

Walker, Susan and Davies, Geraldine (2013) Learning at work and university: Midwifery students and sexual health advice. *Practitioner Research in Higher Education*, 7 (1). pp. 63-77.

Downloaded from: <http://insight.cumbria.ac.uk/id/eprint/1467/>

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
 - a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.

**Learning at work and university:
Midwifery students and sexual health
advice**

Practitioner Research
In Higher Education
Copyright © 2013
University of Cumbria
Vol 7 (1) pages 63-77

Susan Walker, Geraldine Davis
Anglia Ruskin University
geraldine.davis@anglia.ac.uk

Abstract:

Concerns about the theory-practice gap and discussion regarding the role of the pre-registration programme in preparing registered health care practitioners, are two recurring themes in the literature. This study was carried out in a higher education institution in England and was conducted over a twelve month period. It examined how well the undergraduate programme in midwifery prepares student midwives to provide sexual health advice to women. Using focus groups and questionnaires the study sought the views of three consecutive cohorts of final year midwifery students. The research focused on the students' experiences of giving advice on contraception and sexual health to women in their care and on how they responded to proposed changes in the programme. Findings indicated that students wanted more practice-based educational methods. The study suggests that a model in which theoretical knowledge is reinforced practically, with practice based scenarios and mentor emulation as staging points, would help to develop confident practice.

Keywords

Midwifery; professional education; contraception; sexual health; theory-practice gap; curriculum.

Introduction

The ability of health care practitioners to incorporate theoretical learning into their professional practice, and the ways in which pre-registration curricula can best prepare students for practice, is much debated (Roberts and Johnson, 2009). We undertook a twelve month study to examine the extent to which the pre-registration midwifery curriculum prepares student midwives for one aspect of their professional practice, that of providing contraception and sexual health information and advice to women. We examined the students' views on how confident they felt in giving contraceptive and sexual health (CaSH) advice, what they felt would increase their confidence and preparedness, and explored their suggestions for changes to the curriculum that would improve their ability to carry out this aspect of their role.

Background

Discussion of the link between theory and practice in health professional education has occurred across the international sector (Rolfe, 1998; Corlett, 2000; Smeby and Vågan, 2008; Davis, 2010; Sangestani and Khatiban, 2012). Concerns about the

Citation

Walker, S., Davis, G. (2013) Learning at work and university: Midwifery students and sexual health advice, *Practitioner Research in Higher Education Journal*, 7(1), October. Available at: <http://194.81.189.19/ojs/index.php/prhe> (Accessed 15 October 2013).

theory-practice gap for health care practitioners (understood here as the disjunction between theoretical learning in a classroom setting and the requirements of practice), and discussion regarding the role of the pre-registration programme in preparing practitioners to undertake their role as registered practitioners, are two recurring themes in the literature. Of particular interest is the recognition that confidence plays a major role in embedding theory into the practice of registered health practitioners. One of the authors, who teaches about contraception and sexual health (CaSH) to pre-registration midwives, noticed that despite input about CaSH the midwifery students lacked confidence to use this knowledge. This observation was the impetus to undertake the study reported here.

Corlett *et al.* (2003) state that the theory-practice gap is not reduced by simply gaining knowledge and skill. Changing the delivery of the curriculum to try to reduce the theory-practice gap is reported in a number of studies. Aiming to measure the effect of curriculum delivery factors on development of theoretical knowledge and practical skills, Corlett *et al.* (2003) report the value of the work-based preceptor in developing theoretical knowledge in students of nursing in the early stages of new learning but suggest that theory and practice learning occur separately rather than simultaneously. Gardner (2012), reflecting on the legacy of Benner (1984), suggests the need for a reflective culture that more clearly links theoretical knowledge to practice by thinking about practice issues and cases. She is critical of the notion of the expert who relies on tacit expertise which they cannot articulate, identifying this as a source of rift between theory and practice.

The work of Eraut *et al.* (1995) and Eraut (1997) explored the development of personal knowledge of practitioners within their new profession, including newly qualified midwives. The literature suggests there is a transition from theoretical learning to effective knowledgeable practice (Benner, 1984; Eraut *et al.*, 1995). However, Eraut's more recent work (Eraut, 2004) emphasises the formal role of the mentor in supporting the link between theory and practice in the clinical setting and the importance of the Higher Education institution in helping students use knowledge and skills to fit new and unpredictable situations.

A number of authors recommend problem-based learning, experiential learning and reflective practice as ways in which to reduce the theory-practice gap (Corlett, 2000; Rochester *et al.*, 2005; Sangestani and Khatiban, 2012). Barry *et al.* (2012) confirm the use of the Objective Clinical Structured Examinations in developing midwifery practice and Phillips *et al.* (2012) have explored the use of virtual antenatal clinics in developing practice. These forms of learning have been reported to have a positive effect and to increase progress with learning, improving the application of theory to practice and increasing the motivation to learn for pre-registration health practitioners.

Specific studies in sexual health education as part of the midwife's role are limited although there are studies which focus on assessment and discussion of sexual health needs of the patient or client by nurses. Sung *et al.* (2010) and Dattilo and Brewer (2005) found a lack of confidence in undertaking assessment or initiating

discussion of sexual health issues by nursing students in the practice setting. Sung and Lin (2012) identify the value of an education programme in sexual health in increasing nursing students knowledge and attitudes to sexual health. The literature clearly recognises the importance of a pre-registration curriculum which allows development of good practice, but there is little material on students' views about how knowledge and skills might be best developed to minimise the theory-practice gap. There is only very limited research about theory and practice for midwifery students in the field of CaSH advice.

For our study, we sought pre-registration midwifery students' views on whether the curriculum sufficiently supported the development of knowledge and skills to enable them to provide sexual health information and advice to women, and enquired how students considered that the curriculum could be altered to improve their ability to translate theory into effective practice. The study specifically explored the role of confidence in reducing the theory- practice gap.

Research project

The research project as a whole had two aims, the first of which is pursued in this paper. This aim was to ascertain the views of three cohorts of final year midwifery students regarding:

- How confident they felt in giving advice on contraception and sexual health.
- What they felt would increase their confidence and knowledge in this area.
- How they would prefer to receive sexual health education.

A second aim, to estimate competence in delivery of CaSH, is not reported in this paper.

The research was carried out within a higher education institution in England which educates pre-registration midwifery students. It was funded by an internal grant. The participants were a convenience sample of three consecutive cohorts of final year midwifery students (N=86). The participants undertook theoretical aspects of their programme on two separate campuses of one university, with practice placements across a wide geographical area within the East of England. All final year student midwives in these cohorts were invited to participate.

This project was carried out in accordance with ethical guidelines of the British Educational Research Association (BERA, 2011). The project was approved by the University research ethics committee. Fully informed written consent was obtained from all focus group participants. Participant information was supplied on the first sheet of the questionnaire and consent to use of the questionnaire was implied by its completion and return.

The study, informed by Newby (2010) and Parahoo (2006) used an exploratory 'case study' approach to analyse what happens in the current delivery of contraception and sexual health education within the midwifery curriculum, regarding what works well and what is less effective from the perspective of the students. It explored the

student midwives' ideas for feasible changes to the delivery of the programme with the potential to have a positive effect on their practice as a midwife. This study was designed to evaluate both processes (what the student midwives thought about the teaching and learning) and outcomes (what was the confidence of the student midwives).

Three successive cohorts of final year midwifery students were invited to complete anonymously a questionnaire asking about their experiences of and attitudes to giving advice on contraception and sexual health (CaSH) to women in their care, and receiving education on contraception and sexual health (CaSH) in the midwifery curriculum. Participants were recruited by verbal invitation from one of the researchers at the beginning of a class, and questionnaires were returned anonymously in a 'drop-box' at the end of the class, thus enabling potential participants to choose whether or not they participated. The questionnaire was designed to obtain data to address all three elements of the research question; the level of confidence in giving advice, how that confidence could be increased, and preferences for the delivery of sexual health education during the pre-registration midwifery programme. The questionnaire contained both quantitative and qualitative sections. This paper reports the analysis of comments written in the 'free text' boxes of the questionnaire, and triangulates and enriches these by analysis of themes from the focus groups.

Three focus groups were convened, one from each cohort, of third year midwifery students over a twelve month period from July 11 to June 12. The focus group was run by a researcher who did not know the participants. Participants had the right to withdraw without penalty. These procedures ensured that students were able to exert their freedom to choose whether to participate and to express their views freely, and ensured anonymity and confidentiality. The focus group was facilitated using an aide memoire which explored three main themes (a) the participants views on the role of midwives regarding sexual health and contraception (b) how and to what extent the midwifery undergraduate curriculum has prepared participants for delivering advice on contraception and sexual health, (c) participants' views on how contraception and sexual health education could be presented in alternative ways.

The questionnaire responses were analysed quantitatively where appropriate and the qualitative free text responses were analysed thematically. The focus group responses were audio recorded and thematically analysed. The first focus group was analysed separately by both researchers. A coding frame was agreed which was used to analyse the remaining two focus groups, which were also analysed separately. There was strong agreement between both researchers on the themes which arose from the three focus groups. Very similar themes arose from all three focus groups, which allowed the researchers to be confident in the representativeness of the views expressed. The qualitative responses from the questionnaires concurred with the focus group themes, although the emphasis and 'strength' of the views differed. For example more emphasis was placed on the need for informational leaflets in the questionnaire responses, whilst the importance of seeing CaSH advice given in practice was a stronger theme in the focus groups.

Findings and discussion

Eighty six questionnaires were returned representing 83% of the 3rd year students (N=104) who were eligible to take part. Fifty six percent of the sample (n=48) were under 24 years when starting the programme. Forty three percent of the sample (n=37) were 24 years or older on starting their midwifery education (one respondent did not state age). All but one respondents were female.

The findings are presented under two subheadings relating to Questions 6 and 7 of the questionnaire. These are, factors affecting confidence, and factors which would increase confidence. Findings against the third element of the research question, regarding the participants' views on delivery of the pre-registration programme, were very closely entwined with the findings on factors which would increase confidence, and therefore the findings for these two elements have been combined.

What are the factors affecting confidence to give advice?

The questionnaire included the opportunity for participants to give qualitative responses to two questions regarding the factors which affect how confident they felt giving advice, and what they considered would improve their confidence. Table 1 summarises four factors which affect the confidence of the student midwives to give CaSH advice. The percentages of responses refer to the questionnaire responses only, since it is not possible to quantify focus group themes in this way.

Knowledge level was the factor reported by more respondents than any other factor, suggesting this was the most immediate and pressing concern for most participants. Fifty one per cent (44/86) of questionnaire respondents commented that lack of knowledge or education on contraception and sexual health affected their confidence, and 69% (59/86) commented that more knowledge or education/training would increase their confidence.

The participants also identified that the setting could affect confidence, with reduced confidence when time was limited and reduced confidence when in the presence of another family member apart from the woman and newborn child. For example the participants stated that they might be inhibited by the presence of a partner, but they were also inhibited by the presence of other family members such as the father of the woman.

The participants reported increased confidence if they had received guidance from mentors in practice settings, but reduced confidence if they had not experienced mentors giving CaSH advice.

Finally, the participants identified that factors relating to the client/patient herself could affect confidence, particularly noting that their confidence was greater if the woman showed interest in CaSH.

(QR1-07 = Questionnaire response cohort 1, respondent 07
FG2 = Focus group cohort 2)

Table 1. Factors reported in questionnaire as affecting confidence in giving sexual health advice (Q6).

Theme focus (% of questionnaire responses including theme)	Responses within this theme	Examples from the questionnaire data
Knowledge (51%) (44/86)	Confidence is affected by the knowledge of the midwifery student, this includes theoretical knowledge, practical knowledge and personal experience	'Knowledge around the subject area (of contraception and sexual health)' QR1-07 'I feel more confident when I know I have used the contraceptive too' QR3-13
Client (20%) (17/86)	Confidence in giving advice is related to the woman receiving the advice, for example her age and her attitude or responsiveness	'age of woman' QR1-01 'Age esp. if teenager.' QR3-05 'How open they are themselves about contraception' QR2-08 'Whether I have met the woman previously and the relationship I have with her' QR1-17
Setting (19%) (16/86)	Confidence is affected by the setting, for example the location in which advice is given and the amount of time available	'Who you are talking in front of' QR3-11 'Depending on who is with woman e.g. mother or partner' QR2-07 'lack of time restricts the amount of detail I can give' QR1-14 'Time given for discharge talk is limited on ward' QR3-04
Mentor (14%) (12/86)	Confidence is affected by students' experiences with mentors, both the attitude and the practice of mentors affects confidence	'Mixed advice from mentors' QR3-12 'Mentor's attitude' QR2-17

What are the factors which would improve confidence in ability to give advice?

The midwifery students who were participants in this study had firm views on factors which could increase their confidence to give CaSH advice to women. Both questionnaire respondents (67%) (59/86) and focus group participants identified the need for increased knowledge and more education on the topic of CaSH. Questionnaire respondents (19/86) (22%) and focus group participants expressed a desire for patient friendly resources, such as advice leaflets to be available in wards, so that these could be given to women post-natally, supplying advice on contraception and sexual health.

Three themes arose strongly from the focus groups. Firstly, they identified the nature of midwifery as a practical activity and the need therefore for their learning to be practical and practice based, in order to increase their confidence in this role. Secondly, they identified the important role of the mentor in allowing confidence to be developed by observing good practice. Finally, they were very aware of the many constraints within which they would be working as a registered midwife, and that time was a major constraint. Despite this there was strong agreement that giving CaSH advice was part of the midwife's role.

Table 2. Factors reported in questionnaire which would improve confidence in giving sexual health advice (Q7).

Theme (Percentage of questionnaire respondents reporting this theme)	Elements of the theme	Examples from free text in questionnaires
Greater knowledge or more training (67%) (59/86)	More in depth training More revision and updating Education in CaSH to be spread throughout 3 year curriculum	‘Regular lessons in small chunks. Perhaps a workbook in Year 1 so we do individual work on it’ (QR1-01) ‘Further advice and training in our 3rd year to keep us up to date’ (QR2-07) ‘Further, repeated up to date training. Regular updates and info. on new products and changes to existing products AND to be able to see the contraceptive devices’ QR3-05 ‘A more detailed module incorporating contraception and sexual health. It is a major public health need that is briefly taught within midwifery’ QR2-24
Time constraints (47%) (40/86)	Time in practice to give CaSH advice is limited. Time learning about CaSH is limited.	‘Having more time to fully discuss this in practice’ QR2-04
Midwifery is practical, learning needs to be practical and practice based. (12%) (10/86)	Include practical elements of CaSH in all stages of the programme of study. Seeing CaSH advice given in practice.	‘Being involved in this kind of discussion with women regularly, encouraging updating knowledge and observing others’ practice’ QR2-41 ‘Education from a sexual health expert. Being given communication skills to raise the subject’ QR2-26
The mentor plays an important role in developing confidence (7%) (6/86)	More experience needed of mentors providing CaSH. .	‘Updates providing mentors and students with the right up to date knowledge’ QR1-10 ‘Midwives discussing it in practice’ (QR2-01) ‘Good mentors’ QR1-11

More detail of these findings, derived from the focus group data, is provided below.

Practical learning

The value midwifery students placed on ‘practical learning’ was expressed with regard to a number of issues. Students wanted a practical element to be included in

their CaSH education at all stages, and felt that the emphasis on theoretical knowledge delivered by a lecture was not helpful.

'midwifery is a practical role and I would say the majority of us learn by doing or practising so I don't think the way the content is delivered (for whole curriculum) necessarily matches the course'

(FG1).

Practice placements were valued for their ability to reinforce theoretical learning and allow the application of knowledge. Participants remarked that mentors did not always place much emphasis on CaSH and so they missed an opportunity to see advice being given in the community:

'The way you can learn from it is by continuous going out in practice and because if you're working alongside a midwife and they're not really practicing that way you lose it'

(FG1).

'Some midwives go into quite a lot of detail about contraception but then others just sort of skim over it'

(FG2).

Due to the difficulties the participants experienced in raising the topic of CaSH within their own practice, they wanted role play and practice based scenarios to be included in their undergraduate learning, to allow them first to observe and then to practice the communication skills necessary for such a sensitive topic and to think about different scenarios. The students had especial difficulty in raising the subject of sexually transmitted infections.

'I think it's just really difficult to bring up the subject of sexual health with someone who's pregnant, because obviously you know they've had unprotected sex to get pregnant, and I think that's, you know, a bit difficult to bring up'

(FG1).

'Scenarios would be good. Then you start thinking about how you would actually deal with a situation'

(FG1).

'Being given communication skills to raise the subject" (would increase confidence)

(QR2-26).

'The 'how to' is kind of left up to your mentors, isn't it, when you're looking at...going out on your placements[...] you're doing as she does and if you're not getting it from there, then you're not getting it from anywhere'

(FG3).

'Whereas with other topics we're taught how to sensitively discuss it with the parents, I don't think with sexual health and contraception, it's kind of like 'Here's the facts, off you go'

(FG1).

'As a nineteen year old asking a thirty eight year old about their sexual health, talking to them about contraception. It's a bit weird really'

(FG1).

While some role play and case based work is incorporated into the undergraduate curriculum, the participants in this study wanted much more. This reinforces the need for the university based element of the programme to be based in 'real life' examples, and to make the student consider practical and theoretical elements together, and for these 'real life' examples to be broadened so that they take account of the fact that participants did not consider that they were receiving sufficient experience in practice.

Within the theme of 'practical learning', participants identified that those who had experienced a placement in a CaSH clinic had been able to observe professionals raising and addressing CaSH topics in their everyday practice. The participants considered that all midwifery students should experience such a placement, as it would provide practical experience of how to raise issues and discuss them:

'I couldn't feel comfortable just going up to someone and going let's talk about your sexual health. So seeing it in context how other people talk about it'

(FG1).

'I think a placement in a family planning clinic would be really valuable [...] (to learn) how to address it, and how to discuss each method and seeing it in practice from someone who is a professional in that field'

(FG3).

Placements are a significant challenge for many health professional courses, but the value which could be gained from even a short (two week) placement where the midwifery student could observe CaSH advice being given would appear to be very valuable for enabling learning in the student midwives.

Finally, within the general theme of 'practical learning' the participants stated that CaSH was not assessed through their practice portfolios, and hence did not have the status of some of the other elements of midwifery practice. The need to ensure practice to follow up theoretical learning was reduced:

'A lot of our skills and a lot of our midwifery outcomes are validated and signed off but we don't have one for sexual health or contraception'

(FG1).

The importance of mentors

The second theme arising from the data regarding factors which would increase the student midwife's confidence to give CaSH advice was in relation to the mentorship the student received in placements. Participants stated that many mentors did not routinely give advice in this field. Although it is a requirement on discharge that contraception is addressed, participants identified that in many cases mentors saw this as a 'tick box' exercise or limited to the giving of very general facts on fertility and advising women to see the GP:

'A lot of the midwives don't feel confident in their knowledge of contraception. And therefore feel like their duty of care it's better to say: here's a leaflet, go and see your GP'

(FG1).

'There is a note in the...discharge note and it says 'contraception discussed' and you just tick it, and then it says 'form of method chosen' and then a lot of people just write 'discuss with GP at 6 week check'

(FG3).

'Do the midwives we work with know that much? I don't know that they do so they don't offer information. They're not confident in it themselves [...] I think it's always glazed over and they're told to see their GP in 6 weeks'

(FG3).

Students felt that the mentors themselves needed updating in CaSH in order to feel confident, and that continuing professional development or further training in the topic of contraception and sexual health would be appropriate for qualified midwives:

'You do hear mentors saying 'well you're more up to date than me' and 'we learn stuff off you all the time'

(FG3).

'I would do an extra course (in CaSH methods including implant insertion) once I was a qualified midwife, and I think a lot of midwives would be happy to do something like that'

(FG2).

'For qualified midwives, they do annual updates, even just half an hour, you know 'this is what's new (in contraception). It just keeps you updated'

(FG2).

There was huge variability in the students' experience of CaSH due to the variability of their practice placements and mentors' attitudes. It is important to note here that the participants were not criticising the mentors per se, they were identifying the pressures under which the mentors were working, and clearly identifying the lack of information available to the qualified midwife to support this aspect of their role.

Lack of time in the curriculum and in practice

Analysing the data, the researchers identified that 'time' was an important element. There was agreement from participants that giving CaSH advice was part of the midwife's role, but there was also agreement that time was not allocated to this within their curriculum and nor was time available within the work setting to give CaSH advice adequately. The time dedicated to learning about CaSH in the undergraduate curriculum for these participants was felt to be much too little and too early. Students expressed a need for the subject to be taught and then reinforced in subsequent sessions:

'It was like a half day session in our first year. We got loads of information, lots of in depth stuff, and then you go out into the community and you work with the midwives who don't say a lot and it tends to sort of get pushed to the back when you've got all the other stuff you're trying to remember'

(FG1).

'Our curriculum reflects how much midwives give out information, we get one day on it and they say one sentence on it, I think it is quite relative to one another. We don't get a long period on it and then when you're working with mentors who don't discuss it as well it kind of becomes your norm'

(FG1).

The difficulty of finding an appropriate time to give contraception and sexual health advice to women was captured in a statement from one participant:

'the discharge chat ...takes 35 to 40 minutes anyway and if you've got 7 women in your bay that you need to get home, and they all want to go home soon...like each subject is really rushed'

(FG1).

'I would like to have a role (in giving CaSH advice) but I just don't know where it would fit very well because women don't listen immediately post-natally. They wouldn't really listen ante-natally. You could address it in antenatal classes if you had a longer period of time but they are so short now with post natal visiting and antenatal classes they're lucky if they get any. They have to cram so much in about pain relief and everything that they can't address that...'

(FG3).

Thus there was a perception from the participants that there was insufficient time allocated to learning about CaSH and insufficient time within the discharge interview to give CaSH advice to women. Participants strongly agreed that part of their professional role involved giving CaSH advice but this view was not always shared by mentors or by the women whom they were advising:

'I don't think the women see it as our role. They do dismiss us. Many times the women said like 'oh don't worry I'll go back to my Family Planning Clinic. And because they're not seeing it as our role it's very hard to get them to listen to us'

(FG1).

'I still don't think that it's actually seen as a major part of the midwife's role, the actual midwives don't see it as a major part and I think we're not going to have the opportunity to practice it and deliver it anyway. Because when you're there the midwives are not doing it'

(FG1).

Our findings therefore indicate that the participants lacked confidence in providing CaSH advice but had strong views about how that confidence could be improved by making changes to the delivery of the pre-registration midwifery curriculum in the higher education setting and in the practice setting.

Drawing together the findings regarding factors affecting confidence to give CaSH advice, and factors which would improve confidence in giving advice, the data obtained from the questionnaires and focus groups showed that participants reported a lack of confidence in their knowledge levels, too little time devoted to the subject in their undergraduate curriculum, and insufficient reinforcement or development of their knowledge in practice. As a result opportunities for sexual

health education with women were not usually exploited. The limited time available to undertake sexual health education of the women in their care meant that the quality of advice given was restricted, and confidence could not be developed in the skill.

Participants expressed considerable interest in making changes to the curriculum to improve both their knowledge and their confidence to use that knowledge. The changes they suggested require different strategies for theoretical delivery and practical learning. Suggested changes included spacing of sexual health education throughout the three years of the pre-registration curriculum, and opportunities to rehearse this knowledge in practice with teachers who could guide and support them. Opportunities to rehearse communication of sexual health information were also needed.

Discussion

These findings reinforce those of Corlett *et al.* (2003), showing the complexity of learning the theory of sexual health education and relating it to practice. The student midwives who were participants in our study are suggesting that they needed to learn theory and practice together, simultaneously rather than separately, in an iterative style, with practice reinforcing theory and generating new interest in theoretical learning.

The mentor's role was identified as very significant in supporting the development of any newly acquired theoretical knowledge in the practice setting. This echoes the findings of Davis (2010), who in her study of registered nurses learning to become non-medical prescribers in the UK, identified the importance of the role of the mentor in assisting the student to apply theoretical knowledge of bioscience to practice in a range of settings to help to build the links between theory and practice. The same importance is given by Corlett *et al.* (2003) to the role of the preceptor in the translation of theory to practice in first year undergraduate nursing students in Scotland. The findings from this study therefore support those of others (Corlett *et al.*, 2003; Davis, 2010; Erout, 2004).

The current study also identified that many mentors do not appear to be confident in this aspect of their role in regard to contraception and sexual health, so that sexual health education was not reinforced in the practice setting for midwifery students. It was reported that the mentors themselves did not receive any professional development for their role in sexual health education, thus they were unable to reinforce or develop learning about sexual health education in the practice setting. This finding merits further exploration.

Participants who had attended placements in family planning clinics or sexual health clinics or similar settings identified these placements as being very useful in reinforcing and extending their knowledge. This appeared to occur through an application of knowledge to practice by the mentors and by observing how information was communicated to clients. Mentors in these settings had specific knowledge, which they used in practice regularly, and they were confident in the use

of that knowledge. Vedam *et al.* (2007) and Roberts and Johnson (2009) make recommendations for change to practice placements to provide opportunity for more autonomous practice. While adjusting practice placements does present logistical difficulties for the placement of midwifery students, the advantages indicate that providing specific placements to support specific theoretical learning is worthwhile for the education of the midwifery workforce.

Conclusion

We set out to find out how confident midwifery students were in giving contraceptive and sexual health advice, and to find out their views on factors which would increase their confidence. We specifically sought their views on the pre-registration curriculum and its value in supporting them to give CaSH advice.

This study found that student midwives lacked confidence in giving advice about contraception and sexual health to women in their care, despite feeling that this was part of their professional role. Increased understanding of sexual health, provided through a curriculum which builds sexual health knowledge sequentially and through facilitated work based scenarios, supplemented by placement mentors who apply learning to practice in a variety of contexts, were seen by midwifery students to be necessary to support their practice and their development into midwives who were confident in their CaSH knowledge on registration. Changes to the education of midwifery students have the potential to impact positively on the way in which midwives deliver sexual health education to women. Practice mentors play a crucial role in developing confidence in this skill.

Student midwives are essential stakeholders in their learning and in the professional practice of midwifery as they prepare to practice as qualified registered practitioners. If the stakeholder recommendations are to be acknowledged, then the delivery of the curriculum requires a model in which theoretical knowledge is reinforced practically, with role play, practice based scenarios and mentor observation and emulation as staging points from theory to practice. This aligns with the principles of reflective learning and the facilitated model of teaching (Quinn and Hughes, 2007).

Limitations of the study

This funded study aimed to explore on a local basis, within one university, whether the existing curriculum for teaching and learning of sexual health matters by student midwives was effective in meeting their needs. The study is small due to limited funding and the short timescale over which it was undertaken (Robson, 2000). However, the number of participants was relatively large for a small scale study and participation rates were high. We have aimed to provide sufficient detail of the study so that other researchers can consider whether the findings are applicable to their own settings.

Acknowledgements

A small internal grant was provided to support this study.

References:

- Barry, M., Noonan, M., Bradshaw, C., and Murphy-Tighe, S. (2012) An exploration of student midwives' experience of the Objective Structured Clinical Examination assessment process, *Nurse Education Today*, 32(6), 690-694.
- Benner, P. (1984) *From Novice to Expert*. Menlo Park: Ca: Addison-Wesley.
- British Educational Research Association. (2011) *Ethical guidelines for educational research*. BERA. London.
- Corlett, J. (2000) The perceptions of nurse teachers, student nurses and preceptors or the theory-practice gap in nurse education, *Nurse Education Today*, 20(6), 499-505.
- Corlett, J., Palfreyman, J.W., Staines, H.J. and Marr, H. (2003) Factors influencing the theoretical knowledge and practical skill acquisition in student nurses: an empirical experiment, *Nurse Education Today*, 23(3), 183-190.
- Dattilo, J. and Brewer, M.K. (2005) Assessing clients' sexual health as a component of holistic nursing practice: senior nursing students share their experiences, *Journal of Holistic Nursing*, 23(2), 208-219.
- Davis, G. (2010) What is provided and what the registered nurse needs – bioscience learning through the pre-registration curriculum, *Nurse Education Today*, 30(8), 707-712.
- Eraut, M. (1997) Developing expertise in school management and teaching, in Kydd, L., Crawford, M., Riches, C. (ed) *Professional Development for Educational Management*. Buckingham: Open University Press, 37-49.
- Eraut, M. (2004) Informal learning in the workplace, *Studies in Continuing Education*, 26(2), 247-384.
- Eraut, M., Alderton, J., Boylan, A. and Wraight, A. (1995) ENB Researching Professional Education series. Research report 3. *Learning to use scientific knowledge in education and practice settings: an evaluation of the contribution of the biological, behavioural and social sciences to pre-registration nursing and midwifery programmes*, English National Board for Nursing and Midwifery: London.
- Gardner, L. (2012) From Novice to Expert: Benner's legacy for nurse education, *Nurse Education Today*, 32(4), 339-340.
- Newby, P. (2010) *Research methods in education*. Harlow: Pearson.
- Parahoo, K. (2006) *Nursing research. Principles, process and issues*. 2nd ed. Basingstoke: Palgrave Macmillan.
- Phillips, D., Duke, M., Nagle, C., Macfarlane, S., Karantzas, G. and Patterson, D. (2012) The Virtual Maternity Clinic: A teaching and learning innovation for midwifery education, *Nurse Education Today*, [Online]. Available <http://www.sciencedirect.com/science/article/pii/S0260691712001931> (Accessed 09 September 2013).
- Quinn, F. and Hughes, J. (2007) *Principles and practice of nurse education*. Cheltenham: Nelson Thornes.
- Roberts, D. and Johnson, M. (2009) Newly qualified nurses: Competence or confidence? *Nurse Education Today*, 29(5), 467-468.
- Robson, C. (2000) *Small-scale evaluation*. London: Sage.

- Rochester, S., Kilstoff, K. and Scott, G.L. (2005) Learning from success: improving undergraduate education through understanding the capabilities of successful nursing graduates, *Nurse Education Today*, 25(3), 181-188.
- Rolfe, G. (1998) The theory-practice gap in nursing; from research-based practice to practitioner-based research, *Journal of Advanced Nursing*, 28(3), 672-679.
- Sangestani, G. and Khatiban, M. (2012) Comparison of problem-based learning and lecture based learning in midwifery, *Nurse Education Today*, 33(8). [Online]. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/22503681> (Accessed 13 April 2012).
- Smeby, J. and Vågan, A. (2008) Recontextualising professional knowledge – newly qualified nurses and physicians, *Journal of Education and Work*, 21(2), 159–173.
- Sung, S.C., Yeh, M.Y. and Lin, Y.C. (2010) An exploration of the nurses' perspectives and their current practice on sex consultation, *Formosan Journal of Sexology*, 16(1), 1-16.
- Sung, S. and Lin, Y., (2012) Effectiveness of the sexual healthcare education in nursing students' knowledge, attitude, and self-efficacy on sexual health care, *Nurse Education Today*, 33(5). [Online]. Available at: <http://www.deepdyve.com/lp/elsevier/effectiveness-of-the-sexual-healthcare-education-in-nursing-students-roDo04INI5> (Accessed 10 July 2012).
- Vedam, S., Goff, M. and Marnin, V.N. (2007) Closing the theory-practice gap: intrapartum midwifery management of planned homebirths, *Journal of Midwifery and Women's Health*, 52, 291 – 300.