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Title:

An evaluation of how well midwives utilize skills and knowledge acquired on the advanced Physical Examination of the Newborn Course.

Authors

Rosemary Lanlehin, Lecturer in Neonatal Studies, City University London and Dr. Helen Noble Visiting Honorary Research Fellow, City University London. Professor Christine McCourt, City University London.

Abstract

Background

Physical examination of the newborn was established as part of postnatal care in the late 1960s. The role of discharging babies within the first seventy two hours of birth was traditionally undertaken by junior doctors. Currently midwives, nurses, advanced nurse practitioners, and health visitors are being trained to undertake the physical examination of the newborn (NIPE 2010). However, only a fraction of midwives utilize their acquired skills in practice. A survey by Townsend (2004) showed that 2% of babies in England were examined by midwives while 83% were examined by junior doctors.

Aim

The aim of this study is to evaluate how well midwives utilize skills acquired on the advanced examination of the newborn course.

Methods

Forty questionnaires with a series of open and closed questions, were sent out by post followed by phone and email reminders to all those that undertook the physical examination of the newborn course between 2002 and 2005 (n= 40) at a large London University. The eight that responded were midwives. Seven of the midwives rotated between labour ward and postnatal ward, one manages the transitional care unit and is responsible for neonatal discharges.

Analysis

Responses to the three categorical questions were analysed numerically. The remaining thirteen closed questions were appended with an opportunity to make additional comments. These were analysed by themes.

Results

All respondents said they were appropriately trained and felt well prepared for their role to examine babies. However, they felt they were not provided with opportunities to use the skills. Guidelines based on this extended role are available in the workplace but only a few midwives seemed to have negotiated time to implement these.

Conclusion

The findings suggest that those undertaking the advanced examination of the newborn course do not always utilize their skills and knowledge in practice. There may be a need for greater managerial support for the role and exploration of midwives' experiences and motivations.

Background

In the UK all newborn babies must undergo a comprehensive physical examination within the first seventy two hours of birth, followed by a second examination at six-eight to weeks of age as recommended by the DH (Antenatal and Newborn Screening Programmes in conjunction with the Department of Health 2000 and 2008). Traditionally, Newborn Physical Examination was the medical doctors' role. This was usually the responsibility of senior house officers (SHOs) within the neonatal and maternity settings (NIPE, 2010).

In recent years, midwives and neonatal nurses have engaged in new ways of providing total care to mothers and babies. An outcome of this development is that the initial full examination of the baby in the first seventy two hours of life and at six to eight weeks is now seen as part of a trained midwife, health visitor or advance nurse practitioners' remit (NIPE, 2010). Hence, the Physical Examination of the Newborn Programme has been designed across England to prepare midwives, health visitors and nurses to competently undertake physical examination of the newborn, recognise normal and abnormal changes and make referrals if needed. Such a holistic approach is also reinforced in current health policy via making a Difference (DOH, 1999 and 2006), the NHS Plan (DOH, 2003), Standards for better Health (DOH, 2004) and Skills for Health (National Workforce Framework for Maternity, 2004, Antenatal and Newborn Screening Programmes, 2008, Newborn and Infant Physical Examination Committee 2010).

However, it is unclear how well these skills are being utilized after practitioners complete the Physical Examination of the Newborn Programme.

Method

Data Collection

Forty questionnaires were sent out to all those that undertook the Examination of the Newborn Course between 2002 and 2005, at a large University in London (n=40) See appendix one for copy of questionnaire.

The sample frame consisted of thirty eight midwives who rotated between delivery suite and postnatal ward, one community based neonatal nurse and one neonatal nurse who trained as a midwife but now works on the transition care unit as the lead neonatal nurse, responsible for neonatal discharges. The questionnaires were designed based on current knowledge of the issues that had been raised by the students on the course and the issues encountered by the researcher. The questionnaire was also reviewed by a Professor of Research, a research supervisor, and a medical consultant. Consent forms accompanied the questionnaire with a self addressed envelope for return of responses. Respondents were given eight weeks to complete the questionnaires and were followed up with two phone calls and one email reminder.

The questionnaire consisted of sixteen closed questions thirteen of which offered participants the opportunity to provide additional comments (Bryman 2004). Question one focused on the practitioners' qualification and when they completed the Physical Examination of the Newborn Course. Question two asked how many babies the practitioners had examined in the last week prior to completing the questionnaire. Question three was used to assess, if the respondents felt prepared for the new role utilizing a five likert scale to measure the satisfaction of practitioners with their training. The thirteen other questions offered respondents the opportunity to provide additional comments about their experience of the new role (Bryman 2004).

Eight midwives returned their questionnaires. One of the eight midwives also trained as a neonatal nurse and worked as the lead nurse on the transitional care unit. Two of the email addresses were incorrect and these two midwives were telephoned to confirm their new email addresses before resending the questionnaires again both by email and post. Both confirmed over the phone that they were not utilizing their Physical Examination of the Newborn Skills and did not respond to the questionnaire survey. Three questionnaires were returned by email and the remaining five were collected back when the practitioners attended the yearly update for physical examination of the newborn practitioners. The study was approved by the Local Ethics Committee.

Analysis

The researcher analysed answers to the open questions thematically; comparing and contrasting responses to identify patterns and non confirming cases. Qualitative data and themes arising from it were also checked by the researcher's supervisor to improve validity. The emergent themes are as follows: Achievement of Course Objectives; Utilization of Skills; Continuous Professional Development; Medical Support and Manager's Support (Ritchie and Spencer 2003). Responses to the first three closed questions (n=3) are presented numerically.

Results

Eight midwives responded, one currently works as the lead neonatal nurse on the transitional care unit and she is responsible for discharging neonates. In total, respondents had between five to twenty-seven years of experience as a nurse and midwife. One respondent completed the advanced physical, examination of the newborn course in 2002, two in 2003, one in 2004 and four qualified in 2005.

Achievement of Course Objectives

All eight respondents felt that they met the theoretical objectives of the course and felt well prepared for clinical practice following the six month programme. They were also satisfied with the theoretical preparation they received for the physical examination of the newborn: Respondent one said, 'I would like to say thanks for the support from the consultant who helped with supervision and discussion; tutorials were really great it helped and induced a lot of confidence in me'. Respondent two said, 'examination of the newborn gives me the wide skills and knowledge to be able to assess babies on admission and discharge in the neonatal unit; it also helps me to improve my knowledge in diagnostic system'. Respondent three said, 'It was very intense; however it prepared me for adequate assessment of newborn'.

Seven out of the eight respondents were able to achieve their practical objectives within the six months of the course. One respondent was unable to achieve her practical objectives within the set time frame and said, 'it was difficult to get consultants to assess me due to their busy schedule'. However, another respondent actually commended the support received in achieving her practice objective, saying that, 'I was able to achieve my practical objectives within the six months period because of the good support from the registrar and the consultant'.

Utilization of Skills

The practitioners were positive about the support they received during their training. However, it became increasingly difficult for the practitioners to utilize the advanced skills they acquired once the course was completed. Many had to 'fight' for the opportunity to be allowed to utilize their newly acquired skills. The number of babies each person was able to examine weekly ranged from zero to forty.

One respondent said she was able to discharge a baby immediately after she was qualified to examine babies. This respondent later took on the transitional care role of discharging babies. Three said they were able to discharge babies after two weeks, one said after six week, one said after sixteen weeks and one said after twenty-four weeks. Out of the eight respondents, four did not detect any abnormalities and four detected newborn abnormalities such as clicky knees, heart murmurs and glaucoma.

Continuous Professional Development

The respondents expressed the need for the support of their continuous professional development by managers. They also expressed the need for more midwives to be trained to undertake the physical examination of the newborn. In response to the question 'How do you achieve your professional development'? Respondent one said, 'by attending courses

and study days, working on the neonatal unit and observing babies with abnormalities or syndromes'. All the respondents said that more midwives should be trained to examine babies to even out the workload. Respondent four said, 'More time should be provided for professional development and at least some hours a month should be allocated to examining babies'. There was a general consensus amongst the respondents that they should have two days each year to update their skills and knowledge of physical examination of the newborn.

Medical Support and Manager's Support

Practitioners trained to undertake the physical examination of the newborn course were enthusiastic and positive about their training but felt disappointed by the lack of support they received from their managers. Whilst the majority of respondents felt supported by medical staff, they felt less supported by managers. Respondent two said: 'update was carried out by a consultant and she reassured us that we will have full backing if there are concerns'. Respondent three said: 'Yes, I normally get support or assistance from registrars and consultants if required; respondent four said, 'no I did not receive any support from my manager'. Respondent five said: 'no, I did not get any support from managers as I was unable to free myself up due to shortages of staff'.

Seven respondents expressed concerns about the lack of set days allocated to them to examine babies; and the difficulty of incorporating newborn examination into their normal

work load. Respondent one said: 'my manger did not give me any support'. Respondent two said, 'Yes –Initially but due to shortages of staff I was unable to carry on with the skills'. Respondent three said, 'Yes - But there is still no constructive way on how and when to practice this role'. Respondent four said, 'Yes, I am allowed to examine babies at any time to assist the unit and I am allowed to do the extra paid job by examining the babies'. Respondent five said, 'Yes but, since I moved to Scotland in October 2005, I have not been able to undertake the Examination of the Newborn as the neonatologist staff/consultants will not allow me'.

Discussion

This study consists of eight midwives and one of which currently works as a neonatal nurse in charge of the transitional care unit with the responsibility for neonatal discharge. The Information received from the respondents indicates some issues that may inhibit practitioners' use of their learning on the physical examination of the newborn course (P.E.N. Course). In addition, only a small proportion of the sample frame responded to the survey (20%). This may suggest that these professional are short of time. However, researcher was not able to establish the reasons for low response rate or the characteristics of non respondents that might make them different from those who did respond. This makes it difficult to make claims about the generalisation of the findings to different populations. However, the findings do have resonance with findings of another national survey. In a postal questionnaires survey of 197 units in England with an 86% response rate; Townsend (2004) suggested that 44% of midwifery units had midwives with a post-registration qualification to examine babies. However, only 2% of babies in England were examined by a midwife. SHOs carried out 83% of examinations. This again demonstrates an

underutilization of the physical examination of newborn skills specifically by midwives. A qualitative study by Lumsden (2005) found that those midwives who do use these skills expressed personal and professional satisfaction with being able to undertake newborn physical examination and they also gained satisfaction by being able to confirm normality of the baby to the parents. The midwives were satisfied with their expertise when they were able to identify an abnormality (Lumsden, 2005).

There is clearly an underutilization of skills by those that have completed the physical examination of the newborn course. The reasons why some practitioners are under utilizing the skills needs closer examination. It may be worth investigating the demographics of those applying for these courses and ask practitioners why they apply for the PEN course. It may be worth asking if practitioners are nominated by the Trust, self nominate or self fund. Some of these factors may be useful in partly understanding why some practitioners utilize the advance skills post qualification and others do not.

In addition, expressed concerns by participants about maintaining their confidentiality may also suggest that filling out a form on why you are not using your full repertoire of skills may not be an attractive or safe proposition. Further research about ways to make participants safe about giving interviews within the existing code of conduct is paramount.

Conclusion and Recommendations

This small survey has highlighted policy and resource management issues within practice. All respondents reported feeling well trained and well prepared for their role to examine babies. The lack of opportunity to utilise skills and knowledge acquired on the PEN course means the training has had little effect on practice. Most Trusts have written guidelines in place but only a fraction of those who took part in the survey have been able to negotiate a maximum of one day a month to be able to examine babies. In our experience, most of our local consultants are very keen to help and support practitioners.

Assuming all the practitioners want to utilize their skills in practice then these are the recommendations:

- **Managers may need to invest into a yearly update for those staff that have undertaken the course.**
- **Practitioners need to be included in rota for doing physical examination of the newborn.**
- **Each practitioner should examine at least six babies a month to keep update with their skills and knowledge.**
- **It may be helpful if the physical examination of the newborn policy is reviewed at national level to clearly state the number of babies midwifery practitioners are to examine monthly.**

- **Those examining babies should have the opportunity to attend perinatal mortality and morbidity meetings at least once a month or community based teaching sessions for community midwives and health visitors.**

Finally, a larger investigation is needed to explore midwives' experiences and motivations for doing the PEN course including specifically whether some are more motivated than others to negotiate practice time for their new skills.

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