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Appendices

Exploring public attitudes towards the health system of the Kingdom of Saudi Arabia (KSA)

Submitted by Afnan Aljaffary

**For the degree of PhD in Health Services Research and
Management**

City, University of London

Centre for Health Services Research

School of Health Sciences

December 2018

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Appendix I Ethical approvals for the current study

I.a General Directorate of Health Affairs in the Eastern Province ethical approval letter

٤١/١٤٣٨٣٠٧
١٤٢٥/١١/٥

وزارة الصحة
المديرية العامة للشؤون الصحية بالمنطقة الشرقية
General Directorate of Health Affairs in Eastern Province Ministry of Health
7000873336

إدارة التخطيط والتدريب
التخطيط والبحوث

الموضوع / تسهيل مهمة الباحثة

المحترم
المحترمين

سعادة / مدير مستشفى الولادة والأطفال بالدمام
سعادة / مدير إدارة المراكز الصحية الأولية : بالدمام / الخبر / القطيف
السلام عليكم ورحمة الله وبركاته.

برفقته نسخة من خطاب رئيس لجنة البحوث والدراسات بالمنطقة الشرقية رقم ١٧٨٣٠٧
في ٣٠/١٠/١٤٣٥هـ، بشأن تسهيل مهمة المحاضرة بجامعة الدمام / أفنان عبدالعزيز محمد
الجعفري ، على إجراء الدراسة العلمية (تقييم موقف الرأي العام تجاه النظام الصحي في
المنطقة الشرقية بالمملكة العربية السعودية) وحيث أن المذكورة ستنفذ جزء من بحثها لديكم .

لذا نأمل من سعادتكم الإطلاع وتسهيل مهمة الباحثة بما يضمن أن لا يكون هناك أي
تأثير على خدمة المراجعين خلال قيامها بمهام بحثها.

ولكم أطيب تحياتي .

م . المدير العام للتخطيط والتدريب بصحة الشرقية

الدكتور /

أسامة بن محمد المدني



المديرية العامة للشؤون الصحية بالمنطقة الشرقية
General Directorate of Health Affairs in Eastern Province
Ministry of Health
7000873336

الرقم: 41/13/34207
التاريخ: 1435/09/20
المرفقات:

الموضوع: طلب الموافقة على دراسة علمية

من	رئيس لجنة البحوث و الدراسات بالمنطقة الشرقية	الدكتور / حسام رمضان التميمي
إلى	سعادة مدير عام الشؤون الصحية بالمنطقة الشرقية	الدكتور / صالح الصالح
صورة إلى	--	
الموضوع	خطاب موافقة لجنة البحوث العلمية، مستشفى الولادة والأطفال بالبحمام	

السلام عليكم ورحمة الله وبركاته

إشارة لخطاب سعادتكم رقم 41/13/34207 بتاريخ 1435/09/20 المعني بتوجيه سعادتكم لعرض الدراسة العلمية: "تقييم موقف الرأي العام تجاه النظام الصحي في المنطقة الشرقية بالمملكة العربية السعودية" على اللجنة العلمية للدراسات والبحوث في المنطقة الشرقية.

عليه، نرفع لسعادتكم موافقة اللجنة على الدراسة أعلاه، نظراً لأهميتها في قراءة مرئيات أفراد المجتمع تجاه الخدمات الصحية المقدمة بمستشفيات المنطقة الشرقية

دمتم موفقين وحفظكم المولى عز وجل...

والسلام عليكم ورحمة الله وبركاته.

رئيس لجنة البحوث و الدراسات بالمنطقة الشرقية

الدكتور / حسام رمضان التميمي



I.b Senate Research Ethical Committee, City University London ethical approval letter



School of Health

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Northam
Londo

Tel: +44 (0) 2

www

Ref: PhD/14-15/07

28 January 2015

Dear Afnan

Re: Assessing Public Attitudes towards the Health System of Saudi Arabia

Thank you for forwarding amendments and clarifications regarding your project. These have now been reviewed **and approved** by the Chair of the School Research Ethics Committee.

Please find attached, details of the full indemnity cover for your study.

Under the School Research Governance guidelines you are requested to contact myself once the project has been completed, and may be asked to complete a brief progress report six months after registering the project with the School.

If you have any queries please do not hesitate to contact me as below.

Yours sincerely

A black rectangular box redacting the signature of Alison Welton.

Alison Welton
Research Governance Officer

A black rectangular box redacting the contact information of Alison Welton.

I.c Senate Research Ethical Committee, University of Dammam
(currently Imam Abdulrhman Bin Faisal University ethical approval letter)

Kingdom of Saudi Arabia Ministry of Higher Education University of Dammam Office of the Vice President for Research & Higher Studies	 جامعة الدمام UNIVERSITY OF DAMMAM	المملكة العربية السعودية وزارة التعليم العالي جامعة الدمام وكالة الجامعة للدراسات العليا و البحث العلمي
اللجنة الدائمة لأخلاقيات البحث على المخلوقات الحية Institutional Review Board		

IRB Number	IRB-2014-04-312	اليوب-٣١٢-١٤-٢٠١٤
Project Title	Assessing the General Public Attitudes towards Health Systems – Eastern Province Saudi Arabia	
Principal Investigator	Lecturer. Afnan Abdulaziz Aljaffary	
College / Center	Applied Medical Sciences	Department HIMT
Approval Date	18/05/2014	

The application was reviewed and approved at the University of Dammam IRB meeting on Sunday, May 18, 2014.

Approval is given for three years from the date of approval. Projects, which have not commenced within one year of the original approval, must be re-submitted to the University Institutional Review Board (IRB) Committee. If you are unable to complete your research within the validation period, you will be required to request an extension from the IRB Committee.

On completion of the research, the Principal Investigator is required to advise the Institutional Review Board if any changes are made to the protocol, a revised protocol must be submitted to the Institutional Review Board for reconsideration.

Approval is given on the understanding that the "Guidelines for Ethical Research Practice" are adhered to. Where required, a signed written consent form must be obtained from each participant in the study group.

Vice President for Higher Studies & Scientific Research
 Chairman of the Institutional Review Board



Professor Abdulsalam Al-Sulaiman



CC. - Dean
 Deanship of Scientific Research
 - Director General
 King Fahd Hospital of the University
 - Director
 Prince Mohamed Bin Fahd Bin Abdulaziz Center for Research and Consultation Studies
 - Supervisor General for Quality and Safety
 King Fahd Hospital of the University

Appendix II Detailed analysis of national surveys

II.a Detailed analysis of national surveys

British Social Attitudes Survey (BSA): The BSA survey has been carried out annually since 1983 and is the longest running survey in the United Kingdom. Over 90,000 people have taken part in the study until the year 2015. The survey covers different domains related to social issues including, including the NHS, immigration, welfare, education, and transport. New questions and/ or domains are added each year to reflect current issues, but all questions are designed with a view to repeating them periodically to chart changes over time.

This survey asks people about their satisfaction with the NHS, views on improvements in NHS waiting times, expectations about waiting times for NHS appointments, whether the government should support a national health system that is tax funded, free at the point of use, and provides comprehensive care for all citizens. It also asks their view on how the general standard of care in the NHS has changed over the last five years. In addition, the survey asked citizens on their view on the way the NHS uses money and whether they believe that NHS wastes money.

The subsequent BSA surveys went further to ask specific questions related to the recent structural financing changes in the NHS health care delivery. In another words, in the past, the majority or almost all of NHS-funded care was provided by organisations owned and run by the NHS. However, there has been rapid growth in the amount of NHS-funded care delivered by non-NHS providers in recent years. This survey asked the public about their views on where people would like to receive NHS-funded treatment, private services, or non-profit services. In addition, it asked citizens their views on cutting other public services to maintain current NHS services. New questions were added in 2015 survey covering two items; reasons for satisfaction with NHS, reasons for dissatisfaction with NHS.

BSA reports produce useful data that are utilised by the Government, journalists, opinion formers and academics. Part of national broad attitude survey, this survey is one of the earliest surveys eliciting public attitudes towards the health system, Over 90,000 people have taken part in the study until the year 2015. However, as mentioned above, this survey hasn't been specifically designed to elicit public attitudes towards the health system, thus the questions in each domain are limited and general. The section related to public views on the NHS is limited and descriptive; it doesn't explicitly eliciting the causal relationships of different factors, other than demographic factors, that might influence people's views or attitudes towards the NHS. For instance, it didn't examined people's ideological beliefs and in-depth explorations of patterns of utilisation, which have seen to be factors to attitude and opinion towards health systems (Bleich, 2009; Munro & Duckett, 2015). Recently, in 2015, the British attitudes towards the health domain (NHS) has been separated from the BSA and sponsored by different

institution called Kings Fund, thus more in-depth exploration of public attitudes towards NHS is expected in the future reports produced by the King's Fund.

Health Confidence Survey (HCS) Similar to the survey run in the UK, HCS is conducted on an annual basis, since 1995. The HCS is co-sponsored by the Employee Benefit Research Institute (EBRI), a private, non-profit, non-partisan public policy research organisation, and Mathew Greenwald & Associates, Inc., a market research firm. This survey examines the public attitude and opinion on broad range of health care issues, including public satisfaction with the current health system, confidence in the future of the health care system, and attitudes toward health care reform (Helman & Fronstin, 2004). The survey covers themes similar to that of the BSA. For example, it includes questions on public views on the current health system. It also includes questions on their confidence on the ability to get needed care, ability to get affordable care without financial hardship, and the health system ability to give them the freedom to choose their preferred healthcare provider (Fronstin, 2012)

Respondents were asked about the importance of goals when reforming a nation's health system. In addition, the HCS asks participants how the increase in healthcare costs influences their utilisation of healthcare services such as choosing generic drugs, going to the doctor for only more serious conditions, and looking for less expensive healthcare providers. It also assesses reported consumer behaviour when visiting doctors such as; have your doctor explained to you why a test is needed, whether the patient ask about the success rate of a procedure.

The survey is a well-established survey that has been utilised for more than 14 times, with some changes in its versions to cover the emergent changes in health issues in the US. Large number of respondents, more than 18,000, has been interviewed. Unlike BSA, HCS survey has been designed specifically to assess public views and opinions towards the US health system. The questionnaire examines broad spectrum of health related issues in more in depth than the BSA survey; it uses pragmatic and practical way in assessing the public attitudes and opinion towards the strategy of the US health reform by seeking their opinion on the necessity of goals settings in health reforms. In addition, it asks citizens on support or oppose to different strategies to guarantee all Americans have access to health insurance. It includes questions assessing public's confidence; including institutional and interpersonal confidence, towards the US health system. Confidence with the health system influence people's attitudes towards it (Rowe & Calnan, 2006a). Interestingly, this survey includes a section which specifically asks the respondents on the changes in their healthcare utilisation resulting from cost increase, such as the decision to use generic drugs, go to doctor only for serious illness, and skip doses of prescribed medications.

Performance Evaluations, Trust and Utilisation (PETU) Health Care in China Survey: this survey is constructed by group of researchers at the University of Glasgow between the year of 2012 to 2013, and funded by the United Kingdom's Economic and Social Research Council for

a project to examine popular attitudes, trust and the utilisation of health care in China. The questions covered several dimensions including healthcare choice and utilisation, perceptions of health system's performance evaluation, value and trust, and income and expenditure (Munro & Duckett, 2015).

The questionnaire items include respondents health seeking behaviour for minor and major illness, reasons for choosing public/ private providers, patterns of health utilisation and experience in different levels of care and reasons for that, overall satisfaction with the health system, perceptions of the necessity of healthcare reform, importance of improving health system by the government, equality in access to health care, performance of public hospitals vs. governmental hospitals, trust of different types of institutions to look after people's health care needs, media use, and perceptions of medical ethics issues in China.

This survey is quite intense and long. It includes some questions which may not directly relevant to healthcare in China such as public trust on different institutions; such as courts, central government, and police to operate in the best interests of society; perceptions of government spending on vulnerable groups in society such as unemployed people. On the other hand, unlike other surveys, this valid survey is designed to probe attitudes towards the health-care system. It includes detailed sections related to healthcare system's performance evaluation including perceptions of performance of public hospitals vs. governmental hospitals, opinions of medical institutions in relation to skills and experience for doctors, value for money, convenience, opinions on the health system regardless if the respondents use the services or not.

In addition, unlike many other surveys, this survey focuses deeply on public trust on the health system and equity in healthcare such as people's trust on different types of institutions to look after people's health care needs. This is useful because trust is often closely related to healthcare quality (Ozawa & Walker, 2011).

In addition, this survey includes questions on perceptions of normality of inequality in healthcare in developing countries. This survey, in addition has asked the respondents new question which rarely been utilised in other studies which is action that respondents would take in case their friends receive inefficient care and it asked questions on financing healthcare but in a new manner (not typical) such as healthcare costs contributions responsibility (people themselves, the government, and employers), and reliability of different insurance schemes.

Health Care in Canada (HCiC) survey: this survey was been developed in 1998. This survey aims to capture viewpoint of different stakeholders on Canadian health system; healthcare providers, health managers, and the public (McGill, 2014). It is conducted annually and its data is used widely in the academic papers, examples of these papers are given in table 3.1. The key domains of this survey are access to care, quality of care, social determinants of health, and health status in Canada. Focussing on questions designed specifically for the public, questionnaire items include respondent's perceptions that Canadians receive quality healthcare services in the current time, their perceptions of the most important care issues, perceptions of

the affordability of care, timely access to care at different type of healthcare facilities, public perceptions of access improvement proposals. Specific questions were tailored to respondents diagnosed with chronic disease(s) such as their perceptions of professional support to manage their chronic disease, public perceptions of options to improve the Canadian health system.

This survey is developed by several partners whose members worked together to provide their experience and perspective on the Canadian health system such as; Association of Canadian Academic Healthcare Organizations, Canadian Healthcare Association, and Institute of Health Economics. It started with three partners and now it includes 15 partnerships. One advantage of this survey is that it compares public attitudes towards the health system in Canada vs other stakeholders who are the doctors, nurses, and health managers and it probes for more insight between responses from the public and responses from stakeholders.

HCiC survey is comprehensive in examining the access to care issue. It asks the public on the timely access to care for each health facility, as timely access to care may vary from health care facility to another to a high extent for instance access to primary care might be far easier than access to tertiary care. Thus, it is beneficial to distinguish between these different healthcare facilities. Unlike many other surveys, this survey focussed on patient centred care, asking participants on their priorities for enhancing patient-centred care such as; care that is readily, and timely accessed,

care that is provided in a caring and respectful context, and care decisions that are made in partnership between informed patients and their providers. However, this survey is lacking questions related to public trust towards the health system.

Alberta health survey: this survey is designed by Alberta Health and Wellness to gather information about public views on the performance of the health system in Alberta, Canada. The questionnaire is divided into six domains including; health and health services need such as health habits and service's needs, knowledge with health services, quality of health services, availability and accessibility to health services such as waiting times, ease of access to doctors and hospitals, satisfaction with the health system (Northcott & Northcott, 2004).

The questionnaire is valid and fruitful, it has been run in an annual basis for 10 years and it captured the main aspects of healthcare such as access, quality, and satisfaction. In addition, it didn't only ask respondents for their perception of access or quality, but it asked them about services do respondents have difficulty obtaining, reasons for this difficulty, services the respondents couldn't be able to obtain in the last year, and the reasons for that, and reasons for poor or fair quality of care. Another feature in this survey is that it divided the questionnaire by firstly asking respondents on the health care provided in their community in general and then it asked the same questions but by referring to their own personal experience. This can help to validate the results and reduce the bias of linking the responses to the persons' own experience.

In addition, this survey is one of the few surveys that have a specific section asking the respondents on their behaviour to make complaints when things get wrong, and how the system

responds to that, and their knowledge of the services available in the health system. This sort of questions can be vital in obtaining their knowledge and then link it with the overall satisfaction. However, one issue in this survey is that it is quite long which might cause respondent's fatigue; it had a chunk of questions that had been specifically designed for chronic patients.

Appendix III Detailed analysis of independent research surveys

Jadoo et al., (2014), brought out public opinion and preferences of the Turkish health system, with a special focus on the Turkish health reform process. The questionnaire items were classified into several domains including; accessibility (easy access, drugs and treatment are more difficult to get than a decade ago, accessibility to medical treatment, waiting time, patients have to pay more compared to a decade ago), availability of resources (availability of doctors, availability of specialised doctors, availability of health care facilities in the area), quality of care (quality of care improved, doctors are much friendlier, doctors give more information, doctors' office has everything needed to provide complete care), and opinion regarding the public attention paid to the healthcare reforms by politicians and mass media (people feel more responsible for their own health, the population is less informed about health risk, health care gets more attention from politicians). The researchers asked several questions for each domain by comparing the health system now compared to a decade ago. Furthermore, two questions asked for people's preferences about the old and the new healthcare system and whether they prefer health insurance coverage now or that available a decade ago.

This survey has special features; it is one of the few household surveys run in a developing country and covers the core aspects of health care, including accessibility, quality of healthcare, and availability of resources. In addition, the survey items are clear and short (only 17 items) which helps to avoid survey fatigue and increases people's understanding and willingness to participate. For instance, instead of asking participants on the availability of medical technology, which cannot be understood by lay people, the survey asked the respondents whether the doctors' office has everything needed to provide complete care. However, the survey has some issues, one limitation considered by the authors is that all the survey items are designed to compare the current status of the health system compared to its status 10 years ago, which could increase the risk of recall bias and worsened the validity of the questionnaire (Jadoo et al, 2014). In addition, as this survey has been specifically designed to assess public opinion on Turkish health reform, it might be useful to ask the respondents on their attitude towards the current health reform and whether they prefer new health reforms to be implemented in the future.

Balabanova et al., (2012) constructed a questionnaire to assess accessibility and affordability of health care in eight countries in the Former Soviet Union (FSU). The main questionnaire items included social and health determinant factors such as health service utilisation, social capital, living conditions, exercise, alcohol and tobacco; economic characteristics such as income sources, household assets, and economic situation; and a range of self-reported physical and mental health conditions. Questions on utilisation of health care include respondents' health utilisation patterns, reasons of not seeking formal care when needed; such as preference

of self-treatment, could not afford service, could not afford drug, and could not afford either services or drugs, respondents' choices to obtain care, and out of pocket expenditure on health care.

However, the authors criticised the questionnaire because they were unable to obtain objective information on the health problems reported by respondents, and they relied largely on subjective understanding of a health problem and their threshold for seeking care, which inevitably reflects their individual experiences and expectations of the health care system. Nonetheless, self-rated health status (SRHS) is widely acceptable as a measure of health status among health providers and health system policy makers (Singh et al., 2006; Smith et al., 2008), therefore, SRHS is not a major issue which negatively affect the quality of this survey's results.

Hardie and Critchley (2008) constructed a survey to assess public perceptions of Australia's doctors, hospitals and health care systems. The survey tool included items to assess the public level of support for the current health system, and public preferences for public and private health care systems implemented in Australia such as public willingness to pay higher private health insurance premiums to get better care, public's willingness to pay higher taxes to improve the health system in Australia. In addition, similar to HCS, this survey tool included items to assess the public trust on the Australian health system in general.

This survey is one of the rarely questionnaires that asked participants whether they have worked in the health sector or not. The authors criticised this survey because some of its measures because their validity and reliability haven't been evaluated. In addition, the authors criticised the trust measures used in the survey because all of them are single-item ratings, but then they argued that this rating is widely used in social surveys and appear to be able to capture general levels of trust that can be compared across targets and population (Hardie & Critchley, 2008).

Mastilica and Chen (1998) survey, which aims to assess the health services users' views on the Croatian health care system (under the reform). The survey items include, opinion on the quality of health care services, perceived health care expenses, opinion on access to services and medication, and attitudes toward health care reform. It also includes items related to health services utilisation, and self-reported health status. This survey is theory driven as most of its items were constructed on the basis of the R. Andersen's model of health services utilisation (1975) and by using other public attitudes toward health system surveys available in the literature. However, most of the items on the health care reform and health care expenses were implemented for the first time, raising the questions of reliability and validity of these items. It can be argued that, because of their study, the authors should produce new items and tailor them with the Croatian system. However, proper validity and reliability tests should be considered to assure the suitability of the tool utilised.

Appendix IV The search terms for each SPIDER section

Group 1

exp Saudi Arabia/
saudi.tw.

Group 2

exp public policy
exp Health Planning
exp Healthcare Reform
exp Health Priorities

Group 3

Health Status Indicators/
survey*
interview*
focus group*

Group 4

attitude to health
exp attitude
exp public opinion
exp knowledge/ or exp Health Knowledge, Attitudes, Practice
exp social norms/ or exp Social Values/
exp Sociological Factors/
exp public relations/
exp Professional-Patient Relations
exp personal satisfaction/
exp consumer behavior/ or exp consumer participation/
exp health behavior/
exp communication barriers/ or exp health communication/
exp Culturally Competent Care
exp Health Services Accessibility
Healthcare Disparities
exp Needs Assessment
exp Patient-Centered Care

health status/ or health status disparities/

health status.tw.

population health.tw.

exp cost sharing/ or exp healthcare costs/ or exp health expenditures/

health\$ cost\$.tw.

healthcare cost\$.tw.

exp Efficiency/

exp Efficiency, Organizational/

efficiency.tw.

attitude*

opinion*

satisf*

trust*

confiden*

knowledge or awareness or belief* or perception* or preference*

experience*

stigma*

discrimination or priorit*

Appendix V Search strategy developed for MEDLINE (Ovid)

1. exp Saudi Arabia/
2. saudi.tw.
3. 1 or 2
4. exp attitude to health/ or exp attitude/
5. exp public opinion/
6. exp knowledge/ or exp Health Knowledge, Attitudes, Practice/
7. exp social norms/ or exp Social Values/
8. exp Sociological Factors/
9. exp public relations/
10. exp Professional-Patient Relations
11. exp personal satisfaction/
12. exp consumer behavior/ or exp consumer participation/
13. exp health behavior/
14. exp communication barriers/ or exp health communication/
15. exp public policy/ or exp Health Planning/
16. exp Culturally Competent Care/ or exp Healthcare Reform/ or exp Health Priorities/ or exp Health Services Accessibility/ or exp Healthcare Disparities/ or exp Needs Assessment/ or exp Patient-Centered Care/
17. exp Focus Groups/ or exp Health Surveys/ or exp Healthcare Surveys/ or exp Interviews as Topic/ or exp Narration/ or exp Questionnaires/
18. or/4-17
19. health status/ or health status disparities/
20. Health Status Indicators/
21. health status.tw.
22. population health.tw.
23. exp cost sharing/ or exp healthcare costs/ or exp health expenditures/
24. health\$ cost\$.tw.
25. healthcare cost\$.tw.
26. exp Efficiency/
27. exp Efficiency, Organizational/
28. efficiency.tw.
29. 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28
30. (attitude* or opinion* or satisf* or trust* or confiden* or knowledge or awareness or belief* or perception* or preference* or experience* or stigma* or discrimination or priorit* or survey* or interview* or focus group*).tw.

31. 18 or 29 or 30

32. 3 and 31

32. limit 32 to yr= 2007 -Current

Appendix VI Methodological strengths and weaknesses of each study

VI.a Methodological quality of the included studies ($n=40$)

Criteria	Al-Abbad (2015)	AlArifi (2012)	AlBarakati (2009)	Al-Borie & Damanhour (2013)	Al Debasi and Ahmed (2011)	Al Essa et al. (2014)	AlFozaan (2013)	AlGhamdi (2014)	AlGhanim (2011)	AlHassan (2009)
Explicit theoretical framework	1	2	2	3	1	1	1	1	1	3
Statement of aims/objectives in main body of report	3	0	3	3	3	3	3	3	3	3
Clear description of research setting	3	2	3	3	3	3	3	2	3	3
Evidence of sample size considered in terms of analysis	2	2	0	3	1	1	1	1	3	1
Representative sample of target group of a reasonable size	2	3	0	3	1	1	1	1	3	1
Description of procedure for data collection	3	2	3	2	0	1	3	1	3	2
Rationale for choice of data collection tool(s)	0	0	0	1	0	0	0	0	3	0
Detailed recruitment data	0	3	2	2	1	1	3	1	3	2
Statistical assessment of reliability and validity of measurement tool(s) (Quantitative only)	1	1	1	2	1	1	3	3	3	0
Fit between stated research question and method of data collection (Quantitative only)	0	0	0	0	0	0	0	0	3	0
Fit between stated research question and format and content of data collection tool e.g., interview schedule (Qualitative only)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fit between research question and method of analysis	0	0	0	0	0	0	0	0	2	0
Good justification for analytic method selected	1	1	1	1	0	0	1	2	3	3
Assessment of reliability of analytic process (Qualitative only)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Criteria	Al-Abbad (2015)	AlArifi (2012)	AlBarakati (2009)	Al-Borie & Damanhour (2013)	Al Debari and Ahmed (2011)	Al Essa et al. (2014)	AlFozan (2013)	AlGhamdi (2014)	AlGhanim (2011)	AlHassan (2009)
Evidence of user involvement in design	1	1	2	0	0	1	0	0	3	0
Strengths and limitations critically discussed	2	0	2	3	1	1	0	2	3	0
TOTAL SCORE	1.4	1.2	1.4	1.9	0.9	1	1.4	1.2	2.8	1.3
Percentage	45.2	40.5	45.2	63.3	30.0	33.3	45.2	40.5	92.9	42.9

VI.b Methodological quality of the included studies (n=40) - continued

Criteria	AlJamaan et al. (2014)	AlMoajel et al. (2014)	AlOnazi, et al. (2011)	AlQahtani & AlDahi (2015)	AlKhashan et al. (2011)	AlKhathami et al. (2010)	Al-Mobeeriek (2012)	AlMrstani et al. (2014)	AIOtaibi and Abdelkarim (2015)	AlSaquer et al. (2015)
Explicit theoretical framework	1	1	1	1	2	2	2	1	1	2
Statement of aims/objectives in main body of report	2	3	3	0	3	3	3	0	3	3
Clear description of research setting	2	3	3	3	3	2	2	3	2	3
Evidence of sample size considered in terms of analysis	0	3	1	3	3	1	1	1	1	1
Representative sample of target group of a reasonable size	1	2	1	3	2	1	3	0	0	1
Description of procedure for data collection	1	1	1	0	1	2	1	1	1	1
Rationale for choice of data collection tool(s)	0	0	0	0	0	0	0	0	0	0
Detailed recruitment data	1	1	2	0	1	1	1	0	1	0
Statistical assessment of reliability and validity of measurement tool(s) (Quantitative only)	0	3	1	3	3	0	1	1	1	3
Fit between stated research question and method of data collection (Quantitative only)	0	0	0	0	0	0	0	0	0	0
Fit between stated research question and format and content of data collection tool e.g., interview schedule (Qualitative only)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fit between research question and method of analysis	0	0	0	0	0	0	0	0	0	0
Good justification for analytic method selected	0	3	1	0	3	0	2	0	1	1
Assessment of reliability of analytic process (Qualitative only)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Evidence of user involvement in design	0	0	1	0	0	0	2	0	0	3
Strengths and limitations critically discussed	2	2	0	2	2	3	0	0	0	0

Criteria	AlJamaan et al. (2014)	AlMoajel et al. (2014)	AlOnazi, et al. (2011)	AlQahtani & AlDahi (2015)	AlKhashan et al. (2011)	AlKhathami et al. (2010)	Al-Mobeeriek (2012)	AlMrstani et al. (2014)	AlOtaibi and Abdelkarim (2015)	AlSaqer et al. (2015)
TOTAL SCORE	0.7	1.6	1.1	1.1	1.6	1.1	1.3	0.5	0.8	1.3
Percentage	23.8	52.4	35.7	35.7	54.8	35.7	42.9	16.7	26.2	42.9

VI.c Methodological quality of the included studies ($n=40$)- continued

Criteria	AlShahrani et al. (2015)	Alshammari (2014)	AlTurki and Khan (2013)	AlZolibani (2011)	Arrejaie et al. (2014)	Atallah et al. (2013)	Binsalih et al. (2011)	EIbcheraoui et al. (2015)	Habib et al. (2014)	Hamam et al. (2015)
Explicit theoretical framework	1	1	0	0	0	1	1	1	1	1
Statement of aims/objectives in main body of report	3	3	3	3	3	3	3	3	3	3
Clear description of research setting	3	3	3	3	3	3	3	3	3	3
Evidence of sample size considered in terms of analysis	0	1	3	0	0	0	1	3	2	3
Representative sample of target group of a reasonable size	0	1	2	0	0	0	0	3	0	2
Description of procedure for data collection	2	3	2	1	1	3	1	3	1	2
Rationale for choice of data collection tool(s)	0	1	0	0	0	1	2	2	0	2
Detailed recruitment data	0	3	1	0	1	3	1	3	2	1
Statistical assessment of reliability and validity of measurement tool(s) (Quantitative only)	1	3	3	1	0	2	1	0	2	0
Fit between stated research question and method of data collection (Quantitative only)	0	0	0	0	0	0	0	0	0	2
Fit between stated research question and format and content of data collection tool e.g., interview schedule (Qualitative only)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fit between research question and method of analysis	0	1	0	1	1	1	2	3	1	2
Good justification for analytic method selected	0	3	1	0	1	2	2	3	3	3
Assessment of reliability of analytic process (Qualitative only)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Evidence of user involvement in design	0	3	2	1	0	1	1	0	2	0
Strengths and limitations critically discussed	0	2	1	3	2	1	0	2	2	0
TOTAL SCORE	0.7	2.0	1.5	0.9	0.9	1.5	1.3	2.1	1.6	1.7

Criteria	AlShahrani et al. (2015)	Alshammari (2014)	AlTurki and Khan (2013)	AlZolibani (2011)	Arrejaie et al. (2014)	Atallah et al. (2013)	Binsalih et al. (2011)	ElBcheraoui et al. (2015)	Habib et al. (2014)	Hamam et al. (2015)
Percentage	23.8	66.7	50.0	30.0	30.0	50.0	42.9	69.0	52.4	57.1

VI.d Methodological quality of the included studies (n=40)- continued

Criteria	Harakati et al. (2011)	Kaliyadan et al. (2013)	Khawaja et al. (2011)	Mahrous (2013)	Momani and Al Korashy (2012)	Saati (2013)	Salch et al. (2011)	Suleiman (2013)	Suliman et al. (2009)	Zolaly and Hanafi (2012)
Explicit theoretical framework	2	1	1	1	1	1	1	1	3	1
Statement of aims/objectives in main body of report	3	3	3	3	3	3	2	3	3	3
Clear description of research setting	2	3	3	3	3	3	3	3	3	3
Evidence of sample size considered in terms of analysis	0	0	1	3	2	3	1	3	3	1
Representative sample of target group of a reasonable size	0	0	0	3	2	3	0	3	3	1
Description of procedure for data collection	1	3	3	2	3	3	3	2	3	3
Rationale for choice of data collection tool(s)	3	3	3	2	3	3	3	3	2	3
Detailed recruitment data	0	3	2	2	3	2	2	2	2	1
Statistical assessment of reliability and validity of measurement tool(s) (Quantitative only)	0	0	3	NA	3	NA	1	3	3	3
Fit between stated research question and method of data collection (Quantitative only)	0	2	0	NA	3	NA	2	0	3	0
Fit between stated research question and format and content of data collection tool e.g., interview schedule (Qualitative only)	NA	NA	NA	0	NA	3	NA	NA	NA	NA
Fit between research question and method of analysis	0	2	2	0	2	3	2	2	3	2
Good justification for analytic method selected	1	3	1	0	2	2	2	2	2	2
Assessment of reliability of analytic process (Qualitative only)	NA	NA	NA	0	NA	2	NA	NA	NA	NA
Evidence of user involvement in design	0	0	3	0	3	1	0	3	0	0
Strengths and limitations critically discussed	1	2	2	1	2	0	1	3	2	3
TOTAL SCORE	0.9	1.8	1.9	1.4	2.5	2.3	1.6	2.4	2.5	1.9

Criteria	Harakati et al. (2011)	Kaliyadan et al. (2013)	Khawaja et al. (2011)	Mahrous (2013)	Momani and Al Korashy (2012)	Saati (2013)	Salch et al. (2011)	Suleiman (2013)	Suliman et al. (2009)	Zolaly and Hanafi (2012)
Percentage	31.0	59.5	64.3	47.6	83.3	76.2	54.8	78.6	83.3	61.9

Appendix VII Summary of methods and main findings of the included studies

Study	Design	Setting	Type of care	Geographical region/City	Sample	Findings
Al-Abbad (2015)	Cross-sectional survey	Quasi-governmental	PHCs ¹	Central region (Riyadh)	400 patients	40% of female participants were dissatisfied with doctor-patient communication.
AlArifi (2012)	Survey	Private	Community pharmacy care	Central region (Riyadh)	1,699 patients	Only one third of the participants perceived the pharmacist as a vendor. Saudi patients have higher satisfaction, perception and appreciation of the pharmacist's role in the healthcare team.
AlBarakati (2009)	Cross-sectional phone survey	Quasi-governmental	Dental clinic	Central region (Riyadh)	200 female patients	Transportation difficulties, inconvenient appointment times, and dissatisfaction with communication with receptionists were the most common reasons for failed appointments.
Al-Boric & Damanhour i (2013)	Cross-sectional survey	Private; Governmental	Secondary care 'inpatient ward'	Central region (Riyadh) Eastern region (Dammam) Western province (Jeddah) Northern province (Tabuk and Najran)	1,000 patients	Service quality was highest in Riyadh public and private hospitals. Service quality of public hospitals in Jeddah got the highest score after Riyadh, followed by Tabuk, Najran, and Dammam. Service quality of private hospitals in Jeddah got the highest score after Riyadh, followed by Dammam, Tabuk and Najran.
AlDebasi & Ahmed (2011)	Self-administered questionnaire	Governmental	Secondary care Tertiary care	Central region (AlQasim)	500 patients	Around half of the participants were satisfied with the health provision and the infrastructure of the clinics. However, 22% of them found it difficult to get appointments on time.
Al Essa et al. (2014)	Cross-sectional survey	Governmental	Pharmacy care and specialised cardiac clinic	Central region (Riyadh)	49 patients	70% of respondents reported that they received prescription refills on time. 98% of respondents were satisfied with the clarity of written instructions.
AlFozan (2013)	Cross-sectional survey	Quasi-governmental	Secondary care	Eastern region Western region Central region	302 patients	Areas of highest satisfaction with Saudi nurses' care were: respecting religion and culture, maintaining privacy and confidentiality, communication and professionalism. Areas of least satisfaction were related to discharge instructions and

¹ Primary healthcare centres.

Study	Design	Setting	Type of care	Geographical region/City	Sample	Findings
AlGhamdi (2014)	Cross-sectional survey	Governmental	Secondary care	Southern province (AlBaha)	183 patients	updating the patient's family with changes in the patient's condition. Patient satisfaction was positively influenced by health service quality, with the empathy dimension having the greatest influence on patient satisfaction.
AlGhamim (2011)	Cross-sectional survey	Governmental	Outpatient clinics	Central region (Riyadh)	800 patients	Age, gender, education, and health status influenced patients' access to care. Negative perceptions about quality and availability were reported as common reasons for bypassing PHCs.
AlHassan (2009)	Personal Interview survey	Governmental	Community pharmacy care	Central region (Riyadh)	187 consumers	High levels of trust in pharmacists as qualified health professionals. Inconvenient working hours can be a barrier to accessing healthcare centres.
AlJamaan et al. (2014)	Cross-sectional survey (questionnaire interview)	Governmental; Quasi-governmental	Tertiary care	Central region (Riyadh)	73 patients	50% of the cancer patients were unable to access tertiary hospitals. Patients who had been referred to tertiary hospitals had a special royal decree, or had connections within the hospital.
AlMoajel et al. (2014)	Cross-sectional survey	Not stated	PHCs	Eastern province (Jubail)	200 patients	48.5% disagreed that the clinic gave them access to healthcare at any time they need it. Around 40% were dissatisfied with PHCs' working hours. There is a significant relationship of patient satisfaction with gender, where females held more positive attitudes about PHC services than men.
AlOnazi et al. (2011)	Cross-sectional survey	Not stated	Dialysis care	Central region (Riyadh)	100 patients	Patients reported high levels of empathy from both doctors and nurses. Older, female, and less educated patients' perception of empathic treatment by healthcare professionals was greater than others. Patients dialysed in evening shifts perceive less empathy from healthcare workers than patients dialysed in morning shifts.
AlQahtani & Al Dahi (2015)	Cross-sectional survey	Quasi-governmental	Secondary care	Northern region (Tabuk)	420 patients	Patient satisfaction with nursing care is low. Female, less well-educated patients, and patients admitted to the surgical department experienced lower level of satisfaction with nursing care.
AlKhashan et al. (2011)	Cross-sectional survey	Quasi-governmental	Family and Community Medicine Department	Central region (Riyadh)	240 caregivers	Most caregivers were satisfied with the services provided by home care support but still noted areas of deficiency in vocational therapy, physiotherapy, and social services.
AlKhathami et al. (2010)	Cross-sectional survey	Governmental	Secondary care	Central region (Riyadh)	116 patients	Majority of patients reported the Arabic-speaking nurse was more capable of showing empathy than non-Arabic. Majority of patients reported that the non-Arabic nurses engaged in limited conversation, and never or rarely called the interpreter despite the presence of language barriers.

Study	Design	Setting	Type of care	Geographical region/City	Sample	Findings
Al-Mobeeriek (2012)	Self-administered questionnaire	Private; Governmental	Dental care	Central region (Riyadh)	452 patients	Overall high levels of satisfaction with dentists' behaviour and quality of treatment. Patient satisfaction was higher among females than males.
AlMrstani et al. (2014)	Cross-sectional survey	Quasi-governmental	Obstetrics ward	Western province (Jeddah)	150 patients	Satisfaction with care influenced by level of education, age, and nationality. Non-Saudi respondents with different cultures felt they need more attention.
AlOtaibi & Abdelkarim (2015)	Cross-sectional survey	Private	Community pharmacies	Central province (Dawadmi)	100 consumers	Performance of providers is below expectations and one third of the consumers felt health providers pay more attention to the business/financial aspects of care. Around 72% of consumers agreed that pharmacists are ignoring the prescriptions law (sell medicine without prescription), which results in high levels of malpractice.
AlSaqer et al. (2015)	Cross-sectional survey (comparative study)	Private	Secondary care	Eastern province (Alahsa)	150 patients	Insured patients were more positive about the efficiency of ED's services in private hospitals than the non-insured.
AlShahrani et al. (2015)	Cross-sectional survey	Quasi-governmental	Dental care	Central region (Riyadh)	72 patients	Majority of responders were confident about services provided at the university. However, they were less satisfied with the waiting times, duration of treatment completion, and orthodontist interaction and explanation of the procedure while they were treated.
AlShammari (2014)	Cross-sectional survey	Governmental	PHCs	Northern province (Hail)	453 patients	Participants were moderately satisfied with the quality of healthcare provided. The highest satisfaction scores were for interpersonal communication; including health providers' friendliness and respect. The lowest scores were for accessibility and availability of healthcare services.
AlTurki & Khan (2013)	Cross-sectional Survey	Private	Pharmacy care	Eastern province (Alahsa)	657 patients	Most of the respondents had moderate to good satisfaction levels. Respondents aged 50–60 were found most satisfied with the healthcare service provided.
AlZolibani (2011)	Cross-sectional survey	Quasi-governmental	Dermatology clinic	Central region (AlQassim)	741 patients	60% of the participants were satisfied with their care. The organisation of the clinic scored highly; satisfaction with clinic appointment times was low. Satisfaction was positively associated with female gender, age below 40, single status, low education level, low socioeconomic status, and rural residence.
ArRejaie et al. (2014)	Cross-sectional survey	Quasi-governmental	Dental clinic	Eastern province (Dammam)	220 patients	More than 80% of participants were satisfied with the quality of treatment provided by intern students, treatment management, and clinical environment.
Atallah	Cross-sectional survey	Not stated	Tertiary care	Central province (Riyadh)	100 patients	Patients had high levels of satisfaction with nursing care provided. However, the lowest levels of satisfaction were with language and

Study	Design	Setting	Type of care	Geographical region/City	Sample	Findings
et al. (2013)						discharge information.
Binsalih et al. (2011)	Cross-sectional survey	Quasi-governmental	Tertiary care	Not stated/ most likely Riyadh	988 inpatients	Satisfaction with overall services was high. The lowest satisfaction score was related to the quality of in-patient rooms (79.8%). There was a significant negative association between length of stay (LOS) and satisfaction. Significant association between gender and satisfaction, where female participants were more satisfied than males.
ElBcheraoui et al. (2015)	Interview survey household survey	Household visits	NA	National (KSA)	10,735 participants	Saudis do not seem to seek prevention or care until after developing disease symptoms or reaching an advanced stage of illness. Available healthcare services in close proximity are not enough to get Saudis utilising the care offered.
Habib et al. (2014)	Cross-sectional survey	Quasi-governmental	Dental clinic	Central province (Riyadh)	86 patients	The patients treated by the dental students were highly satisfied with their treatment.
Hamam et al. (2015)	Cross-sectional survey	Public places; including cafes, shopping centres and major supermarket chains	Emergency care	Western province (Jeddah)	1,551 subjects	Majority of the respondents believe the emergency services respond late (take more than 30 minutes or more to reach the patient's house).
Harakati et al. (2011)	Cross-sectional survey	Governmental	haemodialysis	Not stated	98 patients	50% of the respondents were dissatisfied with the way their doctors inform them about their illness and felt that they were informed of their illness in an inappropriate manner. Half of them do not understand what the doctor explained to them at all.
Kaliyadan et al. (2013)	Cross-sectional survey	Quasi-governmental	Dermatology care	Not stated/ most likely Eastern province.	161 patients	Most of the responders were highly satisfied with tele-dermatology.
Khawaja et al. (2011)	Cross-sectional survey	Quasi-governmental	PHCs	Central province (Riyadh)	302 patients	Participants were dissatisfied with the appointment times, and the poor explanation of the delivery of service at the reception. Participants were unsatisfied with the receptionists' communication skills and indicate the desire of training to improve receptionists' skills.
Mahrous (2013)	Qualitative (focus groups)	Not stated	Not stated	Western regions (Jeddah)	6 focus group discussions (total number is unknown)	High quality services are not distributed equally to match the public health needs of different geographic areas within the KSA.
Al Momani & Al Korashy	Cross-sectional survey	Quasi-governmental	In-patient care	Central region (Riyadh)	448 patients	Negative experiences of patients with nursing care in the dimensions of information giving, caring behaviour, and nurse competency and

Study	Design	Setting	Type of care	Geographical region/City	Sample	Findings
(2012)						technical care.
Saati, (2013)	Qualitative study (individual interviews)	Governmental	Chemotherapy care	Central region (Riyadh)	60 patients	Poor communication was because of language barriers, differences in culture, and poor support from healthcare staff and family members. Empathy enhanced patient understanding but satisfaction declined with subsequent information during advanced treatment.
Saleh et al. (2011)	Cross-sectional survey	Governmental	Rehabilitation care	Central region (Riyadh)	104 patients	The implementation of the nursing round system (NRS) increased the patients' satisfaction with care provided.
Suleiman (2013)	Cross-sectional survey	Private	Pharmacy care	Central region (Riyadh)	680 patients	Poor satisfaction with providers' communication skills. Participants rarely seek the pharmacist's advice because of lack of private areas to discuss their health issues, and lack of trust in the pharmacist.
Suliman et al. (2009)	Face to face survey	Quasi-governmental	Inpatient	Eastern region Western region Central region	393 patients	Majority of responders were satisfied with care provision. The nurses always give them treatment on time, and treat them with respect. However, the participants believe that they are not given the opportunity to ask if they need to know more about their illness.
Zolaly & Hanafi (2012)	Cross-sectional survey (questionnaire interview)	Governmental	Out-patient clinics and inpatient wards	Western region (Madinah)	200 parents of child patients	Parents were dissatisfied with the degree to which they were involved in their child's care. Parents' satisfaction differed with medical facility, where average scores were higher in in-patient facilities than the out-patient facilities. In addition, parents with high educational levels were more satisfied than parents with low educational levels.

Appendix VIII FGDs recruitment leaflet-English version

Exploring public attitudes towards the health system of Saudi Arabia



We would like to invite you to take part in our research study. Before you decide whether you would like to participate, it is important that you understand why the research is being done, and what it would involve for you.



What will happen if I take part?
The researcher will ask you to fill out a consent form that gives her permission to involve you in a group discussion. All the information you provide will be treated with respect and will not be misused in any matter.



What is the purpose of the study?
This is a PhD project aiming to explore general awareness of the Saudi health system, opinions of the accessibility of different levels and types of healthcare facilities in Saudi Arabia, and satisfaction with the health system.

Why have I been invited?
As a citizen receiving care in KSA, we are interested in hearing your experiences with, and perspectives on the Saudi health system.

What are the possible benefits of taking part?
This study aims to assess patients' attitudes towards the health system of Saudi Arabia. Although you won't receive direct benefits from participating, this study will be of great benefit to Saudi society by ensuring better care to meet your satisfaction and expectations.

What will happen when the research study stops?
If the research stops for any reason, your data will be destroyed permanently and won't be used again in any further research projects.

Will my taking part in the study be kept confidential?
All your information will be confidential and anonymous. Research participants will not be identifiable from their responses.

What will happen to results of the research study?
Papers based on this study will be included in the researcher PhD thesis and will be published in several national and international journals. This project will also be presented in several conferences and seminars. You will be sent a brief report on the study's findings, at your request.



If you have any problems, questions or concerns about this study, please speak to a member of the research team. If you remain unhappy and wish to formally complain, you may do so through the hospital patient affairs department.

OR

You can contact City University London Complaints Procedure.

Full contact details are provided in the informed sheet. Please ask one of the research team to get your copy.

CONFIDENTIAL

Patients Included

Appendix IX Participant Information Sheet –Focus group participation



City University London

Title of study: Exploring public attitudes towards the health system of Saudi Arabia

We would like to invite you to take part in our research study. Before you decide whether you would like to participate, it is important that you 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 it with others if you wish. Ask us if there is anything that is not clear, or if you would like more information.

What is the purpose of the study?

This is a PhD project aiming to explore general awareness of the Saudi health system, opinions of the accessibility of different levels and types of healthcare facilities in Saudi Arabia, and satisfaction with the health system.

Why have I been invited?

As a resident receiving treatment in Saudi hospitals/healthcare centres, we are interested in hearing your experiences with, and perspectives on, the Saudi health system.

Do I have to take part?

Participation in this study is voluntary. You may withdraw at any stage without being penalised. You also have the right to avoid answering any questions, which you feel are too personal or intrusive. Taking part in this research will not affect your treatment or your relationship with any of your hospital healthcare providers.

It is up to you to decide whether or not to take part. If you do, you will be asked to sign a consent form, but you will still be free to withdraw from the study at any time and without giving any reason.

What will happen if I take part?

The researcher will ask you to fill out a consent form that gives her the permission to involve you in a group discussion. All the information you provide will be treated with respect and will not be misused in any matter.

You will also be required to fill out 1 questionnaire. You are not required to release any personal information in that questionnaire.

All the data collected from both questionnaires and interviews will be permanently destroyed after the completion of the study. Should you wish to withdraw from the study, your information will be destroyed immediately.

Expenses and Payments (if applicable)

Not applicable

What do I have to do?

Please fill out the consent form and let the researcher know which dates and time suits you best for the focus group discussion. Then she will provide you with full information about the exact timing of the focus groups and the venue.

What are the possible disadvantages and risks of taking part?

We won't put you under any medical tests; the only thing we need is your opinion. And as mentioned above, you have the ultimate freedom to withdraw from this study at any stage with no penalty. You will be given a specific code which will appear on both your consent form and your questionnaire. If you wish to withdraw and have your data destroyed, your completed questionnaire will be identified from this code and will be destroyed immediately.

What are the possible benefits of taking part?

This study aims to assess patients' attitudes towards the health system of Saudi Arabia. Although you won't receive direct benefits from participating, this study will be of great benefit to Saudi society. It will inform healthcare policy makers as to patient satisfaction with Saudi health systems.

What will happen when the research study stops?

If the research study stops for any reason, your data will be destroyed permanently and won't be used again in any further research projects.

Will my taking part in the study be kept confidential?

All your information will be confidential and anonymous. Research participants will not be identifiable from their responses.

What will happen to results of the research study?

Papers based on this study will be published in several national and international journals. This project will also be presented in several conferences and seminars. You will be sent a brief report on the study's findings at your request.

What will happen if I don't want to carry on with the study?

You have the ultimate freedom to withdraw from the study without an explanation or penalty at any time.

What if there is a problem?

If you have any problems, questions or concerns about this study, please speak to a member of the research team. If you remain unhappy and wish to formally complain, you may do so through the following hospital representatives:

King Fahd University Hospital: Dr.khalid Alotaibi, [REDACTED]

Alkhahal Medical Group : Dr. Sharif Hassan [REDACTED]

Maternity and Child Hospital- Dammam & Primary Health Care Centers: Dr.Hussam AlTamimi ([REDACTED])
[REDACTED]

You can also contact the University Complaints Procedure by phone at (+44) 02070403040. You can then ask to speak to the Secretary to Senate Research Ethics Committee and inform them that the name of the project is: **Assessing the general public attitudes towards health systems-Eastern Province Saudi Arabia**

You could also write to the secretary at:

Anna Ramberg

Secretary to Senate Research Ethics Committee

Research Office, E214

City University London

Northampton Square

London

EC1V 0HB

Email: [REDACTED]

City University London holds insurance policies which apply to this study. If you feel you have been harmed or injured by taking part in this study, you may be eligible to claim compensation. This does not affect your legal rights to seek compensation. If you are harmed due to someone's negligence, then you may have grounds for legal action.

Who has reviewed the study?

This study has been approved by City University London (School of Health Sciences) Research Ethics Committee.

Further information and contact details

For further information, please contact:

Afnan Aljaffary

UK Phone no.: [REDACTED]

Saudi Phone no.: [REDACTED]
[REDACTED]

OR

Adel Youssef

Saudi Phone no.: [REDACTED]

Email: [REDACTED]

OR

Dr.Katherine Curtis Tyler

UK phone number: [REDACTED]

Email: [REDACTED]

OR

Dr Shashivadan Hirani

UK Phone no.: [REDACTED]

Email: [REDACTED]

OR

Dr.Justin Needle

UK Phone no.: [REDACTED]

Email [REDACTED]

Thank you for taking the time to read this information sheet.

IX.a Consent Form- focus group participation



Consent form

City University London

Title of Study: **Assessing the general public attitudes towards health systems-Eastern Province Saudi Arabia.**

Please initial box

1.	I agree to take part in the above City University London research project. I have had the project explained to me, and I have read the participant information sheet, which I may keep for my records. I understand this will involve: Allowing the researchers to involve me in a focus group discussion related to my awareness of and views on the Saudi health system, key determinants of my health-seeking behaviour in Saudi Arabia, my opinion on the accessibility of the different levels and types of healthcare facilities in Saudi Arabia, and my preferred healthcare scheme.	
2.	This information will be held and processed for the following purpose(s): To assess public attitudes towards the health system in Saudi Arabia. I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published.	
3.	I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way. However, if I wish to withdraw from the study after participating in the focus group session and wants my data to be destroyed, the researcher will request to keep the audio recording and analyse only those statements that that did not involve me.	
4.	I agree to the City University London recording and processing this information about me. I understand that this information will be used only for the purpose(s) set out in this statement, and my consent is conditional on the University complying with its duties and obligations under the Data Protection Act 1998.	
6.	I agree to take part in the above study.	

Name of Participant

Signature

Date

Appendix X focus group discussion (FGDs) Topic guide

Version 2.0 [English]

FOCUS GROUP: DISCUSSION GUIDE

Facilitator's welcome, introduction and instructions to participants

Welcome and thank you for volunteering to take part in this focus group. You have been asked to participate, as your point of view is important. I realise you are busy and I appreciate your time.

Introduction: This focus group discussion is designed to explore the general public's current thoughts and feelings about healthcare in Saudi Arabia, and will cover: people's *knowledge and sources of knowledge* about the Saudi health system, their *opinions on how easy it is to access* health services in Saudi Arabia; their *satisfaction with the Saudi health system*, and *how healthcare in Saudi Arabia could be improved*.

The focus group discussion will take no more than **1 hour 30 minutes**.

Confidentiality and anonymity: *Please be advised that our discussions will be audio recorded so that we have a record of what has been said.* This will also help me to listen to you accurately without being interrupted taking notes during our discussion. However, I would like to assure you that the discussion will be confidential and anonymous. The recordings will be kept safely in a locked facility until they are transcribed word for word. Both the recordings and transcripts will be stored based on City University London privacy and confidentiality rules, a copy of these rules is available upon request. The transcribed notes of the focus group will contain no information that would allow any individuals to be linked to specific statements. Please try to answer and comment as accurately and truthfully as possible. If there are any questions or discussions that you do not wish to answer or participate in, you do not have to do so.

Ground rules

- The most important rule is that only one person speaks at a time. You may be tempted to jump in when someone is talking but please wait until they have finished. This will help us to understand and transcribe your views accurately without missing any important information.
- There are no right or wrong answers.
- You do not have to speak in any particular order.
- When you do have something to say, please do so. There are many of you in the group and it is important that I obtain the views of each one of you.

- You do not have to agree with the views of other people in the group, but please respect the views of others.
- Please respect the confidentiality of all participants, and keep all our discussions confidential after this session.
- You don't have to give your real name; if you feel more comfortable using another name you are free to do so.

Does anyone have any questions? (Answers).

OK, let's begin

Warm up

- First, I'd like everyone in turn to introduce him or herself.
 - Can you tell us your first name or any other name you would like us all to use?
 - Could you please write your name on the paper in front of you?

Introductory questions

I am just going to give you a couple of minutes to think about the following questions.

- How healthy do you think that Saudi Arabian population is?
- Do you think Saudi citizens are healthier than citizens in other countries such as Middle Eastern countries? Why?

Is anyone happy to share his or her experience?

Guiding questions

Awareness, knowledge and views

1. Thinking about Saudi healthcare over the last few years. What kind of changes do you notice?

Probes:

- a. Health coverage (New hospitals/ primary healthcare centers (PHCCs)..etc
- b. Facilities in the hospitals and/or PHCCs (waiting area, cleanness..)
- c. Healthcare providers
- d. Saudi healthcare staff (Saudisation)
- e. Appointment system
- f. Out of hours services
- g. Emergency services

2. Thinking about Saudi healthcare over the next few years. What kind of changes do you expect?

Probes:

- a. The introduction of health insurance for all citizens
- b. New medical cities
- c. Better/worse facilities
- d. More/less Saudisation
- e. More/less pharmacies

Trust in the health system

3. To what extent do you think people trust health facilities in Saudi Arabia to provide adequate healthcare?

Probes:

- a. *Safe care(Less side effects/ complications)*
- b. *Effective care*
- c. *Convenient care*
- d. *Respective care*
- e. *Culturally sensitive care*
- f. *Timely services*
- g. *Good treatment outcomes*

Efficiency

4. *How well organised do you think health services are in Saudi Arabia?*

Probes:

- a. *Good value for money*
- b. *Appointment cancelation*

Access

5. To what extent do you think people are able to access the healthcare they need?

Probes:

- a. *Importance of wealth and or social class ?*
- b. *Importance of place of residence?*
- c. *Importance of nationality ?*
- d. *Importance of personal connections (wasta)?*

6. How easy is it for people to get care when they need it at different times?

Probes:

- a. *At weekends*
- b. *At nights*
- c. *At holidays (e.g: Eid holidays)*
- d. *In Ramadan*
- e. *Waiting times?*

7. *How does this affect people's choice of healthcare services?*

Probes:

- a. *More Pro private/ pro public*
- b. *Access through emergency department*
- c. *More dependent on pharmacy services*
- d. *More dependent on alternative medicine*
- e. *More dependent on religious medicine (al teb al nabawi)*

f. Find personal connections (wasta) to access healthcare

Health system's responsiveness and public choice

8. To what extent do you think people in Saudi Arabia get the chance to be involved in making decisions about their own care or treatment?
9. *Do you think people are able to get a second opinion when they are unhappy with the healthcare they received?*

Probes:

- a. *PHC provider*
 - b. *Specialist doctor at governmental hospital/ private hospital*
 - c. *Consultant at governmental hospital/ private hospital/ specialist hospital*
 - d. *Consultation from overseas hospitals*
10. To what extent do you think people in Saudi Arabia are treated with respect by healthcare professionals?

Probes:

- a. *Cultural respect*
- b. *Compassion*
- c. *Dignity of care*
- d. *Privacy respect*
- e. *Doctors/nurses humaneness*

Financial risk protection

11. Moving to medical expenses, to what extent do people find it hard to pay medical bills?
12. To what extent do people go without care because they fear medical bills?
13. How common do you think it is for people to pay for healthcare out-of-pocket?
14. What do you think leads people to do this?

Probes:

- a. *can't afford insurance*
- b. *adequately covered by insurance*

Citizen satisfaction

15. Overall, to what extent do you think people are satisfied/ dissatisfied with the healthcare services they receive in Saudi Arabia?
16. What are the main factors that influence people's satisfaction with healthcare in Saudi Arabia?

Probes:

- a. *PHC services*
- b. *Equity*
- c. *Quality of healthcare*

- d. *Management corruption (wasta)*
- e. *Referral system*
- f. *Treated with respect*
- g. *Ability to pay*

Concluding questions

17. What do you see as the biggest problem(s) facing healthcare and people's health in Saudi Arabia?

Probes:

- a. *Unhealthy lifestyles*
- b. *Ageing population*
- c. *Chronic diseases*
- d. *Environmental factors (air pollution, storms)*
- e. *Financial constraints/affordability of healthcare*

18. What sorts of improvements would you suggest to make it better?

Probes:

- a. *Implementing health insurance for all citizens*
- b. *Better access*
- c. *Better quality*
- d. *Efficient care*
- e. *Reducing out of pocket payments*
- f. *More health promotion through GPs, for children at school (exercises, healthy meals at schools canteens..etc).*

19. Are there any other issues you would like to raise that we haven't discussed so far?

Conclusion

- Thank you for participating. This has been a very successful discussion
- Your opinions will be a valuable asset to the study
- We hope you have found the discussion interesting
- If there is anything you are unhappy with or wish to complain about, please contact the project's principal investigator or speak to me later - our full contact details are provided in your information sheet.
- I would like to remind you that any comments featuring in this report will be anonymous and confidential
- Before you leave, please hand in your completed personal details questionnaire.

Appendix XI Reflection notes taken for each Focus group discussion (FGD)

FGD1

This was my first FGD, consisting of four participants. It was conducted in a Café shop and the place was quiet and convenient. I was anxious about how this interview would go and was relieved to find that the patient was talkative and willing to open up.

R1 was dominant in this group and R3 wasn't able to spell out her ideas. I personally struggled to stop her to give others the chance to speak. Although I made it clear at the beginning of the session that each participant should allow others to share their ideas, as the aim of this group discussion is to hear opinion from each member, as possible. At the beginning, I like the fact that some participants started mentioning some examples from their experience, but this took too long and some participants got bored and stopped talking.

They repeated the king's continuous efforts to establish better services in all sectors. However, in the middle of the discussion, they had more comfort to criticise some areas in the Saudi health system. The participants were varied in their experience; some of them get treatment in governmental hospitals, some in private hospitals, and some in other governmental hospitals. This highly helped to enrich the discussion session.

R2 was interested about the topic this had a little chat together after the session and she gave some recommendation to improve the healthcare provision. She suggested to apply 24 hours/ 7days outpatient services as this service is already implemented in Dubai. She also showed her willingness to help in the snowball sampling.

FGD2

This FGDs was conducted in a venue at other government hospital "A". The place was big and convenient to me, the class is quite big and there was a whiteboard. I used the whiteboard occasionally especially when we talked about the variation in healthcare provision among different groups such as poor vs rich ... etc.

The groups are well educated so I felt the discussion was in a high level of knowledge. Plus the participants came on time and they respect others opinion. I felt it was a good practice to keep the participants leads the discussion without so much intervention from me, especially that this group is quite big contained six participants. The thing that a bit concerned me is the non-Saudi participant and the risk of hiding some ideas because of her fear to be criticised. I tried to give special attention to her to make her more relaxed to spell out her ideas.

I enjoyed talking to this group... we shared our contact numbers in case they need a report on my research results. They also proposed to help me recruiting male participants.

FGD3

This FGD was conducted in Primary healthcare centre “B”. It very challenging to me, I recruited 10 male participants for this FG, 7 of them didn’t show up and only three came on the selected time. I was intending to cancel it but I felt it is useful to conduct it even though the number of participants is small because those participants live in rural area, poor, have 8 dependents, and live in a very small house.

This focus groups consists of husband, wife, and a cousin. They were less educated people. At the beginning of the focus group session, I felt there were some tensions between the participants. The husband interrupted his wife several times and I tried to stop that in a nice but serious way. I didn’t want to put him off but at the same time I wanted to give the wife the courage to tell me what she thinks even if her opinion is opposite to her husband.

The husband used some negative expressions with his wife and occasionally said something like “you don’t know”.

Because of that, I decided not to include relatives in the further FGDs and not to have members from both genders in the future FGDs to reduce the risk of dominance of male participants and thus lose the opportunity to hear the female participants’ views.

FGD4

This FGDs consisted of four participants and was conducted in Governmental hospital “B” in a private room at the out-patient department. The environment in this focus group session wasn’t convenient.

At the beginning I felt very shy, as this was the first session with only male participants. Some of the participants were religious so I lost the eye contact at the beginning. The room offered in the hospital was small as well.

In addition, because room was located in the outpatient department. Annoyingly, the room wasn’t completely quiet. In some occasions we had been distracted with doctors’ calls.

Although, the researcher was assured that the room is quite prior conducting the session. In some occasions, the noise didn’t allow the participants to hear my questions clearly, so I repeated some questions to make sure that the participants understood the question clearly.

In addition, I felt the participants were concerned about their turn to see the doctor. Although, I scheduled this session into their convenient (i.e. 2 hours before their appointment time). But still they weren’t comfortable. Thus, I didn’t put pressure on them and R4 left 10 minutes before the session ends. This interview was short I think as a result of this.

FGD5

This session consisted of five participants and was conducted in at Governmental hospital “B” and was quite convenient compared to the one used in the FGD4. The venue was an empty

inpatient room.

I felt R4 didn't feel comfortable. She scared to share her point of views. This might be occurred because the participants do not know each other. I found it hard to keep her involved in the session. But after a while she became more comfortable to share her ideas and experiences. she also was brave to talk about some sensitive information such as the management corruption and personal connections (wasta).

R2 was very less educated female, so sometimes she couldn't understand the questions but I tried to pay extra attention on her to make sure that she understood the question correctly by giving more probes and explanation using my "lay Saudi accent" when necessary.

Most of the patients here, except R1, was a bit ill. Thus, I tried to put them on ease and not to put more pressure on them with so many questions.

FGD6

This session consisted of five participants at other government hospital "A" in a private room. It went well, although some participants were tired because I met them immediately after their work in the evening (6-7 p.m.). Some of them weren't very concentrated with the group discussion because of that especially R1. Therefore, her involvement was limited a bit.

I was a bit concerned with the fact that they moved to an interesting topic, but less relevant to my research topic, which is the population trust and point of view of Saudi workforce in general, rather than focussing in the healthcare and the health system itself. I tried to keep the focus of this discussion as much as possible without putting them off and losing their interest to share their opinion.

FGD7

This FGD consisted of four participants and conducted in R1 office. The place was quiet, private, and suitable to conduct the session in.

Although this is a male group, I felt I was braver talking to them compared with male group in FGD4. All the participants were non-Saudis and because of that they mostly focused on the insurance categories and the insurance services. However, the dominant member (R2) is an accountant. Thus, in some occasions he talked about numbers and figures related to health insurance and the co-payments of his health insurance class. I couldn't stop him doing that because the health insurance coverage is relevant to access and perceptions of quality of care received. However, I moved my eyes to other participants to give thme more opportunity to share their views and also to make the balance in the contribution between the participants in the session, as possible. There are some questions related to the access to the government hospitals and the care provided there, but they said they are not aware of that because of their ineligibly to access government care. Thus they weren't able to answer them.

FGD8

This discussion conducted five male participants, which has been conducted in a meeting room in a secured building. The place was quiet, private, and suitable to conduct the session in.

The participants varied in their attitudes towards the Saudi health system. Some of them felt that the health system works very well compared to the system implemented in their home country, especially after implementing the cooperative health insurance. While others felt that the budget for healthcare in KSA is huge and can be spent more efficiently. One challenge I faced is that some participants wanted to know more about my own views in the Saudi health system to sort out the conflict in the participants' point of view. I kept reminding them that there is no yes or no answer, I only want to know about their own views and experiences and I respect whatever opinion they have because it will highly help me to conduct my PhD project.

FGD9

This group contained four male participants and conducted in a private meeting room in a secured building.

The FGD went well. I enjoyed talking with this group. They were interested with the topic. The session took too long and exceeded the 90 minutes. Some participants showed their dissatisfaction with the time taken in this session, and I wanted to respect the time that we agreed on at the beginning of the FGD, so I moved to the ending questions to end the session.

FGD10

This FGD consisted of five male participants and conducted at R3 office. The office was private and quite.

Similar to FGD7 and FGD8, all the participants were non-Saudi men and because of that they mostly focused on the insurance categories and the insurance services. Many topics raised in FGD7 have been repeated again in this FGD, especially with regards to the gap between the health insurance classes and the difficulty getting the health insurance approvals for medical claims. Less discussion was given to the government health sector because the participants said they were not aware of the government health facilities because of their ineligibility to get access to them. One participant kindly shared his struggle to get the medical claim approval for his very ill son to make an important procedure at the same day of this session, the participant was emotional and I was worried about his son and his ability to complete the session. I reminded him that he should feel free to leave the session when he feel its necessary to see his son. He missed the last five minutes of the session.

FGD11

This group consisted of four participants. I met this male group at R1 office.

Although all the participants in this session were Saudi men, they focused manily on the

cooperative health insurance because they all working in private companies, allowing them to have health insurance coverage. However, because they are Saudis, they were also managed to share their point of views on the Saudi government health sector and its strengths and weaknesses.

FGD12

This group consisted of five female participants in a café shop. The place was quite and private.

This group didn't have a great amount to say. I tried to prompt a few times, but the participants weren't too receptive of this and after they started sharing their own experience with the services, such as the women who expressed her struggle to get access to care to do her knee procedure, the participants started to open up better.

Appendix XII The questionnaire core (attitude) items considered for inclusion.

Survey items drafted from relevant papers identified in the literature (Phase 1), themes emerged from systematic review (Phase 2), and participants' direct quotations in FGDs (Phase 3) (*Health status*)

#	Items	Item source(s)		
		Literature review (Phase 1)	Systematic review (Phase 2)	FGDs (Phase 3)
1.	Over the past 12 months, what do you think your physical health is?	X Munro & Duckett, 2015		X
2.	Over the past 12 months, what do you think your emotional health is?	X Munro & Duckett, 2015		X
3.	People feel more responsible for their own health as compared with a decade ago.	X Jadoo et al, (2014)		X
4.	The population is less informed about health risk and healthy behaviour as compared with a decade ago.	X Jadoo et al, (2014)		X
5.	Healthcare gets more attention from politicians as compared with a decade ago.	X Jadoo et al, (2014)		X
6.	In general, how would you describe your health	X Commonwealth fund international health survey, 2013		
7.	How often have you found that your health keep you from working full time	X Commonwealth fund international		

			<i>health survey, 2013</i>			
8.	How often have you found that your health limit your ability to do housework or other daily activities	X	<i>Commonwealth fund international health survey, 2013</i>			
9.	How often have you found that you could not cope with all the things that you had to do?	X	<i>WHO, 2003</i>			
10.	I Have experienced salary reduction owing to sick leave.	X	<i>Mastilica & Chen (1998)</i>			

Survey items drafted from relevant papers identified in the literature (Phase 1), themes emerged from systematic review (Phase 2), and themes emerged from FGDs (Phase 3) (*citizens' satisfaction*)

#	Items	Item source(s)		
		Literature review (Phase 1)	Systematic review (Phase 2)	FGDs (Phase 3)
11.1	Which of the following statements comes closest to expressing your overall view of the health system in this country? a. On the whole, the system works pretty well and only minor changes are necessary to make it work better b. There are some good things in our health system but fundamental changes are needed to make it work better c. Our health system has so much wrong with it that we need completely rebuild it d. Not sure	X <i>Commonwealth fund international health survey, 2013; Northcott & Northcott, 2004; Fronstin, 2012</i>		
13.	I'm happy with the way [Australia's] current healthcare system is funded	X <i>Hardie & Critchley (2008)</i>		X
14.	From your own experience or from what you have heard, please say how satisfied or dissatisfied you are with the way in which [NHS] local doctors or GPs run nowadays?	X <i>Gershlick et al., 2015</i>		X
15.	From your own experience or from what you have heard, please say how satisfied or dissatisfied you are with the way in which [NHS] dentists run nowadays?	X <i>Gershlick et al., 2015</i>	X	
16.	From your own experience or from what you have heard, please say how satisfied or dissatisfied being in hospital as an inpatient?	X <i>Gershlick et al., 2015</i>		
17.	From your own experience or from what you have heard, please say how satisfied or dissatisfied attending hospital as an outpatient?	X <i>Gershlick et al., 2015</i>		
18.	From your own experience or from what you have heard, please say how satisfied or dissatisfied you are with the way in which [NHS] accidents and emergency departments run nowadays?	X <i>Gershlick et al., 2015</i>	X	X

19.	Thinking about all of your personal experiences within the past year with the healthcare services. To what degree are you satisfied or dissatisfied with the services you have received?	X	<i>Northcott & Northcott, 2004</i>		
20.	What are the reasons of your dissatisfaction with the health system in this county?	X	<i>Northcott & Northcott, 2004</i>		
21.	What are the reasons of satisfaction with the health system in this country?	X	<i>Northcott & Northcott, 2004</i>		
22.	What are the most important healthcare issue facing [Canada] today?	X	<i>McGill, 2014</i>		X

XII.a Survey items drafted from relevant papers identified in the literature (Phase 1), themes emerged from systematic review (Phase 2), and participants' direct quotations in FGDs (Phase 3) (*Access to care*)

#	Items	Item source(s)		
		Literature review (Phase 1)	Systematic review (Phase 2)	FGDs (Phase 3)
23.	Last time when you were sick, how easy or difficult was it to as health services you need?	X <i>Northcott & Northcott, 2004</i>	X	X
24.	Last time when you were sick, how quickly could you get an appointment to see a doctor?	X <i>Commonwealth fund international health survey, 2013</i>	X	X
25.	How easy or difficult is it to get medical care in the evenings, on weekends, or holidays without going to the emergency department?	X <i>Commonwealth fund international health survey, 2013</i>		X
26.	I can get basic healthcare service at primary healthcare centres rather than going to general hospitals			X
27.	How often you had serious problems paying or were unable to pay your medical bills?	X <i>Commonwealth fund international health survey, 2013</i>		X
28.	During the last 12 months, was there a time when you had a medical problem but did not visit a doctor because of cost?	X <i>Commonwealth fund international health survey, 2013</i>		
29.	During the last 12 months, was there a time when you skipped a medical test, treatment, or follow up that was recommended by a doctor because of cost?	X <i>Commonwealth fund international health survey, 2013</i>		X

30.	During the last 12 months, was there a time when you did not collect a prescription for medicine, or you skipped doses of your medicine because of cost?	X	<i>Commonwealth fund international health survey, 2013</i>		
31.	Care at private healthcare facilities is affordable for me				X
32.	Co-payment for visit to specialist high or very high.	X	Mastilica & Chen (1998)		X
33.	Co-payment for prescribed drugs high or very high.	X	Mastilica & Chen (1998)		X
34.	Out-of-pocket payments a big or very big problem.	X	Mastilica & Chen (1998)		X
35.	<u>I am satisfied with cost of health insurance</u>	X	<i>Fronstin, 2012</i>		
36.	<u>I am satisfied with costs not covered by health insurance</u>	X	<i>Fronstin, 2012</i>		
37.	Considering your life circumstances and overall state of health, how well do you think your main insurance policy meets your needs?	X	<i>Manro & Duckett, 2015</i>		X
38.	My health insurance policy meets my family health needs				X
39.	Please indicate whether affordability of healthcare system in general has improved	X	<i>McGill, 2014</i>		
40.	Please indicate whether affordability of preventive tests has improved	X	<i>McGill, 2014</i>		
41.	Please indicate whether affordability of diagnostic procedures has improved	X	<i>McGill, 2014</i>		
42.	Please indicate whether affordability speciality care has improved	X	<i>McGill, 2014</i>		
43.	Please indicate whether affordability long term care has improved	X	<i>McGill, 2014</i>		
44.	The referral system at primary healthcare centres is difficult and complicated			X	X
45.	It is difficult to get timely access to care without using personal connections (<i>wasta</i>)				X
46.	It is difficult to get the prescribed medicine without using personal connections (<i>wasta</i>)				X

XII.b Survey items drafted from relevant papers identified in the literature (Phase 1), themes emerged from systematic review (Phase 2), and participants' direct quotations in FGDs (Phase 3) (*Quality*)

#	Items	Item source(s)		
		Literature review (Phase 1)	Systematic review (Phase 2)	FGDs (Phase 3)
47.	The quality of care improved as compared to a decade ago.	X <i>Jadoo et al., (2014)</i>		
48.	Doctors are much friendlier as compared to a decade ago.	X <i>Jadoo et al., (2014)</i>		
49.	Doctors give you more information as compared to a decade ago.	X <i>Jadoo et al., (2014)</i>		
50.	My doctor's office has everything needed to provide complete care as compared to a decade ago.	X <i>Jadoo et al., (2014)</i>		X
51.	Doctors use sophisticated technology to diagnose and treat my health issues			X
52.	Receptionists at healthcare centres are friendly and courteous			X
53.	For your last visit, how would you rate your experience of being greeted and talked to respectfully?	X WHO, 2003		
54.	For your [child's] last visit, how would you rate your experience of being involved in making decisions about your healthcare or treatment?	X WHO, 2003		X
55.	For your [child's] last visit, how would you rate the way the health services ensured you could talk privately to healthcare providers?	X WHO, 2003	X	

56.	For your [child's] last visit, how would you rate the cleanliness of the rooms inside the facility, including toilets?	X	WHO, 2003						X
57.	Thinking of the past year, how would you rate your doctor making sure you understand all the important information?	X	<i>Northcott & Northcott, 2004</i>	X					X
58.	Thinking of the past year, how would you rate your doctor explaining things to you in a way you can understand (My doctor usually explains things in a language that is easy for me to understand (e.g. he/she avoids difficult medical terms))	X	<i>Northcott & Northcott, 2004</i>						
59.	My doctor explains things in a language that was easy for me to understand				X				X
60.	In the past 2 years, have you ever been given the wrong medication or the wrong dose by the doctor?	X	<i>Commonwealth fund international health survey, 2013</i>						
61.	In the past 2 years, was there a time you thought a medical mistake had been done by the doctor?	X	<i>Commonwealth fund international health survey, 2013</i>						
62.	Standard of [NHS] has got better in the last 5 years	X	<i>Gershlick et al., 2015</i>						X
63.	I expect standard of [NHS] to get better in the next 5 years	X	<i>Gershlick et al., 2015</i>						X
64.	Has your doctor explained to you why a test was needed?	X	<i>Fronstin, 2012</i>						X
65.	How would you rate the skills and experience of nurses?	X	Munro & Duckett, 2015						
66.	In the past 2 years, was there a time you thought the specialist do not have basic medical information or test results from the GP about the reasons of your visit?	X	<i>Commonwealth fund international health survey, 2013</i>						
67.	In the past 12 months, have your doctor or pharmacist reviewed with you all the	X	<i>Commonwealth fund international</i>						

	medications you take?		<i>health survey, 2013</i>		
68.	In the past 12 months, have your doctor or pharmacist explained the potential side effects of any medication that was prescribed	X	<i>Commonwealth fund international health survey, 2013</i>	X	
69.	In the past 12 months, have your doctor or pharmacist given you a written list of all your prescribed medications	X	<i>Commonwealth fund international health survey, 2013</i>		
70.	How would you rate your doctor listening to you, i.e., you feel that you have been heard	X	<i>Northcott & Northcott, 2004</i>		X
71.	How would you rate your doctor treating you with respect and dignity? Is this ...	X	<i>Northcott & Northcott, 2004</i>		X
72.	My doctor usually respects my time				X
73.	How would you rate your doctor understanding and respecting your healthcare choices	X	<i>Northcott & Northcott, 2004</i>		X
74.	I can get a second opinion about my health issues when needed				X
75.	How would you rate your doctor helping you to participate fully in your healthcare	X	<i>Northcott & Northcott, 2004</i>		X
76.	How would you rate the QUALITY of care you received from your doctor over the past 12 months?	X	<i>Northcott & Northcott, 2004; McGill, 2014</i>		
77.	How would you rate the amount of time your doctor spends with you to address your issues?	X	<i>Northcott & Northcott, 2004</i>		X

XII.c Survey items drafted from relevant papers identified in the literature (Phase 1), themes emerged from systematic review (Phase 2), and participants' direct quotations in FGDs (Phase 3) (*Trust*)

#	Items	Item source(s)		
		Literature review (Phase 1)	Systematic review (Phase 2)	FGDs (Phase 3)
78.	In the past year, how would you rate the amount of trust in your doctor?	X <i>Northcott & Northcott, 2004</i>		X
79.	How confident you are to be able to get the treatment you need	X <i>Fronstin, 2012</i>		X
80.	How confident you are to get healthcare services without financial hardship	X <i>Fronstin, 2012</i>		X
81.	I am confident to receive the most effective drugs			X
82.	How confident you are to have enough freedom to choose who provides you medical care	X <i>Fronstin, 2012</i>		X
83.	How confident are you with the MOH ability to manage health-related resources			X
84.	<i>How likely do you think it is that you would encounter the following types of situations in city or county hospitals around here?</i> Prescribing medicines not covered by insurance even when effective alternatives covered by insurance are available.	X Munro & Duckett, 2015		X
85.	<i>How likely do you think it is that you would encounter the following types of situations in city or county hospitals around here?</i> Taking bribes ("red envelopes" or hong bao) for treatment, which has already formally been paid for.	X Munro & Duckett, 2015		

Appendix XIII Matrix of the quotations taken from the FGDs and drafted survey items.

No#	Item	Direct quotations
1.	Overall, the population health in Saudi Arabia has got better	<i>'Thanks God we have a good health status because of our high standard of living' (R1, FGD1)</i>
2.	Overall, people feel more responsible for their own health	<i>'The people don't value their health.. The person who has diabetes he doesn't pay attention to his diet and he keeps eating food even if the sugar level is high.. People don't like to change their daily routine.. They are used to eat dates with coffee.. They eat whatever they like with no limit' (R3, FGD6)</i> <i>" here in Saudi Arabia anything forbidden is desirable" (R1 , FGD5)</i>
3.	The population is well informed about health risks and healthy behaviours	<i>'We have the information and and health education, but still we are not healthy'. (R2, FGD6)</i> <i>'The awareness increases here from lay people to the top of pyramid' (FGD1,R2)</i>
4.	Healthcare gets more attention from the Ministry of Health	<i>"The Ministry of Health is paying greater attention to healthcare... we can see a lot of improvements in the government health sector."</i> [R2, FGD6, Saudi woman]
5.	Over all, I am satisfied with the Saudi health system	<i>"The MOH has no defects and it is aiming to provide a distinctive health service to the citizen."</i> [R3, FGD3, Saudi man]
6.	I am happy with the way the Saudi health system is currently funded	<i>"The hospitals get an adequate budget but the problem is in organising and managing the resources."</i> [R3, FGD2, Saudi woman]
7.	I am satisfied with the way in which the Ministry of Health primary healthcare centres are operated	<i>"Primary care needs a full reform, to be honest."</i> [R3, FGD2, Saudi woman]

No#	Item	Direct quotations
8.	I am satisfied with the way in which Ministry of Health emergency departments are operated	<i>'If we go to the hospital and we don't have the appointment, the doctor will not take me. They will say go to the emergency and if it is required then they will call us then when we go to the emergency they will say the OPD is open....So now we are as a ball, they treat the patients as a ball. Emergency, they are not taking us as a patient because the OPD is open and when we go to the OPD, they say we have to have an appointment'</i> [R5, FGD10, non-Saudi/Indian man]
9.	I am satisfied with the way in which Ministry of Health dental care is operated	<i>"Thank God we are in a good position. People in the U.S. might wait nine months to see a dentist. We are better off than others."</i> [R1, FGD1, Saudi woman]
10.	It is easy to get access to the healthcare I need	<i>"You would have to wait on an endless waiting list."</i> [R3, FGD1, Saudi woman]
11.	I can get basic healthcare service at primary healthcare centres rather than going to general hospitals	<i>"Primary care centres lack of the minimum standard of care"</i> [R3, FGD7, non-Saudi/Egyptian man]
12.	The referral system is difficult and complicated	<i>'The referral system is complicated and time consuming so I avoid it as much as possible'</i> [R6, FGD2, Saudi woman] <i>"Some primary care centres are frustrating ... if I had a critical illness and I needed a referral, I could wait for about six months to be referred."</i> [R2, FGD1, Saudi woman]
13.	I can quickly get an appointment to see a doctor at Ministry of Health hospitals	<i>"The delay in in getting and appointments and care is a severe issue at the governmental hospitals and the patients sometimes are critically ill and they become bored of that.. It's a story (not straight forward) not like the private hospitals"</i> [R1, FGD6, Saudi woman] <i>'The appointment takes two months or three months and sometimes the patient is critically ill... let's say I'm critically ill? What should I do? What are my options?'</i> (R3, FGD4, Saudi man)

No#	Item	Direct quotations
14.	It is difficult to get timely access to care unless I have personal connections (<i>wasta</i>)	“If you personally know the hospital administrator, you know [that] instead of being admitted to the hospital after two months, you will be able to be admitted to the hospital in two days.” [FGD3, R1, Saudi man]
15.	It is difficult to get the medicines I need unless I have personal connections (<i>wasta</i>)	“they allow you to get it (medicine) if you have <i>wasta</i> .” [R4, FGD5, Saudi woman]
16.	It is easy to get medical care in the out-of-office hours (such as evenings, weekends, or holidays) without going to the emergency department	‘My child is critically ill with heart disease. The cardiologist said to me once his health become deteriorated, I can show the medial report to the doctor at my home town and he should accept to see my child immediately. But unfortunately this never happens. My kid became sick at the night and they asked me to wait until the emergency shift begins, my husband became extremely angry and he started shouting, my child had a fever in that time, after that they brought the doctor to see him. I don’t know why they did that to us, he is a child.’ (FGD5, R5)
17.	I have skipped a medical test, treatment, or follow up that was recommended by my doctor because of cost	“I self-assess my health situation. If I feel that I need to visit the doctor, I will go but I won’t adhere to all the requests or medication my doctor suggests because of the price of medical bills.” [R4, FGD1, Saudi woman] “There are some people who ignore some appointments at the private hospitals because some healthcare services are very expensive” [R1, FGD2, Saudi woman] “The issue in the healthcare here is the medicine charges... the medicine here in Saudi Arabia is very expensive.” [R3, FGD7, non-Saudi/ Egyptian man]
18.	I have serious problems paying my medical bills	“Health is very important to people, and everyone is keen to be in good health, but I couldn’t afford it, it exceeds my ability to pay.” [R1, FGD12, Saudi woman]
19.	I often have to pay for healthcare out of my own pocket (not through health insurance)	“I was very sick and could not bear the pain. We looked for a <i>wasta</i> to facilitate my admission procedures... I couldn’t wait and I had my knee surgery (out of pocket) at a private hospital.” [R3, FGD12, Saudi woman]
20.	Care at private healthcare facilities is affordable for me	“Medical bills at private care blackmail national citizens.” [R1, FGD1, Saudi woman]

No#	Item	Direct quotations
		“Patients could use up all their savings to get care in the private sector.” [R1, FGD3, Saudi man] “The huge expenses of private care are not equivalent to the individual’s average income.” [R3, FGD3, Saudi man]
21.	My health insurance policy meets my family’s health needs	“I had to pay 1000 Riyal (out of pocket) for doctor’s admission and blood tests for my wife... After that, when she became sick I asked her ‘Are you really sick, do you really need to go to the hospital?’” [R2, FGD7, non-Saudi/Egyptian man]
22.	I find it hard to afford co-payments for visits to specialists	“The problem here is the categories of insurance. Some groups pay 2% as a co-payment only and some people in the low insurance class pay 70% of the medical bill. This causes a huge financial strain on them” [R2, FGD8, non-Saudi/ Egyptian man] “An individual with a low salary cannot absorb the cost of insurance.” [R5, FGD10, non-Saudi/Indian man]
23.	I find it hard to afford co-payments for prescribed medicines	“I prefer to go to India and pick up medicines rather than picking [them] up from here.” [R4, FGD10, non-Saudi/Indian man] “The issue in the healthcare here is the medicine charges... the medicine here in Saudi Arabia is very expensive.” [R3, FGD7, non-Saudi/Egyptian man]
24.	My health insurance company usually responds to my medical claims quickly	“Today, my son is going to be admitted to the hospital for the surgery... We spent four or five days... we are going here and there to chase up this paperwork.” [FGD10, R3, non-Saudi/Bakistani man]
25.	My health insurance company usually approves my medical claim	“This is what many of us suffer from. Each employee in a company has insurance, so he goes to a certain hospital and speaks with the insurance representatives and they might then decide that he did not need an operation” [R4, FGD11, Saudi man] “The insurance companies, they just have unqualified consultants... how can they decline or reject? The doctor knows medicine and he has some tests for patients and the insurance company rejects the decision. Not because it’s not in their scope, it is covered. But because

No#	Item	Direct quotations
		<i>they don't approve."</i> [FGD10, R3, non-Saudi/Bakistani man]
26.	I am confident that my doctor will prescribe medicines covered by my insurance, rather than more expensive alternatives	<i>"Doctors usually choose medicines with the lowest price, which are covered by the insurance"</i> [R1, FGD7, non-Saudi/Egyptian man]
27.	Receptionists at the primary healthcare centres are friendly and courteous	<i>"The receptionists at the governmental primary care centres are lacking in etiquette. They are lacking professionalism and they treat people as if they are at the receptionists' home."</i> [R3, FGD2, Saudi woman] <i>"You might ask them a question [and] they don't pay you any attention. They do not reply to you."</i> [R1, FGD5, non-Saudi/Sudani female]
28.	My doctor uses the latest, up-to-date technology to diagnose my health issues	<i>"Some positive changes happened in the last few years, especially with regard to the medical equipment."</i> [R2, FGD4, Saudi man] <i>"It [has been] proven that the governmental hospitals had a lot of advancement in science and technology."</i> [R1, FGD5, non-Saudi/Sudani female]
29.	My doctor usually greets and talks to me respectfully	<i>"Sometimes they are arrogant, and thus the patients' health deteriorated and they become unwilling to seek care."</i> [R2, FGD3, non-Saudi/Bahraini woman]
30.	My doctor respects my time	<i>"doctors also spend a lot of time at the prayer break, and then they simply say that they can't see the patient because their working hours finished."</i> [R1, FGD7, non-Saudi Egyptian man]
31.	My doctor spends enough time with me to address all my health-related issues related to my current health condition	<i>"They do not allow you to talk... they just inform you about your health case in general and give you your prescription."</i> [R2, FGD12, Saudi woman] <i>"My doctor becomes angry if I talk and he behaves as if he is a teacher and I am a student."</i> [R2, FGD5, Saudi woman]
32.	My doctor helps me to make decisions	<i>"There are doctors who don't accept negotiation. He keeps asking, 'Am I the doctor or you?... Ok, instead of disagreeing with me, why don't you make me understand?'"</i> [R1, FG5,

No#	Item	Direct quotations
	about my health	non-Saudi/ Sudanian woman] “It is the patient’s right to refuse a treatment.” [R2, FGD2, Saudi woman]
33.	My doctor understands and respects my healthcare choices	“A lot of them understand that this is the patient’s right. But sometimes you will notice that doctors don’t accept that.” [R1, FG5, non-Saudi/ Sudanian woman]
34.	I can get a second opinion about my health issues when needed	“They never give us the chance to do so, it is impossible here for the doctor to advise you to seek out another doctor for a second opinion.” [R4, FGD1, Saudi woman] “A lot of people here seek a second opinion. They don’t rely on one diagnosis, they go to several doctors. But the patients rarely tell their doctors that they are seeking a second opinion.” [R4, FGD6, Saudi woman]
35.	My doctor usually explains to me why a test (e.g. blood test, x-ray) was needed	“There are doctors who don’t accept negotiation. He keeps asking, ‘Am I the doctor or you?. Ok, instead of disagreeing with me, why don’t you make me understand?’” [R1, FG5, non-Saudi/ Sudanian woman]
36.	The rooms inside healthcare facilities (including toilets) are clean	“I have even noticed lately that there is no care taken to ensure the cleanliness of the toilets... It is so harmful to the health of patients.” [R2, FGD12, Saudi woman] “You have to give the cleaners money to clean for you or to do anything.” [R2, FGD12, Saudi woman]
37.	I am confident that I will receive the healthcare I need without financial hardship	“Medical bills at private care blackmail national citizens.” [R1, FGD1, Saudi woman] “The huge expenses of private care are not equivalent to the individual’s average income.” [R3, FGD3, Saudi man]
38.	I am confident that the Ministry of	“Sometimes there is a waste of money, for example, the hospitals purchase computer-

No#	Item	Direct quotations
	Health will be able to manage the health budget without wasting money	<i>based medical electronic systems and we can see the doctors are still using paper-based medical records.”</i> [R2, FGD2, Saudi woman]
	Which THREE of the following are you currently <i>most satisfied with</i> in the Saudi health system? - Increase of <i>Saudisation</i> in health workforce (i.e. increased numbers of Saudi doctors, nurses, and other health professionals)	<i>“The health workforce, which comprises Saudi nationals, knows exactly what our country needs.”</i> [R2, FGD2, Saudi woman]
	Increase of chronic diseases	‘The diseases are increasing.. We still have diabetes, obesity.. The diseases are still spreading in Saudi Arabia’ [R2, FGD6, Saudi woman] ‘The diseases are increasing such as hypertension, diabetes, and obesity. For example, it is impossible here to find an elderly who doesn’t have hypertension or diabetes.’ [R3, FGD6, Saudi woman].
	Which THREE of the following are you currently <i>most dissatisfied with</i> in the Saudi health system? - Private hospitals focus on making money rather than providing quality healthcare	<i>They want to achieve the target... they may even perform a surgery on me without my need to it.’</i> [R4, FGD9, Saudi man]
	Which THREE of the following are you currently <i>most dissatisfied with</i> in the Saudi health system? - The Ministry of Health does not control prices at private healthcare facilities	<i>“I believe the pricing system at private hospitals is set with inflated prices. The government should intervene on this.”</i> [R1, FGD2, Saudi woman]
	Which THREE of the following are you currently <i>most dissatisfied with</i> in the Saudi health system? - Poor monitoring of the quality of services provided at governmental sector by the	‘The health system doesn’t have control over the hospitals. A hospital can recruit for example three doctors based on their CVs but the health system doesn’t require certain examinations to make sure that those doctors are qualified enough to be employed’ [R1, FGD7, non-Saudi/Egyptian man]

No#	Item	Direct quotations
	Ministry of Health	‘There is no proper monitoring at governmental hospitals’ [R2, FGD5, Saudi woman]

Appendix XIV Actual items drawn from the literature review compared with the modified items

	Actual items	Modified items
1.	Over the past 12 months, what do you think your physical health is?	In general, how would you describe your physical health
2.	Over the past 12 months, what do you think your emotional health is?	In general, how would you describe your emotional/mental wellbeing (this includes happiness, self-esteem and confidence, hopefulness, optimism, life satisfaction, enjoyment and having fun)
3.	Overall, the population health in Saudi Arabia has got better	New item
4.	People feel more responsible for their own health as compared with a decade ago.	Overall, people feel more responsible for their own health
5.	The population is less informed about health risk and healthy behaviour as compared with a decade ago.	The population is well informed about health risks and healthy behaviours
6.	Healthcare gets more attention from politicians as compared with a decade ago.	Healthcare gets more attention from the Ministry of Health
7.	Which of the following statements comes closest to expressing your overall view of the health system in this country? On the whole, the system works pretty well and only minor changes are necessary to make it work better	Which ONE of the following statements comes closest to expressing your overall view of the health system in this country? On the whole, the system works pretty well and only minor changes are necessary to make it work better

	Actual items	Modified items
	- There are some good things in our health system but fundamental changes are needed to make it work better - Our health system has so much wrong with it that we need completely rebuild it - Not sure	- There are some good things in our health system but fundamental changes are needed to make it work better - Our health system has so much wrong with it that we need completely rebuild it - Not sure
8.	Over all, I am satisfied with the Saudi health system	New item
9.	I'm happy with the way [Australia's] current healthcare system is funded	I am happy with the way Saudi Arabian current healthcare system is funded
10.	From your own experience or from what you have heard, please say how satisfied or dissatisfied you are with the way in which [NHS] local doctors or GPs run nowadays?	I am satisfied with the way in which the Ministry of Health primary healthcare centres are operated.
11.	From your own experience or from what you have heard, please say how satisfied or dissatisfied you are with the way in which [NHS] dentists run nowadays?	I am satisfied with the way in which Ministry of Health dental care is operated
12.	From your own experience or from what you have heard, please say how satisfied or dissatisfied you are with the way in which [NHS] accidents and emergency departments run nowadays?	I am satisfied with the way in which Ministry of Health emergency care is operated
13.	What are the most important healthcare issue facing [Canada] today?	Which THREE of the following are the most important health-related issues facing Saudi Arabia today?
14.	Last time when you were sick, how easy or difficult was it to access health services you need ?	It is easy to get access to health services I need

	Actual items	Modified items
15.	I can get basic healthcare service at primary healthcare centres rather than going to general hospitals	New item
16.	Last time when you were sick, how quickly could you get an appointment to see a doctor?	I can quickly get an appointment to see a doctor at Ministry of Health hospitals
17.	How easy or difficult is it to get medical care in the evenings, on weekends, or holidays without going to the emergency department?	It is easy to get medical care in the out-of-office hours (such as evenings, weekends, or holidays) without going to the emergency department
18.	How often you had serious problems paying or were unable to pay your medical bills?	I have serious problems paying my medical bills
19.	During the last 12 months, was there a time when you skipped a medical test, treatment, or follow up that was recommended by a doctor because of cost?	I have skipped a medical test, treatment, or follow up that was recommended by my doctor because of cost
20.	Co-payment for visit to specialist high or very high.	I find it hard to afford co-payments for visits to specialists
21.	Co-payment for prescribed drugs high or very high.	I find it hard to afford co-payments for prescribed medicines
22.	Out-of-pocket payments a big or very big problem.	I often have to pay for healthcare out of my own pocket (not through health insurance)
23.	<i>Considering your life circumstances and overall state of health, how well do you think your main insurance policy meets your needs?</i>	My health insurance policy meets my health needs
24.	My health insurance policy meets my family health needs	New item

	Actual items	Modified items
25.	My health insurance company usually responds to my medical claims quickly	New item
26.	My health insurance company usually approves my medical claims	New item
27.	The referral system at primary healthcare centres is difficult and complicated	New item
28.	It is difficult to get timely access to care unless I have personal connections (<i>wasta</i>)	New item
29.	It is difficult to get the medicines I need unless I have personal connections (<i>wasta</i>)	New item
30.	My doctor's office has everything needed to provide complete care as compared to a decade ago.	My doctor's office has everything needed to provide the care I require
31.	My doctor uses the latest, up-to-date technology to diagnose my health issues	New item
32.	Receptionists at healthcare centres are friendly and courteous	New item
33.	For your [child's] last visit, how would you rate your experience of being involved in making decisions about your healthcare or treatment?	My doctor offers me choices to decide on my health-related decisions
34.	For your [child's] last visit, how would you rate the way the health services ensured you could talk privately to healthcare providers?	I can talk privately with healthcare providers (e.g. without others overhearing)
35.	For your [child's] last visit, how would you rate the cleanliness of	The rooms inside healthcare facilities, including toilets are clean

	Actual items	Modified items
	the rooms inside the facility, including toilets?	
36.	Thinking of the past year, how would you rate your doctor making sure you understand all the important information?	My doctor always make sure I understand all the important information
37.	My doctor explains things in a language that was easy for me to understand	New item
38.	Standard of [NHS] has got better in the last 5 years	The Standard of ministry of health has got better in the last 5 years
39.	I expect standard of [NHS] to get better in the next 5 years	I expect the standard of ministry of health will be better in the next 5 years
40.	Have your doctor explain to you why a test was needed?	My doctor always explains to me why a test was needed
41.	In the past 12 months, have your doctor or pharmacist explained the potential side effects of any medication that was prescribed	My doctor or pharmacist always explain the potential side effects of any medication that was prescribed
42.	How would you rate your doctor treating you with respect and dignity?	Doctors always greet me and talk to me respectfully
43.	How would you rate your doctor understanding and respecting your healthcare choices	My doctor understands and respects my healthcare choices
44.	How would you rate your doctor helping you to participate fully in your healthcare	My doctor help me to participate fully in my health- related decisions
45.	Would you rate the amount of time your doctor spends with you to address your issues?	My doctor spends enough time with me to address my health-related issues
46.	I can get a second opinion about my health issue when needed	New item

	Actual items	Modified items
47.	The location of the healthcare facility I usually visit is convenient for me	New item
48.	In the past year, how would you rate the amount of trust in your doctor?	I always trust my doctor
49.	How confident you are to be able to get the treatment you need	I am confident that I will be able to get the treatment I require on time and when I need it
50.	I am confident that I will receive high-quality care	New item
51.	How confident you are to get healthcare services without financial hardship	I am confident that I will receive the healthcare I need without financial hardship
52.	How confident you are to have enough freedom to choose who provides you medical care	I am confident to have enough freedom to choose the healthcare provider I prefer
53.	I am confident that the Ministry of Health will be able to manage the health budget without wasting money	New item
54.	I am confident that I will receive the most effective drugs for my condition(s)	New item
55.	I am confident that the Ministry of Health will be able to provide adequate care for me in the future	New item
56.	I am confident that the Ministry of Health will be able to provide adequate care for my family in the future	New item
57.	How likely do you think it is that you would encounter the following types of situations in city or county hospitals around	I am confident that my doctor will prescribe medicines covered by my

	Actual items	Modified items
	here? Prescribing medicines not covered by insurance even when effective alternatives covered by insurance are available.	insurance rather than more expensive alternatives

Appendix XV Patient Information Sheet and informed consent form –Questionnaire’s validity test



Participant information sheet

Title of study: Exploring the public attitudes towards the health system of Saudi Arabia

We would like to invite you to take part in our research study. Before you decide whether you would like to participate, it is important that you 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 it with others if you wish. Ask us if there is anything that is not clear, or if you would like more information.

What is the purpose of the study?

This is a PhD project aiming to explore general awareness of the Saudi health system, opinions of the accessibility of different levels and types of healthcare facilities in Saudi Arabia, and satisfaction with the health system.

Why have I been invited?

As a citizen living in KSA, we are interested in hearing your experiences with, and perspectives on, the Saudi health system.

Do I have to take part?

Participation in this study is voluntary. You have the right to avoid answering any questions which you feel are too personal or intrusive. Taking part in this research will not affect your treatment or your relationship with any of your hospital healthcare providers.

It is up to you to decide whether or not to take part.

What will happen if I take part?

You need to answer a mandatory question indicating that you are aged 18 or over, and to give the researcher the consent to involve you in this study. All the information you provide will be treated with respect and will not be misused in any manner.

You will also be required to fill out one questionnaire and one evaluation form. You are not required to release any identifying information in that questionnaire.

All the data collected from questionnaires and the evaluation forms will be permanently destroyed after the completion of the storage period (10 years after the PhD program completion date). Should you wish to withdraw from the study, your information will be destroyed immediately.

Expenses and Payments (if applicable)

Not applicable

What do I have to do?

Please fill out the questionnaire attached, which takes approximately 10-15 minutes to complete and return the questionnaire to the researcher or person handle it to you.

What are the possible disadvantages and risks of taking part?

We won't put you under any medical tests; the only thing we need is your opinion. And as mentioned above, you have the ultimate freedom to withdraw from this study with no penalty. It is difficult to identify your completed questionnaire though if it has been collected, so if you do not wish to end of the survey, please do not select "submit" button and your answers will not be counted. be included in this study, please select "I don't wish to participate" button that is given in the first page of the online questionnaire. If you decided not to participant in the middle or at the

What are the possible benefits of taking part?

This study aims to explore patients' attitudes towards the health system of Saudi Arabia. Although you won't receive direct benefits from participating, this study will be of great benefit to Saudi society. It will help to evaluate a questionnaire, which will be then used to collect data on public views on the Saudi health system. This might inform healthcare policy makers as to patient satisfaction with Saudi health systems, and the way in which the Saudi health system can be improved to increase citizens' satisfaction.

What will happen when the research study stops?

If the research stops for any reason, your data will be destroyed permanently and won't be used again in any further research projects.

Will my taking part in the study be kept confidential?

All your information will be confidential and anonymous. Research participants will not be identifiable form their responses.

What will happen to results of the research study?

Papers based on this study will published in several national and international journals. This project will also be presented in several conferences and seminars. You will be sent a brief report on the study's findings at your request, if you want to do so please send me a report request using my email address given below.

What will happen if I don't want to carry on with the study?

You have the ultimate freedom to choose not to participate in part or all of the project, and you can withdraw from the study without an explanation or penalty at any time. However, once you handle/or submit your completed questionnaire, the researchers won't be able to retrieve it anymore.

What if there is a problem?

If you have any problems, questions or concerns about this study, please speak to a member of the research team. If you remain unhappy and wish to formally complain, you may do so through the following hospital representatives:

King Fahd University Hospital: Dr.khalid Alotaibi [REDACTED]

Alkhahal Medical Group: Dr. Sharif Hassan [REDACTED]

Maternaty and Child Hospital- Dammam & Primary Healthcare Centers: Dr.Hussam ALTamimi ([REDACTED])

Directorate of Health Affairs-Eastern Province: Dr. Abdullah AlQahtani [REDACTED]

You can also contact the University Complaints Procedure by phone at [REDACTED] You can then ask to speak to the Secretary to Senate Research Ethics Committee and inform them that the name of the project is: **Exploring the public attitudes towards health systems of Saudi Arabia**

You could also write to the secretary at:

Anna Ramberg

Secretary to Senate Research Ethics Committee

Research Office, E214

City University London

Northampton Square

London

EC1V 0HB

Email: [REDACTED]

City University London holds insurance policies which apply to this study. If you feel you have been harmed or injured by taking part in this study, you may be eligible to claim compensation. This does not affect your legal rights to seek compensation. If you are harmed due to someone's negligence, then you may have grounds for legal action.

Who has reviewed the study?

This study has been approved by City, University of London (School of Health Sciences) Research Ethics Committee.

Ethical consent has already been obtained from the directorate of health affaires-Eastern province and Imam Abdulrahman Alfaisal University (University of Dammam previously).

Further information and contact details

For further information, please contact:

Afnan Aljaffary

UK Phone no.: [REDACTED]

Saudi Phone no.: [REDACTED]

Email: [REDACTED]

OR

Dr. Katherine Curtis Tyler

UK Phone no.: [REDACTED]

Email: [REDACTED]

OR

Dr.Justin Needle

UK Phone no.: [REDACTED]

Email: [REDACTED]

OR

Dr Shashivadan Hirani

UK Phone no.: [REDACTED]

Email: [REDACTED]

Thank you for taking the time to read this information sheet.

XV.a Consent form

City, University of London

Title of Study: **Exploring the public attitudes towards the health system of KSA**

Please initial box

1.	I agree to take part in the above City, University of London research project. I have had the project explained to me, and I have read the participant information sheet, which I may keep for my records. I understand this will involve: 1. Completing questionnaires asking me about my awareness of and views on the Saudi health system, including my opinion on the accessibility and quality of the different levels and types of healthcare facilities in the Kingdom of Saudi Arabia.	
2.	This information will be held and processed for the following purpose(s): To explore public attitudes towards the health system in Saudi Arabia (<u>pilot study</u>) I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published.	
3.	I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way. However, once I handle/or submit my completed questionnaire, the researchers won't be able to retrieve it anymore.	
4.	I agree to the City, University of London recording and processing this information about me. I understand that this information will be used only for the purpose(s) set out in this statement, and my consent is conditional on the University complying with its duties and obligations under the Data Protection Act 1998.	
6.	I agree to take part in the above study.	

Name of Participant

Signature

Date

Appendix XVI ‘Survey exploring public attitudes towards the health system of the Kingdom of Saudi Arabia’

Dear Participant,

As a part of my Doctoral study at the School of Health Sciences at City, University of London, UK, I am conducting a survey to learn more about the public’s views on the health services provided in the Kingdom of Saudi Arabia.

We would like to hear your opinions on this topic and invite you to complete the following questionnaire. We are interested in hearing your views on Saudi healthcare in general, rather than on any particular health service or facility. Health facilities include primary healthcare centres and both private and government hospitals.

One of the aims of this study is to make healthcare policy makers aware of the Saudi public’s views on the country’s health system, and of ways in which it could be improved.

The information obtained in this survey will be used for research purposes only. It will be completely anonymous and confidential, and not shared with any other organisation.

The survey should take about 15 minutes to complete. Once you have answered all the questions, please return the survey to the researcher.

If you have any questions about this survey, please contact me via email at



Thank you in advance for your time.

Best regards,

Afnan Aljaffary, BSc (Hons), MSc
Lecturer, College of Public Health
Imam Abdulrhman Al-Faisal University
P.O. Box. 2835, Dammam 34212

OR

Afnan Aljaffary
PhD student, School of Health Sciences
City, University of London
1 Myddelton Street
London EC1R 1UW, UK

Part 1: About healthcare in Saudi Arabia

Please read the information on the previous page carefully, and then tick the ONE answer that most closely expresses your view.

1. Thinking about the health of the Saudi population over the past five years, to what extent do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
The population is becoming better informed about health risks and healthy behaviours	☐	☐	☐	☐	☐	☐
Overall, the health of the population of KSA has improved	☐	☐	☐	☐	☐	☐
Overall, people are taking more responsibility for their health choices	☐	☐	☐	☐	☐	☐

2. Thinking about the governmental health sector, to what extent do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
I believe the governmental health sector receives enough funding	☐	☐	☐	☐	☐	☐
I am satisfied with the way governmental health sector's health budget is spent	☐	☐	☐	☐	☐	☐
c. I am satisfied with the amount of service that are available for me free of charge	☐	☐	☐	☐	☐	☐
d. I am satisfied with the level of <i>Saudisation</i> in health workforce (i.e.	☐	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
number of Saudi doctors, nurses, and other health professionals)						
e. I am satisfied with the way Ministry of Health monitors government health sector	☐	☐	☐	☐	☐	☐
f. I am satisfied with the way primary healthcare centres are operated	☐	☐	☐	☐	☐	☐
g. I am satisfied with the way inpatient care is operated	☐	☐	☐	☐	☐	☐
h. I am satisfied with the way outpatient care is operated	☐	☐	☐	☐	☐	☐
i. I am satisfied with the way emergency care is operated	☐	☐	☐	☐	☐	☐
j. Overall, I am satisfied with the governmental health sector	☐	☐	☐	☐	☐	☐
k. I trust the governmental health sector	☐	☐	☐	☐	☐	☐

3. Thinking about the private health sector, to what extent do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
a. I am satisfied with the way Ministry of	☐	☐	☐	☐	☐	☐

Health monitors private health sector							
b. I am satisfied with the way Ministry of Health controls prices at private healthcare facilities	☐	☐	☐	☐	☐	☐	☐
c. I am satisfied with the way primary healthcare centres are operated	☐	☐	☐	☐	☐	☐	☐
d. I am satisfied with the way inpatient care is operated	☐	☐	☐	☐	☐	☐	☐
e. I am satisfied with the way outpatient care is operated	☐	☐	☐	☐	☐	☐	☐
f. I am satisfied with the way emergency care is operated	☐	☐	☐	☐	☐	☐	☐
g. Overall, I am satisfied with the private health sector	☐	☐	☐	☐	☐	☐	☐
h. I trust the private health sector	☐	☐	☐	☐	☐	☐	☐

4. Thinking about your visit(s) to government healthcare facilities in the past year, to what extent do you agree or disagree with the following statements? (Please select not applicable “NA” if you have not visited any governmental healthcare facility in the past year)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
a. It is easy to get access to the healthcare I need	☐	☐	☐	☐	☐	☐
b. I can get basic healthcare service at primary healthcare	☐	☐	☐	☐	☐	☐

centres rather than going to general hospitals						
c. It is easy to get out of hours care (such as evenings, weekends, or holidays) without going to the emergency department	☐	☐	☐	☐	☐	☐
d. The referral system is functioning well	☐	☐	☐	☐	☐	☐
e. It is difficult to get timely access to a specialist unless I have personal connections (<i>wasta</i>)	☐	☐	☐	☐	☐	☐
f. It is difficult to get the medicines I need from hospital pharmacy unless I have personal connections (<i>wasta</i>)	☐	☐	☐	☐	☐	☐

5. Thinking about your visit(s) to private healthcare facilities in the past year, to what extent do you agree or disagree with the following statements? (Please tick NA if you have not visited any private healthcare facility in the past year)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
a. It is easy to get access to the healthcare I need	☐	☐	☐	☐	☐	☐
b. I have skipped check-ups and tests that were recommended by my doctor because of the cost	☐	☐	☐	☐	☐	☐
c. I have skipped a medical treatment that was recommended by my doctor because of the	☐	☐	☐	☐	☐	☐

cost						
d. I have serious problems paying my medical bills	☐	☐	☐	☐	☐	☐
e. I often have to pay for healthcare out of my own pocket (not through health insurance)	☐	☐	☐	☐	☐	☐
f. Private hospitals usually focus on making money rather than providing quality healthcare	☐	☐	☐	☐	☐	☐

6. Do you have health insurance at the moment? If NO, please go to Question 8

☐ Yes ☐ No

a. If **YES**, what insurance category/class are you assigned for?

☐ VIP class ☐ Class A ☐ Class B ☐ Class C ☐ Class D ☐ Below class D

☐ Other, please specify

7. Thinking about your health insurance coverage, to what extent do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
a. I find it hard to afford co-payments for visits to specialists	☐	☐	☐	☐	☐	☐
b. I find it hard to afford co-payments for prescribed medicines	☐	☐	☐	☐	☐	☐
c. My health insurance company usually approves my medical claims	☐	☐	☐	☐	☐	☐
d. My health insurance company usually approves my medical claims in a short	☐	☐	☐	☐	☐	☐

	period						
e. I am confident that my doctor will provide the treatment covered by my insurance, rather than more expensive alternatives	☐	☐	☐	☐	☐	☐	☐
f. Overall, my health insurance policy meets my health needs	☐	☐	☐	☐	☐	☐	☐
g. Overall, my health insurance policy meets my family's health needs	☐	☐	☐	☐	☐	☐	☐

8. How often do you visit governmental hospitals?

☐ Always ☐ Frequently ☐ Occasionally ☐ Rarely ☐ Very rarely ☐ Never

9. How often do you visit private hospitals?

☐ Always ☐ Frequently ☐ Occasionally ☐ Rarely ☐ Very rarely ☐ Never

10. Thinking about the healthcare facilities that you used the most in the past year in Saudi Arabia, to how extent do you agree or disagree with the following statements? (Please select not applicable "NA" if you have not visited any healthcare facility in the past year)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
a. Receptionists at primary care centres are friendly and courteous	☐	☐	☐	☐	☐	☐
b. The doctor's has all equipment needed to provide the care I require	☐	☐	☐	☐	☐	☐
c. The doctor uses the latest, up-to-date technology to diagnose	☐	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
my health issues						
d. I am happy with the amount of time I spend waiting before I see the doctor	☐	☐	☐	☐	☐	☐
e. The doctor usually greet and talks to me respectfully	☐	☐	☐	☐	☐	☐
f. The doctor usually explains things in a language that is easy for me to understand (e.g. he/she avoids difficult medical terms)	☐	☐	☐	☐	☐	☐
g. My doctor is able to talk with me in my native language	☐	☐	☐	☐	☐	☐
h. The doctor spends enough time with me to address all my health- related issues related to my current health condition	☐	☐	☐	☐	☐	☐
i. The doctor helps me to make decisions about my health	☐	☐	☐	☐	☐	☐
j. The doctor understands and respects my healthcare choices	☐	☐	☐	☐	☐	☐
k. I can get a second opinion about my health issues when needed	☐	☐	☐	☐	☐	☐
l. The doctor usually explains to me why a test (e.g. blood test, x- ray) was needed	☐	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	NA
m. The doctor or pharmacist usually explains the potential side effects of any medications that have been prescribed	☐	☐	☐	☐	☐	☐
n. I always trust my doctor	☐	☐	☐	☐	☐	☐
o. I can talk privately with healthcare professionals (e.g. without others overhearing)	☐	☐	☐	☐	☐	☐
p. Nurses have the required skills and experience to deal with my health-related issues	☐	☐	☐	☐	☐	☐
q. Health professionals respect patients' cultural and spiritual needs (such as Islamic beliefs)	☐	☐	☐	☐	☐	☐
r. Care is usually provided in my best interest	☐	☐	☐	☐	☐	☐
s. I have enough information about the location of services I need	☐	☐	☐	☐	☐	☐
t. The location of the healthcare facility I usually visit is convenient for me	☐	☐	☐	☐	☐	☐
u. The rooms inside healthcare facilities (including toilets) are clean	☐	☐	☐	☐	☐	☐

11. Thinking about healthcare in Saudi Arabia over the next five years, to what extent do you agree or disagree with the following statements?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
a. I am confident that I will be able to get the treatment I require on time when I need it	☐	☐	☐	☐	☐	☐
b. I am confident that I will receive the most effective drugs for my condition(s)	☐	☐	☐	☐	☐	☐
c. I am confident that I will receive the healthcare I need without financial hardship	☐	☐	☐	☐	☐	☐
d. I am confident that the Ministry of health will be able to manage their health budget efficiently (e.g without wasting money)	☐	☐	☐	☐	☐	☐
e. I am confident that the Saudi health system will be able to provide adequate care for me in the future	☐	☐	☐	☐	☐	☐
f. I am confident that the Saudi health system will be able to provide adequate care for my family in the future	☐	☐	☐	☐	☐	☐

12. Which THREE of the following are the most health challenges facing the Kingdom of Saudi Arabia today?

- a. Unhealthy lifestyles
- b. Aging population
- c. Growing numbers of people with chronic diseases/ long-term conditions
- d. Environmental factors (e.g air pollution, hot weather)
- e. Not enough preventive care
- f. Other, please specify
- g. I don't know

13. Which THREE of the following are the most health challenges facing the Kingdom of Saudi Arabia today?

- a. Applying taxes to sugar-sweetened beverages (such as soft drinks and energy drinks)
- b. Applying taxes to tobacco products (such as cigarettes)
- c. Offering healthy meals at school canteens
- d. Increasing entertaining health education sessions targeting children at schools
- e. Increasing health information on how to live healthily at primary healthcare centres
- f. Increasing health information on how to live healthily in the media (such as TV and the social media)
- g. Closing the shops (including the shopping malls and the restaurants) early
- h. Encourage employers to provide wellness programs for their employees (such as gym enter in the worksite/discounted offers for gym membership)
- i. Opening more gym centres for females
- j. Other, please specify
- k. I don't know

14. Which ONE of the following statements comes closest to expressing your overall view of the health system in the Kingdom of Saudi Arabia?

- a. On the whole, the system works well and almost nothing needs changing.
- b. The system works pretty well and only minor changes are necessary to make it work better
- c. There are some good things in our health system but fundamental changes are needed to make it work better
- d. Our health system has so much wrong with it that we need completely rebuild it
- e. Not sure

15. What improvements or changes do you think might improve the way healthcare is provided in Saudi Arabia? (please type your opinion in the box given below)

.....
.....
.....
.....
.....

Part 2: About you

The following questions will help us to monitor the demographics of our respondents. This information will be completely anonymous and confidential. Please tick the appropriate category or enter your response below.

3. What is your gender?

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

4. What is your age?

- ☐ 18-24 years
- ☐ 25- 29 years
- ☐ 30-34 years
- ☐ 35-39 years
- ☐ 40-44 years
- ☐ 45-49 years
- ☐ 50-54 years
- ☐ 55-59 years
- ☐ 60-64 years
- ☐ 65-69 years
- ☐ 70-74 years
- ☐ 75+ years

5. What is your nationality?

☐ Saudi

☐ Non-Saudi, please specify

6. Please indicate your highest level of education

☐ Read and write

☐ Primary school

☐ Intermediate school

☐ Secondary School

☐ Diploma

☐ Bachelor degree

☐ Post-graduate degree

7. What is your occupation?

8. What is your monthly income in Saudi riyal (SR)?

☐ I don't have regular income

☐ Less than 5,000 SR

☐ 5,000 SR to 9,999 SR

☐ 10,000 SR to 14,999 SR

☐ 15,000 SR to 19,999 SR

☐ 20,000 SR to 24,999 SR

☐ 25,000 SR to 29,999 SR

☐ 30,000 SR to 34,999 SR

☐ 35,000 SR to 39,999 SR

☐ 40,000 SR and above

☐ Prefer not to say

9. What is your marital status?

- ☐ Single
- ☐ Married
- ☐ Divorced or Separated
- ☐ Widowed
- ☐ Prefer not to say

10. How many dependents* do you have?

**Dependents are people, such as parents, children and other family members, who rely on you for their income*

11. Do you usually live...

- ☐ In a city or town?
- ☐ In a village or rural area?

12. In which province do you currently live?

- ☐ Central province
- ☐ Eastern province
- ☐ Western province
- ☐ Northern province
- ☐ Southern province
- ☐ Living out of Saudi Arabia, please specify

13. In general, how would you describe your physical health

- ☐ Excellent
- ☐ Very good

- ☐ Good
- ☐ Poor
- ☐ Very poor
- ☐ Prefer not to say

Please go back and check that you have answered all the questions.

Thank you for taking the time to complete this questionnaire. Please return it to the researcher.

Your assistance has been invaluable.

Best regards,

Afnan Aljaffary

This questionnaire is highly confidential. If found, please return to:

Afnan Aljaffary, BSc (Hons), MSc

Lecturer, College of Public Health

Imam Abdulrahman Al-Faisal University

P.O. Box. 2835, Dammam 34212

OR

Afnan Aljaffary

PhD student, School of Health Sciences

City, University of London

1 Myddelton Street

London EC1R 1UW

Appendix XVII Questionnaire items considered for rewording, the suggested changes, and the justification of the necessity of rewording

No#	Original item	Suggested changes	Justification
1	The population is well informed about health risks and healthy behaviours	The population is becoming better informed about health risks and healthy behaviours	To improve clarity of the item
2	Overall, the population health in Saudi Arabia has got better	Overall, the health of the population of KSA has improved	To improve clarity of the item
3	Overall, people feel more responsible for their own health	Overall, people are taking more responsibility for their health choices	Better to specify what aspect of healthcare the item is exploring. As the item aims to explore whether people in KSA are making healthier choices e.g. engaging in more physical exercises. The word “health choices” was suggested to be added.
4	I am happy with the way the Saudi health system is currently funded	I believe the governmental health sector receives enough funding	To improve clarity and to make the item more focused on the government health sector, which receives its health budget from the Saudi government.
5	I am satisfied with the way in which the Ministry of Health primary healthcare centres are operated	I am satisfied with the way primary healthcare centres are operated	The original item had few redundant words which needs to be eliminated in order to make it easier to understand

6	It is easy to get medical care in the out-of-office hours (such as evenings, weekends, or holidays) without going to the emergency department	It is easy to get out of hours care (such as evenings, weekends, or holidays) without going to the emergency department	Grammatical mistake; “the” in “in out-of-office hours” needed to be removed
7	The referral system is difficult and complicated	The referral system is functioning well	It is better to make this item positive in order to reduce ambiguity
8	My health insurance company usually responds to my medical claims quickly	My health insurance company usually approves my medical claims in a short period	To improve clarity of the item. As the aim of the item is to explore how long the patient would wait to get the health insurance approval form to be treated rather than how long the patient is out of pocket for after paying for medical care. As the latter does not apply widely to the Saudi health system, unless at emergency cases. The time dimension “in a short period” needed to be included.
9	“My doctor”	“The doctor”	The Saudi healthcare system does not have the concept of a specific doctor who should always serve certain patient(s). Patients go to the hospital and see the doctor on call. In this case, continuity of care with the same doctor does not work well in KSA.
10	My doctor’s office has everything needed to provide the care I require	The doctor has all equipment needed to provide the care I require	The original wording “everything” was vague, and the item needed to be more specific by including “all equipment”
11	It is difficult to get the medicines I need unless I have personal connections (wasta),	It is difficult to get the medicines I need from hospital pharmacy unless I have personal connections (wasta).	It is not clear in the original item if the medication prescribed from the hospital pharmacy or from any other community pharmacies.

12	“It is difficult to get timely access to care unless I have personal connections (wasta)”	It is difficult to see a specialist unless I have personal connections (wasta)”	To ensure the focus and to reduce ambiguity.
13	My doctor usually respects my time	I am happy with the amount of time I spend waiting before I see the doctor	To reduce ambiguity. As the original item might be understood in two differ ways: the doctor understands the patient is busy and thus see the patient on time or the doctor gives the patient plenty of time during the clinical encounter. The former was what the item intended to measure.
14	Care is usually provided in <u>patients</u> best interest	Care is usually provided in <u>my</u> best interest	It would be difficult for the respondent to conceptualise the feelings of others. Linking the item with the patient’s own experience would provide more precise results.
15	I am confident that I will be able to get the treatment I require on time and when I need it	I am confident that I will be able to get the treatment I require on time when I need it	The item with “and” makes it double-barrelled.
16	Which of the following would do most to improve the health of the population of Saudi Arabia?	Which <u>THREE</u> of the following would do most to improve the health of the population of Saudi Arabia?	Better to specify the number of answers that needs to be selected

XVII.a Rewording of the items included in the two ranking questions

	Ranking questions	Modified items
1	Which THREE of the following are you currently most satisfied with in the Saudi health system?- <i>Free of charge health service</i> Which THREE of the following are you currently most satisfied with in the Saudi health system- <i>Increase of Saudisation in health workforce (i.e. increased numbers of Saudi doctors, nurses, and other health professionals)</i> Which THREE of the following are you currently most satisfied with in the Saudi health system- <i>Health professionals respect patients' cultural and spiritual needs (such as Islamic beliefs)</i> Which THREE of the following are you currently most satisfied with in the Saudi health system- Care is usually provided in the patient best interest	Thinking about the government health sector, to what extent do you agree or disagree...- I am satisfied with the amount of service that are available for me free of charge Thinking about the government health sector, to what extent do you agree or disagree...- <i>I am satisfied with the level of Saudisation in health workforce (i.e. number of Saudi doctors, nurses, and other health professionals)</i> Thinking about the healthcare facilities that you used the most in the past year in Saudi Arabia, to what extent do you agree or disagree-<i>Health professionals respect my cultural and spiritual needs (such as Islamic beliefs)</i> Thinking about the healthcare facilities that you used the most in the past year in Saudi Arabia, what extent do you agree or disagree -<i>Care is usually provided in my best interest</i>
2	Which THREE of the following are you currently most dissatisfied with in the Saudi health system- <i>Poor monitoring of the quality of services provided at governmental sector by the</i> Which THREE of the following are you currently most dissatisfied with in the Saudi health system- <i>Poor monitoring of the quality of services provided at private sector by the</i> Which THREE of the following are you currently most dissatisfied with in the Saudi health system -The Ministry of Health does not control prices at private healthcare facilities	Thinking about the government health sector, to what extent do you agree or disagree...-<i>I am satisfied with the way Ministry of Health monitors government health sector</i> Thinking about the private health sector, to what extent do you agree or disagree...- <i>I am satisfied with the way Ministry of Health monitors private health sector</i> Thinking about healthcare in Saudi Arabia over the next five years, to what extent do you agree or disagree- <i>I am satisfied with the way Ministry of Health controls prices at private healthcare facilities</i>

Appendix XVIII Item-total correlations

XVIII.a Item-total correlations: Perceptions of public health in KSA

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The population is becoming better informed about health risks and healthy behaviours	6.79	0.427	0.591
Overall, the health of the population of KSA has improved	6.56	0.494	0.499
Overall, people are taking more responsibility for their health choices	6.47	0.45	0.558

XVIII.b Item-total correlations: MOH financing of government health sector

	Scale Mean if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
I believe the governmental health sector receives enough funding	8.92	0.481	0.674
I am satisfied with the way governmental health sector's health budget is spent	9.51	0.513	0.655
I am satisfied with the amount of service that are available for me free of charge	8.85	0.55	0.631
I trust the governmental health sector	8.91	0.486	0.67

XVIII.c Item-total correlations: Access and organisation of government health sector

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I am satisfied with the way Ministry of Health monitors government health sector	24.54	0.621	0.879
I am satisfied with the way primary healthcare centres are operated	24.3	0.689	0.874

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I am satisfied with the way inpatient care is operated	24.28	0.681	0.875
I am satisfied with the way outpatient care is operated	24.23	0.711	0.873
I am satisfied with the way emergency care is operated	24.19	0.681	0.875
Overall, I am satisfied with the governmental health sector	24.18	0.718	0.872
It is easy to get access to the healthcare I need	24.04	0.577	0.882
I can get basic healthcare service at primary healthcare centres rather than going to general hospitals	24.1	0.523	0.886
It is easy to get out of hours care (such as evenings, weekends, or holidays) without going to the emergency department	24.6	0.493	0.888
The referral system is functioning well	24.27	0.569	0.883

XVIII.d Item-total correlations: Infrastructure and location of healthcare services

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Receptionists at primary care centres are friendly and courteous	35.8	0.519	0.871
The doctor has all equipment needed to provide the care I require	36.08	0.599	0.866
The doctor uses the latest, up-to-date technology to diagnose my health issues	36.29	0.622	0.864
I am happy with the amount of time I spend waiting before I see the doctor	36.53	0.451	0.876
I always trust my doctor	36.05	0.666	0.863
I can talk privately with healthcare professionals (e.g. without others overhearing)	36.01	0.64	0.863
Nurses have the required skills and experience to deal with my health-related issues	36.04	0.594	0.866

	Scale Mean if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Health professionals respect my cultural and spiritual needs (such as Islamic beliefs)	35.46	0.492	0.872
Care is usually provided in my best interest	36.05	0.686	0.861
I have enough information about the location of services I need	35.99	0.565	0.868
The location of the healthcare facility I usually visit is convenient for me	35.69	0.564	0.868
The rooms inside healthcare facilities (including toilets) are clean	36.35	0.497	0.873

XVIII.e Item-total correlations: Doctor-patient communication

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The doctor usually greets and talks to me respectfully	26.42	0.597	0.864
The doctor usually explains things in a language that is easy for me to understand (e.g. he/she avoids difficult medical terms)	26.4	0.657	0.859
My doctor is able to talk with me in my native language	26.31	0.518	0.871
The doctor spends enough time with me to address all my health-related issues related to my current health condition	26.81	0.728	0.853
The doctor helps me to make decisions about my health	26.9	0.71	0.854
The doctor understands and respects my healthcare choices	26.8	0.725	0.854
I can get a second opinion about my health issues when needed	26.91	0.587	0.865
The doctor usually explains to me why a test	26.52	0.602	0.864

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
(e.g. blood test, x-ray) was needed			
The doctor or pharmacist usually explains the potential side effects of any medications that have been prescribed	27.47	0.461	0.879

XVIII.f Item-total correlations: Affordability of care

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I have skipped check-ups and tests that were recommended by my doctor because of the cost	13.4	0.672	0.735
I have skipped a medical treatment that was recommended by my doctor because of the cost	13.61	0.667	0.737
I have serious problems paying my medical bills	13.45	0.705	0.724
I often have to pay for healthcare out of my own pocket (not through health insurance)	13.11	0.502	0.791
Private hospitals usually focus on making money rather than providing quality healthcare	12.74	0.393	0.816

XVIII.g Item-total correlations: MOH monitoring of the private health sector

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted

I am satisfied with the way Ministry of Health monitors private health sector	7.99	0.584	0.707
I am satisfied with the way Ministry of Health controls prices at private healthcare facilities	8.33	0.491	0.756
Overall, I am satisfied with the private health sector	7.66	0.618	0.69
I trust the private health sector	7.83	0.593	0.702

XVIII.h Item-total correlations: Access and organisation of private health sector

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I am satisfied with the way primary healthcare centres are operated	12.38	0.652	0.837
I am satisfied with the way inpatient care is operated	12.3	0.737	0.815
I am satisfied with the way outpatient care is operated	12.26	0.76	0.809
I am satisfied with the way emergency care is operated	12.35	0.733	0.816
It is easy to get access to the healthcare I need	12	0.508	0.87

XVIII.i Item-total correlations Trust in the Saudi health system

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I am confident that I will be able to get the	16.31	0.668	0.887

treatment I require on time when I need it			
I am confident that I will receive the most effective drugs for my condition(s)	16.30	0.714	0.88
I am confident that I will receive the healthcare I need without financial hardship	16.46	0.659	0.889
I am confident that the Ministry of health will be able to manage their health budget efficiently (e.g without wasting money)	16.45	0.757	0.873
I am confident that the Saudi health system will be able to provide adequate care for me in the future	16.19	0.784	0.869
I am confident that the Saudi health system will be able to provide adequate care for my family in the future	16.15	0.753	0.874

XVIII.j Item-total correlations: Perceptions of necessity of wasta to access care

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
It is difficult to get timely access to a specialist unless I have personal connections (<i>wasta</i>)*	3.36	0.371	.
It is difficult to get the medicines I need from hospital pharmacy unless I have (<i>wasta</i>) *	2.54	0.371	.

**Items have been positively rephrased in the dataset in order to calculate accurate reliability test*

XVIII.k Item-total correlations: Perceptions of health insurance coverage in KSA

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I find it hard to afford co-payments for visits to specialists*	20.98	0.483	0.813
I find it hard to afford co-payments for	20.84	0.516	0.807

	Scale Mean if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
prescribed medicines*			
My health insurance company usually approves my medical claims	20.76	0.593	0.795
My health insurance company usually approves my medical claims in a short period	20.95	0.669	0.781
I am confident that my doctor will provide the treatment covered by my insurance, rather than more expensive alternatives	20.800	0.411	0.824
Overall, my health insurance policy meets my health needs	20.84	0.674	0.782
Overall, my health insurance policy meets my family's health needs	20.86	0.621	0.79

**Items have been positively rephrased in the dataset in order to calculate accurate reliability test*

Appendix XIX

XIX.a Table-a Means and standard deviations for the subscale *MOH financing for government health sector*

Item	Mean	SD
I believe the governmental health sector receives enough funding.	3.16	1.23
I am satisfied with the way the governmental health sector's health budget is spent.	2.56	1.17
I am satisfied with the amount of services that are available for me free of charge.	3.26	1.24
I trust the governmental health sector.	3.18	1.15

XIX.b Table-b Means and standard deviations for the subscale *Perceptions of public health status in KSA*

Item	Mean	SD
The population is becoming better informed about health risks and healthy behaviours.	3.13	1.09
Overall, the health of the population of KSA has improved.	3.36	1.06
Overall, people are taking more responsibility for their health choices.	3.45	1.06

XIX.c Table-c Means and standard deviations for the subscale *Access and organisation of health services in the government health sector*

Item	Mean	SD
I am satisfied with the way the Ministry of Health monitors the government health sector.	2.43	1.14
I am satisfied with the way primary healthcare centres are operated.	2.68	1.14
I am satisfied with the way inpatient care is operated.	2.75	1.08
I am satisfied with the way outpatient care is operated.	2.83	1.1
I am satisfied with the way emergency care is operated.	2.83	1.16
Overall, I am satisfied with the governmental health sector.	2.88	1.12
It is easy to get access to the healthcare I need.	2.99	1.09
I can get basic healthcare service at primary healthcare centres rather than going to general hospitals.	2.93	1.11

Item	Mean	SD
It is easy to get out-of-hours care (such as evenings, weekends, or holidays) without going to the emergency department.	2.4	1.10
The referral system is functioning well.	2.76	1.12

XIX.d Table-d Means and standard deviations for the subscale
Infrastructure and location of healthcare services

Item	Mean	SD
Receptionists at primary care centres are friendly and courteous.	3.51	0.99
The doctor has all equipment needed to provide the care I require.	3.23	0.97
The doctor uses the latest, up-to-date technology to diagnose my health issues.	3.01	0.98
I am happy with the amount of time I spend waiting before I see the doctor.	2.75	1.08
I always trust my doctor.	3.26	0.86
I can talk privately with healthcare professionals (e.g., without others overhearing).	3.27	0.95
Nurses have the required skills and experience to deal with my health-related issues.	3.25	0.93
Health professionals respect my cultural and spiritual needs (such as Islamic beliefs).	3.85	0.79
Care is usually provided in my best interest.	3.26	0.94
I have enough information about the location of services I need.	3.31	0.98
The location of the healthcare facility I usually visit is convenient for me.	3.6	0.93
The rooms inside healthcare facilities (including toilets) are clean.	2.95	1.14

XIX.e Table-e Means and standard deviations for the subscale
Doctor-patient communication

Item	Mean	SD
The doctor usually greets and talks to me respectfully.	3.66	0.89
The doctor usually explains things in a language that is easy for me to understand (e.g., he/she avoids difficult medical terms).	3.67	0.92
My doctor is able to talk with me in my native language.	3.74	0.89
The doctor spends enough time with me to address all my health-related issues related to my current health condition.	3.27	0.97
The doctor helps me make decisions about my health.	3.17	0.99

The doctor understands and respects my healthcare choices.	3.29	0.90
I can get a second opinion about my health issues when needed.	3.17	0.98
The doctor usually explains to me why a test (e.g., blood test, x-ray) was needed.	3.54	0.99
The doctor or pharmacist usually explains the potential side effects of any medications that have been prescribed.	2.59	1.11

XIX.f Table-f Means and standard deviations for the subscale

Affordability of care in KSA

Item	Mean	SD
I have skipped check-ups and tests that were recommended by my doctor because of the cost*.	2.82	1.14
I have skipped a medical treatment that was recommended by my doctor because of the cost*.	3.04	1.12
I have serious problems paying my medical bills*.	2.88	1.14
I often have to pay for healthcare out of my own pocket (not through health insurance)*.	2.53	1.22
Private hospitals usually focus on making money rather than providing quality healthcare*.	2.14	1.04

**Items' scores have been transformed to aid interpretation*

XIX.g Table-g Means and standard deviations for the subscale *MOH*

monitoring over the private health sector

Item	Mean	SD
I am satisfied with the way the Ministry of Health monitors the private health sector.	2.61	1.10
I am satisfied with the way the Ministry of Health controls prices at private healthcare facilities.	2.29	1.10
Overall, I am satisfied with the private health sector.	2.96	1.04
I trust the private health sector.	2.79	1.07

XIX.h Table-h Means and standard deviations for the subscale *Access*

and organisation of health services in the private health sector

Item	Mean	SD
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I am satisfied with the way primary healthcare centres are operated.	2.97	1.06
I am satisfied with the way inpatient care is operated.	3.04	1.06
I am satisfied with the way outpatient care is operated.	3.1	1.05
I am satisfied with the way emergency care is operated.	3.01	1.10
It is easy to get access to the healthcare I need.	3.36	1.01

XIX.i Table-i Means and standard deviations for the subscale *Trust in the Saudi health system*

Item	Mean	SD
I am confident that I will be able to get the treatment I require on time when I need it.	3.27	0.95
I am confident that I will receive the most effective drugs for my condition(s).	3.27	0.92
I am confident that I will receive the healthcare I need without financial hardship.	3.10	1.04
I am confident that the Ministry of Health will be able to manage its health budget efficiently (e.g., without wasting money).	3.13	1.02
I am confident that the Saudi health system will be able to provide adequate care for me in the future.	3.39	1.02
I am confident that the Saudi health system will be able to provide adequate care for my family in the future.	3.59	1.19

XIX.j Table-j Means and standard deviations for the subscale *Perceptions of the necessity of wasta to access care*

Item	Mean	SD
It is difficult to get timely access to specialised care unless I have personal connections (wasta)*	2.53	1.25
It is difficult to get the medicines I need from hospital pharmacy unless I have personal connections (wasta)*	3.36	1.15

**Items' scores have been transformed to aid interpretation*

XIX.k Table-k Means and standard deviations for the subscale *Perceptions of health insurance coverage*

Item	Mean	SD
I find it hard to afford co-payments for visits to specialists*	3.36	1.14

Item	Mean	SD
I find it hard to afford co-payments for prescribed medicines*	3.49	1.11
My health insurance company usually approves my medical claims	3.53	1.04
My health insurance company usually approves my medical claims in a short period	3.27	1.15
I am confident that my doctor will provide the treatment covered by my insurance, rather than more expensive alternatives	3.36	1.00
Overall, my health insurance policy meets my health needs	3.48	1.08
Overall, my health insurance policy meets my family's health needs	3.41	1.12

**Items' scores have been transformed to aid interpretation*

Appendix XX

XX.a Table-a

Multiple comparisons (MOH mentoring over the private health sector)			
Bonferroni			
Age categories		Mean Difference	Sig.
18 to 29 years	30 to 39 years	0.19	.140
	40 to 49 years	0.25	.112
	50 and above	0.30*	.006
30 to 39 years	18 to 29 years	-0.19	.140
	40 to 49 years	0.06	1.000
	50 and above	0.11	1.000
40 to 49 years	18 to 29 years	-0.25	.112
	30 to 39 years	-0.06	1.000
	50 and above	0.05	1.000
50 and above	18 to 29 years	-0.30*	.006
	30 to 39 years	-0.11	1.000
	40 to 49 years	-0.05	1.000

*The mean difference is significant at the 0.05 level.

XX.b Table-b

Multiple comparisons (Access and organisation of private health sector)			
Bonferroni			
Age categories		Mean Difference	Sig.
18 to 29 years	30 to 39 years	0.10	1.000
	40 to 49 years	0.26	.099
	50 and above	0.29	.010
30 to 39 years	18 to 29 years	-0.10	1.000
	40 to 49 years	.15	.883
	50 and above	0.19	.231
40 to 49 years	18 to 29 years	-0.26	.099
	30 to 39 years	-0.15	.883
	50 and above	0.03	1.000
50 and above	18 to 29 years	-0.29	.010
	30 to 39 years	-0.19	.231
	40 to 49 years	-0.03	1.000

*The mean difference is significant at the 0.05 level.

XX.c Table-c

Multiple Comparisons (MOH's financing of government health sector)			
Bonferroni			
Educational level		Mean Difference (I-J)	Sig.
No degree	Bachelor degree	.20	.062
	Postgraduate degree	.42*	.001
Bachelor degree	No degree	-.20	.062
	Postgraduate degree	.22	.075
Postgraduate degree	No degree	-.42*	.001
	Bachelor degree	-.22	.075

*The mean difference is significant at the 0.05 level.

XX.d Table-d

Multiple Comparisons (access and organisation of government health sector)			
Bonferroni			
Educational level		Mean Difference (I-J)	Sig.
No degree	Bachelor degree	.25*	.002
	Postgraduate degree	.36*	.001
Bachelor degree	No degree	-.25*	.002
	Postgraduate degree	.11	.541
Postgraduate degree	No degree	-.36*	.001
	Bachelor degree	-.11	.541

*The mean difference is significant at the 0.05 level.

XX.e Table-e

Multiple comparisons (Infrastructure and location of health care services)			
Bonferroni			
Educational level		Mean Difference	Sig.
No degree	Bachelor degree	0.083	0.572
	Postgraduate degree	0.21	0.038
Bachelor degree	No degree	-0.08	0.572
	Postgraduate degree	0.13	0.265
Postgraduate degree	No degree	-0.21	0.038
	Bachelor degree	-0.13	0.265

*The mean difference is significant at the 0.05 level.

XX.f Table-f

Multiple comparisons (Doctor-patient communication)			
Bonferroni			
Educational level		Mean Difference	Sig.
No degree	Bachelor degree	.12	0.204
	Postgraduate degree	.22*	0.043
Bachelor degree	No degree	-.12	0.204
	Postgraduate degree	.09	0.665
Postgraduate degree	No degree	-.22*	0.043
	Bachelor degree	-.09	0.665

*The mean difference is significant at the 0.05 level.

XX.g Table-g

Multiple comparisons (MOH monitoring of the private health sector)			
Bonferroni			
Educational level		Mean Difference	Sig.
No degree	Bachelor degree	0.27*	0.002
	Postgraduate degree	0.36*	0.002
Bachelor degree	No degree	-0.27*	0.002
	Postgraduate degree	0.09	1.000
Postgraduate degree	No degree	-.036*	0.002
	Bachelor degree	-0.09	1.000

*The mean difference is significant at the 0.05 level.

XX.h Table-h

Multiple comparisons (Access and organization of private health sector)			
Bonferroni			
Educational level		Mean Difference	Sig.
No degree	Bachelor degree	0.23*	0.009
	Postgraduate degree	0.41*	0.000
Bachelor degree	No degree	-0.23*	0.009
	Postgraduate degree	0.18	0.175
Postgraduate degree	No degree	-0.41*	<0.001
	Bachelor degree	-0.18	0.175

*The mean difference is significant at the 0.05 level.

XX.i Table-i

Multiple comparisons (Trust in the Saudi health system)			
Bonferroni			
Educational level		Mean Difference	Sig.
No degree	Bachelor degree	.22*	.021
	Postgraduate degree	.50*	.000
Bachelor degree	No degree	-.22*	.021
	Postgraduate degree	.28*	.010
Postgraduate degree	No degree	-.50*	.000
	Bachelor degree	-.28*	.010

*The mean difference is significant at the 0.05 level.

XX.j Table- j

Multiple comparisons (Access and organization of government health sector)			
Bonferroni			
(I) Income1	(J) Income1	Mean Difference (I-J)	Sig.
0 to 5000	5000 to 9999	0.02	1.000
	10000 to 14999	0.15	.941
	15000 to 19,999	0.26	.210
	20,000 and above	0.41*	.007
5000 to 9999	0 to 5000	-0.02	1.000
	10000 to 14999	0.13	1.000
	15000 to 19,999	0.25	.361
	20,000 and above	0.39*	.015
10000 to 14999	0 to 5000	-0.15	.941
	5000 to 9999	-0.13	1.000
	15000 to 19,999	0.11	1.000
	20,000 and above	0.26	.347
15000 to 19,999	0 to 5000	-0.26	.210
	5000 to 9999	-0.25	.361
	10000 to 14999	-0.11	1.000
	20,000 and above	0.14	1.000
20,000 and above	0 to 5000	-.41*	.007
	5000 to 9999	-.39*	.015
	10000 to 14999	-.26	.347
	15000 to 19,999	-.14	1.000

*The mean difference is significant at the 0.05 level.

XX.k Table-k

Multiple comparisons (MOH monitoring of the private health sector)			
Bonferroni			
(I) Income1	(J) Income1	Mean Difference (I-J)	Sig.
0 to 5000	5000 to 9999	0.25	0.067
	10000 to 14999	0.41*	<0.001
	15000 to 19,999	0.55*	<0.001
	20,000 and above	0.58*	<0.001
5000 to 9999	0 to 5000	-0.25	0.067
	10000 to 14999	0.15	1.000
	15000 to 19,999	0.29	0.162
	20,000 and above	0.33	0.102
10000 to 14999	0 to 5000	-0.41*	<0.001
	5000 to 9999	-0.15	1.000
	15000 to 19,999	0.14	1.000
	20,000 and above	0.17	1.000
15000 to 19,999	0 to 5000	-0.55*	<0.001
	5000 to 9999	-0.29	0.162
	10000 to 14999	-0.14	1.000
	20,000 and above	0.03	1.000
20,000 and above	0 to 5000	-0.58*	<0.001
	5000 to 9999	-0.33	0.102
	10000 to 14999	-0.17	1.000
	15000 to 19,999	-0.03	1.000

*The mean difference is significant at the 0.05 level.

XX.I Table-I

Multiple comparisons (Access and organization of private health sector)			
Bonferroni			
(I) Income1	(J) Income1	Mean Difference (I-J)	Sig.
0 to 5000	5000 to 9999	0.16	0.881
	10000 to 14999	0.25*	0.046
	15000 to 19,999	0.44*	0.003
	20,000 and above	0.57*	0.000
5000 to 9999	0 to 5000	-0.16	0.881
	10000 to 14999	0.11	1.000
	15000 to 19,999	0.28	0.248
	20,000 and above	0.41*	0.014
10000 to 14999	0 to 5000	-0.27*	0.046
	5000 to 9999	-0.11	1.000
	15000 to 19,999	0.17	1.000
	20,000 and above	0.30	0.179
15000 to 19,999	0 to 5000	-0.44*	0.003
	5000 to 9999	-0.28	0.248
	10000 to 14999	-0.17	1.000
	20,000 and above	0.13	1.000
20,000 and above	0 to 5000	-0.57*	0.000
	5000 to 9999	-0.41*	0.014
	10000 to 14999	-0.30	0.179
	15000 to 19,999	-0.13	1.000

*The mean difference is significant at the 0.05 level.

XX.m Table-m

Multiple comparisons (Trust in the Saudi health system)			
Bonferroni			
(I) Income1	(J) Income1	Mean Difference (I-J)	Sig.
0 to 5000	5000 to 9999	0.26	.252
	10000 to 14999	0.28	.055
	15000 to 19,999	0.44*	.006
	20,000 and above	0.26	.576
5000 to 9999	0 to 5000	-0.23	.252
	10000 to 14999	0.05	1.000
	15000 to 19,999	0.22	.970
	20,000 and above	0.03	1.000
10000 to 14999	0 to 5000	-0.28	.055
	5000 to 9999	-0.05	1.000
	15000 to 19,999	0.17	1.000
	20,000 and above	-0.02	1.000
15000 to 19,999	0 to 5000	-0.44*	.006
	5000 to 9999	-0.22	.970
	10000 to 14999	-0.17	1.000
	20,000 and above	-0.19	1.000
20,000 and above	0 to 5000	-0.26	.576
	5000 to 9999	-0.03	1.000
	10000 to 14999	0.02	1.000
	15000 to 19,999	0.19	1.000

*The mean difference is significant at the 0.05 level.

XX.n Table-n

Comparisons (Doctor-patient communication)			
Bonferroni			
(I) Occupation1	(J) Occupation1	Mean Difference (I-J)	Sig.
Professional and Business owners	Routine and Intermediate occupation	-.04	1.000
	Retired	-.037	1.000
	Student, housewife & not employed	-.28*	.029
Routine and Intermediate occupation	Professional and Business owners	.038	1.000
	Retired	.001	1.000
	Student, housewife & not employed	-.24*	.017
Retired	Professional and Business owners	.04	1.000
	Routine and Intermediate occupation	-.001	1.000
	Student, housewife & not employed	-.25	.302
Student, housewife & not employed	Professional and Business owners	.28*	.029
	Routine and Intermediate occupation	.24*	.017
	Retired	.25	.302

*The mean difference is significant at the 0.05 level.

XX.o Table-o

Multiple comparisons (Affordability of care)			
Bonferroni			
(I) Occupation1	(J) Occupation1	Mean Difference (I-J)	Sig.
Professional and Business owners	Routine and Intermediate occupation	.37*	.005
	Retired	.38	.111
	Not employed	.19	.901
Routine and Intermediate occupation	Professional and Business owners	-.37*	.005
	Retired	.018	1.000
	Not employed	-.17	.615
Retired	Professional and Business owners	-.38	.111
	Routine and Intermediate occupation	-.018	1.000
	Not employed	-.19	1.000
Not employed	Professional and Business owners	-.19	.901
	Routine and Intermediate occupation	.17	.615
	Retired	.19	1.000

*The mean difference is significant at the 0.05 level.

XX.p Table-p

Multiple comparisons (MOH monitoring of the private health sector)			
Bonferroni			
(I) Occupation1	(J) Occupation1	Mean Difference (I-J)	Sig.
Professional and Business owners	Routine and Intermediate occupation	-.05	1.000
	Retired	.36	.124
	Not employed	-.20	.589
Routine and Intermediate occupation	Professional and Business owners	.05	1.000
	Retired	.41*	.018
	Not employed	-.15	.745
Retired	Professional and Business owners	-.36	.124
	Routine and Intermediate occupation	-.41*	.018
	Not employed	-.56*	.002
Not employed	Professional and Business owners	.20	.589
	Routine and Intermediate occupation	.15	.745
	Retired	.56*	.002

*The mean difference is significant at the 0.05 level.

XX.q Table-q

Multiple comparisons (Access and organisation of the private sector)			
Bonferroni			
(I) Occupation1	(J) Occupation1	Mean Difference (I-J)	Sig.
Professional and Business owners	Routine and Intermediate occupation	.09	1.000
	Retired	.32	.245
	Not employed	-.19	.745
Routine and Intermediate occupation	Professional and Business owners	-.09	1.000
	Retired	.23	.547
	Not employed	-.28*	.039
Retired	Professional and Business owners	-.32	.245
	Routine and Intermediate occupation	-.23	.547
	Not employed	-.51*	.006
Not employed	Professional and Business owners	.19	.745
	Routine and Intermediate occupation	.28*	.039
	Retired	.51*	.006

*The mean difference is significant at the 0.05 level.

XX.r Table-r

Multiple comparisons (Trust in the Saudi health system)			
Bonferroni			
(I) Occupation1	(J) Occupation1	Mean Difference (I-J)	Sig.
Professional and Business owners	Routine and Intermediate occupation	.03	1.000
	Retired	-.07	1.000
	Student, housewife & not employed	-.27	.216
Routine and Intermediate occupation	Professional and Business owners	-.03	1.000
	Retired	-.098	1.000
	Student, housewife & not employed	-.30*	.021
Retired	Professional and Business owners	.07	1.000
	Routine and Intermediate occupation	.10	1.000
	Student, housewife & not employed	-.20	1.000
Student, housewife & not employed	Professional and Business owners	.27	.216
	Routine and Intermediate occupation	.30*	.021
	Retired	.20	1.000

*The mean difference is significant at the 0.05 level.

XX.s Table-s

Multiple comparisons (Access and organisation of government health sector)			
Bonferroni			
(I) MStatus1	(J) MStatus1	Mean Difference (I-J)	Sig.
Single	Married	.14	.184
	Divorced and Widowed	-.13	1.000
Married	Single	-.14	.184
	Divorced and Widowed	-.27	.156
Divorced and Widowed	Single	.13	1.000
	Married	.27	.156

*The mean difference is significant at the 0.05 level.

XX.t Table-t

Multiple comparisons (MOH monitoring of the private health sector)			
Bonferroni			
(I) MStatus1	(J) MStatus1	Mean Difference (I-J)	Sig.
Single	Married	.23*	.008
	Divorced and Widowed	.17	.837
Married	Single	-.23*	.008
	Divorced and Widowed	-.059	1.000
Divorced and Widowed	Single	-.17	.837
	Married	.059	1.000

*The mean difference is significant at the 0.05 level.

XX.u Table-u

Multiple comparisons (Access and organisation of private health sector)			
Bonferroni			
(I) MStatus1	(J) MStatus1	Mean Difference (I-J)	Sig.
Single	Married	.22*	.015
	Divorced and Widowed	.19	.731
Married	Single	-.22*	.015
	Divorced and Widowed	-.03	1.000
Divorced and Widowed	Single	-.19	.731
	Married	.03	1.000

*The mean difference is significant at the 0.05 level.

XX.v Table-v

Multiple comparisons (Trust in the Saudi health system)			
Bonferroni			
(I) PH1	(J) PH1	Mean Difference (I-J)	Sig.
Excellent and very good	Good	.08	.909
	Poor and very poor	.57*	.036
Good	Excellent and very good	-.08	.909
	Poor and very poor	.49	.113
Poor and very poor	Excellent and very good	-.57*	.036
	Good	-.49	.113

*The mean difference is significant at the 0.05 level.

XX.w Table-w

Multiple comparisons (Perceptions of health insurance coverage)			
Bonferroni			
(I) TypeofInsurance2	(J) TypeofInsurance2	Mean Difference (I-J)	Sig.
VIP and class A	Class B & Class C	.35*	.004
	Class D and below Class D	.82*	.000
	Others	-.26	.702
Class B & Class C	VIP and class A	-.35*	.004
	Class D and below Class D	.47*	.012
	Others	-.61*	.002
Class D and below Class D	VIP and class A	-.82*	.000
	Class B & Class C	-.47*	.012
	Others	-1.08*	.000
Others	VIP and class A	.26	.702
	Class B & Class C	.61*	.002
	Class D and below Class D	1.08*	.000

*The mean difference is significant at the 0.05 level.