don't actually smoke around him.....for his health as well...just a little bit still come in and he would be still inhaling it.	Participant 9 Page 5/lines 48-53

Group 2

Master Theme: Emotional Aspects of smoking

Theme/Label (Cluster Label 1)	Brief quote	Page and Line numbers
Implications	Being pregnant that was why I wanted to try and give it up, obviously with all the downfalls it just sent me back to smoking	Participant 7 Page 3/ lines 32-33
Determination	I just need to have that willpower you know....	Participant 7 Page 3/line 34
Emotions	Erm mainly because of the pressure of giving up and also because I did not cut down... Boredom, nothing doing really..... Upset a bit....still made me feel more relax...upset because I had not given up	Participant 9 Page 1/lines 1-7
Thoughts/ feelings around smoking	Because I smoked with my first son throughout my whole pregnancy.....	Participant 9 Page 3/lines 26-27
Ambivalence	I do want to give up smoking, but I don't if you know what I mean	Participant 9 Page 3/lines 28-29
Conflict	Erm I don't think really badly of it....I have cut down so much..... Really feel bad but on the other hand, I do because there is a baby...it is not like the baby asked to smoke	Participant 9 Page 4/lines 32-36
Habit/part of my life	Sometimes I do not enjoy it, Just smoking for something to do, just if I am bored	Participant 7 Page 2/lines 23-24

Financial and health gains	It is expensive and it does take a toll on you	Participant 7 Page 2/line 21
Worst case scenario	If I told I had cancer or something probably	Participant 9 Page 6/line 65

Group 2

Master Theme: Relapse

Theme/Label (Cluster Label 2)	Brief quote	Page and Line numbers
Stressful situations	I had a few ups and downs where I was just having a couple..... This was what made me start having a few fags.	Participant 7 Page 2/lines 15-18
Unable to quit	It was really quick for me, the return to smoking.	Participant 9 Page 3/lines 30-31
Needing more intensive support	The encouragement had gone so it was a bit harder to maintain.	Participant 9 Page 4/lines 45-46
Identifying when I smoke	When I was socialising or when I was indoors, or with nothing to do,.....also when I feel a bit fed up and a bit stress out.	Participant 7 Page 3/ lines 36-37
Identifying when I smoke	When I wake up in the morning.....when I eat...when I am bored...	Participant 9 Page 5/lines 54-55

Group 2

Master Theme: Identifying coping strategies

Theme/Label (Cluster Label 3)	Brief quote	Page and Line numbers
Being occupied	I kept myself busy and always found something to do	Participant 7 Page 2/line 12

Isolation	Going into rehab.... Because where I am still immune and open to the outside world...breathing and smelling cigarettes and then start thinking I want some. I would find it hard to get to a shop.....	Participant 9 Page 2/lines 10-16
Being occupied	Keeping busy and something I enjoyed doing as well	Participant 9 Page 3/line 20-21

Group 2

Master Theme: Support from the pregnancy service

Theme/Label (Cluster Label 4)	Brief quote	Page and Line numbers
Being supported in your quit attempt	She did encourage me and I felt really good in myself	Participant 7 Page 4/lines 39-40
Support	Things that they do is good and they encourage you.... Need to be motivated and positive yourself	Participant 7 Page 4/lines 46-49
Being supported in your quit attempt	The encouragement of the Stop Smoking Team...	Participant 9 Page 4/lines 43-44
Personal choice	Even though they want you to give up they don't pressure you to give up. It is just up to that individual if they have the willpower and the mind- power to give up	Participant 9 Page 5/lines 57-61

2.13 Appendix 8: Summary table of Master Themes (Group 4)

Participant number	P1	P2	P3	P4	P5
Master themes					
Morals	X		X	X	X
Addiction	X	X		X	X
Maintaining cessation	X	X	X	X	X
Support	X	X	X	X	X
Coping strategies	X	X	X	X	X
Being in control				X	

2.13.1 Appendix 9: Summary table of Master Themes for Group 3

Participant number	P6	P11	P13	P15
Master Themes				
Preparation	X	X	X	X
Support	X		X	X
Adjustment Period	X	X	X	X
Advantages of giving up	X	X	X	X
Emotions	X	X	X	X
Developing coping strategies		X	X	X

2.13.2 Appendix 10: Summary table of Master Themes for Group 1

Participant number	P1 4	P8	P12
Master themes			
Addiction	X	X	X
Postnatal Period	X	X	X
Behaviour changes in pregnancy and postpartum	X	X	
Emotional aspects of smoking		X	X

2.13.3: Appendix 11: Summary table of Master Themes for Group 2

Participant number	P7	P9
Master themes		
Emotional aspects of smoking	X	X
Relapse	X	X
Identifying coping strategies	X	X
Support from the pregnancy service	X	X

2.14 Appendix 12: Participant 1 (interview transcript)

Group 4

Interview schedule

Clients who have over a year of not smoking

Coping Strategies:

1) Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 1:

Erm, I think basically you always know or you hear that it is not good to smoke when you are pregnant or when you have a child. The facts that the counsellor came with, the facts that, it was shocking enough, you would not go there, because you knew you have been irresponsible but when it is not even your own life that you are dealing with but someone else, you have to kind of not smoke. The facts and the figures that the counsellor told me and also other stuff.

Interviewer:

And was it different when you had your baby?

Participant 1:

Erm, No.

Interviewer:

Was there any sort of shift in your behaviour or any change in your attitudes because you had your baby, because it was out of you, because it was not someone else's life that you just talked about?

Participant 1:

But then it still is, because I grew up with my dad smoking all during my childhood and I constantly had a cold throughout my whole childhood. So erm, I would still get the urge to want to smoke, but the counsellor said to me that erm to get the cigarette off basically take a shower, change your clothes, every time you had one for it not to be passed onto him. So it is not just possible.

Interviewer:

So it was more just looking at your own childhood and not wanting this for your child?

Participant 1:

Yes, I could smoke when it was just my health I was concerned with, but when it my child's health I had to stop.

Interviewer:

Anything else that you could draw on that made you managed not to smoke?

Participant 1:

Erm, again I think it is the thing that you know that the counsellor is coming around and if I do smoke and I going to have to admit failure, guess I am going to have said I had a cigarette. For me, starting all over again, I found it really hard, I mean I had an eye infection on the day that I gave up smoking so I just spent the whole day in bed and I had to do that way. I could not move and the idea of going through that again for the sake of one cigarette, I don't think I could give up again that's the point I am making.

So I'd rather not go there.

2) Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 1:

Erm a few times I have seen my dad smoke and I would look at my dad and I might see a cigarette in the ashtray and I would just go to have it and then I would remember, also a craving would come. For the craving I deal with it more I think. Then when I find myself going for the cigarette, that scares me. The craving as I said before, I can't do it, it is simple as that.

Interviewer:

Any other situations?

Participant 1:

No not really. My close friend gave up smoking around the same time as me and has started again. When I go to her house I thought I would find it really hard but I don't because she only smokes in her kitchen. So in a way it is removed from me.

Interviewer:

Any other situations?

Participant 1:

No not really, but I have yet to have a drink. So that's going to be a challenge.

3) When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 1:

I was petrified, because I just had visions that I would have the baby and run straight down the stairs and go outside and have a cigarette. I guess the reality of having a baby did not allow that to happen. Anyway it did not. Until I guess when I came home and everything started to settle, I had a few cravings for a cigarette, but having a new baby took over I guess.

Interviewer:

Any other thoughts?

Participant 1:

Erm, You see the funny thing is I felt so well supported by the counsellor, that I felt that it could be thrashed out if I kind of had any fears or problems I could ask the counsellor. I knew it would not happen, trying to gear my head with the counsellor's help of course to know that it is not an option for me anymore.

4) Thinking back to how you cope with not smoking, is there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 1:

I think for me it was just hearing the facts. I don't think there is anything I think it just came from, obviously the inhalator thing helped and chewing lots of gum I guess and trying to be distracted.

Interviewer:

When you say gum, do you mean the nicorette gum?

Participant 1:

No, just chewing gum, I was constantly chewing gum.

Interviewer:

So was that replacing the cigarette? Every-time you wanted a cigarette you chew gum?

Participant 1:

Yes.

Interviewer:

Any other ideas that you pass on to other people?

Participant 1:

No, not really everything I would pass on would come from the text messages and that kind of stuff, so it was stuff that was kind of provided for me. I cannot think of anything.

Interviewer:

So it was what was provided by the service.

Participant 1:

Yes.

.....

Service improvement

5) What do you think of the pregnancy service?

Participant 1:

I think it is brilliant.

Interviewer:

In what way?

Participant 1:

In every way, it does what it said on the tins, that is basically it.

Interviewer:

Any other thoughts about the pregnancy service?

Participant 1:

No.

6) Can it be improved in any way to help people like you give up smoking?

Participant 1:

There is just one thing and it's a really small tiny thing. When I first signed up for the text messages I did not get any at first and when I got them I found them really helpful, so that is the only thing. Nothing, I know it won't work for everyone, but I do think it really worked for me.

Interviewer:

Any other thoughts about how the pregnancy service can be improved?

Participant 1:

No, I think that is it.

.....

Lifestyle and environment

7) What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 1:

Also, I am not the healthy person that you are going to meet and I am getting older. I know that smoking does not really help; it does mix so that was one of the other reasons.

Interviewer:

So being aware of getting older and you cannot get away with it for much longer.

Participant 1:

Yes.

Interviewer:

Any other things?

Participant 1:

No. Erm, the smoking ban was coming in, that kind of helped as well I guess as it was more in the public eye.

8) How supportive were your family and friends about you still not smoking after you had your baby?

Participant 1:

Very supportive.

Interviewer:

Going back to your dad, has his smoking behaviour relaxed at all?

Participant 1:

He still smokes. He gave up, initially he gave up when he found out that I was going to give up, to kind of help me I guess. I keep trying to talk him into giving up. Just every now and then he will be in the same room as the baby, with a cigarette and he will forget for that split second. Apart from that, he will smoke away from the baby. With my friends, only one friend smokes and she goes into another room, but she is doing that by herself, I have not asked her to do this.

2.14.1 Appendix 13: Participant 2 (interview transcript)

Group 4

Interview schedule

Clients who have over a year of not smoking

Coping Strategies

Interviewer:

1) Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 2:

Well first I banned smoking in the house, so that was good and with newborns you cannot smoke around them. So people tend to make the effort to go out of the room and you just don't go with them. So it was not too difficult. Breastfeeding as well, because you end up in other room. So you are not around people when they are smoking.

Interviewer:

Any other thoughts?

Participant 2:

Erm, the thing I noticed most was the smell. Once I stop smoking in the house and I stopped smoking, people what did smoke really smell of smoke and I was quite pleased that I did not smell that way anymore. Then you realised that you used to smell like that. So that was probably one of the main reasons I continued not to smoke.

Interviewer:

So the smell, having a newborn and being ready to stop.

2) Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 2:

Only when I have been drunk. Now I don't like the taste and I am not used to it anymore, that has turn me right off it. So that has kind of reinforced the fact I don't like it anymore, so that is quite good.

Interviewer:

So it is mainly when you have a drink?

Participant 2:

Yes, just because I think they go hand in hand; you have a drink, you have a cigarette, breaking the monotony of it you know.

Interviewer:

Anything else?

Participant 2:

No.

3) When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 2:

I did not think about it. Not at all, just carry on as normal. For me it was a natural process; the more you think about it, the more you find yourself wanting a cigarette. It is harder to ignore the fact that you are not doing it anymore I think. I just did not smoke I just carried on and took every day as it came. I tried not to think about going back to it, and tried not to think of doing it, you know whatever happens, happened.

4) Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 2:

The first one is ban smoking in the house straight away. Which means can you be bothered, especially in the winter, can you be bothered to go and stand outside the door when it is pouring down with rain and it is freezing cold and also you noticed the smell straight away, within days. You wash your curtains and they don't stink. That to me makes such a difference. That would be my first port of call; right I am not smoking, out of the house, no one is smoking in the house and that is better for everyone really.

Interviewer:

Anything else?

Participant 2:

I was quite ready to give up smoking and I think if you are not, it could be, if you don't want to you are going to lying to yourself and I also think having the advisor come round and testing you breath every time it was good, it was like well done me, you know it was a big thumbs up so that I enjoy as well. The positive feedback of it you know.

Interviewer:

So to recap; ban it from the house, Advisor coming round, CO reading and being the right time to quit.

Participant 2:

Yeah, if you don't want to, you are not going to do it. Same for every thing, losing weight as well, if you are not interested in it you are not going to half-heartily do it. For me, these are my reasons that I gave up smoking.

.....

Service improvement

5) *What do you think of the pregnancy service?*

Participant 2:

What do you mean?

Interviewer:

Just in general, Advisor coming round to visit you?

Participant 2:

I thought the no smoking pregnancy service was fantastic, but midwifery, the other side of it was diabolical for me both times. Advisor came every time she was supposed to come. If she was going to be late, or I was going to be late, common courtesy of a phone call or a text. She would text me every now and again in-between visits, e.g. when she was coming fortnightly or monthly she would send a text message every week and that was quite nice. So it felt like you were being watched. The no smoking side of it fantastic.

Interviewer:

Did you not get much support over the midwife side of it? Did they refer you onto the pregnancy service?

Participant 2:

B did. No that was a lie, A did. She was my original midwife, she booked me in and then I never saw her again because they changed the system, you know what I mean.

6) Can it be improved in any way to help people like you give up smoking?

Participant 2:

Well I had a fantastic time so I am more than pleased with it. I definitely tick the very good boxes the whole way down on the paper. Not for me personally, she was brilliant, she was not too in your face, she was not over the top, quite genuine about things, and it was like having a chat rather than being barked [at] you know. It was very informal and very nice.

.....

Lifestyle and environment

7) What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 2:

Choice and the smell. I can't emphasis it enough and also now that I have stopped smoking my taste-buds have changed, and it has been a while, it has been a year, but my taste buds, I am tasting curries, these are getting hotter and things like that. So that is quite nice, I have realised this. I mean I am eating beetroot, before I would have never touch it, but now I can taste it.

I think it has to be about choice, if you are not going to do it then you will not. It is all about personal choice. If you don't want to do it, you are not going to do it, no matter how people will try and enforce it on you and you have to be motivated to do it.

8) How supportive were your family and friends about you still not smoking after you had your baby?

Participant 2:

Fine, fantastic, really supportive, yeah I mean he (my husband) has to go in the garden every time and he has not tried not to and I have a couple of friends that don't smoke as well so that helps as well and the rest of them do.

Interviewer:

So their smoking behaviour did not relax once you had the baby?

Participant 2:

No, with newborns you go out of the room anyway. No they have all been really good.

2.14.2 Appendix A14: Participant 3 (interview transcript)

Group 4

Interview schedule

Clients who have over a year of not smoking

Coping Strategies:

Interviewer:

1) Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 3:

The first part of that, how I managed not to smoke when surrounded by smokers?

What I would do would be to just remove myself from that circle.

Interviewer:

Anything else, did you just take yourself away from that situation?

Participant 3:

Since I gave up I really, really, really (and I did tell this to Advisor too), I cannot stand the smell of smoking neither, I can't do it. I just removed myself from those people.

Interviewer:

So that was when you had your baby, what about when you were pregnant?

Participant 3:

Even before I gave up I was trying to give up, but I was easily swayed until I set my mind that I did not want to do it anymore, not for me then I even started to back off. I mean I am very close with my neighbour and she noticed that I was not coming over so often and she is a smoker herself.

Interviewer:

Again, so removing yourself from the situation and also a change of attitude within you?

Participant 3:

Yes.

Interviewer:

Is there anything else you can think of?

Participant 3:

I [was] made to feel guilty by my son; he would remind me just to make sure, he does that. Doing the tests with Advisor as well, you know she does the breathing test where you blow into it and that made me feel guilty in itself.

Interviewer:

So it is these four things really; so the CO machine, son making you feel guilty, the taste and just removing yourself away from the situation.

Participant 3:

I knew in myself what I wanted and I did not want to smoke anymore. It did not make me feel good.

2) Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 3:

Mainly times when like there is stress, when you feel stressed. Depending on your character, me I am a strong person and I knew what I was aiming for; I did not want to smoke.

Interviewer:

So it was when you were in a stressful situation?

Participant 3:

Yes, most of the time.

Interviewer:

Is there any other situation what springs to mind?

Participant 3:

Not really, just when I was feeling like overwhelm or stressed really. That it was it really.

3) When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 3:

My thoughts were, get food in the house girl.

Interviewer:

So, just to get some food in the house? Was this a replacement thing for cigarettes?

Participant 3:

Yes definitely, I would rather anything else than put a cigarette in my mouth. My thing was to get fruit like juicy watermelon, to get the buds going. That kind of thing.

Interviewer:

How did you think you would cope with it once you had your baby?

Participant 3:

I knew I would because at the end of the day, If I continue to do smoking it's going to make me ill. My son made feel bad, he would say "the little baby", when I was pregnant I was not very well and my son put this on me so bad.

Interviewer:

So you cope with it all by thinking of your health?

Participant 3:

Definitely. Yes, waste of money, I'd rather put the electric on; you know something on the house, rather spending it on cigarettes and killing myself.

4) Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 3:

Not original, but guilt does work, when people tell you that it's not a good thing to do when you are pregnant. Even know we know it and to be told this you might get annoyed someone saying this to you, but it is the truth, that's why we feel this way.

Interviewer:

Are there any other good ideas that you think you could pass on?

Participant 3:

Think of the health of the baby, and of yourself because without you your baby cannot live.

Interviewer:

Anything else?

Participant 3:

I think it is selfish, I mean we were not born with cigarettes in our mouths, it is something we choose to do, no matter how old we were when we picked up the first cigarette. It is not worth it in the end.

Service improvement

5) What do you think of the pregnancy service?

Participant 3:

The non- smoking service, I think it is really good support. She made me feel that if at any time I could contact you guys, and yeah it was brilliant. I recommended it to people.

I have even spoken to my neighbour as she is actually pregnant as well and I have been on her case as well. We will see, I mean I can't make her, I can only tell her.

6) Can it be improved in any way to help people like you give up smoking?

Participant 3:

I was even wondering if you do classes as well, you know? I think the service in itself is brilliant, but you know just too like, I know pregnant mums, some people might think all they do is sit at home and stuff, sometimes they get bored and I am talking about from myself as well, somewhere to go as well. Trying to meet with other parents or people that want to give up.

Interviewer:

So more like a group?

Participant 3:

Yes, pregnant women and women who have children too.

Interviewer:

During the time you are pregnant? Or during the time you are smoking?

Participant 3:

Both.

Interviewer:

So more like a support group.

Participant 3:

Apart from that I believe you guys have done everything that is possible within your powers.

Lifestyle and environment

7) What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 3:

The thought of passive smoking, even if you are walking by in the street, and someone is smoking, within those 50 seconds you are taking in some of what they are blowing out. I really hate that because I am walking my little boy too. So passive smoking as well because that's a killer as well. It is shortening my lifespan.

8) How supportive were your family and friends about you still not smoking after you had your baby?

Participant 3:

Some were quite sceptical. Some were supportive, you know well done, I know if I was to say give me a fag, they would be giving me a fag. Most of them have been good.

Interviewer:

Did their smoking behaviour changed at all once you had your baby?

Participant 3:

It relaxed before this, because I let them know you cannot come into my house smoking, not that I let them do it before, they know for a fact that they would not be allowed to smoke in my house.

2.14.3 Appendix A15: Participant 4 (interview transcript)

Group 4

Interview schedule

Clients who have completed over a year of not smoking

Coping Strategies

1) Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 4:

Erm, pretty much from the day I stopped, I just stopped being around anyone at all that would smoke.

Interviewer:

So just removing yourself away from that situation?

Participant 4:

Yes, completely.

Interviewer:

Was there anything else that you did?

Participant 4:

Afterwards there would have only been one or two occasions around people. Just really trying to avoid people I think. It was helpful because the ban had come into effect so when I went out, where ever I was it would not be a problem.

Interviewer:

So just removing yourself from the situation and obviously the smoking ban helped as well?

Participant 4:

Yes just those two things.

2) Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 4:

Yes, about a hundred of them. Every time I am around my mum. Anytime I was stressed or doing things that I always used to smoke when doing these things. So all of those are quite difficult. The hardest one is in this flat for some reason, when they smoke upstairs, it comes straight through these windows and you can smell it really strongly. So that is horrible.

Interviewer:

So mainly those situations, being around your mum, when you can smell the smoke. Can you think how you cope with this?

Participant 4:

One of the best things that, I cannot remember if it was A or J said [who] said 'do anything but', so whether it being chewing my nails or copious amounts of Red Bull or eating sweets; in my head as long as I had that going around anything but that, but that, so that was fine. Again removing myself from whatever was bothering me. Just avoidance.

3) When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 4:

I was terrified of that, I constantly had that thing of what happens when he is born, because when he is born he is not inside, not directly it was kind of a excuse, being pregnant, thinking, I can't do it because of this. So at first I transferred it over too breast feeding, can't do it because I am breast- feeding. Then because was another six months, then it was kind of I have been doing it for this long you can manage another day, another week, and just kind of pushing it along. It was a big fear.

Interviewer:

So it was more like a process, you coped with it when you had your baby by breast – feeding and then once you finished breast feeding it was the next stage?

Participant 4:

Yes, because it had been longer enough, so it was finding little kind of excuses to give myself so I could just extend it and extend it.

Interviewer:

So has that worked throughout the last year and a half?

Participant 4:

Yes I give myself one other stage to go through. In my head now, “If I can just get pregnant then it will be other six months till I get pregnant, why on earth would I smoke before that? Then it is like by the time you have got pregnant, had the baby, done the breast feeding, it is another two more years, then it will be four years, five years, and why would you smoke after five years. This is all in my head. Just keep pushing it away.

4) Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 4:

My biggest reasons in having difficulty stopping was control. I had this kind of, it is my last thing that I am in control of by being pregnant. It was important to me to understand that I was still in control, I was in control of not smoking, and I was trying to give up smoking. So it was a constant, I get to make these choices when ever I want, I can stop whenever I want, I can have a cigarette when ever I want but it is my control that was really important. I needed to be in control of something and knowing that it was a choice to give up smoking. Control for me was a big factor I think. Seeing it as a drug, rather than a thing you do made a big difference, changing what it is. I found just looking at cigarettes, the last few I was smoking, actually really looking at them and thinking why I am doing this.

Because after awhile you just avoid it, you don't notice a cigarette, you don't notice it, that it is lit, you don't really pay attention what you are doing. So paying attention to the actually thing, when you are walking past people in the street, actually if you are avoiding it, sometimes just looking at people and thinking that is actually a drug they're taking there and then on the street, you know what I mean and just kind of re-label it in a way in your head.

Interviewer:

So having a change of attitude to smoking?

Participant 4:

Yes.

Service improvement

5) What do you think of the pregnancy service?

Participant 4:

Brilliant, Absolutely brilliant, really non-judgemental, really supportive. Did not feel like, I could have texted or phoned literally twenty-four hours a day and I would have not felt bad to do that. Exactly what I would have needed. I did not realised I needed it. It was really supportive and really positive.

6) Can it be improved in any way to help people like you give up smoking?

Participant 4:

Not really. The only thing I asked A about was, after he was born was there a group (or a random) not necessarily every week, but maybe once a month or what- have- you of the local area, because you have a lot of groups of mums and baby, mums and toddlers, but you never feel like that you can talk about smoking, it is like a taboo subject, so if there was a place where once a month or once every six weeks, you could have gone and said " I really want one too but I am not going to". Just that kind of not all the time but perhaps once a month.

Interviewer:

“So when you say a group, do you mean like a mother and toddlers group where you can talk about smoking?”

Participant 4:

Where it is okay to actually say this. Have it as a mothers and toddlers group so it is not smoking, but you know walking in everyone has been there, you can talk about if you want to, but it does not have to be the focus. You don't have to go feeling like, I am going to go, that all they are going to be talking about it and then I am going to want one and it going to remind me and I don't want one. Somewhere you could, there would be a mum there, that you could say that terrible word and you would not be looked at it if you where the devil just for wanting a cigarette.

Lifestyle and environment

7) What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 4:

Money and health, just really expensive, which is actually a massive bonus when you are continuing to quit. Once you realise how much money you have it is quite [a] scare, you don't realised this beforehand and just standard health issues, being able to run for a bus, and not having like chest infections. Support from my partner, he quit just beforehand and did not start again without having any kind of therapy and stuff that I had. The patches and everything they were helpful. Actually more to the point, was understanding triggers, which I would not have had without the support system, because I done quite a lot of counselling training and things like that and even with that background I would have not put two and two together.

I would have not understood why I smoked, and [what] my triggers were, and why they where triggers, therefore would not have known how to avoid it. Do you know what I mean? So I think the actually counselling of it.

Interviewer:

Having identity as a smoker?

Participant 4:

Yes and figuring out where on earth that comes from; at what age and what point, you know all of that stuff? You cannot do this by yourself. You can, but is very ridiculous. I think this will be the key in me not smoking in the future, is the fact that I know a bit more about that side of it.

Interviewer:

So understanding all of your triggers and how to cope with them?

Participant 4:

Yes.

8) How supportive were your family and friends about you still not smoking after you had your baby?

Participant 4:

I don't think apart from my partner, anyone else understood, I think very few people understand that smoking can be an addiction in the exact same way as everything else. So I don't think anyone understood the seriousness of what I was trying to do and I don't think anyone outside of my own house was very helpful at all. A lot of people would go outside and have a cigarette and not see that as something you should not really do, because we can still smell it and it is really strong. So yes I think family wise they could have smoked away from the house.

Interviewer:

Were they doing this when you were pregnant?

Participant 4:

Yes, when I was pregnant I would just not see them, just to completely avoid them. Then once he was born people, do relax a lot and they think it is not a problem anymore.

2.14.4 Appendix 16: Participant 5 (interview transcript)

Group 4

Interview schedule

Clients who have completed over a year of not smoking

Coping Strategies:

1) Can you tell me how you managed not to smoke when surrounded by smokers when you had your baby and when you were pregnant as well?

Participant 5:

I tried to remember things that A said about [how] bad smoking is and tried to remember, if you smoke it affects your baby's health, yes something like that.

Interviewer:

"So just to do with your baby's health, and do anything but not smoke?"

Participant 5:

Yes.

Interviewer:

And was that when you were pregnant as well?

Participant 5:

Yes.

Interviewer:

Is there anything that stopped you from smoking?

Participant 5:

Just to learn this knowledge I learnt by counselling. She suggested to move the order of the kitchen where I used to be smoking.

The order of the electronic things, but I have not changed anything, just to remember the bad things of smoking and try to make myself strong.

Interviewer:

Can you remember anything else?

Participant 5:

Yes, I drank some herbal tea and earl grey tea because it is not normal tea to make my routine different and the flavour of the tea. I used to drink normal tea and coffee when I smoked. I tried not to drink coffee and drink earl grey tea.

2) Can you think of situations when you have felt the need to smoke, but you did not smoke?

Participant 5:

Yes when I got frustrated when I was pregnant when I had an argument with my husband and my husband would go out to the garden and light a cigarette and I really really wanted one, but I just decided not to. So then I just did not have one.

Interviewer:

Were there any other situations when you wanted to have a cigarette?

Participant 5:

Yes my husband, and after I had my baby I was frustrated with my other two children, they were very noisy and the house was so messy, no-one helped me, oh my God and I wanted one. Obviously I did not have any cigarettes, I did not have any life, and I just tried to forget about cigarettes.

3) When you gave up smoking when you were pregnant, what were your thoughts on how you would cope with not smoking when you had your baby?

Participant 5:

I was breast-feeding and this helped me not to smoke.

Interviewer:

How did you think you would not cope with it?

Participant 5:

I was alright. Because I had not smoked for a long time, I did not think about it. The breast feeding helped me with not smoking. Breast feeding, forgetting about cigarettes and the smell of the house. Since I have stopped smoking I have asked my husband not to smoke inside and all the guests who smoke, so they go outside to smoke, so the house does not smell anymore.

4) Thinking back to how you cope with not smoking, are there any good ideas that you used that can be a help to other pregnant women giving up smoking?

Participant 5:

I used the gum and it helped a lot. With the patch I felt really sick, feeling drowsy; it was too strong for me. The gum I was taking the 2mg gum, every time I wanted a cigarette, I used a piece of gum. That is all I can think of.

.....
Service improvement

5) What do you think of the pregnancy service?

Participant 5:

I thought it was very good and I think I could not have stopped smoking without that service. I did not really ask the GP, I just mentioned that I was smoking and I cannot stop and they sent me a letter about the service, it was very easy and quick. It was very good and I very glad.

6) Can it be improved in any way to help people like you give up smoking?

Participant 5:

I think it is already very good, so I don't think so, it is okay as it is.

Lifestyle and environment

7) What other factors besides being pregnant/or having young children around contributed to you giving up smoking?

Participant 5:

My own health as well. Not sure how to explain but socially, whole world is getting a bit like everyone is trying to stop smoking. If you stop smoking you will be respected more. Since I have stopped smoking, when other mums are smoking are smoking in front of the school they are criticised. They are not very good mums, so social stigma, people will look at you. As smoking is damaging the environment, the air and the ground we should all stop smoking. Security as well, in knowing you are protecting your health by not smoking.

8) How supportive were your family and friends about you still not smoking after you had your baby?

Participant 5:

They did not really support me. My husband tried to not smoke too often and he would go outside to smoke. Before he did not care about passive smoking, I explained that there are 4,000 chemicals in a cigarette and then he understood and it is not good for baby and then he changed and he always goes to the garden and reduces the amount of smoking.

Interviewer:

Is that still taking place now?

Participant 5:

Yes it is still taking place and it is already settled and it is like our rule, no smoking in the house.

2.15 Appendix A17: Participant 6 (interview transcript)

Participant 6

Group 3:

Interview schedule

Questionnaire for pregnant clients who have completed 8-12 weeks of not smoking.

Behaviour change:

1) How did you managed to give up smoking?

Participant 6:

Basically I cut it down to like five a day, then to one a day, and then tomorrow, I just thought, this was over two weeks, and I thought I would stop completely and I just did and that was that.

Interviewer:

So that was your technique for giving up smoking?

Participant 6:

Yes.

Interviewer:

Was there anything other techniques that you used to give up smoking?

Participant 6:

Support from the counsellor. Afterwards when she said she was going to come back after so many weeks and test your thing again. [Carbon monoxide to validate self-report of no smoking] I thought if I have smoked I am going to feel like I have let myself down when she does the reading.

2) When did it become easier not to smoke?

Participant 6:

I don't know. I don't think it ever became easier.

Interviewer:

Did it become easier after one week?

Participant 6:

No.

Interviewer:

Is it still on your mind a lot?

Participant 6:

Yes, I have quit now for six months, it did get easier after about a month and a half, I did not think about it as much.

3) What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

Participant 6:

The only thing that really helped me was not drinking tea because I associated that with having a cigarette. The CO machine, because if I had smoked I would have been wasting her time, you know what I mean. That was a really good thing.

.....

Being near smokers

4) What was it like being in situations where you would normally smoke?

Participant 6:

Horrible.

Interviewer:

In what way?

Participant 6:

I don't know I'd think I was missing out. I don't know I would normally be there holding a cigarette and smoking with them. You know what I mean. I just felt like I was getting left out.

5) What is it like being with a partner and any friends who smoke?

Participant 6:

With him it is alright, I am used to it now. In the first few months I suffered from morning sickness the smell, I did not realise, have you smoked before?

Interviewer:

Yes.

Participant 6:

Do you still smoke?

Interviewer:

No.

Participant 6:

Because you do not realise when you smoke how bad it smells until after you have stopped smoking. It stinks. That was the main thing.

Interviewer:

What about when you were with your friends?

Participant 6:

The same thing really, although not as bad as I would not get close to them as my husband.

Interviewer:

Anything else?

Participant 6:

No.

.....

Benefits of giving up smoking

6) How do you feel about your health since giving up smoking?

Participant 6:

A lot better, I have not got that horrible cough you have when you smoke. Smoker's cough when you have to cough a lot. Because of my pregnancy I feel I cannot say at the moment.

2.15.1 Appendix 18: Participant 11 (interview transcript)

Group 3:

Interview schedule

Questionnaire for pregnant clients who have completed 8-12 weeks or longer of not smoking.

Behaviour change:

1) How did you managed to give up smoking?

Participant 11:

I just cut down, and then eventually did not smoke again.

Interviewer:

“Was it over a certain amount of time that you did smoke?”

Participant 11:

Yeah it was over a couple of months, that I went from smoking twenty, then to ten, five and then have one in the morning and one at night. Then none at all.

Interviewer:

So gradually reducing it? Was that easy?

Participant 11:

Erm, sometimes it was alright, it was hard at times.

2) When did it become easier not to smoke?

Participant 11:

When I started feeling her moving, because I thought it not fair on her and I was worried that she would get asthma or something.

Interviewer:

So it got easier once you felt your baby move? How did it get easier?

Participant 11:

Because I thought more about her than me, I need a cigarette, but she doesn't.

3) What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

Participant 11:

Eating, (laughs) and chewing gum.

Interviewer

Is that normal chewing gum?

Participant 11:

When I needed a cigarette I sucked on a boiled sweet. Something to replace the cigarette.

Interviewer:

Is there anything else you can think of?

Participant 11:

No not really, those are the main things. If I felt like a cigarette, probably eat and do one of these things.

.....

Being near smokers

4) What was it like being in situations where you would normally smoke?

Participant 11:

Hard.

Interviewer:

In what way?

Participant 11:

Erm, if I was having my friends round and something, and they would be having a cigarette, then I would find it really stressful, because I would feel like I wanted one and you can smell it. I fancy one then and that would make it hard.

Interviewer:

Anything else?

Participant 11:

When I was out, because when I was pregnant I still have a drink, a wine or something and when you are having a drink, you feel like a cigarette. That was other thing that was hard.

Interviewer:

Any other situations?

Participant 11:

If I had an argument with my boyfriend I automatically wanted a cigarette that is when I did have one, a few times when I was pregnant. Also after you eat as well, yeah after dinner.

Interviewer:

How did that make you feel?

Participant 11:

It was not too bad; I think it would have been hard if I was not pregnant. If I was not pregnant then it would have been harder, but because I thought of her, it was not about me.

5) What is it like being with a partner and any friends who smoke?

Participant 11:

Hard, because they are not considerate.

Interviewer:

In what way?

Participant 11:

They still smoke around you and stuff, so it is hard and they even offer you a cigarette, because they forget, they are used to seeing you smoke, so you sit there and they are like do you want a cigarette, and you're like no. It is hard because you really want to take one and you got to think no, I am okay, thanks. When you really want one, yeah no one is really considerate. My friends still come round and have a cigarette, and I am like, can you not smoke please.

Interviewer:

“What is it like being around your partner?”

Participant 11:

He tried to cut down with me and tried to give up. He always carried on, he could not stop altogether. I was not happy when he was smoking; I tended to go out, because it would get on my nerves, seeing him sitting there smoking. Sometimes I feel happy, because I would think oh yeah at least I am healthy now. When I gave up I felt a lot healthier so when I see them in the morning I would think at least I am not like that. Most of the time it was stressful, I can smell it a lot more, when lots of people are smoking, where as when you are smoking you don't realise that. When I would be sitting on the bus, if someone who smokes would get on, the smell it was horrible. They would stink.

.....

Benefits of giving up smoking

6) How do you feel about your health since giving up smoking?

Participant 11:

I feel a lot healthier, at first you feel erm (coughing sound) in the mornings when you give up. I felt really chesty and stuff. After a few weeks it felt a lot easier to breathe, and it was nice to wake up. I breathe easier and when I run I don't feel so out of breath. It is a lot better.

Extra question

Interviewer:

If you were to think of anything that would help other people in a similar situation to you, what would it be?

Participant 11:

Just do it for the baby, because if you wanted to start afterwards then it is up to you, innit, but for them you want to give them a good start in life and you don't want to give them any breathing problems. When I see them adverts, where it is, if you smoke I smoke and stuff like that, I think like that is not fair on them, because it hard enough for them to breathe anyway. They do not need anything added on top of that.

Also cot death is a worry; I want to make sure that my baby does not have this. So by not smoking, she won't be exposed to smoking in the house.

2.15.2 Appendix 19: Participant 13 (interview transcript)

Group 3:

Interview schedule

Questionnaire for pregnant clients who have had 8-12 weeks of not smoking.

Behaviour change:

1) How did you managed to give up smoking?

Participant 13:

I had to change my thought process, my way of thinking; I had to identify the main causes of why I smoked and erm for me that was sociable because I have grown up with all of my family, my parents, my grandparents, aunts and uncles. Everyone is smoking. So I have always had in my mindset that this is a normal way of life. So I had to kind of separate my ideal lifestyle from that, which was a bit difficult but once I had identified that not everyone smokes, that was a bit easier, erm being around friends that smoke, I had to really separate myself for a little while. Because even though I was giving up smoking I would be around people that smoke and then I would have a lapse.

So realising that it was not peer pressure, they were not forcing me but it was kind of the thing where everyone else is doing it, so why should I not. Erm changing my attitude when I had bad circumstances, like something was going wrong, like an argument, I was upset, I was stressed, or like I said about being flooded and stuff like that. Getting situations like that and then realising that I have not smoked all week, so now this situation that's made me want to give up and just think I need a cigarette. So it was about changing my thought process and realising, identifying why I smoked, when I smoked and kind of just trying to create a kind of plan for myself from that.

Interviewer:

“Is there anything else you can think of?”

Participant 13:

Obviously I wanted to give up, and before I was saying that I wanted to give up, but I don't actually think I was registering that for myself, I think I was just saying that because it sounded good. Oh I want to stop smoking, but I didn't really want to stop smoking. So it had to come from me, really having enough of smoking and caring about my health. A lot of it had to do with my children to be honest because I realised that from my parents, seeing me smoke and they did not care about not smoking, it made me smoke because I thought it was absolutely normal and I don't want my children to smoke, so obviously they are going to follow what I did as I follow what my parents did, because your parents are your role models, so my children did have a very big impact.

I knew how much they wanted me to stop smoking as well. So I did feel guilty when my son was hiding my cigarettes and I would be getting frustrated with him because he would think it was a joke and I really want a cigarette and then I realised it was not a very nice pattern to be getting into.

2) When did it become easier not to smoke?

Participant 13:

Erm seeing the stop smoking lady that helped an awful lot because erm, it just helped me have more of a goal. Which then helped me to make it a little bit easier, erm it got easier as time went by, the less I smoked the easier it got. Clearing my house of any smoking paraphernalia whatsoever, ashtrays, lighters, everything did help. I did not think it would, well what's the point of that, you can grab a cup or plate or something and use it as an ashtray.

Then I actually realised it does help when you cannot find a lighter and the craving, I did not understand that six seconds thing, but I realised if I was identifying time where I was stressed and thought right that's it I am going to smoke, and I couldn't find a light or I couldn't find a ashtray or I did not have a cigarette in the house by the time you have gone to the effort to do all of that you don't even want a cigarette.

So little things were helpful to me, I started to like the fact erm as time went on I got a bit stronger, and where I had identified certain things and tried to create a plan for stopping smoking, I started to like the fact that when people offered me a cigarette, I was able to say no, that made it easier, the more I said no, the more I realised I had become a non-smoker. Then it started to dawn on me that was actually what my aim was.

So it just got easier like that really. I must say it was about six weeks before it started to get easier. That first six weeks I was going back to it, and I was unsure about why I was stopping smoking. If I really wanted to? As I said seeing the counsellor, kind of made me feel guilty when I did see her and I had a cigarette. So it was nice to have support and the support from the kids as well.

Interviewer:

How long have you given up for now?

Participant 13:

Three months of not smoking. After six weeks of understanding why I smoke, it became easier as I was determined not to smoke.

3) What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

Participant 13:

Being pregnant and harming the baby. Having children that would follow in my footsteps and smoke. Also knowing how much I did not want my kids to smoke and thinking about why I smoked. So it is kind of like, if I don't want my children to do something why am I doing it was a big strong hold?

Erm then there is just the health aspects of it, wanting to be healthy, wanting to be able to run up the road without feeling like I am about to collapse and have a heart attack. I was starting to get shortness of breath and stuff like that and it is very expensive. I think when I got through the first six weeks, the first month and a bit had gone past, and I cut down, it started to get to the point where I was actually taking a cigarette from someone and it genuine taste like I was poisoning myself. Where I had cut down so much I could actually sense the difference erm and just trying to be around people that don't smoke instead of people that do smoke. This was really helpful, now I can be around my friends that smoke and not be influenced me. While I was trying to give up it was not helpful.

Interviewer:

“Anything else you can think of?”

Participant 13:

Erm, just my own willpower and determination. Oh of course nicotine patches as well. Nicotine patches were a big help. They got me through the first six weeks, they got me through and on and off after that I might have had one on a bad day (using patches) or something. Now I don't use anything at all.

.....

Being near smokers

4) What was it like being in situations where you would normally smoke?

Participant 13:

It was really, really difficult as I have said, knowing that I am trying to give up smoking and seeing someone else smoking, kind of makes you think why am I giving up, they are not giving up? So I mean you see people smoking and you think it can't be that bad they're doing it, but then you have to kind of identify your own needs, and you really have to separate yourself from following, even if it is like from my case it was my parents who smoke. It is hard not to follow your parents, you don't have anyone else not to follow.

So if you see your parents doing something and you think, I used to say to myself they say, you get really sick with cancer and stuff like that, but my parents have been smoking for twenty years and they are perfectly fine. It is really about kind of getting away from those kinds of thoughts and just trying to change your way of thinking and knowing what you want really. It was difficult and as time went on, it started to become frustrating because now, I do class myself as a non-smoker and I get really quite irritated when people are smoking, because it is only becoming a non-smoker, I realised how much it stinks, it does not taste nice, it does not do anything for you, erm I started to realise how much negative's there is to it.

5) What is it like being with a partner and any friends who smoke?

Participant 13:

None of my partners have smoked. It is always been me, I've been told I cannot be kissed because my breath smells. So I know how it is for the other person when you are with a smoker and it is not nice for a smoker, if you want to give your boyfriend a kiss and a cuddle and he is just repulsed because your breath smells or your hair smells so I have kind of experienced that. Now erm I just came back from holiday with my mum and my dad, and they smoked so much while we were away, and I was really disappointed that they don't want to quit.

I know everyone is different and as I have said you got identify for yourself, and you've got to want to quit. It is really quite, disappointment, kind of frustrating, you have stopped and you think, why I don't can't you and you cannot you see that it is for the best. Obviously that makes you continue not to be a smoker as well. In the early days I would just want to have a cigarette with my friends.

.....

Benefits of giving up smoking

6) How do you feel about your health since giving up smoking?

Participant 13:

I feel like I don't smell, although I used to. I feel like I am starting to get my breath and energy back. I realised how yellow my teeth are and I am trying to get my teeth white again.

Erm, it not a kind of superior feeling, but compared to someone who does smoke, I do feel like I am doing a bit better than that person in terms of my health. Because I now see smoking as quite a self-loading thing. I just really like not to be in the same situation that I am smoking again or anything like that. Before I did not know the difference between non-smoking and smoking, now I do. I can honestly say I prefer being a non-smoker.

2.15.3 Appendix A20: Participant 15 (interview transcript)**Group 3****Interview Schedule****Questionnaire for pregnant clients who have had 8-12 weeks of not smoking****Behaviour change:**

1) How did you managed to give up smoking?

Participant 15:

Erm, when, myself and the counsellor talked about it at length, the times that I smoked you know my main kind of times which were basically when I first woke up in the morning before I get the kids up for school. That was what was getting me out of bed and that was going to be the most important time of the day for me and then in the evening for me as well. I think when I got tired. It seems to be something that I would come in the kitchen and smoke and then go off and do their bath and then come back and have another one. I seem to increased my smoking in the evening as well. So it was identifying the kind of key times erm, the key, the behaviour bit to it when I would actually do it. Erm, once I had sort of, we discussed what else I could do instead.

Which was actually use the Nicotine Replacement Therapy, the inhalator, have the patches anyway, use the inhalator and still come into the kitchen to have my five minutes time out as it were and just smoke, sorry, puff on that instead of a cigarette. Erm gradually may be think of other things, you know other ways that I was going kind of use that as a crutch at those times, but still have the time I needed for myself. Erm and then, I don't know I supposed after I had actually quit I just noticed very gradually over the weeks I was not having to come into the kitchen and having time out anymore. I was maybe just taking deep breaths or I was becoming kind of less stressed anyway because I think nicotine actually makes you more stressed and you don't actually realise it. I think the support; it helps to talk about it a lot before I actually did it with the counsellor.

I think to actively make the decision that it was bad for the baby and I had a lot of that kind of being pregnant the same time, I had a lot of guilt around smoking when I was at the beginning of my pregnancy as well. I found particularly the last four weeks that I was actually smoking it became a fact that every-time I had a cigarette I was feeling awful about it. So that was a huge component to it really, the guilt actually.

2) When did it become easier not to smoke?

Participant 15:

I think really, I think, I kind of what I did was I had the, I gave up at the beginning of the school summer holidays which was not an active choice. I had a bit of a bleed in my pregnancy and that was the thing that really spurred me to think "I am just going to quit now". You know it was a bit of a scare really. Erm it correspond with the beginning of the summer holidays which meant that my routine had changed anyway as a mother I did not have to get up at six o'clock and get the children up and have that two hours rushing around getting them ready to go to school. I was able to lie in and take the day more slowly.

Erm, so I think that helped. Basically what I did was took the patches down from what they say, the strength, three, two and one. I think I had strength three for about three weeks, for the first four or three weeks with the inhalator thing. Erm then I went down to step two as well. I think probably the first three or four weeks were the hardest.

Interviewer:

“After three or four weeks it became easier”?

Participant 15:

It was just making the changes and I think that is also you have the time when the nicotine is clearing out of your system. Nicotine is a drug, but then you also become aware you don't smoke anymore. It takes three or four weeks to get into your head, “I do not smoke anymore”. So the times that I would normally smoke, there was a lot of times if I walked down the street for example and I was quite aware I don't smoke when I walk down the street now, I might have a bag of crisps instead now. So there were a lot of behavioural changes going on in that first month and I think it took that long for them to become easier.

3) What were the main things that helped you with giving up smoking in the first few weeks of your quit attempt?

Participant 15:

It was the NRT and the counsellor was coming once a week as well. I think I felt there was an initial euphoria as well, I think in that first week to four weeks where you feel quite proud you have managed to do something that you have heard so many people say so many times, including myself. Erm I could not ever give up and then suddenly you kind of realise after five or six or seven days. Then you suddenly realise that you have given up and then you feel quite comfortable with that and then you actually get a ‘buzz’ out of it, wow I actually don't smoke, it's been a week or it has been two weeks and I haven't even had the urge to go and buy a packet of cigarettes.

So I think it was a combination of self-praise and being proud plus I presume the patches were helping me and working. Obviously I was using my inhalator as recommended, which is once an hour you are to suppose to use it. I was also finding I would use this at the exact times I would have smoked as well for that first month. Which was first thing in the morning and in the evenings and walking down the road, even sometimes if I did feel too stupid with it?

Also my change of routine, it was the end of the school term, it was very much I am tired, the kids are tired, it was kind of keeping me going. That thought of I will open my eyes in the morning and come into the kitchen and have a coffee and a cigarette before I wake them up. Then that was not happening. So it was, I can get up at nine if I want to and the kids are going to get up and we are going to do this today. So I think the fact that it corresponds with the change in my routine did help.

.....

Being near smokers

4) What was it like being in situations where you would normally smoke?

Participant 15:

Well I don't actually go anywhere and obviously since they have had the smoking ban, anyway even if I did go anywhere it would not really be an issue. It meant my partner, boyfriend he smokes, he just went outside. He still does now, he just goes outside. That was one change I had to say, "There will be no cigarettes in the house whatsoever". Erm other than that, well some of the mums at school smoke, but I was not seeing them because we were not at school. Other than that watching people on the street really, that's the only time I have encountered smoking. Obviously if I give up then I don't expect to have cigarettes in my house. Simple as that really. So other than that the only time I would see it, was when I was out of the house. If it had happened before the smoking ban and I was still going to pubs then it would have been totally different. That was not an issue.

5) What was it like being with a partner and any friends who smoke?

Participant 15:

I think initially it was quite difficult and then it was not. As I have said I would not have it in the house (smoking) because I am not doing it. So it was something I did not sit and actively watch. I would not put myself through a situation where I would sit next to someone and I am watching them, that never really happened.

A couple of the mums that I met at school in the morning, I might have a chat with outside the gate and they might be smoking, it is an outdoor situation. I think I said straight away I had given up and they would just blow the smoke away from me anyway. At that point what I had to remember is you know being pregnant is such a huge part of it. I am quite aware that I am helping my baby's health by not doing this thing. So regardless whether I am standing next to one of the mums that is smoking or not, anyway I am still consciously aware that there is a baby inside my stomach which will be breathing this stuff in.

Benefits of giving up smoking

6) How do you feel about your health since giving up smoking?

Participant 15:

It's quite interesting really because I have discussed this with the counsellor a couple of times as well. Erm, you are not aware of the health benefits. I mean I am not going wow; I am initially aware, erm from what I can see I did not have major detrimental effects, so far touch wood. I did not have smokers' cough, I mean I had a slight burning in my chest in the mornings and obviously that has now gone to be replaced by a little bit of heart burn. Also interestingly enough I am breathless anyway and I have been for quite a long time ago. I noticed I was huffing and puffing walking up the hill to school and I am still am now. So I think it will be interesting to see once I had my baby the difference. I went to the gym once when I was about four months pregnant or something. I did a little bit of work there, but obviously you are doing cardio like you used to be if you are not pregnant.

So you are not going to see if you can run for longer, because that is not an issue so it is kind of really hard to tell. I think maybe my skin does not seem to be as dry on my face. I was getting a bit aware of lots of wrinkles and that does not seem so bad anymore. So I don't know if that's due to giving up smoking. I did not think this was reversible, so it seems to have gone back. So you know I think I am definitely not as dehydrated as I was. I don't seem to be drinking as much coffee either which probably helps, that's either the pregnancy or because coffee and cigarettes for me go hand in hand.

Since I have given up, I will have a coffee in the morning and that's it. Where as when I was smoking, I was tending to have them all day, hand in hand. So I would say that was a couple of the benefits. Taste-wise not a huge amount of difference I thought. Not as dramatic as I would have thought. Erm smell, yeah you know I cannot smell it on my hair anymore. I cannot smell it on my coat anymore. This is quite nice. I always smoked in the kitchen other than last minute at night I might have had one in the bedroom. I never noticed the house smelt that bad, now I think it definitely smells fresher.

Yes, I just think it will be interesting to see after I have had the baby whether I feel any difference then, but what I will say is that I feel less stressed actually. That took a while, about a month or so. Now I just think I am a little bit more level than I was mood-wise. Again as me and the counsellor discussed when you are pregnant you are not to sure where the mood swings are coming from anyway. Yes definitely I do not seem to get as irate as I was. I think you calm down towards the latter, last trimester anyway.

My experiences of giving up smoking was we set a quit date, which I then failed to actually give up on that particular day, then I felt really bad about it and set other one. I think the counsellor came around about three times and we would have this quit day, then she came around and I said I had not managed to. My experience was I just did it on the day itself. Like I said I had to go to hospital that weekend and that scared me a bit anyway.

Interviewer:

Was that when you had the bleeding?

Participant 15:

I had a little bit of the bleed and I came out after a couple of hours. That was the Sunday actually. Monday I still smoked and I went and had the scan. Then Tuesday I gave up and what I actually did was I did not do it in the morning. I smoked my normal one's and got the kids to school.

I think I had about four left in the box and then I made the decision that was going to be the end of it. I was not going to buy any more. I put the patch on about two or three in the afternoon and carried on from there. I think my advice would be not to think about it too much. I think that was becoming a bit of a issue for me, this is the quit date and I put in my diary and then something would happen and I would think oh no I cannot give up. I did try to cut down and I managed, and what I would find would be I would cut down from when I would find out I was pregnant, which was about five weeks. I cut down for about a month then, so ten weeks pregnant erm then I just seem to smoke more again. So I smoked more again for about three weeks and then thought this is ridiculous, because what happens then is you become more of a slave to the cigarettes. You sit and you count them and I am only allowed this, then you sort of look at the clock and think my next one is going to be in an hour then or I won't have the four I need for tonight and it becomes a little bit of an obsession. So cutting down does not really work or not for me.

I think the best thing is just talking through it, you know have your counselling sessions, identifying your triggers and think about what you are going to do instead. Then do not make it into a big deal and just do it and get empowered from doing it. I was sick of thinking this is something I cannot achieve. Let's spin it around and say yes I can and that's was what I did that Tuesday. I think it is important have a date in your mind as I had read a couple of things on the net, if you give up before you are fourteen to sixteen weeks pregnant you will effectively have a smoke-free baby. I had this in the back of my head as well.

So I had this discussion with the counsellor, that was when I definitely be quit by, was the fourteen-sixteen time period. Erm so maybe that would be part of the initial session, when would you like to quit by? I think you have got to have some kind of goal. I think that is quite a good thing to say, as once you go over that time that's when the baby starts to get less oxygen. So if you are pregnant it obviously makes sense to try and stop before that time. Other-wise you are going into the stage where it is beginning to deprive the baby. I stop at thirteen weeks, so it kind of worked out quite well for me.

2.16 Appendix A21: Participant 8 (interview transcript)

Group 1

Interview guide

For the second part of the study, exploring post partum relapse within one month to one year.

Returning to smoking:

1) Can you think back to why you started smoking again?

Participant 8:

What when I had a relapse,

Interviewer:

Yes.

Participant 8:

Erm, I think it was because the babies were, I got used to having them home and they were three months and the novelty had kind of worn off and I had a few spare minutes you know, and my sister also came to stay and she is a smoker. So it was a combination of things, having a few spare minutes, having got used to the babies and wanting to take a few minutes away really and also my sister coming she would have her cigarettes here, combination really, seeing old friends that I had not seen for a while.

Interviewer:

Anything else?

Participant 8:

Just taking that five minutes to myself really I think time out.

2) By giving up for a long time, has this changed your smoking at all?

Participant 8:

Yes, I did not buy roll ups, I was buying single cigarettes out of the local shops. They sell singles there. So I was buying one or two of those, when normally I would not have smoked those [brand] of cigarettes at all. It was my way of saying I am not really going back to smoking. Also I used to smoke a lot of marijuana. I did not go back to this.

Interviewer:

Did it changed in any other way?

Participant 8:

I was only having one or two a day, before I use to sit in the kitchen and chain smoke. I was not chain smoking when I went back to it.

3) What factors to do with having a baby made you think more about going back to smoking cigarettes.

Participant 8:

Maybe it was not really having the babies; maybe it was something that was meant to happen. I probably had more chance in giving up with the babies. The babies made me stop, more than going back to it.

4) Was your return to smoking planned or unplanned?

Participant 8:

Unplanned.

Interviewer:

In what way?

Participant 8:

Because it was something that I did not want to do and I was doing anyway.

.....

Change of lifestyle

5) Can you tell me if any smoking behaviour changed in your household once you had your baby?

Participant 8:

Erm, well I was not smoking at all in my house after I had the babies. I was smoking in the kitchen before.

6) What were the main reasons that you gave up smoking for?

Participant 8:

Mainly because I was pregnant and because I am older now and I smoked for a long time and I was having twins and I was frightened that I would not be able to cope with the birth or with the babies. I felt really depleted of energy and just saturated.

Saturated myself with smoking for years and years and I felt really low in energy. I felt really terrible, and I started to feel really ill. So it was all these things and then A called me. I did not think I could stop as I had smoked for so long, but I was able to.

Interviewer:

Any other reasons?

Participant 8:

For the health of the babies, energy levels to be okay when they were born and just trying to be responsible, having children. Also it would make my life shorter and I have children. I should not do this if I have children.

7) What made you not smoke after you had your baby?

Participant 8:

I was quite protective of them. I did not like the smell of cigarettes near them. I just did not want them to be near it [smoking]. Also I was worried about cot death and I was breast feeding. Just because they were so small and very vulnerable and I thought the smoking would be very harmful for them.

I was feeling quite proud of myself that I had give up smoking, so really I wanted to carry this on. I was quite fearful that if I started smoking around them, it would lead to other things.

8) If you can think of any reasons why women should not go back to smoking after they have had their baby what would this be?

Participant 8:

Yes, the benefits of stopping, you feel really good and it is something you can build on. You end doing more for yourself if you give up smoking. It is a negative factor in your life.

2.16.1 Appendix A22: Participant 14 (interview transcript)

Group 1:

Interview guide

For the second part of the study, exploring post partum relapse at six months to one year.

Returning to smoking:

1) Can you think back to why you started smoking again?

Participant 14:

Erm, yes because I always enjoyed smoking and never tried to give up before I was pregnant, erm and it was probably something simple like having a glass of wine. I cannot remember the exact occasion and it just made me fancy a cigarette.

Interviewer:

“Is there any other reason for going back to smoking?”

Participant 14:

Nope, that’s the reason.

2) By giving up for a long time, has this changed your smoking at all?

Participant 14:

Erm, yes I, would not say I was a smoker with cravings. I would not say I craved smoking anymore erm as I said before I have always enjoyed it and erm I would say it is limited just to the partnership with alcohol and social situations or relaxing occasionally. Because I went so long without smoking during both pregnancies, that's the only reason the habit has changed. I got out of the craving while I was pregnant I think. This happened quite early on in the pregnancy.

3) What factors to do with having a baby made you think more about going back to smoking cigarettes?

Participant 14:

Erm, none really I had the baby so I knew it was not a danger to the baby anymore. Erm so I had my body back. Therefore I was free to do what ever I like and I erm enjoy the cigarette so that's why on occasions I still have one. It is not with a view to going back, or going further or going back to it full time. I don't want to do it full time. Also I did not have another human being inside, so I was not responsible for that health of the child. Well I was but in a completely different way. So I just had me and myself back in my body, and I thought why not if I enjoy it (smoking). It is not putting anyone else in danger except me.

4) Was your return to smoking planned or unplanned?

Participant 14:

Unplanned.

Interviewer:

"In what way?"

Participant 14:

Yep sure, I think when I gave up so successfully while pregnant I did not imagine that I would ever smoke again and all the time I was pregnant I never craved it, so the thought never really crossed my mind. So it was not until, and of course I never drank alcohol when I was pregnant either, very very lightly and very rarely. So it was not until I had a proper drink if you like after the baby was born and my partner smokes so they were in the house (cigarettes) they were there and I thought why not, I am going to have five minutes on my own with a glass of wine and have a cig. So it was definitely unplanned, spur of the moment, I feel like one right now (laughter) so I am going to have one.

.....

Change of lifestyle:

5) Can you tell me if any smoking behaviour changed in your household once you had your baby?

Participant 14:

Erm, yes it was prior to having the baby, my other half smoked outside the house, outside the front door if that counts as changing your smoking behaviour. Therefore if I have ever had a cigarette it had always been outside. After the baby was born he continued to smoke but outside. On the rare occasions that I do it is outside as well. Erm can I talk about my other half, that's part of the household.

Interviewer:

"Yes."

Participant 14:

I think because family life means he spends more time at home, erm he smokes a little less than he did before. He is still a smoker with cravings and things I think. Also he does not smoke much at work, he goes to the pub which he always did before and smokes in there, but because we are so busy and he has to go outside I think his smoking has reduced a little bit because it makes it that little bit more difficult to smoke when there are babies that need things.

6) *What were the main reasons that you gave up smoking for?*

Participant 14:

Erm because I don't think it is healthy for either of you during pregnancy. I don't think it is fair on the baby and in addition whether this is psychological or not, incredible easy to give up knowing that I had a baby growing inside me. Also all the other benefits of not smoking such as the financial side of things, it is cheaper, you know there are so many benefits to giving up smoking, it is common sense that it is better to give up. It was so easy, but the main, the primary reason was because of the health of the baby and for myself.

7) *What made you not smoke after you had your baby?*

Participant 14:

There was a period when I did not smoke, because I had already given up and lost the majority of the cravings, 99% percent. I did not say to myself it had been so long that I wanted a cigarette. Once I started to have that evening drink and make it more regularly, erm that was when I think I don't know in my mind they have always got hand in hand, so I thought why not.

Interviewer:

"Can you pinpoint a time when you went back to it?"

Participant 14:

I can't no, but it was probably only two or three weeks after I had given birth.

2.16.2 Appendix A23: Participant 12 (interview transcript)

Group 1

Interview guide for

For the second part of the study, exploring postpartum relapse within six months to one year

Returning to smoking:

1) Can you think back to why you started smoking again?

Participant 12:

I was just missing it really and I think the patches as well. When I was pregnant, the patches I could not take to them, I kept been sick. So I did not use the patch at all. I just kept really craving for that cigarette. The woman who I had last time she stopped coming round, so in the end I just said let me just have the cigarette. I had one and then the one lead into how many more.

Interviewer:

“Any other reasons?”

Participant 12:

At the time I thought I’ve gone through my pregnancy now, my son is here. He came out okay, so now it is time to start again and then he caught asthma and he was really young. I put it down to me smoking, even though I did not exactly smoke around him. I used to smoke in the kitchen; it was still on my clothes, and on my hair when I lie down and that. He started getting bad coughs and that and I still did not think anything of it. I still carry on smoking up until now really.

2) By giving up for a long time, has this changed your smoking at all?

Participant 12:

I think so.

Interviewer:

Do you know in what way?

Participant 12:

I am not even sure, because, erm I don’t know.

Interviewer:

“You mentioned you used to smoke in the kitchen?”

Participant 12:

Yeah, just used to smoke in the kitchen and the rest of the house was smoke-free apart from that place. Also I started to smoke one every other day and then it went to twenty a day again, thirty a day.

3) What factors to do with having a baby made you think more about going back to smoking cigarettes.

Participant 12:

It was just that when he was born, I assume he was healthy, I just thought, well I gave up while I was pregnant, and then when he was born, I thought he was healthy, so I don't know just started again, really. As I have said before I was just missing my cigarettes and with the patches I did not really take to them and as I have said, when you start taking one, you do kind of like, especially if you do a little while, and then you go back and have the one, it makes you feel like you need it again. You are determined to have it again.

4) Was your return to smoking planned or unplanned?

Participant 12:

I think it was unplanned. It just, I would say it just happened. Really.

Interviewer:

In what way?

Participant 12:

I did not wake up that day and say, today I am going to smoke. It was just, if I walk down the street and I smelt a cigarette, I would get the craving to go into the shop and buy one. As soon as the craving would come, I did not think about anything else apart from the cigarette so I just had to have it. If I got stress out I would go and have a cigarette.

.....

Change of lifestyle:

5) Can you tell me if any smoking behaviour changed in your household once you had your baby?

Participant 12:

Well it was just me and my sister, we started smoking together again. We tried to give up together, and then every time, that's another thing when I would go and smoke, she was not still smoking and I would come back and she would smell the smoke on me and it would make her want to smoke. So then you would say to each other, this one cigarette is not going to hurt, and then when the smoking counsellor would come, obviously we would say, we've got so many days to get it out of our system. After that we started trying to avoid her and then she obviously gave up on us. Which I don't blame her.

Interviewer:

How did the smoking behaviour changed once you had your baby?

Participant 12:

Yeah, the house was smoke-free apart from the kitchen and outside. I would also say I smoked more.

Interviewer:

How did you smoke?

Participant 12:

Because at night times when I could not sleep, I just used to come downstairs and puff away. It was kind of because I had my baby that I was smoking more, because when nights are stressful, the first thing I would go for, would be a cigarette, so that would mean I would smoke more in the night time.

6) What were the main reasons that you gave up smoking for?

Participant 12:

Basically it was because it is right for, when the child is inside your belly and you're smoking, the counsellor said to me, that it takes ten seconds of the oxygen?

Interviewer:

Yes.

Participant 12:

And the thought of that as well, that ten seconds is a lot and then they show those adverts on TV when you smoke the baby blows out the smoke. He had asthma when he was younger and I don't want this child (second pregnancy) to be, honest I feel a lot healthier with this pregnancy and I want my baby to be healthy as well. That's all I can say really.

7) What made you not smoke after you had your baby?

Not applicable (Participant started smoked the next day after giving birth)

8) If you can think of any reasons why women should not go back to smoking after they have had their baby what would this be?

Participant 12:

I think still be in touch with your counsellor. They have time for you. They will sit down and talk to you, it is not even about just the smoking, yeah she will talk to you about your pregnancy, how's the baby and things like that. The last counsellor was a nice person; it was partly my fault because I started to smoke straight away after having my baby. Also if everyone got patches, gum, inhalator and we have it when we need it, then I think they will be okay. Basically just think about your children and your health.

2.17 Appendix A24: Participant 7 (interview transcript)

Group 2

Interview guide for

Understanding the process of a blip (smoking a few cigarettes) to a relapse (return of smoking full-time)

We are interested in exploring the process of lapses and why this leads to relapse with pregnant smokers.

Understanding the journey of going back to smoking:

1) Can you think why you had your first few cigarettes after you set a quit day?

Participant 7:

Bit of stress, my son was like misbehaving, so we had a few problems and it set me back a bit. I just find that it calms me down.

Interviewer:

So it was mainly stress?

Participant 7:

Yes mainly the stress and just having a cigarette makes feels calmer. Maybe that's just the nicotine.

2) How did that make you feel?

Participant 7:

Felt I let myself down, because at first I did quite well at the beginning so obviously to go back it was just like starting all over again.

A bit disappointing really and also a bit low in yourself because obviously you do want to give up because it is not healthy for you. When you get that knock-back and when you start again and then you start again you feel like you have let yourself down really.

2B) At this stage what could have helped you not go back to smoking?

Participant 7:

I think maybe just trying to control it a bit more in myself and not thinking cigarettes will calm me down. Being more positive I suppose.

Interviewer:

What coping strategies had you been using?

Participant 7:

I kept myself busy and always found something to do. That helped me not too smoke. But when you have done everything and you would meet up with your friends and then they would be smoking, and you would think God I'd love a cigarette.

3) Can you tell me when you realised that you had gone back to smoking

Participant 7:

I had a few ups and downs where I was just having a couple and then erm; I ended up liking the taste. I had a few problems in picking up my patches, that threw me out a bit and I only had a few left. My doctors were a bit slow at giving me my prescription. There would be a delay, and this was what made me start having a few fags. Then obviously I just ended up getting back into it. It was a few weeks before I went back to smoking it was only a couple here and there.

4) How do you feel about your smoking now?

Participant 7:

I am not really happy with it, it is expensive and it does take a toll on you. I am not as fit and healthy as I could be if I was not smoking.

I think I would like to try again soon to give it up because I do feel better in myself. Sometimes I do not even enjoy it, just smoking for something to do, just if I am bored. It is a dirty habit really.

5) What was it that made you go back to smoking?

Participant 7:

I think being around friends and that and you feel left out when you are not smoking, because obviously where I used to do it before [smoking] it is just you get in that group and you feel odd because obviously when they are smoking, you want one. Sometimes when I get a bit stressed out, it calms me down.

.....

Coping:

6) What others factors may have helped you not to smoke?

Participant 7:

Maybe if I was working, when you are working you are keeping yourself busy, so it is basically keeping yourself occupied, so keeping yourself occupied and I find I don't smoke as many as I do if I am not busy. When you are not doing anything, I seem to have one after the other. Being pregnant, that was why I wanted to try and give it up, obviously with all the downfalls it just sent me back to smoking. I just need to have that will power you know, keep saying to yourself, "I am going to do this". Or someone trying to encouraging you, you can do it.

7) Could you identify situations where you felt most tempted to smoke?

Participant 7:

When I was socialising or when I was indoors, or with nothing to do, that would be hardest times not to smoke. Also when I feel a bit fed up and a bit stressed out. They would be the main ones where I would end up going back to smoking.

.....

Service improvement:

8, What do you think about the advice and support you got from the Stop Smoking Pregnancy Service?

Participant 7:

They were really good, the lady I had, she did encourage me and I felt good in myself. When I did manage to give up for a few weeks and did not have one, she came and she would say, write a little diary about how you are feeling, and I did feel really proud of myself basically. They do encourage you because they want you to give up smoking. I think the service is really good, they do help and they do understand if you have a problem while you are trying to give up smoking they will help.

9) What other information, or improvements to the Stop Smoking Pregnancy Service would you like to see to help future clients give up smoking?

Participant 7:

I think the things that they do is good and they encourage you, but the person obviously yourself like you need to be motivated and positive yourself, because if the stop smoking service do all they can and they are really helpful and they do support you in giving up smoking, I don't think there is not that much they need to improve.

10) What would make you quit now?

Participant 7:

It would be for my children really. Obviously it is not nice to be smoking around them. Also thinking of my future.

2.17.1 Appendix A25: Participant 9 (interview transcript)

Group 2:

Interview guide for

**Understanding the process of a blip (smoking a few cigarettes) to a relapse
(return of smoking full-time)**

**We are interested in exploring the process of lapses and why this leads to relapse
with pregnant smokers.**

Understanding the journey of going back to smoking:

1, Can you think why you had your first few cigarettes after you set a quit day?

Participant 9:

Wow, that is quite a hard question. Erm mainly because of the pressure of giving up and also because I did not cut down. I have tried to cut down but it does not work and I think it because I enjoy smoking. It is a weird thing to say.

Interviewer:

So two things really, the pressure of giving up and because you enjoy cigarettes?
Can you think of anything else?

Participant 9:

Boredom. Nothing doing really.

2) How did that make you feel?

Participant 9:

Upset a bit because I did want to stop. I still do but I find it really hard to. Also it still made me feel more relaxed as well at the same time, but also upset because I had not given up.

2b) At this stage what could have helped you not go back to smoking?

Participant 9:

The only thing I could suggest is, which I did suggest to the last person when they did set me a quit day, was going into rehab and I know it sounds really weird, because a lot of people go to rehab just for you know alcohol and drugs, but I actually feel it would help me with a rehab because where I am still immune and open to the outside world still into that living and breathing and smelling cigarettes and then I start thinking I want some. I feel rehab would be a very good place for me because there would be no one there that would do the same thing as me. I would find it hard to get to a shop, and even though it would mean more boredom for me, it I think I would find it much easier to quit then than having the ability to be able to just go and buy it really.

Interviewer:

So removing yourself away from the situation?

Participant 9:

Yes.

Interviewer:

When you say rehab could you just explain more about this?

Participant 9:

Either being with other people or being on my own, because if you give up smoking you do it on your own really.

Interviewer:

What coping strategies had you been using?

Participant 9:

I don't really know. Probably if I had to do a lot of housework throughout the day. Something that had to keep my hands active and my mind occupied.

Keeping busy and something I enjoyed doing as well because if I don't enjoy it I will just leave it and think okay let me go back to the cigarettes. Because if it is something I enjoy doing it will take up my time and I don't actually realise I feel the craving for the cigarette while I am doing something like that.

3) Can you tell me when you realised that you had gone back to smoking?

Participant 9:

I realised as soon as I did it, because I smoked with my first son throughout my whole pregnancy, you know it is not a thing where I did not know I was smoking, I do know that I am smoking and that because I do want to give up smoking, but I don't if you know what I mean.

Interviewer:

So was it a gradually stage, you said you set a quit date, and did you have any days where you did not smoke?

Participant 9:

I actually only had about one week of not smoking. It was really quick for me, the return to smoking.

4) How do you feel about your smoking now?

Participant 9:

Erm, I don't think really badly of it. I have cut down a lot from what I used to smoke, because I decided to carry on smoking that is the reason, I have cut down so much erm I probably smoke a average of four a day now. I was smoking a lot more before. So I don't really feel that bad but on the other hand, I do because there is a baby inside me, and you know it is not like the baby asked to smoke. I have put it there, so I don't know how to express it really, the baby did not ask for it, but why am I doing it? It is still hard to, you know even though the baby is there, why can I not stop?

5) What was it that made you go back to smoking?

Participant 9:

As I said before, being bored and enjoying smoking because I have done it for such a long time now. Not even enjoying it, probably say used to it, something that I am used to doing. I have smoked now for more than five years, no more than seven years actually so it is quite a habit and the routine that I do as well.

.....

Coping:

6) What others factors may have helped you not to smoke?

Participant 9:

The encouragement of the Stop Smoking Team, when I see them come around I don't want to tell them that I am smoking again, so that encouragement helped a little bit, but once they had left the house, the encouragement had gone so it was a bit harder to maintain.

Interviewer:

"So mainly the encouragement, do you think there is anything else that may have helped you not smoke?

Participant 9:

Knowing that I am pregnant would help me stop smoking but it has not which is a funny thing to say and probably having my other son, I don't actually smoke around him, I do actually go outside or if he is in the other room, I will smoke out of the window. I would never smoke in the house with closed windows or anything. He would be another reason why I would stop as well. For his health as well, even though I am smoking outside of the window or outside the door, maybe just a little bit could still come in and he would still be inhaling it.

7) Could you identify situations where you felt most tempted to smoke?

Participant 9:

When I wake up in the morning and I have a cup of tea. When I eat, when I am bored, and before I go to bed as well, or when I go to the toilet. I like smoking when I go to the toilet. Those are the really main factors.

.....

Service improvement:

8) What do you think about the advice and support you got from the Stop Smoking Pregnancy Service?

Participant 9:

Their advice was good actually, they try their best to help you, and even though they want you to give up they don't pressure you to give up. They also advise [you] to still try and give up so I think their advice is good.

9) What other information, or improvements to the Stop Smoking Pregnancy Service would you like to see to help future clients give up smoking?

Participant 9:

Not really, I think the service is good. They do their best really. It is just up to that individual if they have the willpower and the mind-power to give up.

10) What would make you quit now?

Participant 9:

If I was told I had cancer or something probably. Something so dramatic that would make me quit. I know it sounds horrible to say that, but I think that would be the most one you know that would be worst than rehab, I would think, had enough, give it up really, I would not want it to get to that point. If it did I would.

Section C: Professional Practice

3.1 Teaching case study

Core Unit 4

Case Study for Teaching

Health Psychology in a Quit Smoking Service for

MSc Health Psychology Students at a London University

Background

Since completing my MSc in Health Psychology I have remained in touch with the people who coordinated and managed the MSc course at a London University. An opportunity came up to do some workshops on the course and I decided to explain how Health Psychology is used in smoking cessation. This is my third year of teaching MSc students.

The module unit is Placement and Practitioner Skills. Students have a wide range of guest speakers delivering workshops on their specialised subject. After receiving the module booklet (see Appendix B) with module aims and learning outcomes I started to plan and design the workshop.

Setting

The workshop is set in a classroom at the university and normally lasts for two and a half hours. Extra time was allowed at the end of the workshop to ask any questions.

Plan and design training programme

Assess training needs

After being asked by the course director of the MSc course (see Appendix B1) to do the workshop this year, I began to develop and design the workshop.

I found planning the workshop slightly challenging as it was the start of my Stage Two course and I was trying to understand the teaching and training competence and the handbook for Stage Two. In my working practice I have never had to do a needs assessment of the audience. To clarify this confusion I emailed the course director of my Stage Two course to explain this in greater detail (See Appendix B2). I identified the needs of the audience by reading through the course module booklet. As the module is based on practitioner skills I developed the needs assessment on how health psychology is applied in working practice. Once I had completed my materials for the workshop I booked a session with my supervisor to go over the content of the workshop and to arrange the details for my teaching being observed.

I developed my own aims and objectives (See Appendix B3) based on the course module booklet. Based on my previous knowledge of teaching students, they wish to know lots of facts and figures about the relevant subject. I had prepared a reading and references list before the workshop. At the start of the teaching session I did a round of introductions and asked students for their aims of the course. This generated a question and answer session. This made me wonder whether I had included their aims into the workshop. I mentioned to the students that if I did not cover all of their aims I would email relevant journals to their course director and also if they wanted any support or other resources to feel free to email me on my work email address.

Programme structure and content

The teaching session consisted of seven sections; introduction, national context and why we have quit smoking services, nicotine addiction and withdrawal, readiness to change, NRT rationale and Zyban rationale, treatment role play and reflection and evaluation (See Appendices B4 and B5, training timetable and programme for students).

Training methods and approaches

When I design any workshops or training, I bear in mind that students need structure in their learning. In my last job I attended a train the trainer course which I found very helpful to maximise adults learning abilities. The course covered principles such as Theory of Intelligences (Gardner, 1983). Gardner (1983) proposed seven different intelligences of how adults learn and engage with teaching materials.

From my previous experience of teaching, this group of MSc students I noticed that their learning style is a mixture of Linguistic, learning best by listening and interpersonal is learning best with others. (Gardner, 1983). With this in mind I gave the students the opportunity to participate in group work and a wide range of activities, generate their own ideas and to interact with their fellow students. I made sure students had time to think and watch activities such as presentations and the role play. By including these methods into the workshop I am implementing a learner-centred approach to teaching such as individual learning, group learning and presentation methods.

Produce training materials

By using the course module booklet for MSc students and the training standard booklet on smoking cessation, (Health Development Agency, 2003) I developed some training materials for the workshop. This training standard booklet is used by those working in smoking cessation for a coordinated approach to content and quality of training in this field. I adapted the materials slightly as this module is based on practitioner skills and the issues associated with working as a health psychologist, therefore students will have some insight into the real issues that affects health psychologists working in healthcare settings.

Materials and Media used.

This teaching workshop was at a university. I contacted the course director to let them know in advance the materials that I needed for the workshop. Also I arrived early to check that all the equipment and materials were ready for the workshop.

Media used:

Computer

Projector

Memory stick

Materials used:

Flipchart paper	Pens	Carbon Monoxide Machine (CO)
Flipchart pens	Handouts	Monitoring form for role-play

Blu-tack Training packs Nicotine Replacement Therapy samples
Video camera

Delivery of training programmes

I was feeling slightly nervous at the start of this teaching as my supervisor was observing me teaching; after a few minutes I felt less tense and got on with delivering the workshop. I had prepared a reading and references list before the workshop. In total eighteen students attended the workshop. The teaching session consisted of different sections such as presentations on national context, why we have quit smoking services, NRT rationale; Zyban rationale and group work on nicotine addiction, withdrawal, readiness to change, role play demonstration and evaluation of the workshop.

In the middle of the training I recruited a student to take part in a role play. The student would take on the role of a female smoker wanting to give up smoking. The workshop was broken up into presentations and group work. All the learning objectives identified by myself and the course director were met. The majority of the student's aims that they identified were met. When the students took part in group work I encouraged participation and gave good feedback to students during the workshop. I encouraged the students to ask questions and if they were unsure about any part of the workshop to ask for an explanation about the topic of interest.

Training Challenges

When delivering the training I realised that the training packs were not in order, I felt embarrassed about this and made sure all the students knew which presentations and handouts I was using for each section of the workshop. One other challenge was that I did not cover some of the topics that students identified at the start of the workshop such as the Stages of Change model and smoking and mental health. One other challenge was a lot of material was being covered in such a short time and it was a challenge to keep students motivated and focus on the workshop. Sometimes the students took a short time to answer questions that I gave them.

By giving them extra time to reflect on their potential answer, it made them much more relaxed when answering the question. I felt this was a challenge in one way, as it was only from observing how students responded to questions being asked that I picked up on this.

What worked well

I found the introduction session at the start of the workshop generated a lot of questions and answers. From the question and answer session I felt relieved that they were showing an interest in the workshop. Students seem interested in the presentations and asked for more information on the effects of smoking on the body. All the students commented that they found the role-play useful and it gave them an in-sight into developing, practitioner skills. For me as a facilitator this was rewarding as it is one of the MSc learning outcomes of the module.

One other comment about the role play was, “it is a concrete example of an intervention” and gave them more confidence for when they start their work placement. A few students enjoyed the session on how to build a rapport between the client and the health care professional, e.g. what questions to ask a smoker. They found this useful for developing interventions to implement behaviour change. Also a few students mention that they found learning about Nicotine Replacement Therapy (NRT) products and Zyban useful. On reflection I think when I was talking about NRT and Zyban, I could have passed samples around to the students to encourage more interaction and participation with this presentation.

On the whole the students enjoyed the workshop. I felt I made sure that everyone understood the presentations; the pace of the workshop was appropriate, used the whole space of the room and I came across as being confident and knowing my subject area. I had a few emails sent to my work email address saying how they enjoyed the workshop and learnt from the teaching session. Overall, I enjoyed delivering the workshop and felt pleased that I could pass on my knowledge and skills to MSc students.

Assessing learning outcomes

I found the aims and the objectives identified by myself (see Appendix B3) were all covered. The learning outcomes and module aims (see Appendix B) will be completed on successful completion of the module, Placement and Practitioner skills. I felt that I had made a valuable contribution to making students aware of how health psychology is used in a quit smoking service.

Throughout the training I mention if students needed any more questions answered to email me. As I did not have time to go over some of the learning outcomes identified by the students, I made arrangements to send relevant paperwork to their course director on mental health and smoking and the Stages of Change model in relation to smoking cessation.

Plan and implement assessment procedures

Students completed the evaluation form at the end of the workshop. The content of the evaluation form consisted of questions on how useful they found the workshop, what they did not find useful, any skills learnt, how the workshop can be improved, knowledge and skills I have passed onto them, other comments, has this increased their knowledge of how health psychology can be used in a working environment and any aspect that was not, to explain clearly.

Evaluate such training programmes

The workshop Health Psychology in a quit smoking service was evaluated using the objectives set by myself (see Appendix B3) and the learning outcome and aims set by the course director of the MSc course (see Appendix B). The students had set objectives as well, with the majority of these covered by the workshop. I used an evaluation questionnaire for feedback on the training. I received some positive feedback via email.

Reflection and Summary

I enjoyed delivering the teaching to the MSc students. I felt that the learning outcomes identified by myself and the course director were met. From evaluating the training and reading the comments on the evaluation sheet I felt that I need to make a few changes to the teaching workshop.

Since starting the Stage two course it has changed some areas of how I work. I have become much more reflective in my working practice which is good for developing as a health psychologist. I previously mentioned that this teaching took place at the start of my Stage Two course. I feel when I was designing the teaching workshop I did not take into consideration how health psychologists can contribute to a quit smoking service and designed the session from a NHS perspective. When I do a workshop at the university next year I will take these comments on board and improve the teaching session for implementation in future programmes.

Since reading through all the evaluation sheets I would make the following changes to any future teaching workshops on Health Psychology and Smoking Cessation:

- 1) To be more organised on sending the handouts to the university and making sure they are in the correct order.
- 2) More on Health Psychology models in relation to smoking.
- 3) To include more of Motivational Interviewing.
- 4) Students to do a role-play and then feedback to the class.
- 5) To show students the differences between a motivated client who wants to give up smoking and someone who is not motivated.

Overall I enjoyed the workshop and felt pleased that I could answer all the questions the students had, and feel confident to delivering the workshop next year. For future training sessions with MSc students I may ask them what they would like to learn from the workshop before developing and designing the workshop. This could enhanced the delivery of the workshop and encourage students to take an active role in this module.

References

- 1) Catalyst Training. Train the Trainer. London: Catalyst Group Services, 2004.
- 2) Gardner (1983) Frames of mind: The Theory of Multiple Intelligence, New York: Wiley.
- 3) Health Development Agency (2003) Standards for training in smoking cessation treatments: London: Health Development Agency.
- 4) Module Booklet (2006) Placement and Practitioner Skills: London: [REDACTED] University.
- 5) Royal College of Physicians. Nicotine Addiction in Britain: A report of the Tobacco Advisory Group of the Royal College of physicians, 2000

3.1.1 Appendix B3 Aims and learning objectives

Needs assessment of the audience

Health Psychology has an important role in looking at ways of both explaining and changing health behaviours. As the MSc Health Psychology course at this London University has a strong practitioner focus with one of the core activities being the work placement, students will gain more knowledge and understanding of how Health Psychology is applied in working practice.

This module is based on practitioner skills, there will be a role play on this workshop to enable students to think and reflect how to use developing practitioner skills in professional practice. Also this workshop will enable students to think critically and evaluate how interventions are implemented to encourage behaviour change.

Students will be provided with a framework of theory and professional principles of how health psychology is used in a quit smoking service. Psychological principles such as motivational interviewing and readiness to change will be discussed. From this workshop students will have some insight into the real issues (both positive and negative) that affects health psychologists working in healthcare settings.

As most students have different learning needs, the workshop will focus on several teaching styles such as discussion, exercises, presentation and case study. Gardner (1983) Theory of Intelligences, proposes eight different intelligences of how adults learn and engage with teaching materials. This workshop will include these principles of learning.

By students participating in group work, role plays, and being taught about how health psychology is applied in working practice, it will increase their knowledge base and provide evidence of prospective jobs in the health care field. It may even motivate them into applying for jobs in the world of smoking cessation.

3.1.1 Appendix B3 Aims and learning objectives

Learning objectives of the audience

Aims

To provide MSc Health Psychology Students with skills and knowledge of being a health psychologist in a working environment.

To promote the development of practitioner skills in health psychology

To provide a framework of theory and professional principles for practitioner activities in smoking cessation

To familiarise students with a understanding of how to enable behaviour change

Increase student's knowledge of the ethical, legal and administrative issues associated with working in smoking cessation.

Learning objectives

On successful completion of the workshop students will be able to:

Understand current issues within smoking cessation

Understand some approaches to helping people implement changes in behaviour.

Identify the extent of the problem of smoking in the UK and the cost to the NHS

Knowledge of how addictive smoking is.

How to use different intervention styles in consultations

To reflect and develop practitioner skills of day-to-day practice on work placements.

3.1.2 Training Case Study

Level One Training in Smoking Cessation for Staff based in a Prison.

Background

One of the projects that I am working on for my role as a Primary Care Facilitator involves improving the care pathway of a smoker to a non-smoker in the prison environment. I have been working with the Pharmacy department to raise awareness of the service that they provide to inmates. From previous discussions we identified that quite a few of the Healthcare providers and Prisons officers do not know that they provide a smoking cessation service to inmates and staff as well. Therefore from this meeting we decided to do a Level One training session for staff with the main aim to raise awareness of the smoking cessation clinic at the prison and how to refer clients to this service.

I will describe how I planned, designed and delivered Level One training in Smoking Cessation and my reflection and experience of doing so.

Setting

The training was held at a Prison in one of the teaching rooms. The training lasted one hour and thirty minutes in total with extra time at the end for question and answer session. The Pharmacy Department gave a brief talk about their service. The rest of the training was delivered by myself.

Plan and design training programme

Assess training needs

Since I have taken on this project to improve the care pathway of smoker to a non-smoker in a prison environment I have identified certain ways of how the service can be improved for inmates and staff wishing to give up smoking. One of the key outcomes from these meetings was to increased staff awareness of smoking cessation in prisons and awareness of the smoking cessation clinic managed by the pharmacy department.

I developed a training session outline for the three pharmacists working in the department, we agreed to have a meeting to discuss what the main aims and objectives of the training are. After this meeting I put together a training pack for the participants and emailed this to the pharmacists for feedback to see if I needed to make any relevant changes to the pack. Apart from a few minor amendments it was agreed that it was fine to go ahead and use this pack for the Level one Smoking Cessation training. At the start of the training I asked the participants what they would like to be covered on the training. The aim of this exercise was to give the participants structure in their learning and to construct the participant's main aim of the session and to incorporate their ideas with the main objectives of the training.

Programme structure and content

The training session consisted of seven sections, national context and local profile, why do people smoke, brief overview of the prison stop smoking treatment and support available, Addiction, Nicotine Replacement Therapy products, how to raise the subject of smoking cessation and smoking quiz (see Appendices C and C1, course programme and training timetable)

Training methods and approaches

When I design and develop training workshops I always try and think of how people will learn. Most people have a different way of learning, some people prefer presentations other people prefer group work. Therefore with this in mind I mainly use Gardner (1983) Theory of Intelligences. Gardner (1983) proposed seven different intelligences of how adults learn and engage with teaching materials such as Kinaesthetic, Visual, Linguistic, Interpersonal, Intrapersonal, Musical and Logical. This workshop will include these principles of learning. Also my training style is a learner-centred approach making sure learners have the opportunities to take part in group work, individual learning and presentation methods and being aware of their experiences which can enhanced the training session.

Produce training materials

Health Development Agency (2003) developed a training standard booklet on smoking cessation treatments. The purpose of this training standard for smoking cessation is to improve the effectiveness of smoking cessation services by raising the quality of the training provided to smoking cessation advisers. Whenever I design any smoking cessation training sessions I use this standard as a guide for the content of information that needs to be included in any training materials.

As this was the first time I have trained any healthcare professionals based in a prison environment I adapted materials and resources slightly to meet the participants learning needs and objectives of the training.

Materials and Media used.

As this training was in a prison environment, I wanted to keep the training as informal as possible. Therefore I decided not to use a computer to do presentations and just used handouts and talked around the topic of interest.

Materials used

Flipchart paper	Pens	Mouthpiece for CO machine
Flipchart pens	Handouts	CO chart
Blu-tack	Carbon Monoxide Machine (CO)	Nicotine Replacement Therapy samples

Delivery of training programmes

I have delivered teaching and training in smoking cessation in many different settings to health care professionals. I was feeling slightly apprehensive about this training as it was set in a prison environment and some of the participants who attended were prison officers. The rest of the participants were a mixture of prison nurses, senior health care officers and health care officers. In total ten participants attended the training. Based on my knowledge and experience of small groups of participants, group work gives them a chance to engage with their colleagues and to keep them focused on the training. While I was delivering the training I decided to do a mixture of group work, feedback from group work and then using handouts to generate a short discussion around relevant topics.

In the middle of the training, I decided to encourage the pharmacists to join in with the training to encourage participation from the participants on the training course. Also as one of the handouts was explaining the pathway of a smoker to a non-smoker in the prison setting I felt it was better coming from the pharmacists of how inmates and staff can access the service and how the service works. This was because they have much more knowledge about how the service operates than me.

Training Challenges

I found when I was designing this session I had to take lots of things into consideration such as making presentations short and straight to the point because a lot of material was being presented in a short time, e.g. one hour and thirty minutes. Also making the session informal as from previous discussions with the pharmacists, the participants are used to informal training workshops. Thus it was a challenge to make sure that the participants engaged with the handouts and were interactive in the group work.

At the start of the training I noticed one of the senior health care officers was a bit defensive about the topic of giving up smoking, once we started to do some group work he admitted that he smokes, talking to him about his smoking seemed to make him less sensitive about the fact that he smokes. This was a challenge as I was thinking that it could be because he smokes, by turning the issue around I felt less challenged when delivering the workshop.

What worked well

I found the introductions and the objectives the participants had identified for themselves were covered by the objectives developed by myself and the pharmacy department. The group work seem to work well, participants were very interactive with their colleagues when completing their task. Feedback from the group work proved to be useful for them as a few of the participants had never thought of why people continue to smoke. Many of the participants enjoyed thinking of a definition for addiction in relation to smoking. I felt that the participants seem interested in the addiction handout and asked several questions about addiction. This was positive as it showed that the participants were engaged and interested.

When the pharmacy department explained about their service all of the participants knew about the service, but did not know how it worked, by explaining this in detail it will encourage the participants to raise awareness of the service to staff and inmates wishing to give up smoking. Again many of the participants asked lots of questions to the pharmacy department. I took a step back from this section of the training to encourage rapport between the pharmacy department and the participants. The quiz proved to be useful to them, the participants asked lots of questions about some of the answers to the questions. I was pleased with this as it showed that they were wanting to know more about smoking cessation.

A few of the quiz questions were revision for them as I had covered this in the handouts. I did this on purpose to see if they were listening to the training and to see if they could recall some of the answers. As a facilitator this was rewarding in the sense that they seem to be learning new information. I did a short discussion on Nicotine Replacement Therapy (NRT) products; I did not go into a lot of detail as the pharmacy department tend to use patches to help people give up smoking. By showing them the samples and encouraging them to feel free to try them, generated a lot of discussion. Overall this was a good group of participants to train up to Level one and I enjoy delivering the workshop.

Assessing learning outcomes

I found that the learning objectives that the participants had identified at the start of the course were covered and the objectives that myself and the pharmacy team (see Appendix C4) had identified were covered as well. Throughout the training session I made participants aware that they could ask any questions about smoking cessation and also made sure that I had answered their questions and provided encouragement and feedback on their group work.

Since I have completed the training session I have been in touch with the pharmacy department and they have reported an increased in their referrals from health care providers at the prison. Also there are more people wanting to do Level One smoking cessation training.

Plan and implement assessment procedures

I did plan to hand the evaluation forms out at the end, after I had finished training (see Appendix C2). However the participants had a question and answer session which they generated themselves so I felt torn between answering their questions and making a stand about completing the evaluation sheet. In the end I felt it was better to have their questions answered. I arranged with the pharmacy department for the participants to evaluate the training when they collected their certificates for attending the course from the pharmacists. On my next meeting with the department I will arrange to collect the evaluation sheets.

Evaluate such training programmes

The Level One smoking cessation training was evaluated using the objectives set by the participants, objectives set by myself and the pharmacy team (see Appendix C4) and positive verbal feedback from some of the participants and the pharmacy team.

Reflection and Summary

I enjoyed this training, even though I was feeling apprehensive before delivering the training due to delivering a lot of essential information that needed to be covered in such a short time frame. Also as I have mentioned before I was slightly concerned about some of the prison officers being defensive either about their smoking or the training session. As it turned out all of the participants seem to enjoy the training, were interactive and asked lots of questions. A few participants expressed the need to know more, I did hand out a reading list and recommend them to attend our 2-day Level Two smoking cessation course which would give them more knowledge and skills to use in their work place.

A few participants were slightly shocked over some of the facts and figures surrounding passive smoking (see Appendix C3, Quiz). After explaining in depth why these figures exist they began to understand more about this. Quite a few of the participants at the end of the training talked about the training and said how much they enjoyed the training. I asked the pharmacy department for feedback as well and if they thought I would need to make any changes to the training session and they agreed they thought the training should be the same the next time I delivered the training at the prison.

However on reflection I would make the following changes,

- 1, To make time for evaluation sheet to be completed
- 2, Ask for extra time to do the training

My personal thoughts on the training are that the learning objectives identified by all those involved were met. Also the informal style and contents of the training was appreciated by the pharmacy team and the participants. By doing this training it has given me much more experience with other health care professional groups and given an insight into the problems staff experienced in their working environment with inmates.

3.1.3 Appendix C training timetable

Sessions	Objectives	Time needed
<i>Introductions</i>	To introduce themselves and ask what they need from the course. Also to find out how much they know about smoking cessation.	1.00 - 1.10
<i>National context and local profile</i>	To provide some background information on smoking and health: number of smokers, kinds of dependence and public health impact. Additionally to raise awareness of difficulties local residents faced in giving up smoking.	1.10- 1.15
<i>Why do people smoke</i>	Raising learners awareness of why people start to smoke, continue to smoke, why people stop smoking, relapse and what makes a good quit attempt. Therefore to encourage learners to be aware of how smoking becomes part of a person's life.	1.15- 1.30
<i>A Brief overview of HMP stop smoking treatment and support</i>	To make learners more aware of the service the Pharmacy Department provide, e.g. effectiveness of the specialist service involving behavioural support and medication available for inmates.	1.30- 1.45
<i>Addiction</i>	Ask learners for a definition of nicotine, and how smoking fits into psychology. Will also discuss withdrawal symptoms from nicotine and dependence level on nicotine.	1.45- 1.55
<i>NRT rationale</i>	To increase learners knowledge on how medication help smokers give up, e.g. describe the various forms of Nicotine replacement therapies and their use.	1.55 - 2.00
<i>How to raise the subject of smoking cessation</i>	Looking at how to help people stop smoking in terms of when and how to address the subject. Learners will be asked to think of suitable questions to ask clients who want to give up smoking.	2.00 - 2.15
<i>Quiz</i>	To find out how much learners know about smoking cessation and to dispel any myths about smoking.	2.15- 2.30
<i>Evaluation</i>	Evaluation sheets will be handed out to clarify whether the learning objectives have been met.	2.30 - 2.35

3.2 Consultancy case study

Case Study for Consultancy

“Salt it Out”

Qualitative Studies exploring the attitudes and belief of clients regarding salt consumption, salt consumption patterns and barriers to making changes to the level of salt consumed in their diet (pre-intervention study and post- intervention study).

SETTING: A Teaching Primary Care Trust (TPCT)

CLIENT GROUP: Participants from a range of black and minority ethnic (BME) groups identified by the Nutrition and Dietetic Department. The target audience were people living in London from Afro-Caribbean, Black African, Asian, Irish and Turkish communities. These groups were used as they are at increased risk of cardiovascular disease.

AIMS OF CONSULTANCY:

1. Interview 15 individuals (3 from each BME group) at pre-intervention and at post intervention (3 months after taking part in a Cook and Eat Programme) to gain an insight into participants’ attitudes and beliefs regarding salt consumption, salt consumption patterns, barriers to behavioural change, link between salt and health and salt levels consumed. Also to analyse participants’ views on the Cook and Eat Programme they attended.
2. Conduct fifteen 15-20 minute semi-structured interviews and transcribe verbatim. Repeat this process post-intervention (at 3 months).
3. Analyse the data using Interpretative Phenomenological Analysis (IPA).
4. Produce two reports; one for pre-intervention study and one for post-intervention study.

SEEKING ETHICAL APPROVAL

At the start of the project, the local ethics committee was contacted to determine whether ethical approval was needed. The local ethical committee requested a brief outline of the project from the contact client (the organisation who first contacted the consultant with a request) was asked a series of questions concerning the project, such as:

- 1) Are the participants recruited for the project NHS patients?
- 2) Will you require the use of NHS facilities or premises?
- 3) Will you require access to records of participants' previous medical history?
- 4) Is the purpose of the proposed project to try to improve the quality of patient care in the local setting?

As the contact client answered “no” to all of the questions the contact client was informed that project did not need ethical approval.

ASSESSMENT OF REQUEST FOR CONSULTANCY

In May 2007, I was approached by one of my Stage 2 colleagues on my course to undertake a piece of work for my consultancy competence. My colleague had secured funding for her Primary Care Trust to assist people in London to improve salt practices in the home by reducing salt consumption over the long-term. The work would involve using qualitative research methods to gain an insight into participants' attitudes and beliefs regarding salt consumption, salt consumption patterns, barriers to behavioural change and salt level consumed.

The Cook and Eat Programme is a 4-week programme designed to provide participants with practical information and skills on adapting recipes and cooking healthier meals low in salt. The qualitative baseline data was used to inform the development of the Cook and Eat Programme. Material was generated by the use of semi-structured interviews (Appendices D and D1 interview schedules for pre-intervention and post-intervention studies) and analysed using IPA. For each study a report was completed (Appendices D2 and D3) and sent to the Food Standards Agency (FSA). Between me and my Stage 2 colleague (client), we agreed on a time for the initial assessment meeting for this project.

During the meeting I was given the Proposal form (Appendix D4) and the Invitation to Tender Service Specification (Appendix D5) for the 'Salt it Out' project. We discussed various aims, objectives, time frames and expectations of the project. It was agreed I would read through these documents and then submit the Invitation to Tender to TPCT. After receiving feedback from the client that the Invitation to Tender was accepted, I conducted a literature review of the Phase III of the FSA campaign on reducing salt consumption to government targets. I also investigated the work the FSA have completed on reducing salt consumption over the last few years. The project was planned to start in July 2007 and to be completed in February 2008. Therefore, the Service Level Agreement (Appendix D6) between me and the client organisation (TPCT) was signed in July 2007. The client identified and negotiated a timescale for the project:

1. July –August 2007: Interview 15 participants from BME groups (3 in each group)
2. September 2007: Transcribe and analyse of interviews using IPA.
3. October 2007: Complete report for pre-intervention study due of 'Salt it Out'.
4. November 2007: pre-intervention report to be sent to the FSA.
5. December 2007: Interview participants who were interviewed at baseline and those who completed the Cook and Eat programme.
6. January 2008: Transcribe post- intervention interviews.
7. January 2008- February 2008: Complete report for post- intervention study due of 'Salt it Out'.

I requested the following input from the client:

1. Monthly meetings between me and the client.
2. Contact details of dieticians who would be facilitating the Cook and Eat programme.
3. TPCT logo and map of the Hospital.
4. Details of participants who were willing to be interviewed about their salt consumption.
5. To observe one Cook and Eat programme session.
6. To be kept informed of any developments on the quantitative aspect of the project and if any changes were to be made to the project.
7. To receive feedback from the FSA on the qualitative aspect of the project.
8. If agreed, to be able to publish results from the qualitative studies.

This timescale and input was agreed between me and the client to maximise a successful outcome for the consultancy project. As funding had been given by the FSA for this project to commence it was crucial to develop and maintain a good working relationship with the client. Once the SLA was signed I began to make a start on the project. This involved contacting the dietetic department to see if any suitable participants were interested in being interviewed about their salt consumption. I also contacted the client to ask if they could book a room for me to use when interviewing participants. The client introduced the person leading on the recruitment of participants to me at one steering group meeting. The interview schedule was devised based on the project aims, (see Appendix D& D1).

Once participants had agreed to take part in the study, their demographics, including their ethnicity was stated and then they were identified as Participant 1, Participant 2, to maintain confidentiality and anonymity. The participants were also interviewed at 3 months post-intervention to see if any changes had been made in their salt consumption and to obtain feedback of the Cook and Eat programme. All data collected during the course of the project was stored securely and confidentiality was maintained in accordance with the Data Protection Act (1998). After the data was analysed an independent researcher evaluated the analysis of the data to reach a conclusion. Also, once the reports (Appendices D2 and D3) of the pre-intervention and the post-intervention study were complete they were sent to the client, the dietetic department and the organisation working on the quantitative aspect of the 'Salt it Out' project.

Once the Invitation to Tender was accepted I had to produce a table of my professional fees and expenses (Appendix D7) involved for completing the project. I also had to negotiate an hourly rate for the work involved with the project and to invoice (Appendix D8) TPCT to receive payment for completing the project. In addition I identified which materials I required such as a tape recorder, tapes, batteries and memory stick for the project. I was worried about not being able to recruit enough participants for each BME group as the time-scale was quite a short time period to achieve this.

Another concern was that of working in partnership with lots of people involved with the project as sometimes there can be a lack of communication between those involved with the project. Therefore, with this in mind, I devised a plan to keep everyone informed of my progress whilst working on the project.

Reflection

The main challenge at the start of the consultancy was developing a rapport and a professional relationship between all those involved in the project. Another challenge was the time constraints involved with this project and trying to manage my time effectively to complete the project to the deadline specified by the client. Additionally, one other skill that I had to learn was how to break down the work within the project and then negotiate payment for the consultancy work. This was a learning curve for me. On reflection I did not take into account the write-up of the reports for the project.

PLANNING CONSULTANCY

Once all the initial meetings had taken place to discuss the aims (Appendix D9) and objectives of the project, I was introduced to the dietetic department as the researcher who would be completing the qualitative aspect of the project. After all these formalities had been agreed I began to make a start on the consultancy project. My first task was to contact the dietetic department to talk about how the participants were being recruited. It was agreed that one of the main dieticians would approach potential participants at community groups and health promotion events to see if they would like to be interviewed about their salt consumption.

The dietician would then pass on the participants' contact details for me to see if they would like to be interviewed about their salt consumption. Before the start of the interview I would mention the Cook and Eat programme to them. It was important to try and encourage all the participants I interviewed about their salt consumption to attend the Cook and Eat programme as I had to interview the participants after they had completed the programme to see if there had been any behaviour change in reducing their salt consumption, if they had gained any knowledge, if they had made any changes in controlling their salt intake and their thoughts on the Cook and Eat programme.

The most appropriate research method for this project was semi-structured interviews and these were analysed using IPA. IPA (cited in Smith, Harre, & Langenhove, 1996) is a becoming a popular method used in psychology to gain insight into how people think about certain phenomena being investigated within their particular social, cultural and historical contexts. It is phenomenological in that it wishes to explore an individual's personal perception or account. The method recognises that access to these thoughts is dependent on the researchers own perceptions, which are required to make sense of the participant's personal world through a process of interpretative activity. The interviews were audio-taped, with participants consent, and then transcribed verbatim. I also collected information on the Cook and Eat programme as this provided valuable insight in designing the intervention and the evaluation.

The client requested two meetings that I would attend along with the representative whose organisation were completing the quantitative aspect of the 'Salt it Out' project to discuss the outcomes of the pre-intervention and post-intervention studies. I also requested for the client and I to be in touch every couple of weeks by email and to have a progress meeting each month. This was to avoid any lack of communication, avoid potential problems between me and the client and to keep everyone informed of the progress of the qualitative aspect of the project in case any changes or modifications had to be made to the project.

With any consultancy project, (Schein, 1999) states that the helping process should always begin in the PC (process consultancy mode) in the initial assessment of any given problem. Once the client and the consultant have more knowledge about the existing problem a decision can be made whether to stay with this model or move to one of the other consultancy models. In this consultancy project the problem was identified and the solution was clear, therefore the expert model is the most appropriate one to use. The 'expert model' of consultancy was used (Schein, 1999). In this model the client decides that they have neither the time nor the necessary skills to 'fix' an identified 'problem' and therefore requests an expert to undertake the identified solution and 'fix the problem'. Therefore with this project the client was seeking a health psychologist experienced in qualitative research to explore participants' views on their salt consumption pre-intervention and post-intervention. The 'expert model' of consultancy (Schein, 1999) states that the client knows what kind of information or service she or he is looking for and that the consultant is able to provide the information or the service.

Reflection

At this stage of the consultancy project the client took a step back from being involved with the project and introduced me to the person managing on the recruitment of the participants. This approach is consistent with the 'expert model' of consultancy, e.g. the problem is passed on to the consultant. I found relying on somebody else to recruit participants quite stressful and this may not have been the effective approach. This was quite stressful as the project had a short time-frame for both studies to be completed. I found the client quite helpful in dealing with problems such as recruiting participants and sought her advice and consent on making changes to the project. On reflection it may have been easier to attend some health promotion events with the dietetic department to recruit potential participants for the project.

ESTABLISHING, DEVELOPING AND MAINTAINING WORKING RELATIONSHIPS WITH CLIENTS

Throughout the consultancy contract, the contact client (the individual who first contacted the consultant with a request) and the intermediate clients (individuals who are involved in various aspects of the project) remained in touch by emails (Appendix D10) telephone calls and meetings. All of the meetings took place at the client's place of work. The contact client's main issue was that the project had to be completed on time. There was a delay in recruiting participants. At the start of the project the overall aim was to recruit three participants from each BME group and interview them pre-intervention and post-intervention. However, due to the delay and difficulties faced in recruiting participants it was not possible to interview fifteen participants and have three participants in each BME group.

By the end of August I had interviewed eleven participants. Therefore being aware of potential problems and discussing them with the client helped towards developing a positive outcome, e.g. both being committed to keeping the project on course for the completion date of the project. In addition, work on the project would be stored on the client's work computer and my own personal computer. This would all be password protected to ensure confidentiality. The only people to have access to this information would be the contact client and me.

During the project the contact client and I negotiated strategies for dealing with any concerns the client had. This normally involved having discussions about the project and taking into account the client's preferences and requirements and agreeing on the next step to take. I felt this was the best approach to take as for me it was a learning curve and helped develop a good relationship with the client.

At the end of each study (pre-intervention and post-intervention) the client was sent a report (Appendices D2 and D3) for her to look at and make recommendations or changes. The client's feedback of the report was considered and changes were made.

Reflection

Reflecting back on the consultancy project, it may have been beneficial to meet all the people involved with the 'Salt it Out' at the onset. This would have been useful to clarify roles, expectations, and to develop good working relationships with all those involved in the project. Towards the end of the study it became apparent that the dietetic department needed more supervision in terms of recruiting participants to be interviewed and to be aware of the deadlines for each stage of the project. Perhaps if this was identified earlier on in the consultancy project it may have ceased to be an issue.

CONDUCTING CONSULTANCY

The project started in June 2007. I began contacting potential participants in June and interviewing them about their salt consumption in July 2007. The interviews were completed in August 2007. It was agreed I would let the dietician know if I needed any more participants. Some of the participants who I contacted did not want to take part in the Cook and Eat programme, or they did not meet the inclusion criteria for the study, e.g. they had already taken steps to reduce the salt in their diet and were not the correct BME group for this study. I mentioned this concern to the contact client and was given a new list of participants to contact. At the start of every interview, I asked for the participant consent for the interviews to be recorded. Once I had consent I started the interview. As the project was split into two stages I asked for an initial payment at the start of the project with the final payment to be issued at the end of the project.

The second round of interviews was completed in December 2007. Only half of the participants attended the Cook and Eat programme, so only five participants were suitable to be interviewed to see if there was any behaviour change. I designed and developed an interview schedule (Appendix D1) for the post-intervention study and emailed this to the contact client. After a few changes were made to the schedule I began contacting the participants to ask them to be interviewed about their salt consumption and their thoughts on the Cook and Eat programme.

As the interviews were taking place in December, the dietetic department had brought gift vouchers for the participants to thank them for taking part in the Cook and Eat intervention and the studies. This was useful as it was an incentive for them to attend the interview. The format for interviewing the participants post-intervention stayed the same as it was for the pre-intervention study. In October 2007 I attended a meeting with the contact client and the consultant who was overseeing the quantitative aspect of the project. This was to discuss the combined qualitative and quantitative aspects of the study and to review the progress of the study. Additionally it enabled discussion of any potential problems and concerns with the project such as the sample size of the quantitative and qualitative studies.

We booked one final meeting between all of us on the 21st of February 2008 as this was one week before the data would be submitted to the FSA. Once the contact client was satisfied with both reports for the pre-intervention and post-intervention studies (see Appendices D2 and D3) they were sent to the FSA. The consultant who was working on the quantitative aspect of the project combined the qualitative and quantitative reports together for a final evaluation report for the FSA.

Once this evaluation report (Appendix D11) was completed an email was sent to the contact client and me. Both of us had to look at the report to see if any changes were required. After the changes had been made it was sent to the FSA. Finally, I submitted my invoice to the finance department at the hospital.

Reflection

Initially I was due to interview fifteen participants; however this was not possible due to difficulties in recruiting participants. This shows the difficulties of working with others on projects. When planning the consultancy I should have taken this into consideration.

One other difficulty was that some of the participants due to attend the first interview did not turn up this was frustrating as it took longer to find new potential participants. Furthermore, a few people were interviewed but did not complete the Cook and Eat programme. On reflection, if more advertising around the intervention and more time allocated for the project was available there may have a bigger sample size for the qualitative aspect of the project.

In terms of the outcomes for the qualitative project the aims were met, e.g. exploring participants' attitudes and beliefs regarding salt consumption patterns, barriers to changing behaviour, salt levels consumed and participants' experience of attending the Cook and Eat intervention. Also, the aims were met in terms of behaviour change such as reduction in salt consumption, reading food labels to check salt levels, improved knowledge regarding the link between salt and health, improved participants' ability to interpret information on food labels and participants' motivation to change salt practices.

MONITORING THE PROCESS OF CONSULTANCY

The aim of collecting data from the pre-intervention and post-intervention study was achieved. However at the start of the project it was agreed that fifteen participants would be interviewed about their salt consumption. Due to the difficulties faced in recruiting participants this was not possible. The purpose of the post-intervention study was to explore changes to the participants' attitudes and beliefs regarding the link between salt and health, in addition to any behavioural changes made to their salt practices. The findings suggest that all participants have reduced their salt intake. Even though not all of the consultancy's objectives were met, e.g. not interviewing fifteen participants at pre-intervention and post-intervention, it gave an insight into the participants' understanding of the link between health and salt, attitudes, beliefs and gaps in their knowledge.

In the pre-intervention study I worked with two other researchers to discuss emerging themes and to reach a conclusion about the interpretation of the data. In addition, in the post-intervention study one other researcher was employed to improve the consistency and reliability of the analysis. Changes were made to the original analysis of the data in both studies and agreed with the client. It was agreed between me and the contact client that if any changes were made to the reports and analysis of data findings we would book a meeting to go over any amendments that was needed. This was always a few weeks before the deadline of the report being due in order for amendments to be completed on time.

I found this useful in terms of making sure the report was completed in the style requested by the contact client. Throughout the project I was aware of the time-scale involved and implemented strategies to make sure the objectives were met, e.g. managing my time effectively and keeping in contact with all the people involved in the project. Also, as the person working on the quantitative aspect of the project was completing the final evaluation report for both parts of the consultancy, I had to make sure the post-intervention report was completed two weeks before the client would submit all findings to the FSA.

Reflection

On reflection I was worried about the time frames of the project. Since most of the contact was completed by email or phone calls with all the clients involved, I feel I should have insisted upon many more meetings to take place between all those involved in the project. This would have helped with the monitoring process of the project. As it is always difficult to work with several clients, I felt I could have taken a proactive approach in recruiting participants, i.e. helping the dietician to recruit participants. The approach I used was to contact a third person involved with the project, (the dietician's line manager) to ensure that extra participants were recruited for the interviews.

I felt as the consultant that I did not have the same expectations as the intermediate client (dietician) and it became quite stressful in keeping on target with the project deadlines for all the work to be completed. I feel it was very much a learning curve for me on how to manage multiple relationships within one organisation. In any client work with consultancy projects, Schein (1999) states consultants have something to learn from each other on how relationships can be conceptualized and managed when one intervenes in complex systems.

EVALUATING THE IMPACT OF THE CONSULTANCY

The qualitative aspect of the 'Salt it Out' project was evaluated using qualitative research methods. Material was generated by the use of semi-structured in-depth interviews. Data collected from the semi-structured interviews was analysed using IPA.

When comparing participants' accounts in the pre-intervention study and the post-intervention study it shows that there had been some behaviour change in terms of their salt consumption such as:

- Reducing the amount of salt added when cooking
- Reducing salt through their food choices when cooking
- Increased knowledge of the importance of consuming a low-salt diet
- Increased awareness of the implications of eating a diet high in salt
- Confidence in their ability to read and interpret food labels
- Awareness of the high salt content of everyday processed food
- Being much more in control of their ability to reduce the salt in their children's diet

The pre-intervention and post-intervention reports for the qualitative aspect of this project were amalgamated into one final evaluation report together with the quantitative aspect of this project (see Appendix N) and submitted to the FSA.

Reflection

It was at the final stage of the project that I began to feel much more confident in my role as an external consultant. As the project was split into two stages it was useful to reflect back and see how I could develop as a consultant. On a personal level I feel that it has increased my awareness of skills I have as a health psychologist. It has given me greater understanding in how to manage my time effectively and how to work on projects.

In terms of my professional development it has established the need for effective partnership working with all clients involved with the project and to be aware of any difficulties or changes that need to be made with consultancy projects.

3.2.1 Appendix D6 Service Level Agreement

Julie Pearson
and
Teaching Primary Care Trust

SERVICE LEVEL AGREEMENT

July 2007 – February 2008

1. **Parties to the Agreement**

This agreement is made between:-

Julie Pearson

and

Teaching Primary Care Trust
Public Health Directorate
London

2. **Purpose of the Agreement**

The agreement is to evaluate the qualitative aspect of the 'Salt in Out'; Food Standards Agency funded salt reduction initiative subject to the terms of the Service Specification.

3. **Agreement Period**

The agreement will commence on 2nd July 2007 and end on 29th February 2008.

The contract may be terminated, without penalty, if the Teaching Primary Care Trust or the Contractor gives the other party three months notice in writing.

4. **Terms and Fees**

Payment will be made as follows:-

50% will be payable upon your appointment and the remainder at the end of the agreement period (29th February 2008). Payment will be made following the submission of an invoice to the Teaching Primary Care Trust.

5. **Payment Terms**

Payment will be due within 30 days.

6. **Confidentiality/Data Protection**

Any information that may be available to the Contractor that s/he may have access to, for the purpose of performing the service required, shall be held in the strictest confidence and shall not be divulged to any third party without the express permission of the Teaching Primary Care Trust.

In addition, any work undertaken and recorded is owned by the Teaching Primary Care Trust and cannot be used by the Contractor unless prior written agreement has been obtained.

7. Unsatisfactory Performance

In the event of the Contractor failing to provide a service to the reasonable satisfaction of the Teaching Primary Care Trust, the problem area(s) will be identified and a corrective course of action agreed, within an appropriate timescale.

In the event of the continuing failure of the Contractor to provide an acceptable service, the Teaching Primary Care Trust will be at liberty to review the whole agreement and serve Notice of Termination.

Signed by the Contractor

Signed _____

Designation _____ Dated _____

Signed for and on behalf of the Teaching Primary Care Trust

Signed _____

Designation _____ Dated _____

SERVICE SPECIFICATION

Evaluation of the FSA Funded 'Salt if Out' Initiative

1. The Contractor will be expected to:

- a) Conduct fifteen 15-20 minute semi-structured interviews (3 people from each BME group) at baseline and at 3 months post-intervention to gain an insight into participants' attitudes and beliefs regarding salt consumption, salt consumption patterns, barriers to behavioural change and salt levels consumed. The interviews will be transcribed verbatim.
- b) Collect qualitative data at 3 months (3 people from each BME group) to gain an insight into participants' views on the cook and eat sessions/grocery tours.
- c) Analyse the data generated using Interpretative Phenomenological Analysis (IPA). Interim findings to be submitted at dates to be agreed by the TPCT Lead.
- d) Produce an Evaluation Report for TPCT by 1st February 2008 following agreed guidelines.
- e) Be available within the time frame of the contract, including a period after the delivery of the Evaluation Report, to assist in the compilation of the Final Report due to the FSA by 29th February 2008.
- f) Produce succinct reports, written in plain English in accordance with guidance issued by Teaching Primary Care Trust.
- g) Attend and present progress updates and reports at monthly meetings of the Partnership Steering Group/TPCT Lead.
- h) Be responsible for any recruitment, employment, management, resource and administration needed to fulfil the contract.

Professional Fees and Expenses

The fees for “Salt it Out” are outlined below and based on the service specification.
The fees are based on an hourly rate of £40.00.

Service	Time allocated to task	Total cost
Steering group Meetings from 1/5/07 to 29/2/08 (monthly)	1 hour (total of 10 meetings for duration of contract)	£400
Evaluation meeting	2 hours	£80
Monthly meeting between contractor and TPCT Lead from 1/5/07 to 29/2/08	1 hour	£400
Compilation of final report	6 hours	£240
Travelling expenses from Kingston to community venues		£422.40
Interviewing 15 clients at baseline and interviewing 15 clients at post-intervention.	60 minutes for each interview = £40.00. £40 x 30 interviews	£ 1,200
30 interviews transcribed verbatim & analysis		£2,400
Independent researcher (to look over analysis of data)	£40 per hour, £40 x 8 = £320	£320
Materials		
Paperwork		£30.00
Tape recorder tapes		£40.00
Memory Stick (for transcripts of interviews)		£15.00
	Total cost	£5,547.40

3.3 Case Study for 5.1: Implement interventions to change health-related behaviour

5.1a Assess the suitability of clients for health-related behaviour intervention

In my job role (as Stop Smoking Advisor for pregnant women and new mothers at a Primary Care Trust), I help pregnant clients and mothers of children five and under give up smoking. I will describe the intervention designed to implement behaviour change in a client who was two months pregnant and felt that this was the right time to give up smoking. The client has given up smoking before but only for two weeks. The client seemed motivated to give up, was concerned with undertaking the behaviour change plan. We discussed taking each day as it comes.

Whenever we visit clients we have to fill out a monitoring form which includes details about their smoking, demographic and surgery details, health background and expected delivery date. This gives us an idea of their smoking history, e.g. how many they smoked and whether they are smoking more or less during their pregnancy. It also facilitates discussion around sensitive topics such as the use of recreational drugs and if they have any other health problems. Additionally it is useful for us to have a record of each home visit and monitor the client's progress.

The client agreed to do a Carbon Monoxide (CO) reading to measure how much carbon monoxide is left in the body from smoking and to see how dependent she is on nicotine. The client CO reading is 25 ppm, this shows she is quite a heavy smoker. Most people are classed as heavy smokers if they have a cigarette within the first hour of waking and by how many cigarettes they smoke throughout the day. From this we discussed which Nicotine Replacement Therapy (NRT) products to use, most heavy dependent smokers benefit from using a secondary NRT product, the client decided to try a patch and an inhalator as a secondary product. I discussed with the client, why she smokes and how to recognise her triggers for when she smokes.

We also talked about why she wants to give up smoking; the main reasons are protecting her unborn child from the dangers of smoking, and also to have a much healthier lifestyle. We also talked about her previous quit attempts, smoking history and why she smokes. We talked about using coping strategies, and how to use them when she gives up smoking.

5.1b) Identify and negotiate the behaviour change goals of the clients:

I explained the pregnancy service that we provide and how we can help her give up smoking, e.g. support from us in her quest to give up smoking, receiving NRT through her GP surgery, text messaging and health promotional leaflets. I explained how the service works and what we expect from her, setting a quit day, using NRT, weekly visits for the first six to eight weeks and CO readings each week. After explaining how setting a quit day and giving up cigarettes completely is the best way to give up smoking we agreed on a quit day in one week's time (Hajek, 1989).

We decided this as the service has to fax over a request for NRT (Appendix E) for the client to her GP's surgery and this normally takes one to two days. I also asked the client to use this time to prepare for her quit day, e.g. identifying coping strategies on how to avoid smoking cigarettes, thinking of how to cope when being around smokers, avoiding cues associated with smoking until she can cope with the situation and keeping her house free of cigarettes and other smoking paraphernalia.

As the immediate goal is to give up smoking we discussed how to use the medication properly. The client decided to use the patch, and talked about changing a new patch to a different body part each day. This is to avoid localised skin irritation developing. We also discussed making sure the patch remained on the client's body each day, and to call me if she experienced any problems. We agreed on a follow up visit a week after her quit day and that I would text her on her quit day.

5.1c) Assess the cognitive, behavioural and situational determinants of, and influence on, relevant current behaviour:

The client is surrounded by smokers in the home, work and educational environment. The client lives with her father who smokes in the house.

The client is in her final year at university and socialises with a group of friends who all smoke. Most of her other friends smoke as well. The client has a part time job and works with a team of smokers. The client has never really tried to quit apart from a brief time a few years ago when she gave up for two weeks. She returned back to smoking as she was bored with not smoking.

The client's current behaviour is worrying as she is surrounded by smokers and may find it a struggle to give up smoking. Also in pregnancy the metabolic rate speeds up and pregnant clients metabolise nicotine quicker than they would if they are not pregnant. However, the client is pregnant with her first child, and wants to give up for herself and the unborn child.

The client feels this is the right time to give up and is not enjoying her cigarettes as much as she used to. One belief the client has is, that using Nicotine Replacement Therapy (NRT) products is not necessary for her. I explain that by using medication, smokers double their chances of giving up smoking (Department of Health, 2000). I also explain the risk benefit ratio; even though NRT does cross the placenta to the baby it is felt to be safer than continuing to smoke during pregnancy.

I also explained that by using NRT it will help with the cravings and make the quit attempt easier than not using any medication. Cravings normally last three minutes and can be described as a desire to smoke. By taking the time to explain this to the client, she feels reassured about using medication to help her give up smoking.

5.1d) Develop a behaviour change plan based on cognitive-behavioural principles:

The Intervention was based on three theoretical frameworks, including Stages of Change, Prime Theory and Biopsychosocial Model.

West (2006) Prime theory is a new model used in smoking cessation. It is an attempt to make sense of what is known and observed about the complexity and variability of addictive behaviour. Prime theory is an acronym of: Plans; Responses; Impulses; Motives and Evaluations.

Prochaska and Diclemente (1983) devised the concept that behaviour change is a cyclical process passing through certain defined stages. Their ideas are often referred to as the 'Stages of Change'. The model proposes that individuals go through a series of consistent and identifiable stages in smoking behaviour. These so-called 'Stages of Changes' reflect the individual's intention to quit smoking.

The Biopsychosocial Model (2003) looks at three systems which are all separate from each other yet are also connected to each other, systems within systems. These three systems for smoking are; socialising with other smokers, physical changes in your body, and the psychological aspect of desiring a cigarette.

The client's main concern is changing her lifestyle, e.g. trying to imagine life without cigarettes and trying to cope without cigarettes. We discussed how the client can make small changes to her routine for each day, e.g. not drinking coffee in the morning until she feels comfortable to do this. The main emphasis was on the unborn child's health, we also talked about how her health would improve as a result of giving up smoking.

We talked about the main aspects of the behaviour change. The client is worried about how to give up certain cigarettes, e.g. the one after meal times. I advised the client to use her secondary product (inhalator) after meal times as this will help. The client was also concerned with being around smokers and trying not to smoke, I advised the client to think of coping strategies for this situation, also to use her NRT, and to tell her friends not to offer her any cigarettes.

The main situational barriers the client was concerned with, was being in a smoking household. We discuss how the client could ask her dad to smoke outside, or in a separate room to the client. After discussing this, the client felt more confident in her ability to start the behaviour change.

Cognitive, behavioural and situational facilitators of the behaviour change:

The main reasons that the client wants to give up is to protect the health of the unborn baby.

We talked about how if the client gives up smoking this early in her pregnancy it will reduce the risks to the unborn child. The client's main reason for quitting is to have a healthy pregnancy and to give the unborn child a chance to develop and grow.

Behavioural

We discussed how smoking is associated with socialising, after meals, and drinking coffee. We talked about how to not smoke in situations that the client may find herself in; we came up with various ideas on how to avoid smoking.

- 1) Change daily routine,
- 2) Use NRT every day
- 3) Warn family and friends not to offer her any cigarettes
- 4) Avoid social situations until she feels confident to be near smokers
- 5) Take each day as it comes.

Situational

The client admitted her real challenge will be when she is at university and when she is working as, this is when she smokes a lot of cigarettes. Using my previous experience with other clients, we talked about how the client could make a fresh start on her quit day, keeping herself busy, using her secondary NRT product on these occasions. We also discussed how the client should have some spare Nicotine replacement patches and the inhalator in her bag, just in case she may forget to put her patch on or it slips off.

In conclusion, we also talked about how she can get support from the service with weekly text messages and to use these to help her feel motivated with the behaviour change. Some of the text messages are related to the situation the client is in, e.g. socialising with friends, "Well done 4 not smoking in the pub".

Motivators and rewards for behaviour change

We agreed to keep a track of how many days that the client has not smoked. I handed out a calendar to the client (see Appendix E1). We talked about the client rewarding herself for not smoking at the end of every week. The calendar had a short paragraph on each week telling the client the benefits of being smoke free for one week, two weeks, and three weeks.

We talked about the benefits of blowing into the Carbon Monoxide machine as it is a good motivator for the client to see the benefits of giving up smoking as the client's CO reading will drop within twenty-four to forty-eight hours if they have not smoked. We also talked about the client receiving text messages each week, additionally I asked the client to call me if she needs to speak to me about her quit attempt before the next visit. We talked about how the support from the service can be motivational, e.g. the client knowing that someone is visiting her each week to confirm non-smoking status.

Tasks.

The first visit is to talk about the service and to see if they would like to give up smoking. We talked about when would be a good time for the client to quit. We decided on a quit day in one week's time. I advise the client to prepared for quit day:

- 1) Smoking all her cigarettes, not keeping any after the quit day
- 2) Warning her family and friends not to offered her any cigarettes
- 3) Collecting prescription from GP's surgery.
- 4) Keeping herself busy the first few days
- 5) Using NRT every day.
- 6) Think positively, "Stopping smoking is the best thing I can do for my health."

We agreed that I would text the client when her prescription is ready for collection and I would call on the quit day. We scheduled the first appointment after the quit day.

Cognitive-behavioural Strategies

I talked about how withdrawal symptoms such as cravings only lasting three minutes, and to focus on other tasks for three minutes, advising the client to be on her guard for tempting situations, e.g. if someone offers her a cigarette. Additionally we discussed how compliance with NRT can help the client with her cravings and make the quit attempt easier.

I advised the client to keep track of the quit attempt. In the intervention I have focused on the physical, social and psychological aspects of smoking by including these in an intervention, it will help the client develop coping strategies to stop smoking. I asked the client to identify 'light-up' triggers, those times when the client has opened the packet and smoked and to think of ways to distract herself away from the situation and to practise these distraction strategies, so they become automatic.

The main emphasis of the intervention is on the health of the unborn child, we talked about the benefits of not smoking while pregnant and how giving up can have a huge benefit on the developing unborn child and the client as well. We talked about taking each day as it comes, and being prepared for any change in behavioural thoughts, "I will not buy cigarettes when I go to the shops". I advised the client to make some changes in her behaviour, avoiding socialising with friends until she feels confident to do so and not smoke.

We talked about the dangers of passive smoking for her and the unborn baby, with the idea that certain rooms in the house would be smoke free and to keep busy for the first few days. I advised the client that exercise can help with a quit attempt and encouraged her to do some exercise and to check with her midwife which exercise is suitable for an expectant mother.

Therefore to sum up the first visit,

- 1) I encouraged the client to think of having a positive image of themselves as a non-smoker
- 2) Prepared for how they will feel when they stop.
- 3) Developed alternatives to replace their smoking habit.
- 4) Make quitting the most important thing that they are doing.
- 5) Feel in control of their life without using cigarettes.

5.1e) Ensure monitoring and support for behaviour change plan:

One of the best ways to help this client group is to use evidence-based practice approach. Ershoff, Ashford and Goldenberg (2004) found that this group of clients who are pregnant need intensive behavioural support with their quit attempt. The service offers weekly visits for the first 6-8 weeks with visits lasting from thirty minutes to one hour or sometimes even longer, it all depends on the amount of support the client needs. Then monthly visits for up to one year or more depending on how long the client needs the support they receive from the service.

Each week the client's CO (carbon monoxide) reading will be assessed to confirm self report of non-smoking status. The intervention will be tailored to their needs. The client will be asked if they have been smoke-free, are using medication regularly and how their week has been. This will be to ensure they are not experiencing any problems with their medication and to see how they have coped with not smoking.

Also to check if the client is experiencing any withdrawal effects, whether they are craving cigarettes or any side effects from the medication. With this group of clients, many will go back to smoking in the postpartum period (Mullen, Richardson, Quinn & Ershoff, 1997). Towards the end of the pregnancy there is a shift in the intervention, to move from the child's health to an emphasis on the woman's health. This is to encourage this group of clients to look upon this behaviour change as a lifelong commitment not to smoke.

Towards the end of a client's pregnancy we introduce ideas on how they are going to cope with not smoking once they have had their baby, as some clients just tend to quit for the duration of pregnancy. We talked about how dangerous passive smoking is around children in a discrete and sensitive way. We also encourage the client to change their coping strategies or to make a new plan of action for not smoking after they had their baby.

By preparing the client to think and prepare for the birth of their baby and planning how to cope with not smoking there is a chance that they may not return to smoking. We also talked about how we can stay in regular contact with them in the postpartum period to encourage cessation by either monthly visits, or we assess if they need more contact and support from the service as they may be experiencing strong urges to smoke. We normally let the client decide when they do not need the support from the service and encourage them to make full use of the service.

Monitoring of the behaviour change plan

All of the clients who access the Pregnancy service receive visits from the team for as long as they need support from the service. The majority of clients receive six to eight weeks of weekly visits. The clients are asked if they would like to have a visit every two weeks, normally it is left to the client to decide when they feel ready to have a home visit every two weeks. If this is the case fortnightly visits are continued up until the third month of their quit attempt.

After three months we introduced the idea of monthly visits for up to a year of clients setting a quit day. We also make sure we plan a visit a couple of weeks before they are due to encouraged cessation in the postpartum period. At each visit self reporting of non-smoking status is checked by using a CO machine and recorded in the client notes, also generally checking how they feel about their quit attempt, if they are experiencing any problems with withdrawal symptoms and using their medication.

Most clients use NRT products for three months, sometimes longer. This is assessed at the home visits to see how they feel about not using NRT after three months. For most clients it is a gradual process, as the weeks go by they use less amounts of NRT. We do encourage some women to have some NRT in the house after they have given birth, as the postpartum period is when most women relapse.

5.1f) Evaluate outcome:

The client set a quit day on the 16th of February which was in her first trimester of pregnancy and has not smoked for eight months. This client's main reason for giving up smoking was her pregnancy. The client has just had a baby boy in September 2007. The client admitted that she could not have given up on her own; it was the support that she received from the service that made a difference, e.g. the weekly visits and blowing into the CO machine on each visit. This made the client feel motivated to carry on with the quit attempt.

When the client received a text message from the service it made her feel supported with her behaviour change plan. I also mention to the client the health benefits of quitting for her and the unborn child such as, if an expectant mother gives up smoking it is less harmful for the unborn child's development.

When the client had quit for four weeks I handed out a certificate (Appendix E2) for stopping smoking and a present for the baby, this encouraged the client's quit attempt as she mentioned that she could visualise her baby being smoke free. Additionally I sent a thank you and progress letter (Appendix E3) to the practice nurse who referred the client to the service. The client used NRT products such as the patch and the inhalator, the client had to change to a different patch as the Nicorette Patch was irritating her skin, and we discussed changing to a different patch such as the Niquitin CQ clear patch as this is less likely to irritate a person's skin.

I also advised the client to overcome her barriers with smoking, e.g. the client's main concern was going back to work and being around friends who smoke. To overcome this I advised the client to use her patch and her secondary product, the inhalator, when in these situations. The effective parts of the quit attempt for this client was support, using NRT products, text messages, and protecting her unborn child's health.

Towards the end of the pregnancy I introduced the idea of the behaviour change becoming lifelong cessation, the client had admitted to feeling concern about how she would feel once she had her baby. We talked about looking at the behaviour change as a lifelong cessation plan. I encourage the client to think about changing her coping strategies and to have a plan of action for when she comes home from the hospital.

Since the client had the baby she has started using her NRT a lot more and seems to be struggling with her quit attempt. The client admitted the thought of smoking is on her mind a lot more since having the baby. I suggested fortnightly visits for the next couple of weeks. Since the client has had her baby she has been smoke free for two months.

5.1g) Negotiate completion, follow-up:

The client has been smoke-free for eight months, six months while pregnant and two months in the postpartum period. We have agreed on monthly visits for the next six months. At one of the home visits we talked about coping strategies and how to develop a new action plan for staying stopped in the postpartum period.

Conclusion

In summary, I found this client easy to work with, she never cancelled any appointments, did not smoke at all once a quit attempt was set and seemed to appreciate the home visits. She took all of my advice about her quit attempt on board. The behaviour change plan has been met and the client has a healthy baby boy. The client will continue to be supported in her quit attempt in the postpartum period.

In addition, having reflected upon the delivery of the intervention I feel that I need more knowledge and skills around postpartum women giving up smoking. Therefore by continuing to help this group of women give up smoking I will improve my counselling skills and it will give me much more experience within this client group.

Reflection (skills developed from working with this client)

I feel from this case study I established and developed a client- practitioner relationship. In smoking cessation work with pregnant clients there are a lot of clients setting quit dates and then they may not manage to give up smoking. Often you may only see them a few times, this is unfortunate as it does not give you enough time for a client-practitioner relationship to develop and promote behaviour change. With this client I was able to enhance my clinical skills, psychological skills of communication, empathy, and knowledge of tailoring the intervention to the needs of the client.

I found after a couple of visits the client became much more relaxed in my company and we discussed coping strategies of how to cope with not smoking. Working together plays a role in the client-practitioner relationship and appropriate treatment regimes are put in place. This was one of the first pregnant clients I have seen from the start of her pregnancy and who is still not smoking at the one year follow up. From this I learnt how to develop the intervention for the client when she was pregnant and how to modify the intervention for the postpartum period.

It was rewarding for me personally to reflect and observe how the client was undertaking the behaviour change, compliance with using medication, listening to my ideas on how to cope with not smoking and overall being honest about how she felt about the behaviour change. It was also a learning curve for me in terms of how to discuss sensitive topics such as how clients will feel about their smoking in the postpartum period. I developed an intervention that focused on their health and seeing cessation as a lifelong behaviour change.

The development of skills as a Health Psychologist?

From this competence I feel I have been able to develop myself into a more reflective trainee, able to 'reflect in' and 'reflect on' practice and continue to reflect on my professional practice. Furthermore I was able to work at an ethical and professional standard and furthered my capacity to develop my counselling skills with this client group. For me personally, writing this behaviour change up as a competence and receiving constructive feedback has prompted me to further grasp the idea of reflection and its purpose.

I have observed how theoretical models can be applied and used with this group of clients. As a result I certainly feel that I have grown as a professional in more than one way, I gained knowledge and understanding in smoking and pregnancy/ post-partum period. I have developed demonstrated skills in one optional competence, leading me to become a more self-confident, pro-active and reflective trainee.

Dear Doctor,

Client Name: Client Y

DOB: 22/2/76

As you will be aware, the PCT has a specialist Stop Smoking service for pregnant women and new mothers. We offer one to one home visits on a weekly basis to support this client group to give up smoking.

I am currently seeing one of your patients (details above) who would like help to quit. I am therefore requesting a prescription for **NRT** for her.

Current NICE guidelines stipulate that all smokers who have struggled to give up should be offered **NRT** on prescription, as used in conjunction with intensive behavioural support, more than doubles their chances of quitting successfully.

I am sure that you are aware that changes in the product licensing means that pregnant women and lactating mothers can now be prescribed **NRT**, but if you have any queries about this, or wish to discuss this with me, please do not hesitate to contact me on either of the above telephone numbers.

Would you therefore please prescribe a two week supply of **2 boxes 24hr 21 mg patches and 1x42 cartridge box of Inhalator** on an ongoing basis? When the client needs a repeat prescription, I will write to you to request this. During our weekly sessions, I will be monitoring CO levels to ensure the patient is not smoking.

Yours sincerely,

Julie Pearson

Stop Smoking Advisor for Pregnant Women & New Mothers

3.4 Case Study for 5.2 - Direct the Implementation of Interventions

5.2a) Establish needs and implement strategies for the procurement of resources

Setting GP surgery

Description of work:

To observe one of our service providers helping people give up smoking within a primary care environment.

As part of my role as a Primary Care Facilitator, I have to train health care professionals to deliver smoking cessation interventions to clients wishing to give up smoking and support them in their role as smoking cessation advisors. I attended a meeting at a surgery in January 2007 to identify a way of improving the smoking cessation service offered by the nurses to help people give up smoking.

One possible outcome was for the surgery's Health Care Assistant (HCA) to attend our Level 2 Smoking Cessation training and then be observed by myself for four weeks when seeing clients who wish to give up smoking. The main problem with the nurses completing smoking cessation clinics is that they do not have a lot of time to devote to smoking cessation. One of the main objectives of the meeting was to think of a way that the service could be improved for the clients (see Appendix F, Needs assessment report)

We decided to call the HCA into the meeting and ask if she would like to attend the training. After the HCA had completed the training it was agreed I would sit in with the HCA and observe the smoking cessation clinics and give feedback about the consultations. As the HCA is new to smoking cessation we decided once the training course had been completed, to advertise the clinic in the surgery to recruit smokers to the clinic. From my experiences of working with primary care for the last few years, HCAs can make a valuable contribution to helping people give up smoking. HCAs can devote more time to helping people give up smoking and become specialists in smoking cessation.

It also takes the pressure off practice nurses to do smoking cessation clinics. When service providers do their smoking cessation clinics in surgeries there is a high drop out rate of people not attending their appointments to minimise this I made sure that the HCA would call them the day before their appointment to ensure that they would attend. The next step was to book a visit with the HCA to go over any issues or queries she had about smoking cessation work. This was to make sure the HCA felt confident whilst helping clients to give up smoking. The main concern was medication issues, how to decide which is the best medication for clients to use. All stop smoking clinics in surgeries issue clients with medication such as Nicotine Replacement Therapy (NRT) and Zyban to help with their quit attempt.

We looked at the NRT and Zyban chart from the training folder (see Appendix F1) and talked about this. I explained that with any new job you are bound to feel slightly apprehensive. In addition I mentioned that I would be observing the clinics for the first four weeks and for the HCA to feel free to clarify any issues that may come up during the smoking cessation clinics. On my next visit I handed over all the resources needed for the intervention and I checked with the HCA whether she had a room available for when she is seeing clients. After making sure all the resources were available we had a look at the clients booked into the clinic for the following week to give us an idea of their smoking history. We also made suitable suggestions for any medication that the client may want to use and also how to conduct the intervention from the information that is recorded on the client notes on the computer system.

5.2b) Assess the capabilities of the people required to conduct and monitor a planned intervention.

The HCA had attended the training in February 2007 and the clinics started in April 2007 for four weeks. I encouraged the HCA to read through her training folder and to make notes on things that needed further explanation. I also advised the client to read some journals that proved useful when helping smokers give up smoking.

We discussed how to motivate people into making their behaviour change and I advised the HCA to read a resource pack called 'Helping Smokers Change' (Mason, 2001) which is based on motivational interviewing and helping people develop confidence in their ability to make the behaviour change. The HCA was worried about medication and did not feel confident when talking about Zyban. We talked through this and came up with a plan for how to talk about Zyban such as:

- 1) Looking at the Zyban chart for guidance
- 2) Checking the patient medical history
- 3) If in doubt, asking other members of the clinical team

I also mentioned that the GP needs to have the final decision whether or not their medical history determines if it is suitable for them to use. Zyban has a long list of contraindications, e.g. anyone with a head injury cannot use this aid. I also advised the HCA to have the National Institute for Clinical Excellence (NICE) guidance on NRT and Zyban for smoking cessation nearby when completing the intervention as it is a useful document to refer back to if needed (NICE, 2002).

As this guidance was a few years old I gave the HCA more recent research on NRT such as Guidance for Health Professionals on Changes in the Licensing Arrangements for NRT (ASH, 2005). I also advised the HCA to be aware of the smoking ban and implications for clients who wish to give up smoking. After discussing all this with the HCA I felt confident that she would make a good smoking cessation advisor and would be able to conduct the intervention. One of the key parts of completing smoking cessation work is to have good interpersonal skills and to put clients at ease when they are discussing their smoking with you. The HCA has good interpersonal skills. Also with her previous background of working in her role as a HCA she is able to use transferable skills such as listening and knowledge of medical issues when completing smoking cessation clinics.

Most health care professionals who undertake smoking cessation work have to complete a Level 2 Smoking Cessation course designed and developed by their local quit smoking service and to have some health care background. The training is based on evidence-based practice (see Appendix F, Needs Assessment).

In addition the smoking cessation guidelines that our service providers use are based on established practices on how to provide a smoking cessation service in primary care (Health Development Agency, 2003). Over the years I have noticed that health care professionals attend a training course and are unsure how to start the intervention. To make it easier for anyone starting smoking cessation work, I designed a treatment plan (Appendix F2) on how to start the intervention, resources needed and information the client may need. This is a procedure that we expect our service providers to use as a guide until they feel confident to undertake smoking cessation work.

5.2c) Advise and guide the activities of designated others

The week before the intervention started I had a meeting with the HCA to discuss supervision needs and support. This was to clarify how I would give feedback on the clinics. I also mentioned how I had to assess the intervention and to discuss her progress with the practice manager and the practice nurse. It was agreed between us that I would give feedback at the end of every consultation and to give feedback to the HCA at the end of the observation period. It was agreed that I would be introduced to the clients as someone who is observing the HCA clinics. Additionally it was agreed that they could consult me if they were unsure about any issues around the topic of smoking cessation during the consultation. When clients are seen in a primary care setting such as a surgery or a pharmacy shop for help in giving up smoking the first initial assessment normally takes twenty-five minutes as you have to assess how motivated they are in their quit attempt.

This is completed by asking them questions such as why they need to give up smoking and if they used NRT/Zyban before. Also we need to record their demographic details on a template and do a Carbon Monoxide (CO) reading to assess their level of dependence on nicotine. After the initial assessment the follow up visits normally last between ten to fifteen minutes. The follow-up visits consist of checking compliance with medication, asking clients to do a CO reading, asking how they are feeling about their quit attempt and checking if they have enough medication to last them till their next consultation.

We encouraged the service providers to see clients for the first four to six weeks of their quit attempt. Clients are only seen for this short time frame as Stop Smoking Services are measured on how many four week quitters they produce in one financial year. In the first week of the HCA starting the intervention five clients attended the smoking cessation clinic. The first client was a male that had been admitted to hospital with chest pains. He had not smoked since having a heart attack three weeks ago. I observed the HCA carry out the consultation competently with this consultation, talking about NRT and offering advice on how to cope without cigarettes. I did not need to contribute to this intervention. At the start of the clinic I mentioned to the HCA that I would be taking notes. After every visit had finished we had a chat about the intervention and I gave the HCA feedback about how the intervention was completed.

The second client the HCA saw was a difficult case as he did not speak English and his son was translating for him. I found with this consultation that the HCA did not mention to the client about using a secondary product of NRT given that the client is a heavy dependent smoker and would benefit from a secondary product. With all of the clients the HCA was good at approaching the clients and encouraging them to talk about their smoking. I felt the HCA's third client consultation was very good, she seemed to enjoy this one better and answered all of the client's queries about giving up smoking. The only issue that came up was the HCA said, "if you have a cigarette please do come back and see me".

This is the wrong approach to take as clients may think that this is giving them consent to smoke. I spoke to the HCA about this and found giving feedback difficult as it felt like a criticism of her consultation style. I turned it around by saying if the intervention was completed with a certain protocol it would improve her practitioner skills. Also I reminded the HCA to explain how addictive smoking is and how it may be difficult for clients to give up smoking. With the fourth client the HCA seemed to be taking my advice on board and mentioned about the secondary NRT product. The client was not ready to quit, so the HCA mentioned what the service consists of and how seeing someone each week helps with the quit attempt.

I thought this consultation was good and the HCA covered lots of things in the visit such as coping strategies, avoiding coffee and social situations until they feel confident enough to cope with these situations. The last client had a consultation with the nurse the day before so it was a short visit to collect some NRT patches and make sure the client was ready for quit day. Overall the HCA seemed to have learnt a lot from the Level 2 Smoking Cessation course. As a safety measure I had to report back to the practice nurse after every clinic had been completed just to keep the nurse informed of the HCA progress with the smoking cessation clinic. I left my contact details with the nurse and the HCA to get in touch if they needed any resources, advice or guidance on how to undertake smoking cessation work.

I found giving feedback a challenge as you have to be assertive and deal with difficulties that you may come across when directing the intervention. I was supposed to observe the clinics for four weeks, however on my last visit none of the clients turned up for their appointment, even though the HCA called them the day before. We used the time to go over the smoking cessation clinics I had observed. The HCA found the session useful and I was pleased with the outcome.

5.2d) Technical support for a planned intervention

From my own personal experience when I have helped surgeries with completing their smoking cessation clinics it is difficult to get used to a new computer system. The surgery uses the Emis PCS system. I contacted one of my work colleagues to go over all the information needed to record a client's details on the computer with the HCA at the surgery. We have designed a template that all service providers use in surgeries to record details about the client, smoking history and their quit attempt.

In addition, I checked if the HCA knew how to fill in details for the prescription. The HCA admitted that she did not know, therefore I felt it was necessary for the surgery's computer technician to go over this with the HCA. I handed out some notes on how to use the smoking cessation template and to issue prescriptions.

I made sure that the HCA computer was password protected and that all data was filed away in a cabinet and locked. The surgery has an Emis PCS computer system which people can only access if they work at the surgery. All staff have a password to get into the computer system. Also I made sure all my supervision notes were password protected.

5.2e) Oversee and direct the conduct of a planned intervention

I booked a meeting with the practice nurse to talk about the HCA smoking cessation clinic. I mentioned that the HCA would complete the work within the protocol for smoking cessation work. I left a copy of the treatment plan (Appendix F2) with the nurse to make sure the clinics are conducted within the frameworks of how I planned and directed the intervention. As the smoking cessation clinic finished one week early I sought consent and approval from the Practice Manager to complete the supervision session with the HCA. I explained that in the last week of the smoking cessation clinic no-one attended. The HCA did not have any more clients booked in until two weeks time as a few of them were having fortnightly visits.

The Practice Manager was pleased with this outcome. I felt confident giving feedback to the HCA in a sensitive manner and tried to encourage learning and the development of new skills from completing smoking cessation clinics. I feel that with lots more practice with smoking cessation work the HCA can build up a good intervention style and make a difference to the surgery's service for helping clients give up smoking.

Reflection

Directing the implementation of interventions was not a new area of skill development for me as I have to do this as part of my role as a Primary Care Facilitator. However, giving feedback and supervision to a HCA is a new area for future development in my working environment. I imagined how I have felt when receiving constructive feedback of my work and implemented this into supervision sessions with the HCA.

When directing the intervention I made sure the Practice Manager and the Practice Nurse were aware of how the HCA was completing the smoking cessation work. By ensuring everyone was involved I felt the intervention was implemented quite well into general practice. Since I have observed these HCA smoking cessation clinics I have been asked to observe two more service providers smoking cessation clinics. I feel that I am gaining more experience in how to give constructive feedback and supervision to service providers. Following each smoking cessation clinic I gave feedback to the HCA and evaluation notes were made.

At the end of the smoking cessation clinics, the intervention was evaluated to clarify that the needs of the HCA and the surgery had been met (Appendix F- Needs Assessment Report). From observing smoking cessation clinics I have identified that some service providers are lacking in confidence when it comes to helping people give up smoking. Supervision and observing service providers clinics is now offered to all our service providers once they have completed the smoking cessation training course to encourage development in their role as a smoking cessation advisor.

I found the implementation of the intervention provided a learning experience for me, and I am able to make improvements to the intervention and to direct service providers to implement it. The HCA seemed to have much more confidence in her ability to help people with their quit attempt since attending the training course and being observed implementing an intervention. Therefore the importance of assessing and directing the implementation of an intervention on how to help people give up smoking was explored within a primary care setting.

3.4.1 Needs Assessment Report for 5.2

As part of a programme of quit smoking initiatives within the Stop Smoking service a range of health care professionals have been trained to provide specialist support to people wishing to give up smoking. Some of these professionals are based in primary care health settings such as practices. One of the surgeries expressed the need for their Health Care Assistant (HCA) to attend our Level 2 Smoking Cessation Training course.

The success of the NHS smoking cessation services depends upon highly trained and skilled smoking cessation advisors to provide support and advice to smokers who are motivated to quit. When designing any training programme practitioners should refer to the standard for training in smoking cessation treatments, (Health Development Agency, 2003). In this standard it looks at the two main areas for smoking cessation, knowledge and skills. It is vital that people who deliver advice and support to those who want to quit smoking have up to date knowledge of what works best and that they have the skills to implement that knowledge. The Stop Smoking Service Level 2 training course is based upon learning objectives taken from this training standard.

This surgery has a high population of registered patients who are smokers. After talking to the nurses based at the surgery it was recognised that there is a need for more of the staff to take on some of their workload such as helping people giving up smoking. The nurses felt that they do not have the time to help people give up smoking because of other work commitments.

A number of possible developments were suggested to improve the smoking cessation clinics at the surgery for patients who wish to give up smoking. These included:

- Health Care Assistant to attend Smoking Cessation training.
- Advertise the training to other clinical staff
- Increased awareness of the smoking cessation clinic to people who wish to give up smoking.

During my time at the surgery I booked the HCA on to our Level 2 smoking cessation training course. After the training it was agreed that I would observe the HCA smoking cessation clinics for four weeks and give feedback on the clinics to the HCA, practice manager and the practice nurse. Once the HCA had completed the training course I assessed how she felt about completing smoking cessation work and if there was anything I could do to help.

We agreed on her pre-intervention needs. I made sure all these needs were met before the HCA started the intervention. The pre-intervention needs are,

The pre-intervention needs identified by the HCA are:

- 1) Guidance around medication issues.
- 2) How to motivate clients to implement the behaviour change
- 3) Resources to carry out the intervention such as a computer, room and booklets to help clients give up smoking.
- 4) Being observed when helping clients give up smoking.
- 5) Treatment plan of the process to help clients with the behaviour change (See Appendix C).

From the meeting at the surgery I also developed a list of learning objectives and outcomes for the HCA.

Aims

- To develop the skills and knowledge of the HCA around smoking cessation.
- To promote the development of practitioner skills in smoking cessation interventions.
- To provide a framework of theory and professional principles for practitioner activities in smoking cessation.
- To familiarise the HCA with an understanding of how to enable behaviour change.
- Assess levels of dependence on nicotine.
- Gain awareness of how to assess which medication is suitable for light, medium and heavy smokers.

- Learn and implement changes to smoking cessation interventions if appropriate.
- Attend updates on smoking cessation twice a year to update knowledge and skills.

Learning objectives

On successful completion of the intervention the HCA will be able to:

- Understand current issues within smoking cessation.
- Understand some approaches to helping people implement changes in behaviour.
- Understand issues within smoking cessation in general practice.
- Knowledge of how addictive smoking is.
- How to use different intervention styles in consultations.
- Reflect and develop practitioner skills for smoking cessation interventions.
- Set up and develop smoking cessation interventions.

Evaluation of the intervention

I felt that needs of the HCA and the practice were met. The practice nurse reported that she has heard good feedback about the intervention from other staff at the surgery and is feeling able to hand over more smoking cessation clients to the HCA. The HCA comes across as someone who finds it easy to interact with clients who want to give up smoking. This is important as communication is used a lot in smoking cessation interventions. I feel the HCA would benefit from clinical supervision with other HCAs in general practice. I did make this suggestion to the practice manager and the practice nurse.

I did have one last meeting with the HCA and discussed how she felt about the supervision and to see if her learning objectives had been met. The HCA reported feeling confidence to be able to run a smoking cessation clinic in the surgery. In addition I mention to the HCA it would be of benefit to keeping her skills in smoking cessation updated for her to attend our updates twice a year. Overall the HCA was pleased with the outcome.

Also some of the patients gave feedback to the nurses that they were happy with the service they received from the HCA in helping them give up smoking. On reflection if I had realised that the nurses may have seen some of the HCA's patients I would have designed a questionnaire to be used for evaluation of the HCA's smoking cessation clinic. Each surgery is given a target each year, I mentioned this to the practice nurse and practice manager that we assessed the progress each quarter and compare this with their last years' performance.

This is main outcome the surgery is measured on each quarter. I mentioned this to the practice manager to see if there may be an increased in how many patients give up smoking since the HCA's has started smoking cessation work at the surgery and also to see if the intervention has any impact on their performance in helping patients give up smoking.

I did have a few concerns at the start of the intervention with the HCA being open and honest with the clients when they admit that they have smoked. One other example is that I thought issues such as how addictive smoking is were not being included in the intervention. Once I gave feedback on how to improve her practitioner skills I could see how the HCA was implementing this feedback into practice.

Also I realised that when any HCA starts smoking cessation work there is a lot to remember, and I tried to be understanding and empathise with the HCA. On reflection the intervention was successful, the HCA is able to set up and run smoking cessation clinics in the practice and the practice is able to offer smoking cessation clinics to clients who wish to give up smoking.

Competence: Unit 1 Generic Professional Competence

Generic Professional Case Study

Introduction

It's not a successful climb unless you enjoy the journey (***Dan Benson***).

Since starting my Stage II professional training I feel that I have been on a voyage of discovery of how I have developed as an applied health psychologist. In reflection sometimes the journey has been smooth sailing and filled with positive outcomes. Additionally it has been stressful at times completing some of the competencies as I have felt challenged when undertaking some of the work for the Stage Two course. Above all it has been an enjoyable experience filled with developing a range of skills and abilities. These include becoming confident in my ability to reflect on my work, conducting research, enhancement of teaching and training work and inspiring me to develop as a professional applied psychologist. This case study will reflect on how I have developed as a psychologist during my two years on the Stage Two course.

Background in Health Psychology

Since completing my MSc in Health Psychology I have been working in the area of smoking cessation for five years with two Primary Care Trusts in London. I am employed as a Primary Care Facilitator. This role involves training Health Care Professionals (HCPs) to help people give up smoking and supporting them in their role as smoking cessation advisors. In addition, another major aspect of my job is to agree objectives and targets for advisors, e.g. liaising with HCPs to monitor and review targets within Primary Care agreements. Also I have to design and deliver training to a wide range of HCPs.

Since working with the Stop Smoking Service I have explored ways of how I can develop as a health psychologist. This has involved taking on projects to improve service delivery in different areas of smoking cessation such as working with the prison service, helping pregnant smokers give up smoking, facilitating focus groups for qualitative research and interviewing different groups of women smokers about giving up smoking, relapsing during the pregnancy and postpartum period.

1.1) Implement and maintain systems for legal, ethical and professional standards in applied psychology

One of the first things I had to do just before starting my Stage Two course was review and change how the Pregnancy Stop Smoking Service could be improved for pregnant smokers with the aim of increasing the quantity and quality of support provided to this group of smokers. Our previous pregnancy counsellor had left, and we needed to implement new changes to the service. These included how people access the service, counselling aspects of how to guide the behaviour change, storing client information, confidentiality, awareness of the Children's Act and making sure myself and a colleague followed this professional way of working.

This gave me an insight into how to store patient information safely and securely, e.g. in accordance with the BPS guidelines and the Data Protection Act. Between me and my colleague we developed a professional way of working, e.g. making sure both of us had access to the locked drawer. In addition, we made the team aware of our daily movements since the nature of the job involves visiting client's homes and not being in the office every day.

As one of my main duties is to develop and design training courses for HCPs wishing to help people give up smoking in their working environment, I have to adhere to the training standard booklet on smoking cessation (Health Development Agency, 2003). This training standard booklet is used by those working in smoking cessation for a coordinated approach to content and quality of training in this field.

I have also taught postgraduate students in universities, which has been useful to pass on my professional way of working to MSc Health Psychology students and to inspire some of them to work in the field of smoking cessation. Over the past two years I have undertaken research as part of my Stage Two competencies and for my Primary Care Trust. I feel that this has enhanced my understanding of the need for confidentiality when handling data. In addition it has helped clarify the need for consent forms and patient information sheets when undertaking any research project.

For my research project I had to complete a Central Office of Research Ethics Committee (COREC) application form for my research project. Consent was given for the research to be undertaken. Once the participants consented to take part they were made anonymous upon entry into the study. By helping pregnant smokers give up smoking I felt this gave me an idea of how to design and develop interview schedules for this group of smokers. For example, I began to see how we could explore novel areas of research such as understanding why pregnant smokers relapse back to smoking in the postpartum period.

Interviewing all the participants for my research was an enjoyable experience as I began to see how their knowledge could improve the service for this group of smokers. In addition my professional practice has been supplemented by attending regular workshops, with peer support from other Stage Two colleagues and by keeping reflective practice logs. The reflective practice logs have been useful for me to reflect on how I have developed as a health psychologist over the last two years and to evaluate knowledge and feedback for improved practice into my own work. One example of how my practice has changed is being much more reflective when helping people to give up smoking.

1.2) Contribute to the continuing development of self as a professional applied psychologist

In the last year I feel I have grown as an applied psychologist, Primary Care Facilitator and a trainer. I have regular supervision meetings with my line manager in my current post and have been able to identify new projects such as working with the pharmacy department at a prison to develop awareness of their service to prisoners and staff (see consultancy folder). Between me and the pharmacy department we designed and developed a poster (Appendix G) advertising the prison stop smoking service. This was displayed within the prison health care suite. We also advertised in the living areas where prisoners socialise after consent was given by the governor of the prison.

Additionally to increase awareness of the service to staff, we advertised training courses for them to attend within their working hours (see training folder). I found delivering the training session quite daunting at first as I felt quite challenged by staff who voiced their concerns about the forthcoming smoking ban being implemented in the prison environment. By explaining the benefits of the new legislation for them I was able to turn the discussion around to a more positive perspective about new changes being established in their workplace.

In addition, I designed a project proposal to explore support needed for smokers to remain abstinent longer-term (Appendix G1). This involved working with two other health psychologists in designing an interview schedule and focus group discussion schedules for long-term quitters, smokers and HCPs to explore how the service can be improved for smokers wishing to give up. Upon reflection this was useful for my development as an applied psychologist. For example observing how they facilitate focus group discussions enabled me to learn and develop my own facilitation skills to incorporate best practice into my own work. This gave me more of an idea how to conduct focus groups such as posing the questions, keeping the discussion flowing and encouraging people to participate fully.

Since starting my Stage Two, I have worked with a number of colleagues on my course. I found this rewarding in the sense that it has increased my knowledge and understanding of how health psychology can be used in the NHS, other voluntary organisations and in academia. This was achieved when working with two other Stage Two colleagues. One example of this was submitting a joint article on our experiences of the Stage Two course. We submitted the paper in August 2007 and received confirmation that our paper entitled, 'The City Experience' was to be published in Volume 16, Issue 4, 2007. In conclusion this was a good starting point on how to pass on knowledge and advice on completing the Stage Two course to other trainees and to consider submitting future papers to health psychology journals.

I have had regular supervision meetings with my supervisor and my line manager. This has been useful for voicing any concerns about some of the competencies of the Stage Two course and challenges I have come across as a trainee health psychologist. In addition this has helped develop a timetable for completing coursework leading to the development of time management skills. I have also attended team meetings for our service over the last few years and have found it a useful exercise to discuss any issues over working practice and to be working in a supportive team. Since starting the Stage Two course I have been much more reflective in my working practice and this has led to improvements in my training style, counselling style and applying psychological principles to all areas of my work as a Primary Care Facilitator.

Developing my skills as a Teacher/Trainer

One area of my trainee work experience that I have enjoyed is the teaching and training competence. While teaching MSc Health Psychology Students I videotaped some of my workshops to identify any areas of my teaching skills that needed to be improved. I found the main things that I needed to improve on were reading from the laptop and not the screen. Additionally to ensure I was always fully engaged with the audience and that it ran smoothly. Also I generally asked for feedback from work colleagues and (HCP's) on how I deliver training and teaching sessions to improve on my skills as part of my ongoing professional development.

Recently I received some feedback from a practice nurse on the Level 2 training course which was to include a presentation on the performance of Stop Smoking Service from the beginning of the service being accessible till the last financial year. Therefore I tend to listen to this feedback and incorporate the changes into my training style. Within the first year of my Stage Two course I attended a workshop on teaching and training. I found this useful in terms of exercises you could do to relax your voice before you deliver any presentations to audiences and found this to be a great help when delivering training as part of my job.

As training is a key part of my job, whenever I go on training courses I generally observe how people deliver training to a wide range of audiences. Thus I tend to adopt some of their training strategies for my own training style. For example, repeating questions back that are asked by a member of the audience and after answering the question finishing with the sentence “Has that answered your question?” I find this gives me more time to think of the appropriate answer to the question and to make sure the audience hears the question. In addition we have had lots of colleagues who have left the service so I have had to deliver training with new members of the team. I have found this to be rewarding in the sense that it has given me greater understanding of different training styles and how to work together to deliver training sessions.

Becoming a trainee health psychologist has given me much more scope in how to move on to the next stage of my career development and how to progress as a health psychologist whilst working in the NHS. I am looking forward to writing up my research project and also next year when I can apply all these skills and knowledge I have acquired into starting a new job. The next stage of my career I would like to focus more on is developing how health psychology theories can be used in palliative care. I feel my skills such as teaching, research and knowledge of behavioural change can be of use in a hospital environment.

1.3) Provide psychological advice and guidance to others

During my two years experience as a trainee health psychologist I have been able to provide psychological advice and guidance to others such as helping pregnant smokers give up smoking, observing HCPs delivering smoking cessation clinics and observing colleagues' training sessions. I found giving feedback to practice-based staff was a new area of skill development for me (see 5.2 competence case study). I felt confident giving feedback to HCPs in a sensitive manner and tried to encourage learning and development of new skills from completing smoking cessation clinics. Following each smoking cessation clinic I gave verbal feedback to HCPs and evaluation notes were made. These guidelines that I follow are based on evidence-based practice and guidelines developed by the Health Development Agency (2003).

For the first year of my Stage Two training I helped pregnant women give up smoking. I found this rewarding in the sense that by receiving support from me they were able to change their behaviour. In addition it was much more positive when I was able to offer the support to clients on a long-term basis such as including the duration of the pregnancy and postpartum period and for them still to be smoke-free. The support programme was evaluated at the end of the treatment programme by clients completing a questionnaire on the effectiveness of the service. I found the client group I have worked with over the last two years made me reflect on how I have acquired greater knowledge and understanding on how people give up smoking, the reasons why they give up smoking, coping strategies they employed to help them give up smoking and maintenance of the behaviour change long-term.

One model that I use a lot in my work is the Biopsychosocial Model of Addiction. This has been useful when designing interventions for clients, e.g. finding out their beliefs about smoking, their social environment and exploring how they may cope with nicotine withdrawal symptoms. Various other models have been useful to implement in practice such as the Stages of Change model, e.g. developing the intervention around the stage clients are at. In the maintenance stage clients will have many months of not smoking and may still need to be in touch with the service to avoid relapsing back to smoking.

The motivational interviewing technique I use with clients has been instrumental in helping clients believe that they can give up smoking. In addition I have had to comment on new colleagues' training sessions. This was completed in an informal way such as observing their training sessions and making notes of their training style. Once the training sessions were over I gave verbal feedback. It was useful for me in terms of reflecting back on my training practice and taking on the role of a mentor to ensure positive appraisal of colleagues' training sessions. I feel this has contributed to how I can develop in a managerial role whilst working in the NHS.

1.4) Provide feedback to clients

During my two years as a trainee health psychologist I have been able to provide feedback to MSc Health Psychology students on how to find a job in health psychology and advice on how to develop interview skills during a teaching workshop. In addition a few of the MSc students have been in touch when they needed information about smoking cessation. This has made me realise how I have developed as an applied health psychologist and to be much more aware of my skills and expertise in the field of smoking cessation.

My consultancy work involved working for one another Primary Care Trust. The work involved using qualitative research methods to interview participants about their thoughts and feelings regarding their salt consumption before they enrolled on a Cook and Eat programme. I also interviewed them after they had completed their Cook and Eat programme (see consultancy folder). This was quite a challenging piece of work in terms of managing my time effectively to be able to do the project.

One other aspect of the project was working in partnership with many people involved with the project as sometimes there can be a lack of communication between those involved. I found it quite stressful working with several different clients. With this in mind, I devised a plan to keep everyone informed of my progress whilst working on the project. The main method of communicating feedback to the clients on the progress of the project was achieved by telephone calls and emails. I enjoyed the consultancy competence and it has given me confidence in the ability to work in a consultancy role again in the future.

I have previously discussed my research project interviewing pregnant and postpartum women on giving up smoking and relapsing back to smoking. This has been useful for me to feed back their comments to our pregnancy counsellor so that changes can be made to the service. Additionally it has been useful for me to pass on useful tips to pregnant smokers at the start of their quit attempt on how postpartum women have managed to remain smoke-free. I am looking forward to analysing the data and writing up the research project and subsequently I will be able to add to the knowledge of what is already known about the topic area of smoking and pregnancy.

Conclusion

Enrolling on the Stage Two course has been of benefit to me to develop as a professional applied psychologist. On reflection, during the last two years of professional training I have felt challenged several times when completing various competencies such as completing the COREC form. I was previously unaware how much detail is involved in undertaking a research project using participants from an NHS service. It has been instrumental for my development and confidence to complete the COREC application form and to attend a panel interview to receive constructive feedback about my research project.

One other area I have felt challenged in is conducting and completing a systematic review. I felt this was a piece of work that really made me think about all the stages of the review including formulating my research question, developing your search strategy and inclusion criteria. In addition, searching databases, extracting data/information from publications and deciding whether or not a meta analysis was required. Even though these two pieces of work have been the greatest challenges I found I have grown in confidence. It has made me aware of my progress I have achieved over the last two years of developing as a professional applied psychologist.

I now feel so much more confident in my ability to take on new challenges and I have realised the benefits of attending health psychology and various smoking cessation conferences and Stage Two workshops. It has been useful to talk to other Stage Two colleagues about their experiences of working in the NHS and other applied settings.

This has proved useful for my professional practice and I have also been able to use their expertise to help my development as a professional applied psychologist, e.g. receiving feedback on interview schedules for my research project and on my teaching practice. Since the start of my professional training I have been reflective in my working practice on how I can apply health psychology principles in my working environment, e.g. using the Stages of Change Model and applying this to smoking cessation to implement behaviour change in smokers wishing to give up smoking. I have also thought about how other work colleagues can use health psychology in their working practice and have influenced colleagues to use motivational interviewing (MI) strategies when seeing clients who wish to give up smoking. For all areas of my professional development as a health psychologist I tend to be reflective in my practice and once I have completed any coursework or client work and when delivering training I tend to take notes on how I did to reflect on my continuing development as a professional applied psychologist.

In conclusion, I feel that it has been an enjoyable experience. I have found the workshops very useful and use the workshops as a source to keep myself on track and motivated to completing the Stage Two course. Additionally I have found working with other Stage Two colleagues a tremendous source of help and a support group has been formed and developed over the last two years. I am now looking forward to the prospect of looking for a new job once I have finished writing up the research where I can develop further as an applied health psychologist. Additionally I hope to be able to have some free time to dedicate to private teaching work and undertaking research projects.

Section D: Systematic Review

Section C: Professional Practice

4.0 Conduct a Systematic Review

The Role of Engagement and Disengagement Coping Strategies in Aiding Recovery and Adjustment to Breast Cancer

Background

Breast cancer is the most common cancer among women, and the second leading cause of cancer related deaths after lung cancer. The breast cancer illness poses several challenges for women, one being how they employ strategies to cope with the disease. How women cope with their diagnosis of breast cancer can have an effect on their quality of life.

Coping strategies can be defined as engagement and disengagement. Engagement coping is characterised by responses which involve orienting toward the source of stress or one's emotions by attending to and processing threat-relevant information, attempting to regulate one's responses to the stressor such as, thoughts, emotions, behaviour, and physiological arousal and developing plans of action to cope with the stress.

Disengagement coping responses in contrast, are characterised by orienting away from the source of stress and one's emotional responses. These coping responses can be described as cognitive and behavioural avoidance, suppression of unwanted thoughts, emotions and denial.

Objectives

This review seeks to answer the following question: "Does the type of coping strategy (engagement/disengagement) employed by women with breast cancer influence their chances of adjustment and recovery to the disease".

Search strategy

Electronic searching of the following databases: such as Ovid Medline, Cochrane database for systematic reviews, PsychInfo, Cochrane reviews search for breast cancer, Embase, EBM Reviews full text- Cochrane DSR, ACP Journal Club, DARE and British Nursing Index (BNI). Hand-searching took place of selected reference lists.

Inclusion criteria

Studies were included if they met the following criteria:

- 1) Studies that specifically investigated coping strategies and their effect on recovery and adjustment to breast cancer.
- 2) Studies conducted within the last fifteen years.
- 3) Studies that used women with a breast cancer diagnosis.
- 4) Studies using longitudinal, prospective longitudinal and cross-sectional design in addition to randomised controlled trials.

Exclusion Criteria

The following studies were eliminated as:

- 1) They investigated coping in spouses of breast cancer sufferers.
- 2) They focused on coping in non-breast cancer sufferers.
- 3) Or they dealt with therapeutic interventions and coping.
- 4) Research where women had other breast problems.

There were no restrictions on variables such as age, culture, stage of illness, occupational class or education.

Data collection and analysis

Data was extracted and methodological quality was assessed independently by two reviewers and any discrepancies were resolved. The studies were reviewed by a third reviewer as a quality check and differences in judgement were resolved accordingly.

Main results

Nine studies met the inclusion criteria for the review. All of the studies had the primary aim of looking at how the role of coping strategies influenced adaptive and maladaptive outcomes in breast cancer patients.

Reviewers' conclusions

The type of coping strategy used by patients with breast cancer does determine adaptive and maladaptive outcomes. Those who used engagement coping strategies experience less distress, anxiety, improved quality of life than those who used disengagement coping strategies. Those who used disengagement coping strategies experience higher levels of distress and anxiety which had a negative effect on their quality of life. The findings imply that interventions teaching engagement coping strategies would be beneficial for breast cancer patients, while discouraging the use of disengagement coping strategies would be important for all patients.

Background

Breast cancer is the most common cancer among women, and the second leading cause of cancer related deaths after lung cancer. The World Health Organisation (WHO) estimates that 1.2 million people were diagnosed with breast cancer worldwide in 2001 (Gunes, Chick, & Zepnep, 2004). The highest rates of breast cancer are in the United States of America, Australia, New Zealand, South America, Eastern and Western Europe (Radice and Redaell, 2003).

To be diagnosed with breast cancer is a devastating event for a woman. Common responses to the diagnosis of cancer can consist of three phases: phase I, the initial response, disbelief and denial, phase II dysphoria, a time during which the patient is slowly acknowledging the reality of the diagnosis and phase III longer term adaptation during which more long-lasting and permanent adjustment occurs (Holland and Gooen-Piels, 2000).

Stress and Coping Framework of Lazarus and Folkman (1984)

Lazarus and Folkman (1984) suggest that adjustment to a stressful situation is influenced by the characteristics of the stressful situation along with attributes of the individual (i.e. personality trait and demographics), the individual's situation-specific cognitive appraisals, and the coping strategies the individual uses to manage the situation. Lazarus and Folkman (1984) also described how the individual's assessment can result in an attempt to control the threat with emotions (emotion-focused coping) or to control it through the use of problem-solving (problem-focused coping). In emotion-focused coping the individual changes the meaning or perception of the stressful situation. The person may cope by denying the facts or refusing to acknowledge the situation. With problem-focused coping the individual changes the environment or self. The person copes by defining the problem, considering alternatives and finding solutions.

Engagement and Disengagement Coping Strategies

Coping strategies have been characterised into two broad classes, namely engagement and disengagement coping. Engagement coping strategies are those that change one's emotions or thoughts about a stressor, or ones that involve effortful behaviour to reduce the stressor. Engagement strategies consist of active coping, (active search for information, optimistic outlook on disease, considering illness as a challenge, positive reframing, acceptance, seeking support and having a "fighting spirit") (Yang, Brothers, & Anderson, 2008). In contrast disengagement strategies can be described as emotions, cognitions, or behaviours that attempt to lessen the impact of the stressor through avoidance or escape. This has included emotional coping strategies such as avoidance, non-expression of emotions, repression, behavioural distancing, denial and helplessness/hopelessness (Cousson-Gelie, 2000).

Engagement coping strategies have generally been associated with positive outcomes such as better quality of life, less psychological distress, positive adjustment and recovery to the disease. Disengagement coping strategies have been found to be related to increased distress in breast cancer patients. Greer (1991) found patients who reacted with a fighting spirit were significantly more likely to live and be free of recurrence than patients with fatalistic or helpless responses.

Aymanns, Fillip, & Klauer (1995) found in contrast that rumination, defined as “focussing upon the implications of the disease for one’s life” combined with a failure to minimize the threat of cancer was associated with poorer psychological adjustment. A further study found a link between avoidant coping or negative coping suggesting that it was a strong predictor of poorer adjustment. Women who showed more avoidant coping had more distress and a poorer quality of life (McCaul et al., 1999).

Similarly, Scholl, Harlow, Brandt, & Stolbach (1998) used five models to examine the relationship among disease stage (i.e., Stage II versus Stage IV) age, coping style, and psychological adjustment in 100 women diagnosed with breast cancer. Women in the study with higher levels of coping (fighting spirit) and less maladaptive coping styles (e.g., hopelessness/helplessness and fatalism) had lower levels of depression and anxiety and a higher quality of life. One other predictor of how coping styles can influence psychological adjustment to breast cancer is control. Taylor, Lichtman, & Wood (1984) found a main effect for personal control beliefs in predicting psychological adjustment to cancer such as patients reporting that one could control one’s cancer and the belief that others could control the cancer were significantly associated with better psychological adjustment.

In addition optimism has been demonstrated to show adaptive outcomes when receiving a diagnosis of breast cancer. In contrast Carver et al. (2003) found pessimism predicted disruption in social and recreational activities among breast cancer patients. Some studies have reported results that optimists confronting difficult/stressful situations experience less distress than pessimists (Raikkonen et al., 1999 and Schou et al., 2004). The mechanism that mediates the positive effect of optimism has been attributed to the different strategies that optimists and pessimists use to cope with stress (Matthews et al., 2004). This study found that optimists used more acceptance active coping and less avoidance/denial than pessimists.

Objectives

This review seeks to answer the following question: “Does the type of coping strategy (engagement/disengagement) employed by women with breast cancer influence their chances of adjustment and recovery to the disease?”

Engagement coping strategies were defined as, optimism, control, emotional approach coping, acceptance, positive reframing, social support, religion, emotional expression and fighting spirit. Disengagement coping strategies were defined as emotion-focused disengagement, pessimism, hopeless/helpless, denial, behavioural disengagement and avoidance coping. Coping strategies influence outcomes such as adjustment and recovery to the disease, distress and quality of life.

Criteria for considering studies for the review:

Types of studies

Longitudinal design, prospective longitudinal design, cross-sectional design and randomised controlled trials were considered for inclusion.

Types of participants

All of the studies included women diagnosed with Stage 1, Stage II, Stage III, Stage IV breast cancer, non-metastatic and recurrence of breast cancer within the age range of twenty-eight to seventy-five years.

Types of outcome measures

All of the studies had the primary aim of looking at how the role of coping strategies could influence adaptive and maladaptive outcomes in breast cancer patients. The outcomes were measured using self-reports of coping responses with reliable and validated questionnaires. Participants were followed up at initial assessment and at various follow ups of three, fourth, six and twelve months. One study had a follow up period of two years after diagnosis.

Search strategy for identification of studies

Studies included in this review were derived from two main sources: electronic databases, and reference lists of key studies. The databases searched for studies published between 1980 and 2008.

The following databases were searched:

- 1) Ovid Medline (1996- week 3, June 2008) 29/6/08.
- 2) Cochrane Database for Systematic reviews (2004-2008- 2nd quarter) 29/6/08.
- 3) Psycho-Info (2000- week 4, July 2008) 20th and 29th July 2008.
- 4) Cochrane Reviews search for breast cancer (20th July, 2008).
- 5) Embase (1980-2008 week 27) 9th July 2008.
- 6) EBM Reviews full text- Cochrane DSR, ACP Journal club and DARE. 11th July 2008
- 7) British Nursing Index (BNI) 11th July 2008

Reference lists of relevant papers for the topic area and the review studies were searched for studies not identified by the original search.

The search terms were:

- 1) Breast
- 2) Cancer
- 3) Oncology
- 4) 1 or 2 or 3
- 5) Adaptation, Psychological/or coping
- 6) Engagement
- 7) Disengagement
- 8) Strateg\$
- 9) Denial, or “Denial (Psychology)”
- 10) Optimism
- 11) Fighting Spirit
- 12) Adjustment or Social Adjustment
- 13) 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12
- 14) 4 and 13
- 15) 6 and 7
- 16) 4 and 15
- 17) Recovery
- 18) 4 and 13 and 17

After searching all of the databases, forty papers were selected for consideration. On further analysis nine studies were chosen for the review as they adhered to the inclusion criteria.

Methods of the review,

The methodological quality of each study was assessed to provide the following:

- 1) Clear definition of the aims of the study.
- 2) A description of the study design (sufficiently detailed to allow replication).
- 3) Study population.
- 4) Inclusion and exclusion criteria.
- 5) Response rate of potential participants.
- 6) Reported attrition rates for each group
- 7) Appropriate measures.
- 8) Follow-up points.
- 9) Reporting of all outcomes targeted as indicated in the aims of the study.

Quality Assessment

In addition, all studies were reviewed for the presence/absence of methodological qualities:

- 1) Is the population clearly described?
- 2) Response rate.
- 3) Pre-intervention data for each group.
- 4) Sample size justification (or discussion of statistical power).
- 5) Measures reported objectively and reliable.
- 6) Coping strategies/outcomes identified and the aims of the study achieved.
- 7) Number of follow-up points.

Two reviewers independently assessed each study. A third reviewer assessed the studies as an additional quality assurance measure, and changes were made accordingly in consultation with the other two reviewers.

The following quality assessment scoring system was used:

- 1) Is the population clearly described: (2 = Information given, 1= some description and 0 = no information given).
- 2) Response rate: (2=Information given, 1 =some description and 0= no information given).
- 3) Pre-intervention data for participants: (2 =Information given, 1=some description and 0= no information given).
- 4) Sample size justification: (2=100 or more participants participated in study or 1= discussion of statistical power, yes, but did not get enough participants and 0= not mentioned).
- 5) Measures used reported: (3=Yes, all measures used reported, 2= explanation of measures used, 1= brief explanation of measures and 0= no measures used reported).
- 6) Attrition rate: (3= Lost to follow up rate mentioned and reasons why, 2= briefly mentioned and 0 = not mentioned).
- 7) Coping strategies/outcomes identified and the aims of the study achieved: (3= Coping/Strategies/outcomes identified and hypothesis met significant result, 2= explanation of results/coping strategies/outcomes given and not significant result).
- 8) Number of follow-up points: (1 = Follow up after initial assessment, 2= 2 follow-ups after initial diagnosis of cancer and 3= 3 follow-ups).

The studies were assessed qualitatively, when summarizing the results; e.g. studies were categorised as high, (16-20 points) intermediate (11 to 15 points) and low quality (6 to 10 points). The main emphasis on the reviewing process was to see if coping style predicts maladaptive or adaptive outcomes and whether the aims/hypothesis of the study was achieved.

Table 1. Quality Assessment.

Study Details	Quality assessment overall score
Stanton et al. Citation: Journal of Consulting and Clinical Psychology Year: 2000	17.5
Carver et al. Citation: Journal of Personality and Social Psychology. Year: 1993	12
Schou et al. Citation: Psycho-Oncology Year: 2005.	18
Oswiecki, & Compas. Citation: Cognitive Therapy and Research Year: 1999.	13
Holland, & Holahan Citation: Psychology and Health Year: 2003.	11
Cousson-Gelie Citation: European Review of Applied Psychology Year: 2000	12

Table 1. Quality Assessment.

Study Details	Quality assessment overall score
Reddick et al. Citation: Journal of Psychosocial Oncology Year: 2005	18.5
Yang et al. Citation: Annals of Behavioural Medicine Year:2008	16
Roussi, Krikeli, Hatzidimitriou and Koutri Citation: Psycho-Oncology Year: 2007	13

Description of studies

The studies included in the review had participants who originated from Norway (Schou et al., 2005), France (Cousson-Gelle, 2000), Greece (Roussi et al., 2007) & the USA (Carver et al., 1993, Holland & Holahan, 2003, Stanton et al., 2000, Yang et al., 2008, Oswiecki & Compas, 1999 & Reddick et al., 2005). Most of the studies took place took place in a cancer centre, two at local hospitals and the remaining two studies took place within a cancer institute.

Six of the studies looked at the effects of coping style and how this could influence maladaptive and adaptive outcomes such as quality of life, distress, mental health, interaction on anxiety/depression symptoms and fatigue (Cousson-Gellie, 2000, Reddick et al., 2005, Roussi et al., 2007, Stanton et al., 2000, Oswiecki, & Compas, 1999 & Yang, Brothers, & Andersen, 2008). One study examined perceived social support and coping to positive adaptation to breast cancer (Holland & Holahan, 2003).

Two other studies looked at how coping mediates the effects of optimism and pessimism on quality of life and distress (Carver et al., 1993 & Schou et al., 2005). Most of the studies used quantitative methods consisting of various questionnaires to assess coping and adjustment. Only one study (Osowiecki & Compas, 1999) used a structured interview to collect information on patient demographics and perceptions of control. All of the studies used more than one measure (see Appendix A). In all of the studies the questionnaires used had been validated or employed in previous studies and all measures reported from all of the studies had adequate internal consistency and construct validity.

A total number of 809 participants were targeted across the nine different studies. The lowest number of participants in a study was fifty-six (Holland & Holahan, 2003) and the highest was approximately 165 (Schou et al., 2005). A wide variety of coping strategies were measured such as Engagement, optimism, control, emotional approach coping, acceptance, religion, positive reframing, emotional expression and fighting spirit, social support, disengagement, emotion-focused disengagement, pessimism, hopeless/helpless, denial, behavioural disengagement and avoidance coping.

Many of the coping strategies were related to outcomes such as adjustment and recovery to the disease, distress and quality of life. Three of the studies (Schou et al., 2005, Holland & Holahan, 2003 & Reddick et al., 2005) used a theoretical model to provide the conceptual basis for the studies. Lazarus and Folkman (1984) was the most commonly cited theory. The theory posits that coping is a process involving an initial appraisal, the threat, and an appraisal of the situation and coping strategies. The way a woman copes with the diagnosis of breast cancer depends largely upon her appraisal of whether the diagnosis poses a threat, a challenge or potential harm/loss, or some combination of these and the coping strategy she uses. The participants were women diagnosed with breast cancer in different stages of the illness. Of the nine studies reviewed, seven included women diagnosed with early stage cancer. The remaining sample of participants had recently been diagnosed with recurrence of breast cancer and Stage 1, 11, 111 or 1V breast cancer.

In half of the sample women were undergoing treatment, and in the remaining sample they had either completed it, or the study did not indicate whether treatment was still being received. Inclusion criteria and exclusion criteria seem too vary across all of the studies. Six of the studies did not indicate whether any criteria were used for the studies. One study exclusion criteria was previous or current cancer diagnosis other than breast, neurological disorders and dementia and the inclusion criteria was women had to be diagnosed with their first recurrence of breast cancer (Yang et al., 2008).

The criteria for one other study, (Schou et al., 2005) was that women had to be newly diagnosed with operable breast cancer, have no other major disabling medical or psychiatric condition, have the ability to read and write Norwegian and be aged eighteen or older. Holland & Holahan (2003) study excluded patients with mental or debilitating physical illness.

Methodological quality

All of the studies reported on demographics variables such as age, mean age of sample, education, employment/occupation marital status. In addition all studies reported on the number of participants participating in the research and diagnosis of breast cancer. Five of the studies included participant's ethnicity in their studies, (Holland & Hollohan, 2003, Carver et al., 1993, Stanton et al., 2000, Yang et al., 2008, Reddick et al., 2005). Two of the studies observed how religion is used as a coping strategy in their sample of participants, (Carver et al., 1993 & Reddick et al., 2005).

Only four of the studies provided information on the response rate, these vary from 97.3%, 83%, 79% and 70% (Yang et al., 2008, Stanton et al., 2000, Reddick et al., 2005 & Schou et al., 2005). All of the studies recruited participants during a scheduled appointment to discuss their illness. Participants were asked to participate in the studies by medical/research staff. One study recruited participants to participate in a federally funded, randomized controlled trial that measured effectiveness of a coping strategy program (Reddick et al., 2005).

Six of the studies collected baseline data from participants, (Schou et al., 2005, Cousson-Gellie, 2000, Holland & Holahan, 2003, Reddick et al., 2005, Carver et al., 1993 & Yang et al., 2008). Two of the studies did not indicate whether they collected baseline data from participants. (Roussi et al., 2007 & Osowiecki & Compas, 1999). One study did not indicate that they collected baseline data, however they did monitor the patients by telephone until treatment was completed and then patients were enrolled in the study (Stanton et al., 2000).

Only two studies had a sample of more than one hundred participants (Reddick et al., 2005 & Schou et al., 2005). Schou et al. (2005) had 165 participants at both of the assessment points, one being at initial diagnosis and twelve months after breast cancer surgery. Reddick et al. (2005) had 138 participants who took part in the study at the initial assessment. The remaining seven studies had a sample group of participants of under 100 (Carver et al., 1993, Cousson-Gellie, 2000, Holland & Holahan, 2003, Roussi et al., 2007, Stanton et al., 2000, Osowiecki & Compas, 1999 & Yang, et al., 2008). Only two studies mentioned sample size justification (Osowiecki & Compas, 1999 & Reddick et al., 2005). However this was mentioned in relation to future research to use a bigger sample size to test for statistical power and to increase the strength of any future studies.

Only four studies reported attrition rates (Cousson-Gellie, 2000, Schou et al., 2005, Yang et al., 2008 & Stanton et al., 2000). These attrition rates were 32%, 21.3%, 21% and 9%. All studies assessed whether participants used coping strategies to cope with diagnosis of breast cancer and at various stages of the disease. Three studies found that (Cousson-Gellie, 2000, Yang et al., 2008 & Stanton et al., 2000) engagement coping was related to improved quality of life, positive adjustment and recovery that coping through disengagement was related to greater distress, poor adjustment and recovery for breast cancer patients.

One other study found a similar result (Roussi et al., 2007) such as participants who used emotion-focused engagement at pre-surgery combined with social support experienced less distress three months later than participants who did not use any emotion-focused engagement coping. In addition perceived social support and coping were associated with positive adjustment to breast cancer and avoidance coping strategies were negatively related to psychological well-being (Holland & Holohan, 2003). One of the earlier studies included in this review (Carver et al., 1993) found that engagement coping strategies such as acceptance, positive reframing, humour and use of religion predicted lower distress, while behavioural disengagement and denial predicted more distress. Reddick et al. (2005) concluded that participants who have better pain coping strategies also have lower levels of anxiety, fatigue and depression.

Schou, Ekeberg, & Ruland (2005) examined whether optimism/pessimism had a direct and indirect influence on quality of life. Optimists responded with 'fighting spirit' which had a positive effect on their quality of life. In contrast pessimists responded with hopeless/helplessness, which had a negative effect on their quality of life. Oswiecki & Compas (1999) assessed the effects of coping and their interaction on anxiety/depression symptoms. Engagement coping was related to lower anxiety/depression symptoms and disengagement coping was related to more anxiety/depression symptoms.

Seven of the studies had two follow up points after initial assessment (Cousson-Gellie, 2000, Holland & Holahan, 2003, Oswiecki & Compas, 1999, Roussi et al., 2007, Schou et al., 2005, Stanton et al., 2000, Yang et al., 2008). Carver et al. (1993) had three follow ups after initial assessment. These follow ups ranged from three months, six months, twelve months and two years. Reddick et al. (2005) had only one initial assessment point at study entry.

Results

Table 2. The method and outcome of the nine included studies

Author/Year and Aim.	Study Population and Care Setting	Procedure	Outcomes
Stanton et al. (2000)	Women with Stage 1 or 11 breast cancer being treated at five oncology clinics	Patients completed measures of coping strategies and psychological adjustment which they received at study entry (time 1) and three months later (time 2).	Women who, at study entry, coped through expressing emotions surrounding cancer had fewer medical appointments for cancer-related morbidities and decreased distress during the next three months compared with those low in emotional expression.

Table 2 The method and outcome of the nine included studies

Author/Year	Study Population and Care Setting	Intervention	Outcomes
Holland & Holohan (2003).	Middle class women who had been diagnosed with breast cancer attending a private oncology and surgery practices.	Patients completed measures on social support, coping strategies, and psychological well-being and health behaviours. Only one assessment.	It was hypothesized that women who had higher perceived social support would use more coping strategies. Results show that social support and coping strategies were associated with positive adjustment. Avoidance coping strategies were negatively related to psychological well-being.
Cousson-Gelie. (2003).	Women with non-metastatic breast cancer attending Insitut Bergonie.	Patients were interviewed three times before announcement of diagnosis and treatment, three weeks after diagnosis and finally two years after diagnosis.	Results show that breast cancer patients cope with the diagnosis and the disease in four ways: perceived stress, perceived social support, self-accusation and problem-focused coping.

Table 2. The method and outcome of the nine included studies

Author/Year and Aim.	Study Population and Care Setting	Procedure	Outcomes
Roussi et al. (2007).	Greek women diagnosed with breast cancer (N=72) admitted to a local public hospital	All patients were approached a day prior to surgery, two to three days after surgery and three months later. Patients completed questionnaires on coping strategies and their moods such as anxiety and tension.	Patients reported on their coping efforts and levels of distress. Acceptance and humour were negatively related to distress at all times. Participants who used emotion-focused engagement coping experienced less distress three months later than participants who did not use any emotion-focused engagement coping. The results indicate that pre-surgery use of emotion-focused engagement coping can be adaptive.

Table 2. The method and outcome of the nine included studies

Author/Year and Aim.	Study Population and Care Setting	Procedure	Outcomes
Schou et al. (2005)	Norwegian women newly diagnosed with breast cancer (N=195) from a university hospital	All the patients completed two assessments, one at diagnosis and twelve months after breast cancer surgery to investigate the relationship between optimism /pessimism and quality of life. To see if this attributed to appraisal and coping strategies.	Optimism and Pessimists had both a direct and indirect influence on quality of life (QoL). Optimists responded with fighting spirit and pessimists responded with hopeless/helplessness. The results suggest the influence of optimism and pessimism on QoL appears to be mediated by coping both before and after treatment for breast cancer.

Table 2. The method and outcome of the nine included studies

Author/Year and Aim.	Study Population and Care Setting	Procedure	Outcomes
Yang et al. (2008).	Breast cancer patients recently diagnosed with recurrence (N=65) after diagnosis and attending a medical oncology clinic in a hospital.	Two assessments completed at nine weeks after diagnosis and the follow-up was completed four months later to see if engagement and disengagement coping strategies are moderators or mediators between stress and QoL.	Engagement coping moderated the effect of symptom stress on mental health QoL , whereas disengagement coping mediated the effects of both traumatic stress and symptom stress on mental health QoL.
Reddick et al. (2005).	Women with Stage 11, 111 or 1V breast attending a cancer institute.	Only one assessment was completed. The study examined the effects of anxiety, fatigue, and depression on QoL and how coping mediates these relationships in women with breast cancer.	The findings from the study revealed that patients with better pain coping strategies also have lower levels of anxiety, fatigue and depression. The study found a racial difference in the use of religious coping strategies such as praying.

Table 2. The method and outcome of the nine included studies

Author/Year and Aim.	Study Population and Care Setting	Procedure	Outcomes
Carver et al. (1993)	Women with breast cancer Stage 1 or Stage 2 attending a private oncology clinic	The project was conducted as a series of interviews, at baseline, pre-surgery focusing on mood level and coping. Follow-ups interviews took place seven to ten days after surgery, three months, six months, and twelve months. These included coping and mood disturbance.	Optimism related inversely to distress at each point. Acceptance, positive reframing and use of religion were the most common coping reactions; denial and behavioural disengagement were the least common reactions. Acceptance and the use of humour prospectively predicted lower distress, denial and disengagement predicted more distress.

Table 2. The method and outcome of the nine included studies

Author/Year and Aim.	Study Population and Care Setting	Procedure	Outcomes
Oswiecki et al. (1999).	Women diagnosed with breast cancer (N=70) recruited from breast cancer centre.	Each patient completed a structured interview and written questionnaires assessing psychological variables. Follow-ups assessments were completed at three and six months investigating the effects of coping, perceived control and their interaction on anxiety/depression.	There were no main effects for perceived control. Problem-focused engagement coping was related to lower anxiety/depression symptoms near diagnosis. Emotion-focused disengagement coping was related to more anxiety/depression at six months and problem-focused engagement was related to lower anxiety/depression at six months.

The design methods for this review consisted of a longitudinal design (Cousson-Gelie, 2000, Carver et al., 1993, Roussi et al., 2007, Stanton et al., 2000 and Yang et al., 2008), prospective longitudinal design (Oswiecki & Compas, 1999 & Schou et al., 2005), cross-sectional design (Holland & Holahan, 2003) and randomized controlled trial, (Reddick et al., 2005). Six of the studies examined demographic and treatment variables with respect to their relationship with major study variables (Carver et al., 1993, Holland & Holahan, 2003, Roussi et al., 2007, Stanton et al., 2000, Schou et al., 2005 & Yang et al., 2008).

Roussi et al. (2007) examined the relationship between background variables and distress using Pearson's product moment correlation coefficient for the continuous variable (age) and analyses of variance (Anova) for the categorical variables (marital status, educational level, occupation, type of surgery and treatment). No relationships were found. Two of the studies had similar results with demographic variables and treatment variables in relation to the study variables (Carver et al., 1993 & Schou et al., 2005) age, chemotherapy and surgery types were found to have a significant association with the study outcome variables.

Carver et al. (1993) reported age that was correlated with distress at the three months and six months follow-ups and that post-surgical distress correlated with chemotherapy. Therefore analysis of post operative distress incorporated a control for three months of chemotherapy, and analysis of three months and six months of distress incorporated a control for age. Schou et al. (2005) found that age was correlated with quality of life variables at both assessments and that chemotherapy was associated with role functioning. In addition, type of surgery was associated with physical symptoms and role functioning at twelve months. Stanton et al. (2000) reported one significant association on dependent variables that younger women reported more distress on the Profile of Mood Scale (POMS) questionnaire than older women. Age was controlled in all analyses.

Holland & Holahan (2003) found one treatment and one demographic variable that reached statistical significance: the relation of age with avoidance coping and the relation of stage of disease with avoidance coping. Age and stage of disease were controlled in all analyses. Yang et al., (2008) reported that only marital status was significantly correlated with medical outcomes. Each study used different methods of analysis. Schou et al. (2005) used a combination of statistical analysis such as anova, t test and bivariate analyses. Spearman's correlation coefficients were performed to evaluate the relationship between independent variables and the five functional domains of the EORTC QLQ-C30 (The European Organisation for research and treatment of cancer questionnaire). This measure is used to assess quality of life in cancer patients.

Roussi et al. (2007) used repeated measures and anova's to test for variability of coping at different assessment points within the study. In addition, to reduce the probability of Type 1 error, a Bonferroni adjustment was made to the error level. Roussi et al. (2007) also conducted post hoc analyses in order to identify differences in coping at the start of the study and three months after initial assessment. Reddick et al. (2005) included means and standard deviations that were computed for each of the outcome measures, stratified within each coping scale. Additionally, the Pearson product-moment correlation coefficients, bivariate correlations and multiple regression statistical analysis were used to test for relationships between coping and depression anxiety and fatigue.

Cousson-Gelie (2000) used a path analysis to test the mediating effects of the adjustment strategies between predictors and criteria. To test for the eventual moderating effect of the adjustment strategies, multiple regression analyses was used. Oswiecki & Compas (1999) used Manovas to see if any significant changes occur with coping and control variables over time. In addition correlation analyses were used to see whether perceived control was significantly related to anxiety/depression symptoms.

Oswiecki & Compas (1999) used linear multiple regression equations. These were constructed at each time point to examine the effects of the demographic variables such as stage, perceived control, problem-focused coping and the interaction of coping and control on psychological distress. Yang et al., (2008) used repeated measures anova to examine whether any changes occurred in the participant's quality of life from initial to follow-up assessment.

In addition, to test for the role as a moderator, four separate hierarchical multiple regression tests were conducted. For the tests of coping as a mediator, four path analyses were conducted. For both the moderation and mediator analyses, initial quality of life was controlled. Holland & Holahan (2003) study used an exploratory path model which was tested using multiple regression techniques. In the path analysis, approach coping strategies were restricted to confrontive coping, problem solving and positive reappraisal. Stanton et al. (2000) used multiple regression tests in their study with age and initial values on the dependent variables as the covariates and coping scales as predictors. Multiple regression analyses were also performed to assess the interaction of hope and emotionally expressive coping for predicting the dependent variables.

Carver et al. (1993) the first aspect of the data analysis was descriptive, namely the nature of the patients' experiences across time. Repeated measures analyses yielded significant overall effects. Correlations analysis tests were used to examine whether optimism was related to coping and if coping was related to distress. The final statistical test used was path analyses to examine direct paths and indirect paths (through coping) between optimism and distress.

A brief description of the nine studies is presented in the following sections according to the stage of breast cancer diagnosis, (newly diagnosed with breast cancer, Stage I, Stage II, Stage III, Stage IV and recurrence of breast cancer). The main focus for this review is, "Does the type of coping strategy employed by women with breast cancer influenced adaptative or maladaptative outcomes in terms of adjustment and recovery to the disease?"

Newly diagnosed with breast cancer

Roussi et al. (2007) explored how Greek women (N=72) diagnosed with breast cancer reported on their coping efforts and levels of distress the day before surgery, three days after surgery and three months later. Acceptance and humour were negatively related to distress at all three time points, whereas denial and emotional expression were positively related to distress post-surgery and three months later. Additionally the relationship between patterns of coping and distress was also examined.

Participants who used emotion-focused engagement coping at pre-surgery (defined as acceptance or emotional expression combined with social support) experienced less distress three months later than participants who did not use any emotion-focused engagement coping. The last part of the study explored flexibility (explained as the use of multiple coping strategies) was found to negatively predict distress. In conclusion the results indicate that pre-surgery use of emotion-focused engagement coping can be adaptive and that the adaptive of each stressor may vary as the stressor evolves. The reviewers judged this to be of intermediate quality (see Appendix B, Quality Assessment System)

Osowiecki & Compas (1999) assessed how coping and perceived control interacted on anxiety/depression symptoms in seventy women with breast cancer near their diagnosis at three and six months follow ups. Problem-focused engagement coping was related to lower anxiety/depression near diagnosis. Emotion-focused disengagement coping was related to more anxiety/depression symptoms at six months. Problem focused engagement was related to lower anxiety/depression symptoms at six months.

In addition, the interaction of problem-focused engagement coping and perceived control was a significant predictor of lower anxiety/depression symptoms only near the time of diagnosis. There were no main effects for perceived control. The reviewers judged this to be of intermediate quality (see Appendix B, Quality Assessment System).

Schou et al. (2005) explored the relationship between optimism-pessimism and quality of life and whether it attributed to the appraisal and coping strategies of women diagnosed with breast cancer. Patients completed several measures at diagnosis and twelve months after breast cancer surgery. Optimism-pessimism had both a direct and indirect influence on quality of life. Two coping strategies were found to influence coping strategies: 'fighting spirit' and hopeless/helpless.

Optimists responded with 'fighting spirit', which had a positive effect on their quality of life. In contrast, pessimists responded with hopeless/helplessness, which had a negative effect on their quality of life. The relationship between pessimism and quality of life at time of diagnosis was also mediated by appraisal, such as threat. The results suggest that the influence of optimism and pessimism on quality of life appear to be mediated by coping before and after treatment for breast cancer. The reviewers agreed that this study is categorized as high quality.

Stage I, Stage II, Stage III or IV breast cancer

Holland & Holahan (2003) examined the relation of perceived social support and coping to positive adaptation to breast cancer. Participants had been diagnosed with Stage I or Stage II breast cancer. Results indicated that perceived social support and approach coping strategies were associated with positive adjustment. Avoidance coping strategies were negatively related to psychological well-being. If the study had focused on negative health behaviours a relationship between avoidance coping and health behaviour may have been found. The reviewers classed this study to be of intermediate quality.

Carver et al. (1993) examined how patients with breast cancer reported on their overall optimism about life: one day pre-surgery, ten days post surgery, and at three, six, and twelve months follow ups, their recent coping responses and distress levels. Optimism related inversely to distress at each time point. Acceptance, positive reframing, and the use of religion were the most common coping reactions. Denial and disengagement predicted more distress. Further analyses of the data revealed that several coping reactions played mediating roles in the effect of optimism on distress.

All the reviewers classed this study to be of intermediate quality. Stanton et al. (2000) tested the hypothesis that coping through emotional approach (involving actively processing and expressing emotions) enhances adjustment and health status for breast cancer patients. Patients (N=92) completed measures within twenty weeks after medical treatment and three months later. Patients at the initial assessment who coped through expressing emotions surrounding cancer had fewer medical appointments for cancer-related morbidities, enhanced physical health and vigour, and decreased distress during the next three months compared with those low in emotional expression.

Expressed coping also was related to improved quality of life for patients who perceived their social contexts as highly receptive. These findings suggest that an effective ingredient of positive adjustment to a diagnosis of breast cancer is the ability to express emotions surrounding one's experience. The reviewers judged this to be of high quality. Cousson-Gelie (2000) investigated the structure of the adjustment strategies to gain insight into the mediating or moderating effects of these strategies used by patients (N=75) diagnosed with Stage II breast cancer. Patients were assessed at two follow-up points, three weeks and two years after diagnosis.

The data revealed that patients with breast cancer reacted in four ways: being stress, using social support, self-accusation and problem-focused coping. In contrast perceived stress and self-accusation were associated with poor subsequent adjustment. Results did not show any favourable effect for problem-focused coping on quality of life. Results indicate that coping strategies mediate the relationships between trait-anxiety and quality of life. Therefore it is reacting with distress (stress and anxiety) at the announcement of the diagnosis that mediates these relationships.

In conclusion, the results suggest that coping strategies have a mediating but not a moderating effect in the relationship between predictors and criteria. This study was assessed as being of intermediate quality by the reviewers. Reddick et al. (2005) examined the effects of anxiety, fatigue and depression on quality of life in patients (N=138) with Stage II, III and IV breast cancer. The study examined how coping mediates these relationships and looked at racial differences in types of coping, anxiety, fatigue and depression.

Results indicated that the type and intensity of coping used by patients are related to their experiences of fatigue, anxiety and depression. Patients who had higher overall coping scores reported less psychological distress than women with lower overall coping scores. Patients who coped by ignoring pain, using positive coping self-statements and increasing behavioural activities reported less depression than patients who reported reinterpreting pain sensations, diverting attention from pain and praying or hoping.

Also the women who reported using positive coping self-statements also reported lower anxiety. Type of coping exerted a greater influence on depression than on fatigue or anxiety. Reddick et al. (2005) also found a racial difference in the use of coping strategies. African-American patients scored significantly higher on praying and hoping than Caucasian patients. The patients reported that their relationship with God was one of the main supports that allowed them to get through difficult times. The reviewers assessed this study to be of a high standard.

Recurrence of Breast Cancer

Yang et al. (2008) investigated the longitudinal relationships between stress, coping, and quality of life with patients (N=65) diagnosed with recurrence of breast cancer. Engagement and disengagement coping strategies were tested as moderators or mediators between stress and quality of life. Results indicate that engagement moderated the effect of symptom stress on mental health quality of life, whereas disengagement coping mediated the effects of traumatic stress and symptom stress on mental health quality of life.

Yang et al. (2008) results also state that engagement coping was identified as a plausible moderator and that disengagement coping served as a mediator. For example, patients are more likely to use disengagement coping strategies as their stress level (of either type) increased, therefore the increase in the use of disengagement coping predicted poorer quality of life. For a small subset of patients using frequent engagement coping in the face of physical symptoms, their quality of life was maintained. For their traumatic stress, frequent use of engagement coping was not as effective. The reviewers categorized this study to be of a high quality.

Summary of analyses

Conducting a meta-analysis was considered to be inappropriate, due to the heterogeneity in follow-up assessments, different stages of breast cancer, ethnicity and socio-economic group differences for this review.

Discussion

The results of this review are positive in that all nine studies demonstrate a relationship between the types of coping strategy employed and whether the outcome is adaptative or maladaptative. Results showed that engagement coping style leads to better prognosis in terms of quality of life and adjustment and a disengagement coping style predicts poor adjustment, distress and depression. The findings demonstrated in this review imply that individuals identify the changing demands of a situation as it evolves and employ the appropriate coping strategies to meet those demands that may be important for successful coping.

Strengths and weaknesses of the review

One limitation of this review is the lack of previous systematic reviews carried out in this area of research. Systematic reviews assessing the effects of psychological interventions on survival outcomes for women with breast cancer appear to be absent from the literature. By including breast cancer patients with engagement coping behaviour patterns, interventions may potentially be more effective. One other weakness of the review is the sample size of six studies was extremely small. This has implications when attempting to apply the findings of the whole population of breast cancer sufferers in that it is unrepresentative.

Most of the studies included a cultural element other than the 'white western' norm. Some of the African-American breast cancer patients used religious beliefs to help them cope with breast cancer. There are complications that could have arisen in some of the studies of this nature, which may make them vulnerable to bias and wide variations in outcomes such as the aggressiveness of the underlying disease. This would not be known prior to participating in the research and cannot be controlled for. Secondly, when the number of participants decline at long term follow-up, the risk of underlying disease characteristics or death may affect the study outcomes.

Also, when examining the review findings, the patients used only one method of coping such as engagement or disengagement strategy. Patients could have used more than one approach, e.g. they could feel positive and adopt a problem focused approach one day but may use a disengaging strategy another day. Patient's attitudes and thoughts toward their illness may not be static but could undergo changes. Six of the studies participants consisted of breast cancer patients with middle class status. Two other studies did not mention socio-economic status. One study sample group reflected the coping of patients with low socio-economic status. This has several limitations. Firstly it reflects the coping of a specific section of the population, women with middle class socio-economic status. Secondly, it limits the generalisation of the review findings. Lastly women with a higher socio-economic status may have more resources available to them than lower socio-economic women.

Three of the studies in the review used the same measures, namely the Profile of Mood Scale, Coping Orientation to Problems Experienced and Life Orientation Test. The remaining studies used a combination of different measures. Standardisation of outcomes and instruments to assess studies is vital for future research. Most of the studies used a longitudinal design, with the exception of two studies. One used a cross-sectional design and one study was a randomized controlled trial. All of the studies had different follow-ups assessments and participants were at different stages of the breast cancer disease trajectory. Thus, a meta-analysis was not appropriate for this review.

Although a detailed component analysis was not conducted, it is possible to gain insights from the studies reviewed concerning how women cope with breast cancer. The studies included in the review are consistent with wider evidence of coping in women with breast cancer (Greer, 1991, McCaul et al., 1999 & Scholl et al., 1998). It has increased our understanding of how women cope with the diagnosis of breast cancer and the experience of living with cancer and how these coping strategies develop over time. Two of the studies looked at the relationship between optimism-pessimism and the effects on distress and quality of life. Results suggest that the influence of optimism and pessimism on quality of life and distress appears to be mediated by coping at various follow-ups points throughout both studies.

Patients used various coping reactions such as engagement and disengagement strategies to cope with the diagnosis of breast cancer. Seven other studies found a link between social support, emotional approach coping strategies and problem-focused engagement which led to positive outcomes such as lower anxiety/depression, positive adjustment and enhanced health/quality of life status for participants. In contrast participants who endured poor adjustment, greater levels of distress and higher anxiety levels used disengaging styles, for example helplessness, avoidance, denial and hopelessness.

Implications for Practice

These findings have important implications for practice. From the review studies it is apparent that women use a variety of coping strategies to cope with diagnosis, treatment and survival of breast cancer. Healthcare professionals need to be aware of these when designing any interventions for breast cancer patients. Also, what is effective for one stressor (e.g. changes in appearance) may not be effective for another (e.g. fears/anxiety of treatment options). Interventions need to be personalised in that one intervention may not be suitable for all people and coping strategies may need to attend to specific stressors and specific strategies. All patients would benefit from being taught coping skills on how to cope with breast cancer for better outcomes.

The results suggest that they may also benefit from being taught specific coping skills based on the particular stressor, such as interventions that focus on social support and building communications which may be most effective for improving family relationships. However educational interventions may be most useful in enhancing patient relationships with healthcare providers (Okamura et al., 2003). The findings from this review add to the literature suggesting that women with disengagement coping strategies are at greater risk for poor adjustment to breast cancer. In addition health care professionals could identify women at risk of poor adjustment by using a short measure for optimism for example, the Life Orientation Test Revised, (LOT-R).

This could be administered to women around the time of diagnosis to identify women with disengagement coping strategies. Secondly, women who are giving up on life could be identified at any one of numerous medical appointments throughout the first year by assessing for behavioural disengagement and fatigue as this variable could be more than a treatment side effect and indicate that women may be at risk of giving up on life.

Also the ongoing health care professional/patient relationship may establish rapport and communication patterns which will provide a framework for assessing situational changes and structuring coping interventions. This could be providing information and local resources to women regarding appropriate exercise to relieve anxiety and depression. Additionally suggesting or referring women and their families to counsellors to assist them with partner and family outcomes, and providing spiritual resources to help cope with fear and anxiety.

Both initial and subsequent patient assessments will provide the basis for recommending tailored strategies which breast cancer patients may find useful as they confront different stressors during diagnosis, treatment, and survival. In conclusion, gearing interventions and clinical practice towards how to cope with specific stressors, removing barriers to effective coping, avoidance of negative thinking and enhancing patients' coping flexibility may be the answer in maximizing outcomes for women with breast cancer.

Implications for research

All the studies within this review had short follow-ups assessment points with the longest being two years. Two years is a relatively short time, and is often filled with treatment options and activities. It would be interesting to follow a larger sample of women longitudinally, beginning immediately at diagnosis. Breast cancer sufferers may find different kinds of support and coping strategies to be more helpful when dealing with longer term issues such as the threat and experience of recurrence. From this review is clear that more research is needed on the impact of cancer on the psychosocial functioning of breast cancer patients, especially survivors from black and minority ethnic groups.

Given the growing population of survivors of breast cancer exploring the pattern of coping with the illness and treatments effects is critical. This information would equip health care professionals to intervene to improve the overall quality of life of breast cancer sufferers. Also some of the coping strategies breast cancer sufferers use may be elude from psychometric assessment such as being physically active, seeking information, resting, using medications, complementary and alternative therapies (Manuel et al., 2007). In light of this research, some measures may need to be adapted and updated to improve our understanding of coping with breast cancer.

Further qualitative research is required to provide a more complete picture of coping in this population. This qualitative research will help clinicians to develop interventions and improve clinical practice guidelines. Further studies with follow-up agreed stages, standardisation of outcomes and instruments to assess them are vital. Decisions about which measures and when to assess follow-up should be made in the light of the methods of existing research already completed. In conclusion, despite these limitations, the review findings can influence interventions for women with breast cancer and help them adopt engagement coping strategies and to be informed about the consequences of adapting disengagement strategies, for example increased levels of distress, anxiety and poorer adjustment to the diagnosis of breast cancer.

References

1. Aymanns, P., Fillip, S., & Klauer, T. (1995). Family Support and coping with cancer: some determinants and adaptive correlates. *British Journal of Social Psychology*, 34, 107-124.
2. Carver, C. S., Lehman, J.M., & Antoni, M. H. (2003). Dispositional pessimism predicts illness-related disruption of social and recreational activities among breast cancer patients. *Journal of Personality and Social Psychology*, 84, 813-821.
3. Cousson-Gellie, F. (2000). Breast cancer, coping and quality of life. *European Review of Applied Psychology*, 50, 315-320.
4. Greer, S. (1991). Psychological responses to cancer. *Psychological Medicine*, 21, 43-49.
5. Gunes E. D., Chick, S. E., & Zeynep. A. (2004). Breast cancer screening services: trade-offs in quality capacity, outreach and centralisation. *Health Care Management Science*, 7, 291-303.
6. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.
7. Matthews, K. A., Raikkonen, K., Sutton-Tyrrell K., & Kuller L .H. (2004). Optimistic attitudes protect against progression of carotid atherosclerosis in healthy middle-aged women. *Psychosomatic Med*, 66 (5): 640-644.
8. McCaul, K., Sandgren, A., King, B., O'Donnell, S., Branstetter, A., & Foreman, G. (1999). Coping and adjustment to breast cancer. *Psycho-Oncology*, 8, 230-236.

9. Okamura, H., Fukui, S., & Nagasaka, Y. (2007). Psycho-educational intervention for patients with primary breast cancer and patient satisfaction with information: an exploratory analysis. *Breast Cancer Res Treat*, 80 (3):331-338.
10. Radice, D., & Redaell, A. (2003). Breast cancer management. *Pharmacoeconomics*, 21, (6), 383-396.
11. Raikkonen, K., Matthews, K. A., Flory, J., Owens, J., & Gump, B. (1999). Effects of optimism, pessimism, and trait anxiety on ambulatory blood pressure and mood during everyday life. *Journal of Personality and Social Psychology*, 76 (1): 104-113.
12. Schnoll, R., Harlow, L., Stolbach, L., & Brandt, U. (1998). A structural model of the relationships among stage of disease, age, coping, and psychological adjustment in women with breast cancer. *Psycho-Oncology*, 7, 69-77.
13. Taylor, S. E., Lichtman, R., Wood, J., Blum, A., Dosik, G., & Leibowitz, R. (1985). Illness-related and treatment-related factors in psychological adjustment in breast cancer. *Cancer*, 55, 2506-2513.
14. Yang, H. C., Brittany, M., Brothers, M., & Andersen, L. (2008). Stress and quality of life in breast cancer recurrence: Moderation or Mediation of coping? *Annals of Behavioural Medicine*, 35, (2): 188-197.

Studies Included in the Review

1. Carver, C., Pozo, C., Harris, S., Noriega, V., Schier, M., Robinson, D., Ketcham, A., Moffat, J., . . . Clark, K. (1993). How coping mediates the effect of optimism on distress: A study of women with early stage breast cancer. *Journal of Personality and Social Psychology*, 65, (2): 375-390.
2. Cousson-Gellie, F. (2000). Breast Cancer, Coping and Quality of Life: A Semi-Prospective Study. *European Review of Applied Psychology*, 50, 315-320.
3. Holland, D., & Holahan, C. (2003). The Relation of Social Support and Coping to Positive Adaptation to Breast Cancer. *Psychology and Health*, 18, (1), 15-29.
4. Reddick, B., Nanda, J., Campbell, L., Ryman, D., Gaston-Johansson, F., & Faan, R. (2005). Examining the Influence of Coping with Pain on Depression, Anxiety and Fatigue among Women with Breast Cancer. *Journal of Psychosocial Oncology*, 23, (2-3), 137-157.
5. Roussi, P., Krikeli, V., Hatzidimitriou, C., & Koutri, I. (2007). Patterns of Coping, Flexibility in Coping and Psychological Distress in Women Diagnosed with Breast Cancer. *Cognitive Therapy Research*, 31, 97-109.
6. Schou, I., Ekeberg, O., & Ruland, C. (2005). The Mediating Role of Appraisal and Coping in the Relationship between Optimism-Pessimism and Quality of Life. *Psycho-Oncology*, 14, 718-727.
7. Stanton, A., Danoff-burg, S., Cameron, C., Bishop, M., Collins, C., Kirk, S., . . . Sworowski, L. (2000). Emotionally Expressive Coping Predicts Psychological and Physical Adjustment to Breast Cancer. *Journal of Consulting and Clinical Psychology*, 5, 875-882.

8. Oswiecki, D., & Compas, B. (1999). A Prospective Study of Coping, Perceived Control, and Psychological Adaptation to Breast Cancer. *Cognitive Therapy and Research*, 23, (2), 169-180.
9. Yang, H., Anderson, B., & Anderson B. (2008). Stress and Quality of Life in Breast Cancer Recurrence: Moderation or Mediation of Coping. *Annals of Behavioural Medicine*, 35, (2): 188-197.

4.1 Quality Assessment System (Appendix H)

Author Stanton et al. (2000)

.....

Population clearly described

Women with Stage 1 or 11 breast cancer being treated at oncology clinics. All were English speakers, age range given, marital status given, ethnicity, employment status given, educational level given, treatment/therapy given.

Population is clearly described in detail.

.....

Response rate given

122 introduced to the study, 101 consented to participate, and sixteen declined and five consented but did not complete the initial questionnaire representing an 83% participation rate.

Yes, breakdown of all stages of the recruitment process.

.....

Pre-intervention data for participants

Preliminary analyses were conducted to select demographic (e.g. age, education, ethnicity, employment status, marital status) and cancer-related (e.g. diagnosis duration, types of treatment, attendance at psychological support services) covariates for use in primary analyses. Demographic and cancer-related variables did not interact significantly with primary predictor variables.

Pre-intervention data reported = Yes

.....

Sample size justification

No mentioned of sample size justification and just under one hundred participants, ninety-two in total

.....

Measures used reported

All measures reported explanation of measures given and why the measures are used. In addition a subset of self-reported medical appointments to ensure their accuracy.
Measures reported yes.

Attrition rate

Only lost participants before the start of the study, (9% attrition) no lost to follow ups after enrolment into the study.

Yes and explanation given for attrition rate.

.....

Coping strategies/outcomes identified and the aims of the study achieved

Tested the hypothesis that coping through emotional approach, which involves actively processing and expressing emotions, enhances adjustment and health status for breast cancer patients. Women who, at study entry, coped through expressing emotions surrounding cancer had fewer medical appointments for cancer-related morbidities and decreased distress during the next three months compared with those low in emotional expression.

All achieved.

.....

Number of follow-up points

One, three months after first assessment.

.....

Notes:

This study can be categorised as high quality. It is assessed to be of a very high standard, the only assessment category it did mentioned was sample size justification. It suggests that an effective ingredient of positive adjustment and health maintenance following a breast cancer diagnosis is the ability to express emotions surrounding one's experience.

.....

Author Carver et al. (1993)

.....

Population clearly described

Women with breast cancer Stage I or Stage II attending a private oncology clinic. Researchers asked for demographic details such as marital status, ethnicity, employment status, educational level, religious beliefs and treatment/ therapy.

Population is described in detail.

Response rate

Virtually all women the physician introduced the study spoke with the interviewer and approximately 85% of them agreed to participate. However does not mentioned how many people the interviewer spoke to.

Partly described the response rate.

.....

Pre-intervention data for participants

After informed consent was obtained, an initial interview took place incorporating demographic and personality measures. Also they assessed the extent to which demographic and treatment variables were related to the study's outcome measures, determining the need to control for these variables in the main analyses.

Pre-intervention data was collected.

.....

Sample size justification

No mentioned of sample size justification and N= 59 participants took part in the study.

None mentioned.

.....

Measures used reported

All measures used reported and explanation given why they were used.

.....

Attrition rate

None recorded, fifty-nine participants took part in all three follow-ups after the initial assessment.

.....

Coping strategies/outcomes and the aims of the study achieved

How coping mediates the effects of optimism on distress. Optimism related inversely to distress at each point. Acceptance, positive reframing and use of religion were the most common coping reactions; denial and behavioural disengagement were the least common reactions. Acceptance and the use of humour prospectively predicted lower distress, denial and disengagement predicted more distress.

All achieved.

.....

Number of follow-ups points

Three follow up-points at three months, six months and twelve months after initial assessment.

.....

Notes

This study is categorized of intermediate quality. The main reason for this is the small sample size and it did not mention sample size justification. Results should be viewed with caution. As it is not known whether acceptance can be fostered into an adaptive way for everyone when diagnosed with breast cancer.

.....

Authors Schou et al. (2005)**Population clearly described**

Norwegian women newly diagnosed with breast cancer (N=195) from a University hospital. Information on demographic data was collected.

Population described in detail.

.....

Response rate

245 women originally invited to participate, six excluded, two for not showing for surgery and forty-two refused to participate. Total number of participants at first assessment N=195.

Response rate reported.

.....

Pre-intervention data for participants

Information was collected from participants at baseline such as age, marital status, educational and employment status was obtained by self-report and medical data was also collected from the participant' medical journal after surgery.

Pre-intervention reported.

.....

Sample size justification

No mention of sample size justification. N= 165 participants took part in the study.

Measures used reported

All measures reported and explanation given as to why they have been used.

.....

Attrition rate

195 agreed to participate and 165 (70%) completed the questionnaires at both assessment points.

.....

Coping strategies/outcomes identified and the aims of the study achieved

To investigate if the relationship between optimism-pessimism and quality of life is attributed to the appraisal and coping strategies. Optimism-pessimism had both a direct and indirect influence on quality of life. Results suggested that the influence of optimism and pessimism on quality of life appears to be mediated by coping both before and after treatment for breast cancer. Fighting spirit and hopeless/helplessness appears to reflect the characteristics coping strategies for optimists and pessimists.

.....

Number of follow-up points

One follow-up after initial diagnosis at twelve months.

.....

Notes

This study can be categorized as high quality.

.....

Authors Oswiecki & Compas (1999)

.....

Population clearly described

Participants were seventy women newly diagnosed with breast cancer. Patients were recruited from the Breast care center.

Population is described

.....

Response rate given

None given

.....

Pre-intervention data for participants

Demographic data was obtained from the participants such as age, education and their marital status.

Brief pre-intervention data given

.....
Sample size justification

This study mentioned sample size justification but it was mentioned in relation to future research to use a bigger sample size to test for statistical power. N=70 participated took part in this research.

.....
Measures used

All measures reported with a clear explanation given as why the measures are used.

Measures reported yes

.....
Attrition rate

No lost to follow-ups, seventy participants took part in all assessments.

.....
Coping strategies/outcomes identified and the aims of the study achieved

Coping, perceived control and symptoms of anxiety/depression were assessed at diagnosis, three months and six months. There were no main effects for perceived control. Problem-focused engagement coping was related to lower anxiety/ depression symptoms near diagnosis. Emotion-focused disengagement coping was related to more anxiety/depression at six months and problem-focused engagement was related to lower anxiety/depression at six months.

Nearly all achieved.

.....
Number of follow-up-points

Two follow-ups after initial diagnosis, one at three months and six months.

.....
Notes:

This study is categorised of intermediate quality. The main reason for this is the small sample size, lack of demographic variables assessed, inclusion and exclusion criteria and response rate of participants willing to take part in the study.

Authors Holland & Holahan (2003)

.....

Population clearly described

Participants were between the ages of thirty-eight and fifty-eight who had been diagnosed with Stage 1 or Stage 11 breast cancer. All were obtained through the private oncology and surgery practices. Demographics details such as age, marital status, ethnicity, educational background and work history were assessed.

Population is clearly described in detail.

.....

Response rate given

No information given on response rate.

.....

Pre-intervention data for participants

As part of the study, each participant received a consent form and a questionnaire. This included age, marital status, information about diagnosis and treatment, education, household income level, work history and any other health problems. This was completed before taking part in the study. A number of demographic and treatment variables were also examined with respect to their relationship with the major study variables.

Pre-intervention data reported =yes.

.....

Sample size justification

No mentioned of sample size justification. N=56 participants in total.

.....

Measures used reported

All measures reported and explanation given of measures.

Measures reported = yes

.....

Attrition rate

None reported

Coping strategies/outcomes identified and the aims of the study achieved

It was hypothesised that participants who had higher perceived social support would use more approach coping strategies that involved approaching the problem either cognitively or behaviourally. Results showed that perceived social support and approach coping strategies were associated with positive adjustment. Avoidance coping strategies were negatively related to psychological well-being.

All achieved

Number of follow-up points

Only one assessment.

Notes

This study can be categorized as intermediate quality. As the study has a small sample size it is limited as it was completed with a small homogeneous sample.

Author Cousson-Gelie (2000)

Population clearly described

The group comprised seventy-five women with non-metastatic breast cancer (Stages II) socio-demographic and stable personality characteristics were estimated by questionnaires before diagnosis and treatment plan.

Population is partly described

Response rate given

None given

Pre-intervention data for participants

Demographic details were assessed but not described in the study.

Sample size justification

No sample size justification mentioned and N=75 participants took part.

.....

Measures used reported

All measures used reported and explanation of measures given.

.....

Attrition rate

Of the seventy-five patients, forty-eight (64%) are in complete remission, two (2.7%) have local relapse, nine (12%) have metastatic recurrence and sixteen (21.3%) have died as a result of their cancer. Assessment therefore concerns fifty-nine patients.

.....

Coping strategies/outcomes identified and the aims of the study achieved

The impact of different biological, psychological and social factors on quality of life for patients diagnosed with breast cancer. Results show that breast cancer patients with the diagnosis and the disease in four ways: perceived stress, perceived social support, self-accusation and problem-focused coping.

.....

Number of follow-ups

One after initial assessment, this took place two years after initial assessment.

.....

Notes

This study can be categorised as intermediate quality. It did not give a breakdown of the demographic variables, sample size justification and response rate. However it did follow participants for up to two years after diagnosis, giving an insight into adjustment to breast cancer, coping strategies and quality of life two years after.

Authors Reddick et al. (2005)

.....

Population clearly described

Women with Stage II, III or IV breast cancer attending a National Cancer Institute. Information was collected on age, race, marital status, educational level, religion, living arrangements, average yearly outcome, occupation and work status. All of this information was presented in a table.

Population is clearly described in detail.

.....
Response rate given

142 introduced to the study (participation rate: 97.3%)

Yes, break down of all stages.

.....
Pre-intervention data for participants

The analyses included baseline data collected from 138 breast cancer patients during their pre-admission out-patient clinic visit.

Pre-intervention data reported=Yes

.....
Sample size justification

Did mentioned sample size justification, however it was in relation for future research and to use a bigger sample size to test for statistical power. N=138 participants took part in the study.

.....
Measures used reported

All measures reported, and explanation of measures given and why the measures are used.

.....
Attrition rate

Lost four participants before the study started. N= 138 participants took part in the study. Attrition rate= 2.82

.....
Coping strategies/outcomes identified and the aims of the study achieved

This study examined the effects of anxiety, fatigue and depression on quality of life in women with breast cancer. Also examined how coping mediates these relationships and looked at racial differences in types of coping, anxiety, fatigue and depression.

All achieved.

Number of follow ups points

Only one assessment.

.....

Notes

This study can be categorized as high quality. It is assessed to be of a very high standard. Results indicated that the type and intensity of coping used by the women with breast cancer in this sample population are related to their experiences of fatigue, anxiety and depression. In addition the study found a racial difference in the use of coping strategies.

.....

Authors Yang et al. (2008)

.....

Population clearly described

Breast cancer patients recently diagnosed with recurrence (N=65) after diagnosis and attending a medical oncology clinic in a cancer center. Demographic details were assessed such as age, education, employment, family income and marital status. Disease characteristics were also reported such as stage, hormone receptor status, number of nodes at original diagnosis, disease free interval, and location of recurrent disease.

Population is clearly described in detail.

.....

Response rate given

Among N=104 eligible patients, twenty-two declined to participate and eighty-two (79%) were accrued.

.....

Pre-intervention data for participants

This was assessed at baseline. Extra information was assessed such as types of cancer treatment.

Pre-intervention data reported =yes

.....

Sample size justification

No mentioned of sample size justification and N=65 participants took part in the study.

.....

Measures used reported

All measures reported, explanation of measures given and why the measures are used.

.....

Attrition rate

Seventeen (21%) did not complete follow-up. N=65 participants took part in both assessments. The reason for the attrition rate was explained as scheduling difficulties, study drop out and death.

.....

Coping strategies/outcomes identified and the aims of the study achieved

This study investigated the longitudinal relationships between stress, coping and mental health and quality of life.

All achieved

.....

Number of follow-up points

One follow-up, four months after diagnosis.

.....

Notes

This study can be categorized as high quality. It is assessed to be of a very high standard. The only assessment category it did not mention was sample size justification. It had a very small sample size, and the relevance of these findings to other ethnic/minority is unknown.

.....

Authors Roussi et al. (2007)

.....

Population clearly described

Greek women diagnosed with breast cancer (N=72) admitted to a local public hospital. Before the study commenced patients completed a questionnaire to assess their demographic details and treatment/therapies.

Population is described in detail

.....

Response rate

No information given on the response rate.

.....

Pre-intervention data for participants

Pre-intervention data was obtained. Also the relationship between background variables and distress was examined. No relationships were found.

.....

Sample size justification

No mentioned of sample size justification. N=72 participants took part in the study.

.....

Measures used reported

All measures used reported and explanation given why they were used.

.....

Attrition rate

None reported, participants took part in all of the follow-ups.

.....

Coping strategies/outcomes and the aims of the study achieved

Examined how coping efforts vary over time for the women as a group and how these coping efforts relate to distress. Also we explored the relationship between patterns of emotion-focused engagement coping strategies and distress.

All achieved.

.....

Number of follow-ups points

One follow-up three months after initial assessment.

Notes

This study is categorized of intermediate quality. The main reason for this is the small sample size, no information given on the response rate and it did not mention sample size justification. Results should be viewed with caution. As it is not known whether these results can be generalised in other segments of the Greek population.

4.1.2 Data Extraction Table

Appendix H1

Clear definition of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Measures used	Follow-up points	Reported on all outcomes
Annals of Behavioural Medicine, 2008.								
In the prediction of mental health and quality of life, what is the role of coping, and does the role alter with different strategies of coping and/or different types of stressors	Longitudinal design	Breast cancer patients recently diagnosed with recurrence (N=65) after diagnosis and attending a medical oncology clinic in a cancer center.	Women diagnosed with their first recurrence of breast cancer. Exclusion criteria were previous or current cancer diagnosis other than breast, neurological disorders and dementia.	Among 104 eligible patients, 22 declined, and 82 (79%) were accrued.		1) Impact of events scale 2) Symptoms, signs, illnesses and toxicities. 3) The Karnofsky performance status. 4) Disruption due to pain. 5) Disruption due to fatigue. 6) The brief cope. 7) Quality of life-mental health	Four months after initial assessment	Yes.

Clear definition of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Measures used	Follow-up points	Reported on all outcomes
Cognitive Therapy Research 2007								
To explore the relationship between individual coping strategies, patterns of coping, and flexibility on the other hand and psychological Distress on the other.	Longitudinal design	Greek women diagnosed with breast cancer (N=72) admitted to a local public hospital	None given	Seventy-two participants took part, no information given on how many participants were approached to take part in the study.	All participants took part in all aspects of the study.	Profile of Mood Scale (POMS) Coping orientation to problems experienced (COPE)	Two to three days after surgery and three months later.	Yes

Clear definition of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Measures used	Follow-up points	Reported on all outcomes
Cognitive Therapy and Research 1999								
To examine perceptions of control, coping efforts, and emotional distress.	Prospective longitudinal study	Women diagnosed with breast cancer (N=70) recruited from Breast care center.	None given	Seventy participants were recruited for the study, no details given for how many were contacted.	None	Structured interview to collect information on patient demographics and perceptions of control	Three months after diagnosis and six months post-diagnosis	Yes

Clear definition of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Measures used	Follow-up points	Reported on all outcomes
Psycho-Oncology 2005. To investigate if appraisal and coping strategies mediated the relationship between optimism-pessimism and quality of life in women diagnosed and treated with breast cancer.	Prospective longitudinal design	Norwegian women newly diagnosed with breast cancer (N=195) from a University hospital.	To be eligible, women had to be newly diagnosed with operable breast cancer, have no other major disabling medical or psychiatric condition, ability to read and write Norwegian and aged eighteen or older.	245 women originally invited to participate, six excluded, two for not showing for surgery and forty-two refused to participate.	195 at initial assessment and 165 completed questionnaires at both assessment points.	1) Visual Analogue Scale 2) The mental adjustment to cancer scale 3) The European organization for research and treatment of cancer 4) The life orientation test revised	Twelve months after breast cancer surgery	Yes

Clear definition of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Measures used	Follow-up points	Reported on all outcomes
Journal of Consulting Clinical Psychology.								
Investigated emotional approach coping as a mediator of the relation between hope and adaptive outcomes.	Longitudinal design.	Women with Stage I or II breast cancer being treated at five oncology clinics.	None given.	122 introduced to the study, 101 consented to participate, and sixteen declined and five consented but did not complete the initial questionnaire representing an 83% participation rate.	None. N=92 participants	1) The cope. 2) The hope scale. 3) The functional assessment of cancer therapy. 4) The profile of mood states. 5) One-item index of perceived health	Three months after first assessment	Yes

Clear definitions of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Appropriate measures	Follow-up points	Reporting on all outcomes
European review of Applied Psychology								
To investigate the structure of the adjustment strategies used by women with breast cancer and to gain insight into the mediating or moderating function of these strategies	Longitudinal design	Women with non-metastatic breast cancer attending Institut Bergonie	None given	None given. Seventy-five participants took part	None given.	1) The perceived stress scale 2) The cancer locus of control scale 3) The social support scale 4) The ways of coping checklist 5) The state-trait anxiety scale	Two years after diagnosis	Yes

Clear definitions of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Appropriate measures	Follow-up points	Reporting on all outcomes
Psychology and Health 2003								
It was hypothesized that participants who had higher perceived social support would use more approach coping strategies that involve approaching the problem either cognitively or behaviourally.	Cross-sectional design	Middle class women who had been diagnosed with breast cancer attending a private oncology and surgery practices	Exclude individuals with mental or debilitating physical illness	N=56 participants in total took part. No information on the response rate.	N= 56 participants at assessment	1) The social provisions scale 2) The revised ways of Coping scales 3) The scales of psychological well-being 4) 4-point likert scale for health behaviours	Only one assessment	Yes

Clear definitions of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Appropriate measures	Follow-up points	Reporting on all outcomes
Psychosocial Oncology 2005								
Examined the effects of anxiety, fatigue, and depression on quality of life in women with breast cancer	Randomized controlled trial	Women with Stage II, III or IV breast cancer attending a National Cancer Institute	Inclusion into funded randomized controlled clinical trial	None given 138 participants participated in the study	None reported	1) Coping was measured by the CSQ. 2) State-Trait Inventory 3) The Beck Depression Inventory 4) Piper Fatigue Scale	Only one assessment	Yes

Clear definitions of the aims of the study	Study design	Study population and care setting	Inclusion and exclusion criteria	Response rate of potential participants	Reporting attrition rates	Appropriate measures	Follow-up points	Reporting on all outcomes
Journal of personality and Social Psychology 1993								
1) To examine individual differences in optimism-pessimism 2) Aspects of people's coping reactions have prospective effects. 3) Whether coping reactions constitute a mechanism.	Longitudinal study	Women with breast cancer Stage I or Stage II attending a private oncology clinic	None given	None recorded, N=59 patients	None recorded.	1) Life orientation test. 2) COPE. 3) Profile of mood states.	Three months, six months and twelve months	Yes