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A snapshot of African research presented at the ICM 29th Triennial Congress 2011, Durban, South Africa

Key words: African midwifery research, HIV/AIDS, pasteurisation of breastmilk, caring in midwifery, postnatal care, preceptorship, evidence-based midwifery

'Increasing women's access to quality midwifery services has become a focus of global efforts to realise the right of every woman to the best possible health care during pregnancy and childbirth.' This is the opening statement of *The state of the world's midwifery* report's executive summary (UNFPA, 2011), which was launched at this year's ICM congress in Durban. And with a global emphasis, this edition of *EBM* highlights the challenges facing our midwifery colleagues in Africa.

HIV/AIDS is one of the major public health issues facing the African population. The first paper by Minnie et al (2011) explores the factors influencing counselling for HIV testing of pregnant women using qualitative approaches and interviewing lay counsellors who provide the service. Although the voices of the women are not presented, the information provided is highly relevant to the local population in South Africa where the study was undertaken. Furthermore, the research is supported by a recent document from the World Health Organization (WHO) *The global health sector strategy on HIV/AIDS 2011-2015* and in particular, the section on *Strategic direction 1: optimize HIV prevention, diagnosis, treatment and care outcomes* where it clearly states the importance of counselling services provision and a commitment to tackling the issue of HIV/AIDS through: '...promoting provider-initiated HIV testing and counselling, re-testing, and counselling of couples in antenatal, maternal, newborn and child health services' (WHO, 2011: 11). The WHO have also committed to supporting the generation of evidence related to gender-based health inequities and barriers to accessing services and will 'include women (including women living with HIV) and community carers in developing policies and normative guidance aimed at ensuring that HIV services meet the needs of women' (WHO, 2011: 28). This strategic WHO (2011) document strengthens and adds to the recommendations posed by Minnie et al (2011).

On a related issue, the second paper by ten Ham et al (2011) focuses on the pasteurisation of breastmilk as a potential method of inactivating HI type 1 virus in the home. The paper is a systematic review and compares the evidence on two methods of pasteurisation: flash-heating and pretoria. The evidence demonstrates the effectiveness of both treatments in eliminating the HI virus, but nutritional and protective safety could not be confirmed. However, it is the potential for a major reduction in the transmission of HI virus from breastmilk to infants that cannot be under-estimated and the recommendations for education and training of both midwives and mothers to access new evidence for safe and effective practice are also supported by the WHO (2011) strategy.

The third paper by Chokwe et al (2011) is a rather disturbing description of 'uncaring' and 'caring' practice as observed by student midwives when they reflect on their clinical placements. The paper is qualitative with a large sample size of 76 learners and portrays very poor practices where midwives demonstrate cruelty to mothers. The most positive message from this revealing paper is that the learners knew the behaviours displayed were uncaring. The challenge for educators is to ensure the learners become model 'carers' for the future and there is a strong message for the South African Nursing Council to tackle this unacceptable behaviour by qualified practitioners.

The fourth paper by Sakala et al (2011) is a descriptive study using a convenience sample of 154 mothers attending the under-five clinics with infants aged between eight and 12 weeks old for postnatal care in Malawi. The aim of the study was to identify the factors influencing the utilisation of the postnatal services provided. However, the sample was limited to those who actually attended and the 100% response rate from this group was unusual and would require some further exploration to rule out perceptions of coercion. The major finding from the study was the role of the midwife in providing advice to women with regard to the importance of attending postnatal services and implications for supervisors of midwives to ensure that a more robust postnatal appointment service was operationalised.

The final study by Dennis-Antwi (2011) is a qualitative study exploring the important issue of preceptorship in Ethiopia, Ghana, Uganda and Zambia with a sample of 100 participants. The main approaches were interviews and focus groups and the sample included midwifery tutors, preceptors, midwives and key stakeholders from the maternity services. The main outcomes indicated that while all of the countries knew the value of preceptorship and wished to provide the requisite training and support, the current systems were failing to do so. The current environments did not reach an adequate standard for optimal support of newly qualified midwives and this has major implications for future education programmes and service delivery. The major threat identified was the potential for poor post-registration support (preceptorship) to undermine the WHO (2011) efforts to reduce maternal and infant mortality due to 'limited practical skills and poor attitudes to care'.

In conclusion, this special edition of *EBM* highlights some of the issues that midwives in Africa are researching and it provides an illuminative picture of the challenges facing the WHO, women, practitioners, educators and researchers.

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Factors influencing counselling for HIV testing of pregnant women as perceived by lay counsellors

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Abstract

Background. In South Africa (SA), many HIV-positive pregnant women and their babies do not benefit from strategies limiting mother-to-child transmission and enhancing their health because of their unknown HIV status. The quality of counselling for HIV testing may influence whether or not a pregnant woman is tested. In SA, community members are trained as lay counsellors to provide counselling for HIV testing. As these counsellors come from the same communities as the pregnant women, their insight can be valuable to improve HIV counselling.
Research question. What factors influence counselling of pregnant women for HIV testing from the perspective of lay counsellors?
Method. A qualitative exploratory, descriptive, design was used to gain an insider's perspective of counselling through interviews. Ethical clearance was given by the North-West University. The sample was willing counsellors who provided support in a health district in the north-west province of SA. Data saturation determined the sample size and this resulted in a sample size of seven. Data were analysed using thematic analysis.
Findings. The seven counsellors who participated in the study, were all female and their ages ranged from 24 to 60 years of age. Their work experience as counsellor ranged from three months to 12 years.
Implications. The findings of this study rendered valuable information for more effective counselling for HIV testing during pregnancy that could result in more women and babies benefiting from strategies to limit the impact of HIV.

Key words: South Africa, midwifery research, mother-to-child transmission of HIV, counselling and testing, lay counsellors, evidence-based midwifery

Introduction

The HIV/AIDS epidemic in South Africa (SA) include adult HIV prevalence of 18.1%, an estimated 5.7 million people living with HIV/AIDS, and a fall in life expectancy from 63 years in 1990 to 54 years in 2007 (WHO, 2008). Within the pandemic of HIV/AIDS, babies infected through mother-to-child transmission (MTCT) resulting in paediatric AIDS is an even greater tragedy. Adaption of usual practices and antiretroviral therapy can halve the risk of transmission from mother to baby (Kesho Bora Study Group, 2011) and can significantly improve an infected woman's health. However, in order to benefit from these strategies, pregnant women should know their HIV status.

An estimated 29.4% of SA pregnant women are HIV positive (SA Department of Health, 2010a), however, the 2007/2008 figures indicate that only 81% of pregnant women who used the public health services were tested for HIV (Johnson, 2010). Although it may seem obvious that it is beneficial to know her HIV status, a pregnant woman may not necessarily perceive it as such (Aynalem et al, 2004). In addition to motivational factors like concern for her baby's health and fear for changes if she is found to be HIV positive, perceptions regarding counselling for testing, may influence a woman's decisions about whether or not to be tested (Minnie et al, 2008).

Due to the human resource for health shortage in SA, task shifting often takes place (Dohrn et al, 2009). One of the tasks shifted is counselling for HIV testing. Counselling is mostly done by lay counsellors (who receive two weeks of training). As the lay counsellors are critical in the service delivery to pregnant women and they make a valuable contribution, the following research question arose: What factors influence counselling of pregnant women for HIV testing from the perspective of lay counsellors?

Method

The design was exploratory and descriptive and used qualitative approaches (to gain an insider's perspective from the counsellors) (Burns and Grove, 2009). The sample was drawn from all counsellors providing counselling for HIV testing during pregnancy in the identified health district and who consented to participate. The sample size was determined by reaching the saturation level, with no new insights being generated from the data (Holloway, 2005; Streubert Speziale and Carpenter, 2007) and this was achieved after seven interviews. The ethics committee of the North-West University approved the study (certificate number: 04K26).

Individual interviews (Kvale, 1996) were conducted and recorded. After the central question about which factors they see as influencing the counselling for HIV testing of pregnant women, follow-up questions and prompts were used to ensure rich responses from the participants. Interviews were transcribed verbatim.

Data were analysed using thematic analysis (Braun and Clarke, 2006). The first author and a co-analyst independently analysed the data and after they reached consensus on the major and supporting themes, the findings of the study were discussed in relation to the findings of previous studies.

Table 1. Strategies to ensure trustworthiness applied in this study

Standard	Strategy
Truth value	Putting participants at ease and developing a trust relationship Recording of interviews and use of field notes Use of co-analysts and consensus meetings and use of participants' own words in reporting
Applicability	Research process, characteristics of participants as well as context described in detail (rich description)
Consistency	Audit trail with detailed descriptions of research occurrences The co-analysts worked independently
Neutrality	Original interview schedule, recordings, transcripts, notes and memos were kept as audit trail

Table 2. Factors influencing counselling for HIV in pregnancy

Themes	Subthemes
Counsellor factors	1.1 Motivation 1.2 Personal factors
Counselling factors	2.1 Counselling process 2.2 Difficult counselling sessions
Client factors influencing counselling	3.1 Understanding counselling information 3.2 Readiness for testing 3.3 Follow up
Organissational factors influencing counselling	4.1 Support for counsellors 4.2 Clinic infrastructure and routine 4.3 Job insecurity
Community factors influencing counselling	5.1 Stigma 5.2 Negative perceptions of clinics 5.3 Community practices

Strategies to ensure trustworthiness (Cresswell, 2003) are outlined in Table 1.

Discussion of findings

Demographics

The seven counsellors who participated in the study were all female and their ages ranged from 24 to 60 years of age. Their work experience as counsellors ranged from three months to 12 years. The five main themes and their subthemes were identified from the data (see Table 2) and will now be discussed. The extracts are referenced with the participant's number, followed by the page number of the transcription on which the extract appears.

Counsellor factors

Motivation

Two of the participants were motivated to become counsellors because they felt touched by the burden of HIV/AIDS and the need to make a difference to people's lives:

"I feel that it was important to... when I get that information, to spread the information to other people. That is why I become a counsellor, to give people information" (4:4).

To receive recognition and positive feedback, motivate them to continue:

"If a person, for example, if I've tested a person for HIV and he is positive, and he comes back to me every time and he takes the things I've told him, then I feel good because then I feel hey, what I've done, I've reached what I've been looking for" (2:4).

This finding corresponds with a study by Grinstead et al (2000) in Kenya and Tanzania where counsellors also felt valued because they assisted people to solve their problems. The World Health Organization (WHO) (1999) stresses the importance of motivated counsellors as they tend to be more empathetic and skilful.

Personal factors

Several of the participants spoke about the emotional impact of the HIV counselling on them as person:

"You are stressing about people's problems. You are taking people's problems, you are making it yours" (1:3).

The counsellors deal with intense emotional issues when they inform people that they have a life-threatening disease (Solomon et al, 2004). Emotional exhaustion may result from involvement over an extended period, without a way of dealing with it, as one of the counsellors confirms:

"There was a time when I was very irritable and then I realised it is because of the counselling, and I am not counselled myself. It ended up with me seeing a social worker who helped me... She has opened up wounds, but helped me as I am another person now" (2:3).

Counsellors stated that in order to cope with the emotionally draining work, they keep an emotional distance from their clients:

"You keep yourself strong so that the people outside do not see you are sad. If they can see you feel sad, how are you going to work?" (7:2).

As could be expected, counsellors found it difficult to cope when their own family was touched by HIV/AIDS. As in the study of Baggaley et al (1996), participants felt unable to discuss HIV with their families. One of the participants in this study reported her experience:

"Because my worry is, I had a child. Then she died in 1999. I tested her, but I could not tell her... At that time I could not tell her myself, because she said herself, she is not going to the clinic because they are going to test her" (7:3).

Counselling factors

Counselling process

The counselling process brings about a heavy workload and nearly all the counsellors expressed their frustration:

"Here you work that you forget to eat" (2:6) and *"Would you believe me if I tell you that I help 17 people during a day?"* (7:5).

The lack of enough human resources also hampers the counselling process. Van Dyk and van Dyk (2003) caution that proper HIV counselling is simply not possible in circumstances where limited resources lead to long waiting periods and a heavy client load.

Counsellors had a very task-orientated approach and measure the efficiency of their counselling primarily by the uptake in HIV testing:

"I explain everything to them so in the end they agree to do the test" (4:2).

The counsellors reported that although they do not force anyone to be tested, nearly all pregnant women consented to be tested. This correlates with a study by de Paoli et al (2002) in which participants described a 'good' counsellor as someone who could persuade pregnant women to do what the counsellor wanted and accept HIV testing.

Participants used provision of information to persuade women to be tested:

"For you it's moving beyond the fear of the patient, giving them information" (4:3).

Both group sessions and individual counselling are used to provide information:

"I am supposed to do individual counselling but because there is not enough space and time, I do it in a group, but if I take the woman to determine if she wants to do the test or if she is willing to do the test now, we are alone" (2:2).

This concurs with van Dyk and van Dyk's (2003) view that group counselling can be used to provide information, but is not appropriate as 'counselling' as it lacks privacy and confidentiality. On the contrary, Mabunda (2006) indicated that clients prefer group counselling as it provides an opportunity to ask questions and to learn from one another; but emphasised that there were some questions that could not be asked in a group.

None of the participants mentioned pregnant women being counselled and tested with their partners, although couple testing is recommended in the prevention of MTCT (PMTCT) guidelines of the SA Department of Health (2010b). If partners are involved in counselling, more men would use the counselling services and more partners would disclose their HIV status to each other (Holmes, 2005).

Difficult counselling sessions

The counsellors found certain types of counselling sessions especially difficult. If clients are referred to the counsellors by healthcare professionals for HIV testing without being prepared for what to expect, it can cause the client and counsellor a great deal of stress:

"I ask, when you came, did the sister tell you what you should get here? No, she told me to come to you, and if I am finished, then I can go to fetch my pills... I understand the point. It may be a HIV-related disease, but do it in a professional way, warn the patient that you think it may be 'the disease' and that she sends you to someone that would talk to you about it" (2:6).

UNAIDS (1997) stresses the fact that clients should be prepared that they may be HIV positive prior to being sent to a counsellor.

Client factors influencing counselling

Understanding the information

Considering how important counsellors believe that giving information is, it is not surprising that the participants discussed their strategies to ensure the clients understood the information provided:

"Rather use a language that they can understand, down under, 'a body does not have soldiers anymore' because if you explain it too high, you get the idea they do not understand anything" (2:5).

Readiness for testing

The participants reported that some clients were unprepared when they first realised that they have to make a decision about whether or not be tested for HIV:

"Others they come to the clinic (for antenatal care) not knowing that they are coming to do the HIV test. So when you tell them that you are going to do the test, they become shocked and scared. They are not ready yet to do the test" (4:2).

Follow-up

Clients, who are tested and found to be HIV positive, receive post-test counselling by explaining the implications of the result. After the post-test counselling, counsellors continue to support their clients:

"I know my patients, especially those who are HIV positive. When they come to collect treatment, I see them when they sit there and I just go and talk to them and give them support" (4:7).

Although the participants realised the value of support groups for HIV-positive people, they had not yet established such groups:

"I really want to establish a support group but there are not sufficient facilities. In the first place there is no transport; here is shortage of staff, so when I am not in the clinic the clients would suffer" (2:4).

This concurs with UNAIDS' (2001) acknowledgement that support groups can be a source of comfort and strength and it is not easy to establish and maintain such groups.

Organisational factors influencing counselling

Support for counsellors

McCoy et al (2002) and Pronyk et al (2002) stress the importance of support for and supervision of frontline staff and recommend peer-support groups and debriefing sessions to help prevent emotional exhaustion. The participants clearly valued the support they received from their co-workers:

"I am so happy here, because if I have a problem, I go to the other sister and tell her this and this and if I don't understand this problem with my patient, I just can go to the sister and ask

what can I do with the patient, you know? I love them" (1:5).

Some of the participants realised that they also needed professional support:

"...counsellors they are also in the need to get some, to be counselled" (7:2).

The participants confirmed their need for additional training to keep up to date. Although the participants did receive some ongoing training, it was sporadic in nature and perceived as insufficient:

"HIV is changing every day, we need more training" (1:6).

Shetty et al (2005) supports the need for training and states that lay counsellors can provide an acceptable voluntary counselling and testing (VCT) service if their training is supplemented with ongoing supervision and mentoring. The report on the assessment of the public sector's VCT services indicates that although support and supervision systems exist, they are inadequate (Magongo et al, 2002). In a study by Grinstead et al (2000), participants also expressed their fear of not knowing enough to be able to answer their clients' questions about HIV transmission and other topics.

Clinic infrastructure and routine

The participants reported the problem of insufficient space:

"Sometimes we use the room of tea... maybe there are staff who needs to come to tea, that means you must wait... for him or her to drink the tea, after that you can do counselling. So the problem is the clinic is very small" (5:2).

Already in 1999, the WHO (1999) stated that not having a designated space for counselling is a constraint on effective counselling. Patel et al (2002) in their study conducted in the Western Cape in SA, also identified 'no space' as a challenge for lay counsellors to do their work effectively.

The clinic's routine can also influence the counsellors:

" ...I asked the sister... I told her it would be the best if I only do counselling on Mondays, Tuesdays, Wednesdays and Thursdays... If there is enough time and I'm not exhausted, then I also do it according to arranged appointments" (2:3).

Seeing clients by appointment can be beneficial if the client doesn't have an extended waiting period prior to consultation. In addition, enough time can be scheduled for each counselling session. Grinstead et al (2000) also suggested that seeing fewer clients would allow them to be less overworked.

Job insecurity

Counsellors didn't read perceived job security as their stipend was paid irregularly and they feel their work was not appreciated. They were employed by a non-government organisation (NGO), which was subsidised by the Provincial Department of Health but doesn't have reserves to pay them when there is a delay in the payment from the government:

"Some of the counsellors did not receive a salary for four months. How does a person come to work, if she does not have food to eat, if she does not have bus fee?" (2:5).

In the report on the evaluation of the PMTCT pilot sites of SA, McCoy et al (2002) describe the problems associated with the payment of lay counsellors. There was a marked difference in the amount they are paid by the various provinces, and counsellors are not paid the same rate as other lay community health workers. These factors affect the counsellors' morale and ultimately the effectiveness of their counselling. Doherty et al (2003) also highlight that the low salaries of counsellors cause high turnover rates as there is a lack of recognition of their value, resulting in a constant need for retraining.

Community factors influencing counselling

Stigma

A high level of stigma is associated with HIV-positive people in SA. Cameron and Kahn (2005) predict that stigma will only decrease when HIV affects every household, every family and every workplace, church and community organisation. Participants verbalised their experiences as follows:

"Like stigma, they say people wouldn't accept you, because they will think that maybe you were sleeping around without using any protection... So that is why maybe she will think, I would rather not test" (3:4).

Although not stated explicitly, the efforts to ensure confidentiality indicated that the counsellors themselves view HIV with a high level of stigmatisation:

"Unless you tell your mother that you are HIV positive, I have to keep the secret. Even if you are deteriorating, deteriorating and they are asking me, what is the problem; I don't have to tell them. It is private and confidential. I like to tell them but I don't have to tell them" (1:6).

However none of the participants in this study said that they felt stigmatised due to their HIV/AIDS-related work. By contrast, the stigma by association or secondary stigma of health workers is a well-recognised concept in the literature (Patel et al, 2002; Brown et al, 2003).

Negative perceptions of clinics

Although counsellors did not feel stigmatised, they reported that people had negative perceptions of the clinics, and this could influence their counselling:

"They feel there is no confidentiality, they are very unfriendly with the people there" (2:5).

To overcome this challenge, one-third (33%) of the participants in the study by van Dyk and van Dyk (2003) declared that they preferred to attend a clinic where nobody would know them, as they feared that their results would not be kept confidential.

Community practices

Clients who had an HIV-positive result in one clinic often have the test repeated at another clinic, in the hope that the first result was incorrect. This practice adds to the counsellors' workload:

"They say I didn't do the test, but she has done it. She goes to the next clinic and says, it's the first time I am doing the test, to see if they will give the same results" (4:9).

One of the counsellors told the interviewer of a way in which young men avoided being tested for HIV themselves:

"The young men, they impregnate the girls, with the effect that the woman gets the shorter end of the stick. All pregnant women get tested. So, if the woman, if she is positive, he

knows he is also positive" (2:7).

Levack (2005) describes the practice of 'proxy testing' where men do not want to be tested for HIV, but consider their partner's status as an indicator of their own status. Only 21% of all clients who receive VCT in SA are men (Levack , 2005).

Conclusion

Factors influencing counselling of pregnant women for HIV testing as perceived by lay counsellors were identified. Effective counselling for HIV testing during pregnancy in the clinics studied is hampered by counsellor-related factors, counselling factors, client-related factors, organisational factors as well as community factors. From these five groups of factors, the following conclusions are deduced.

The lay counsellors who have to shoulder most of the responsibility for the counselling are ill-prepared, ill-supported and under-appreciated and often emotionally exhausted. While group counselling is effective to provide information related to HIV testing and to answer questions, one-on-one sessions are important for counselling, although close to impossible in over-crowded clinics with limited or no private space. Although participants did not mentioned couple-testing, the latest evidence points towards the value of partner involvement during the counselling sessions.

Participants alerted the need for support, mentoring and additional training to improve their quality of counselling. Clients are often referred to them by the health professionals without being informed why they are referred, resulting in a complicated counselling process.

Client-related factors that influence counselling include the importance of clients to understand the information received and their readiness for testing. Follow-up and support of positively tested clients are important, especially by means of support groups, however, counsellors have not been successful with establishing support groups.

A need for organisational support in the form of continuous education, support and planning of additional space in clinics for counselling as well as the need to rather see clients per appointment to avoid over-crowding of facilities at times, was identified. Job insecurity as evident in salaries not being paid on time, being lower than those of other lay health workers, resulting in a high turnover of lay counsellors and the need for re-training, are evident.

Lastly, factors such as stigma, negative perceptions of the clinic's ability to keep results confidential and health practices in the community that have an effect on the quality of counselling, were verbalised. Not only does the stigma associated with HIV/AIDS prevent pregnant women consenting to testing, men also feel that they do not need to be tested because the status of his partner indicates his own status. On the other hand, clients tend to go to other clinics after being tested positive to be re-tested, thus contributing to the over-crowding of facilities.

Limitations

This study was conducted prior to the launch of the PMTCT programme (SA Department of Health (2010a) and did not therefore incorporate the possible changes that could have taken place since implementation.

Recommendations

To improve counselling for HIV testing during pregnancy and ultimately help more women and their babies to benefit from the available strategies, the following recommendations should be considered:

- Implementation of the PMTCT programme (SA Department of Health, 2010a), such as the provision of information before an HIV test as 'information sessions'. The initial information should be presented in a 'group information session', followed by an 'individual information session' accompanied by suitable educational material, such as brochures, posters and videos
- Implementation of couple testing and other involvement of male partners should be actively promoted. This may implicate adapting health services, for example, hours to accommodate men
- Managers should be advised to make counsellors feel more appreciated, ensure that they are better prepared and supported, as counselling would be of a higher quality, HIV-test uptake will improve and more HIV-positive women and their babies would benefit from the available strategies
- Ensure regular debriefing and formal counselling sessions to enhance the coping of lay counsellors. The ideal counsellors would be registered professionals with relevant training (midwives, nurses, psychologists or social workers). However, due to a shortage of health professionals in SA, they could best be utilised for difficult cases and to support and mentor lay counsellors
- The follow-up and support of HIV-infected pregnant women should be addressed more actively in the training of lay counsellors
- Planning of clinic schedules need to limit overcrowding of facility and should provide time and opportunity to establish support groups.

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Pasteurisation of expressed breastmilk as in-home procedure to limit mother-to-child transmission of HIV: a systematic review

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Abstract

Background. When HIV-positive mothers decide to breastfeed, pasteurisation of breastmilk could be a safe way to inactivate HI type I-virus. Two pasteurisation methods – flash-heating (FH) and pretoria pasteurisation (PP) – can be used as an in-home procedure. In the presence of many small studies, this systematic analysis critically reviews and synthesises the best available evidence related to these methods.
Aim. To critically review and summarise the best quality empirical evidence of the effectiveness of pasteurisation as in-home procedure, as a means of inactivating HI type 1-virus.
Method. Studies regarding FH and PP were systematically selected, critically appraised for methodological quality, and summarised in relation to safety (eliminating HIV, but maintaining the protective and nutritional value), feasibility and acceptability.
Findings. Data from the final sample (n=12) was extracted and findings presented in a narrative format (safety, feasibility and acceptability). Both FH and PP methods were reported as safe in inactivating the HI-virus. However, nutritional and protective safety could not be confirmed. Insufficient evidence exists of the feasibility and acceptability of both methods.
Implications. Pasteurisation of breastmilk can be recommended as safe alternative feeding for HIV-exposed infants due to its ability to eliminate the HI virus while maintaining most of the milk's protective and nutritional value.

Key words: Pasteurisation, expressed breastmilk, in-home procedure, HIV-positive mothers, mother-to-child transmission, systematic review, evidence-based midwifery

Introduction

Mother-to-child transmission (MTCT) is the most significant cause of HIV infection in young children (WHO et al, 2008; Humphrey, 2010). As the HI virus is found in cell-free as well as cell-associated compartments of breast milk, ingestion of breastmilk is one of the ways in which MTCT of HIV can take place, in addition to in-utero and intrapartum transmission (Thiry et al, 1985; Ruf et al, 1994). Breastfeeding, is usually the preferred choice of feeding for the newborn infant globally and specifically in developing countries (WHO et al, 2008), but it might not be the best feeding choice for the infant of a HIV positive mother. Flash-heating (FH) and pretoria pasteurisation (PP) can be used as an in-home procedure to eliminate the HI virus in human milk. This systematic review explores pasteurisation of breastmilk as a means of overcoming the challenges outlined.

Background

Breastfeeding offers multiple benefits to mothers and their babies; when women do not breastfeed, evidence demonstrates that there are significant health risks to infants and young children. For example, there is an increased risk of morbidity and mortality due to diarrhoea and pneumonia (Nicoll et al, 2000; Thior et al, 2006; Humphrey, 2010). In addition to the new recommendations regarding antiretroviral therapy, the World Health Organization (WHO) and the South African National Department of Health (NDoH) recommend that HIV-infected women should breastfeed their infants exclusively for the first six months of life, introducing appropriate complementary foods thereafter and continued breastfeeding for the first 12 months of life. In situations where replacement feeding is acceptable, feasible, affordable, sustainable and safe, women are advised to avoid breastfeeding (WHO, 2009; NDoH, 2010). To overcome the challenges associated with HIV transmission, both the WHO and the South African DoH recommend that pasteurisation of breastmilk be considered as an 'interim feeding strategy'; for example, after a period of exclusive breastfeeding to minimise breastmilk viral load, or as an alternative to breastfeeding during periods of increased risk, such as when the mother is suffering from mastitis and cracked or bleeding nipples (NDoH, 2008; WHO et al, 2008; WHO, 2009).

Two approaches to increasing the safety of breastmilk have been investigated, namely direct boiling, which causes significant nutritional damage (Welsh and May, 1979), and pasteurisation, which inactivates HI-virus type 1 (McDougal et al, 1985). Pasteurisation has the advantage that it does not destroy the essential nutritional elements of breastmilk such as vitamins, immunoglobulin A (IgAs), secretory immunoglobulin antibody (SIgA), lactoferrin and lysozyme surviving digestion (Goldblum et al, 1984; van Zoeren-Grobben et al, 1987; Israel-Ballard et al, 2005; Israel-Ballard et al, 2008). The following three methods of pasteurisation

of breastmilk have been investigated:

- Holder pasteurisation where industrial equipment is used to heat expressed breastmilk (EBM) to 62.5°C for 30 minutes. This method inactivates HI-virus type 1 while retaining most of the breastmilk's protective elements (McDougal et al, 1985; Eglin and Wilkinson, 1987; Lawrence and Lawrence, 2005)
- FH, where EBM in a glass jar is placed (uncovered) in a container with water on a heat source. When the water begins to boil, the milk is removed from the water bath and covered with a lid. Once cooled down (to 37°C), the breastmilk is fed to the infant with a cup or spoon (Abrams, 2007)
- PP, where water is boiled in a one-litre pot, removed from the heat source. A total of 50mls of EBM in a covered jar is immediately placed in the water for 20 minutes. The jar is then removed from the water, where it will be left uncovered to cool down to 37°C (Jeffery et al, 2000).

Although the Holder pasteurisation method is widely used in milk banks, it is not suitable as an in-home method due to the requirements such as gauges and timing devices (Lawrence and Lawrence, 2005). However, both FH and the PP method can be used as simple in-home procedure as household items are used (Abrams, 2007).

Effectiveness of both FH and PP in terms of safety to eliminate the HI virus have been investigated (Israel-Ballard et al, 2005; Jeffery et al, 2001). Limited evidence exists regarding other aspects of effectiveness, such as the acceptability of pasteurisation as an in-home method (Israel-Ballard et al, 2006), and the barriers towards acceptability, such as stigmatisation, cultural beliefs, lack of knowledge and confidence of pasteurisation (Coutsoudis, 2005; Leshabari et al, 2006). The aim of this systematic review was to investigate in-home heat treatments (FH and

Table 1. Data-extraction (n=11)

Study	Findings	Relevance
Chantry et al, 2009	Flash-heating (FH) significantly decreased total IgA and IgG concentrations (SD: 318.0 (1.9) vs. 398.2 (1.9) µg/ml and 89.1 (2.7) vs. 133.3 (2.5) µg/ml, p <0.001 each).	FH is able to retain most of the immunological value of the milk.
Israel-Ballard, 2007	Virologic safety: All flash-heated samples showed undetectable levels of cell-free HIV-1 compared to unheated samples (p <0.00001). Unheated samples had a significantly higher rate of bacterial propagation, including pathogenic growth, over eight hours than flash-heated samples (p <0.005).	Findings from this study regarding safety of FH: FH is able to effectively eliminate HIV (virologic safety), retain most of the nutritional value (nutritional safety) and limit bacterial growth (bacterial safety).
Israel-Ballard et al, 2005	Virologic safety: Both methods (FH and PP) inactivated more than three logs of HIV-1. FH resulted in undetectable reverse transcriptase (RT) activity. Nutritional safety: Neither method caused significant decrease in any vitamins. Heat decreased immuno-reactive lactoferrin (p <0.05) but not the proportions of lactoferrin and lysozyme surviving digestion.	Findings from this study regarding safety of both methods (PP/FH) – both methods are able to eliminate HIV
Jeffery et al, 2003	Antibacterial safety: Bacterial growth: control sample: 34 (59%) of the 58 control portions showed bacterial growth, while only 4 (6.8%) of the 58 PP treatment portions showed bacterial growth (p = 0.0000, OR 0.0523, confidence interval [CI] 0.01389-0.178523). Sterility maintained after 12 hours.	Findings from this study regarding: The PP method is able to retain most of the protective value (over time) and limit bacterial growth.
Jeffery et al, 2001	Virologic safety (viral replication): Samples from HIV-positive women (naturally infected breastmilk): Control sample: five of the 26 showed evidence of viral replication. PP treatment sample: None of the 26 showed evidence of viral replication. Control sample: four of the 25 showed evidence of viral replication.	Findings of the virology safety of PP: The PP method is able to effectively inactivate HIV in breastmilk.
Jeffery and Mercer, 2000	PP was found reliable with a narrow 95% CI for a variety of starting conditions tested such as volume of water, sizes, shapes of materials and containers to reach and maintain the required temperature of 56°C for at least 15 minutes.	Findings from this study concerning the safety (reliability) of PP: PP was considered reliable (in terms of safety) under a range of conditions.

PP) of breastmilk for HIV-positive mothers, with the aim of answering the question: what is the effectiveness of in-home pasteurisation of HIV-positive expressed mother's milk (PP and FH) in terms of safety (eliminate HIV, but maintaining the protective and nutritional value), feasibility and acceptability?

Methods

To address these objectives, the following five steps (Magarey; 2001, American Dietetic Association (ADA), 2008) associated with the systematic review of reported evidence were used:
Step 1: Formulating a focussed review question
Step 2: Search strategy
Step 3: Critical appraisal
Step 4: Summarising the evidence, which includes:
a) data-extraction and
b) data-analysis
Step 5: Summary of the findings

The review question
The review question was structured using the following elements: population of interest (P); interventions (I); comparative interventions (C); the outcomes (O) to measure the effect; timeframe (T); and setting (S) – known as the PICOTS format (Melnyk and Fineout-Overholt, 2005; ADA, 2008).

The operationalisation of these elements in the study was as follows:
P – HIV-positive mothers
I – heat treatment as in-home heat treatment of EBM: FH and PP
C – as compared to: exclusive breastfeeding; different methods of heat treatment of EBM; and between mothers living in urban versus rural areas
O – operational defined as effectiveness: safety: (eliminate HIV and retain the protective and nutritional value); feasibility; acceptability
T – during first six months and weaning period
S – In-home.
The review question was stated as follows: What is the effectiveness of in-home pasteurisation of HIV-positive expressed mother's milk (PP and FH) in terms of safety (eliminate HIV, but maintaining the protective and nutritional value), feasibility and acceptability during the first six months and the weaning period compared to exclusive breastfeeding and between mothers living in urban and rural areas?

Search strategy
To ensure that all important studies were included, multiple sources were used to obtain both published studies such as hand searches of hard copy journals, references and unpublished studies (grey literature).The following databases were used: ProQuest (theses and dissertations), EBSCOhost: Academic Search Premier, CINAHL, Health Source: Nursing Academic Edition, MasterFILE Premier, MEDLINE, PsycINFO and AfricanNiPAD (journal articles), ScienceDirect (journal articles), Cochrane (systematic reviews of studies). Databases used on the South African national level involved: Nexus (National Research Foundation: NRF), SAePublications and Sabinet. Conference proceedings and research theses were searched by the first author (WTH) using the internet and manually by scoping through the references and contacting the authors. Key words used were: (HIV or AIDS) and (heat or pasteuri* or steri*) and (milk or breast* or human milk or mother* milk or feeding).

Inclusion criteria
The review included all qualitative and quantitative studies published since 1990, in Afrikaans, English or Dutch, which are relevant to effectiveness in terms of safety, feasibility and acceptability of PP and FH as in-home methods to pasteurise expressed breastmilk only.

Exclusion criteria
Studies of the Holder method as heat-treatment procedure only and those which are not specific to breastmilk or breastfeeding or pasteurisation as well as non-research reports and duplicates were excluded.

After reading the titles and abstracts, the final list of 11 studies for critical appraisal was compiled based on consensus between the authors. To ensure that no relevant data were missed, the search was updated six months after the first search whereby the same search strategy (including the same databases and key words) was used. One relevant study (Chantry et al, 2009) was then included in the sample existing of 12 studies.

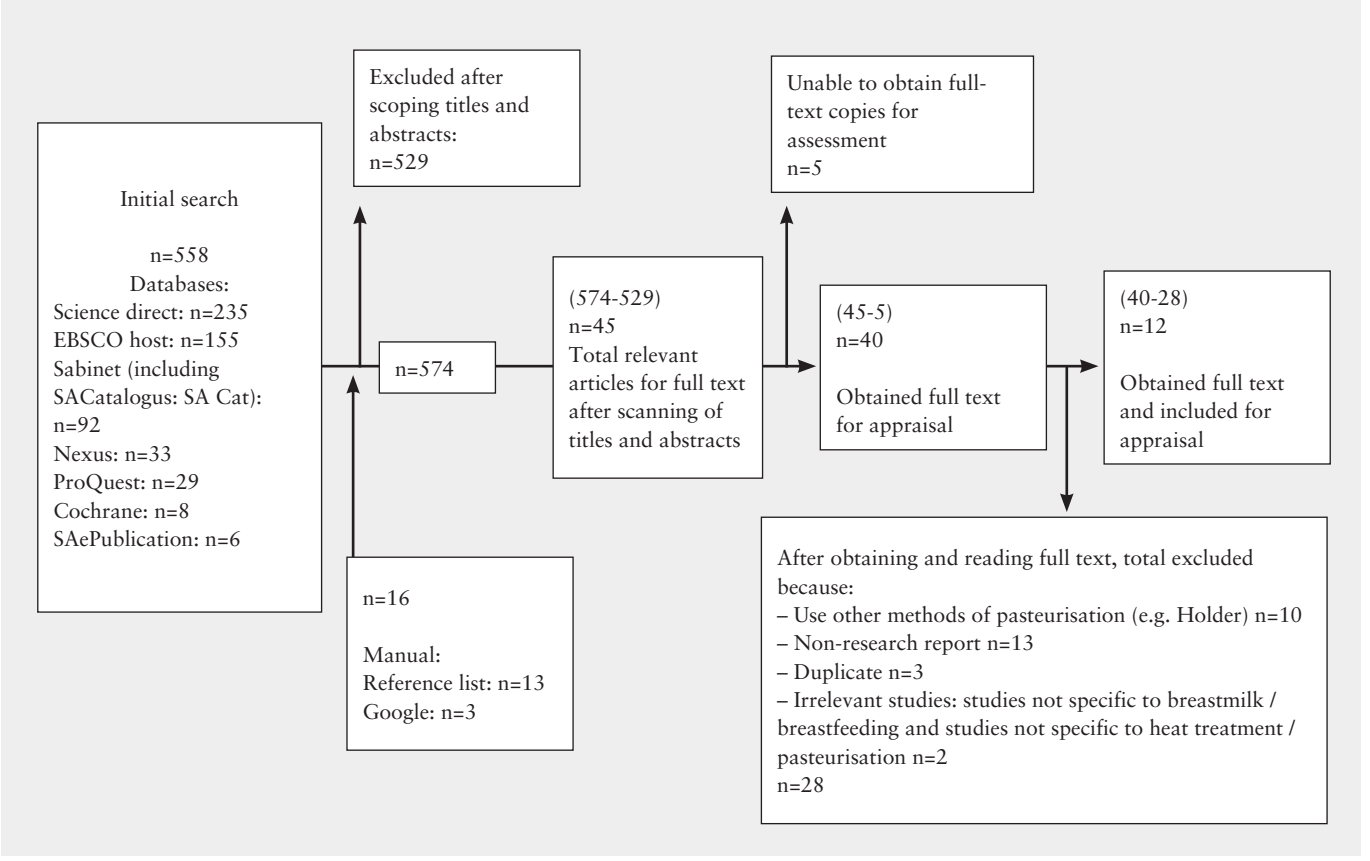
Critical appraisal
Appropriate tools were used to determine the methodological quality of the studies by all three authors independently including the evaluation tool for quantitative research studies using an experimental design from Health Care Practice Research and Development Unit (HCPRDU, 2005), the Critical Appraisal Skills Programme instrument for randomised controlled trials, cohort studies and qualitative studies (CASP, 2006) and the *Johns Hopkins Nursing – Evidence-based practice* research evidence appraisal tool (Newhouse et al, 2007) for studies using mixed methods.

Data extraction and data synthesis
After critical appraisal, the characteristics of the included studies were extracted. Thematic analysis was used for the synthesis process as a means of providing a summary of relevant findings of each study (Dixon-Woods et al, 2006).

Results

The results of the applied search strategy are reported in Figure 1. The initial search identified 558 articles. On reading the titles and abstracts, 45 articles appeared to meet the stated inclusion criteria and the full text accessed. Application of the inclusion and exclusion criteria resulted in 12 articles being reviewed.

Figure 1. Results of application of the reported search strategy



Findings – in relation to safety, feasibility and acceptability of EBM pasteurisation, the following findings are reported:

Safety

Synthesis of the evidence related to the safety of FH and PP includes the effectiveness of the process in eliminating or inactivating the HI virus and the ability of the process to retain the protective and nutritional value of EBM:

a) Eliminating/inactivating the HI virus – both pasteurisation methods (FH and PP) were found to effectively eliminate/inactivate the HI virus. Both methods inactivate HIV-1 up to> 3 logs resulting in undetectable reverse transcriptase (RT) activity: the transformation of the HIV in the cell DNA (Level I evidence as reported by Jeffery et al, 2001; Israel-Ballard et al, 2005; Israel-Ballard, 2007).

b) Retaining the protective and nutritional value of the EBM – none of the methods of pasteurisation caused a significant decrease in vitamins; except for a slight decrease in vitamin C and E and protective elements (such as lactoferrin and lysozyme surviving digestion) (Israel-Ballard et al, 2005 – level I evidence). Both methods were found to eliminate spiked bacteria (*E.coli* and *S. aureus*) and destroy bacterial contamination. However, FH was superior to PP in retaining more antibacterial activity (Israel-Ballard et al, 2005 – Level I evidence). FH however significantly decreased the concentrations of IgA and IgG, anti-HIV-1, anti-pneumococcal polysaccharide and anti-poliovirus. In contrast, it increased the binding capacity of IgA to influenza. Flash-heated milk retains most (66%) of the antibody specificity (IgA and IgG) for the microbial antigens tested, and therefore offers similar protection with unheated milk (Level I evidence reported by Chantry et al, 2009). However, the stability of nutritional, immunological and anti-microbial value and safety in different settings (such as field settings instead of laboratory settings) was not confirmed (Level I evidence by Israel-Ballard, 2007; Chantry et al, 2009). PP was found to be reliable under a range of conditions such as different volumes of milk and the initial and ambient temperature of milk. PP might be safe in retaining benefits such as the nutritional and anti-microbial value of breastfeeding (Level I evidence by Jeffery and Mercer, 2000).

Feasibility

On reviewing the literature, pasteurisation of EBM was reported to be a safe and feasible option in the weaning period after six months up to 24 months. In particular, when milk production was well established or partially used in times of increased risk of HIV transmission such as when maternal mastitis occurred (Level I evidence, Israel-Ballard, 2007; Level III evidence, Israel-Ballard et al, 2006). It was also noted that both FH and PP were considered affordable (Level III evidence Israel-Ballard et al, 2006). However, both pasteurisation methods were time consuming and require skill and facilities such as a heat source and fuel (Level III evidence, de Paoli et al, 2003; Israel-Ballard et al, 2006).

Table 2. Studies regarding acceptability (n=1)

Study	Findings	Relevance
de Paoli et al, 2003 Are infant-feeding options that are recommended for mothers with HIV acceptable, feasible, affordable, sustainable and safe? Pregnant women's perspectives	Participating women reported that they would change to an alternative infant-feeding method if they were found to be HIV infected and were advised to do so. Heat treated EBM and wet-nursing were not regarded as viable infant-feeding methods due to social barriers such as a lack of support from the partner and potential negative reactions from the community (fear of stigma/rejection).	Pasteurisation was not well accepted due to social barriers such as lack of support and fear of stigma.
Burke, 2004 Infant HIV infection: acceptability of preventive strategies in central Tanzania	Limitations to future adoption of infant-feeding options are resource limitations, stigma of HIV/Aids, widespread fear of HIV-testing, and insufficient education. Heat-treating breastmilk was considered impractical, except for some urban people with salaries, due to the fact that these options are complex and time consuming.	Pasteurisation was not seen as acceptable due to practical (feasibility) issues (complex and time consuming).
Israel-Ballard et al, 2006 Acceptability of heat treating breastmilk to prevent mother-to-child transmission of human immunodeficiency virus in Zimbabwe: a qualitative study	The practice of expressing breastmilk was more common among working women. Major concers included: the inability to bond with the child; cultural taboos (participants in urban and suburban areas had less attachment to such beliefs compared to participants in rural areas); fears for rejection when expressing breastmilk and the inequalities between men and women limit safe breastfeeding practices. However, after discussion, participants believed that these issues could be overcome. Participants were interested to hear that pasteurisation could kill the HI virus. However, they were sceptic that pasteurisation could reduce the nutritional value of the EBM (request for evidence!). Pasteurisation was seen as affordable, however, was also regarded as time consuming. Participants preferred FH above the Holder method after demonstration due to the minimal equipment required.	FH was seen as more acceptable throughout the discussion (views changed). Cultural taboos and stigma could be overcome. FH was seen as more feasible after discussion and demonstration. Affordability was seen as the greatest benefit, while time constraints and social and cultural stigma were seen as major disadvantages. Note: This study is one of the few studies that addresses feasibility and acceptability of particularly the FH method.
Leshabari et al, 2006 Translating global recommendations on HIV and infant-feeding to the local context: the development of culturally sensitive counselling tools in the Kilimanjaro region: Tanzania	Expression and heat-treatment of breastmilk were seen as not feasible due to it being time consuming and due to cultural beliefs. According to some, nurse counsellor 'informants' providing health education on this technique is important. Not breastfeeding but using replacement feeding and EBF was perceived as unacceptable due to social pressure and a lack of control, a lack of knowledge and confidence in implementing the recommended feeding options.	Pasteurisation was seen as unacceptable (due to cultural beliefs) and not feasible (due to the view that it was too time consuming). Health education is vital to increase the lack of knowledge (and feasibility and acceptability).
Pullen et al, 2002 Attitudes of HIV-infected mothers towards expressed and pasteurised breastmilk for infant-feeding	All mothers (n=10) interviewed indicated that they were positive towards the PP method. Five mothers requested assistance due to a lack of financial resources or facilities for safe alternative infant-feeding methods. Two mothers expressed fears concerning an inability to produce sufficient breastmilk (n=1) and the disclosure of HIV status (n=1).	The small sample (n=10) indicates a positive attitude towards the PP method. However, due to fear for disclosure and its consequences, the feasibility for continuing the PP method after discharge is questionable.

Acceptability

Although sufficient and strong evidence supports the effectiveness of heat treatment of HIV-positive breastmilk, the practice needs to be acceptable in the community, especially where breastfeeding is the accepted means of infant feeding. Several studies indicate that pasteurisation of EBM as in-home treatment is not well accepted by people living in rural and urban areas (Level III evidence, de Paoli et al, 2003; Burke, 2004; Leshabari et al, 2006). In fact, less acceptability of in-home treatment exists in rural areas than in urban areas (Level III evidence, Pullen et al, 2002; de Paoli et al, 2003; Israel-Ballard et al, 2006). However, acceptability was found to be strongly influenced by culture, especially in rural areas. Cultural beliefs such as the inappropriateness of touching breastmilk and suspicion from family, neighbours and the community if the baby did not take his feeds directly from the maternal breast were cited (Level I evidence, Israel-Ballard et al, 2006; Level III evidence, Pullen et al, 2002; de Paoli et al, 2003; Burke, 2004). Some evidence (Level III) suggested that education could improve the level of acceptability of FH (Pullen et al, 2002). It was concluded that counselling and demonstration of pasteurisation could be important strategies to reduce stigma and increase acceptability of in-home methods (Level III evidence, Burke, 2004; Israel-Ballard et al, 2006).

Discussion

Limitations – firstly, during the search strategy, only the electronic databases subscribed by the North-West University were used. However, to overcome the possibility that important studies were omitted, multiple sources were used as mentioned in the search strategy. Secondly, even though the search strategy was conducted as broadly and rigorously as possible, it was not always possible to obtain the full text of the articles. Thirdly, blinding was not used during the critical appraisal process; this could be a limitation with regard to the validity of the appraisal.

Effectiveness of pasteurisation

Effectiveness of both pasteurisation methods could not be confirmed due to a lack of evidence. Evidence was found that both pasteurisation methods (FH and PP) are effective in eliminating/inactivating the HI-Virus and retaining most of the nutritional value and protective elements.

Existing evidence concerning the feasibility of pasteurisation as in-home treatment of HIV-positive EBM is also insufficient. Further research is needed to determine the acceptability of pasteurisation of EBM as simple in-home procedure; specifically the role of stigma in acceptability is not clear and needs to be investigated in different settings (rural versus suburban) by means of qualitative research (Pullen et al, 2002; de Paoli et al, 2003; Israel-Ballard et al, 2005).

However, it was also found that perceptions of pasteurisation can be changed positively by health education (Israel-Ballard et al, 2006). To enable HIV-positive mothers to make an informed decision regarding infant-feeding and thereby limit MTCT of the HI virus, it is recommended that health practitioners keep up to date with the best evidence regarding pasteurisation. Another strategy to empower mothers to make an informed choice of infant-feeding and to limit MTCT of the HI virus is to train health workers to enable them to counsel and demonstrate pasteurisation and to offer HI infected mothers evidence-based health information. In conclusion, this systematic review demonstrates the complexities surrounding the effective use of in-home pasteurisation to prevent HI-virus transmission. Further research is required to address the documented barriers to the feasibility and acceptability of the practice.

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Caring in clinical practice: experiences and perceptions of learner midwives

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Abstract

Background. There is a growing concern about the lack of caring in midwifery clinical practice. In addition findings of studies exploring health-seeking behaviours in South Africa indicated the abuse of the pregnant women by midwives as the most important reason causing a delay in seeking health care.

Objective. To explore the experiences and perceptions of the learner midwives of caring as exhibited by qualified midwives during midwifery clinical practice.

Methods. A qualitative and phenomenological study was done. Ethical clearance was granted by the university and the managers of the hospitals where the Baccalaureus Technologiae II and III learner midwives were placed for work-integrated learning. Three self-report techniques used were diaries, debriefing sessions with reflection and focus group.

Findings. Data from 48 diaries and two focus groups were analysed using a qualitative approach. Care of the women and midwife-related themes emerged, each with caring and uncaring as major categories. The findings illustrated that the learner midwives were familiar with and internalised the meaning of caring from the theoretical facilitation, however they did not always experience caring in midwifery clinical practice. Some of the midwives were caring, but the majority did not role model commitment, competence, compassion, confidence and communication.

Implication for practice. Managers must be held accountable for setting, implementing and maintaining caring standards in the healthcare institutions. Furthermore, there is a need to emphasise the importance of role modelling and ensure that the affective aspect of caring is communicated to the learner midwives during theoretical facilitation and clinical practice.

Key words: Perceptions, experiences, caring, learner midwives, midwives, evidence-based midwifery

Introduction

Caring is an abstract concept. It is a fundamental human need and an important component of the midwifery profession (Karaöz, 2005). Hunter (2006) writes that caring is human behaviour that includes the holistic being: physical, emotional, social, spiritual and moral. According to Mulaudzi et al (2001), caring is an inborn characteristic that every human being is assumed to possess.

In a relationship with vulnerable women during labour, a caring environment is created and comfort is promoted when their needs and desires are met (Lowdermilk and Perry, 2006). The comfort experienced in a caring relationship overrules the discomfort caused by the pain of it, thus increasing the threshold of pain (Lowdermilk and Perry, 2006). In addition, when midwives portray a caring behaviour to women during labour, a significant long-term contribution to a positive birth experience is created (Pembroke and Pembroke, 2008).

Caring has several different meanings. According to Wilkes and Wallis (1998), caring is seen as an essence, core and the tradition of midwifery. Mulaudzi et al (2001) explain caring according to the five Cs: commitment, compassion, competency, conscience and confidence. Caring is an assistive, supportive act towards an individual with the aim of improving the human condition or way of life (Karaöz, 2005). Midwives' duties of care are different from other health professionals, in that the health professionals' duties are mainly instrumental in nature. The duties of care for midwives comprise of the instrumental part, which refers to the physical aspect of care, and the affective part, referring to the emotional aspect of caring (Mulaudzi et al, 2001). The instrumental part includes roles, functions, knowledge and tasks, while the emotional aspect of caring refers to love, attitudes and feelings, which include compassion, and emotions (Watson et al, 2005).

Irrespective of all caring behaviour emphasised during training in South Africa, there is an outcry expressed in several studies conducted internationally and locally, about midwives' uncaring attitude towards childbearing women. In the findings of the study by Hunter (2006) exploring the language used in midwifery literature that affects childbirth culture, the participants mentioned that the language used by the professional was strong and their desires and feelings were not acknowledged during routine procedures. In South Africa, Jewkes et al (1998) and Abrahams et al (2001) explored health-seeking behaviours of antenatal women. The studies revealed several themes as the causes of delay in seeking health care. The most important reason that emerged from the study was the uncaring attitude of midwives, which was noted by antenatal women as the overall deterrent to seeking health care.

In a study about the efficacy of role models (Bluff and Holloway, 2008) findings illustrated that if inappropriate behaviours are to be prevented during clinical practice, consideration should be directed to role modelling. According to Kitson (2003), nursing-midwifery and caring are closely related. Since midwifery is a caring profession, it is important for learner midwives to be accompanied and taught by midwives who are caring in order for them to become caring professionals at the end of their training (Bluff and Holloway, 2008). In South Africa, learner midwives spent 1000 hours in clinical midwifery practice (South African Nursing Council, 1985), therefore, it is

important that they are socialised into caring, so that caring becomes a professional value for midwifery practice.

Aim of the study

The study was designed to explore the experiences and perceptions of the learner midwives of caring during midwifery clinical practice.

Background

In 2004, the nursing school planned and held weekly debriefing sessions with all the four-year group of learners after their exposure to clinical practice. The sessions were conducted by the mentor lecturer of each group who encouraged learners to reflect on and discuss incidents they encountered during clinical practice. The aim of the sessions was to ensure that learners were assisted in coping and developing problem-solving and critical thinking skills through recall and reflection of previous experiences. During the discussions, the learner midwives revealed their experiences of negative behaviours by midwives.

Consequently, a pilot study was conducted on caring behaviours of registered midwives and nurses as perceived by learners (Ramukumba et al, 2005). The findings showed that a high proportion of the learners at different levels mentioned that the registered midwives and nurses did not portray caring behaviours such as commitment, compassion, competency, conscience and confidence in their work.

This paper reports follow-up research undertaken between 2006 and 2008. Therefore, the objective of this paper is to report the perceptions and experiences of learner midwives of caring as displayed by midwives during midwifery clinical practice in Tshwane, Gauteng in South Africa.

Ethical considerations

Ethical approval was granted by the research and ethics committee of the university (reference number: 2006/10/025), the Department of Health and the managers of the hospitals where learner midwives of the university were placed for work-integrated learning. Ethical principles of respect for persons, autonomy, beneficence, justice, anonymity and confidentiality were applied at every stage of the research.

Trustworthiness

The principles as proposed by Lincoln and Guba (1985):

- *Credibility*. Reflects the accuracy of the participants' experiences in the study and includes activities that increase the probability that credible findings will be produced
- *Transferability*. Refers to the probability that the findings have meaning to others in similar situations of study
- *Dependability*. Triangulation of methods can enhance the dependability of the findings (Sharts-Hopko, 2002)
- *Confirmability*. The process of recording the findings in such a way as to leave an audit trail that can be followed by other researchers (Speziale and Carpenter, 2007).

Research design

The design was exploratory and descriptive and used a qualitative approach. According to Brink (2006), qualitative research is defined as research that elicits meaning, lived experiences, perceptions or behaviour of people. The intention was to understand the meaning that the participants give to their everyday lives about caring.

Sample

The sample was the Baccalaureus Technologiae II and III (B Tech II and III) full-time learner midwives who were registered for Midwifery II and III subjects in the years 2006, 2007 and 2008. They were placed for work-integrated learning in the midwifery health facilities accredited by the South African Nursing Council. The sampling method was convenient and purposive (Schneider et al, 2003). Every B Tech II and III learner midwife agreed to participate in the study and the sample size realised was 76.

Data gathering

Several self-report techniques namely debriefing sessions with reflection focus group and diary were used to gather the data. Due to the qualitative nature of the research question, the question linking the three data-gathering methods was as follows: "*From your own perspective, please tell me your experiences and perceptions of caring during midwifery clinical practice.*" The participants had to respond verbally during the debriefing sessions and the focus group, and they had to document their experiences and perceptions of caring during midwifery clinical practice in the diary.

The debriefing sessions, conducted during the Midwifery II, III and Nursing Dynamics III classes were arranged with the head of the School of Nursing (one hour per week per group for one year). All learner midwives present in the class during that period participated in the sessions voluntarily. They gave written informed consent and agreed to write reflective reports that were compiled as field notes.

Speziale and Carpenter (2007) define a focus group as a semi-structured group session, moderated by a group leader with the purpose of collecting information on an elected topic. Two focus groups, comprising the B Tech II and III learner midwives were held to illicit the learners' experience of caring in practice. Permission to audiotape the sessions was obtained.

In addition, the learners kept a diary that was a ten-page document in which they explained any incident that occurred when they observed caring or uncaring by midwives. The participants had six months to complete their diaries. All the data collection processes were piloted before use.

Data analysis

Speziale and Carpenter (2007) propose a three-step process for qualitative data analysis, which includes naïve reading, structural analysis and interpretation of the whole. This approach was used to analyse the data.

Findings and discussion

Findings from the three sets of data are presented as a demographic profile of the participants, themes, categories and sub-categories. The sample size was 76 participants (n=76). Table 1 provides the demographic profile of the participants.

More than half (63%; n=48) of learner midwives were in the 18- to 21-year age group with 20% (n=15) in the 22 to 25-

Table 1. The demographic profile of the learner midwives (n=76)

Criteria	Characteristic	n
Age group (years)	18-21	48
	22-25	15
	26+	13
Socio-cultural group	Tswana	27
	Afrikaans	14
	Other	35
Gender	Male	12
	Female	64

year age group. More than a third of the group (36%; n=27) were from the Tswana socio-cultural group followed by the Afrikaans group at 18% (n=14). Females constituted 84% (n=64) of the participants.

Findings

Care of women and midwife-related incidents were themes that emerged from data analysis, and each had categories of caring and uncaring. Table 2 illustrates the schematic presentation of the data analysis.

The sub-categories are described and supported by the direct quotes from the participants.

Incidents of care reflecting caring

Three sub-categories were generated. The sub-categories were pain alleviation and promotion of comfort, physical attendance/presence, positive communication through health education and involvement of partners.

Pain alleviation and promotion of comfort

Learner midwives perceived caring as alleviation of the woman's pain and promoting comfort. They perceived that by giving pain medication and rubbing the woman's back during labour demonstrated caring behaviour. Some of the participants' responses were:

"The patient was kept as pain free as it was possible."

"She massaged the patient's back to relieve pain."

"The sisters who nurse patients in high care keep them free from pain."

"Patients are treated with respect."

In another specific incident, the woman confessed that she had used traditional medicine to induce labour, hence had painful contractions. The participant mentioned that the midwife advocated for the woman to receive pain medication:

"Irrespective of the fact that the patient used 'muti', the sister gave her pethidine and aterax for pain. Throughout the labour, she kept the patient as comfortable as it was possible."

Table 2. Themes, categories and sub-categories from triangulated data of diaries, debriefing sessions and focus group

Theme	Categories	Sub-categories
Patients' care-related incidents	Caring	Pain alleviation and promotion of comfort Physical attendance/presence Positive communication and involvement of partners
	Uncaring	Disregard for patients' cultural practices and wishes Imposing control over patients' management and lack of respect for their individuality Lack of emotional support of patients who had a fetal death
Midwife-related incidents	Caring	Midwives' passion for work and competence
	Uncaring	Unsafe midwifery practice and negligence Cruelty and unprofessional behaviour

Physical attendance/presence

In another incident, the participants deliberated that the midwives were very supportive to the primigravida, who had no knowledge about pregnancy and labour. The midwife took time and explained what was expected of her. A participant declared:

"The sister was really there for the patient. She explained everything that was happening. She taught the patient about pregnancy, labour and baby care."

The participants mentioned that caring for basic needs by some of the midwives was excellent as they communicated well with their women, and gave health information and advice where it was indicated. The participant explained:

"The basic needs of the patient were met. The sister put up a drip for the mother who had maternal exhaustion. Most of the nurses were caring."

Participants experienced kindness and empathy as a form of caring behaviour. According to participants, they perceived the kindness expressed by midwives as caring to women:

"The welcoming attitude of the midwife let the patient open up to her emotionally."

Positive communication and involvement of partners

The participants stated that positive communication to women results in a positive therapeutic milieu where women were calm and cooperative with the midwives and the labour progresses more rapidly:

"Caring is providing health education to the patient about pregnancy, labour and baby care."

According to the participants, midwives acknowledging the presence and recognising the role of the women's partners demonstrated caring. One participant elaborated:

"Partner or a family member was allowed into the delivery room to provide support to the woman. This I think was real caring."

A participant observed how the midwife accommodated the partner during the whole process and procedure of labour. According to the participant, the midwife aimed at strengthening the bond between the mother-father and the baby:

"The sister was so supportive and included the partner. She allowed the partner to cut the umbilical cord. I really enjoyed that!"

Incidents of care reflecting uncaring

The sub-categories of uncaring that were generated included

disregard for women's cultural practices and wishes, imposing control over women's management, lack of respect for their individuality and lack of emotional support of those who had a fetal death.

Disregard for women's cultural practices and wishes

In one incident, the participant explained to the woman's mother that the girdle on her daughter's waist had to be removed as she was prepared for caesarean section. As a doula, the woman's mother became petrified because she believed that the waist girdle would protect her daughter from dying in the operating theatre. According to the participant, the midwife came in and screamed at the woman:

"'You must leave your dirty things at home when you come to hospital!' This was said in front of a group of learners and other patients."

In another incident, a partner was forced to witness the delivery against his wishes and cultural practices:

"I felt bad when I saw the midwife forcing the patient's partner to witness the delivery against his will. I reminded her about cultural beliefs, and she totally ignored me, and continued to shout at the patient's husband."

Imposing control over patients' management and lack of respect for their individuality

In the labour room of another institution, the participant mentioned that the midwife forced the woman to receive pain medication against her wish of a natural birth free of analgesia. According to the participant, the woman had her family supporting her, and coped well with the pain. When the woman refused the medication, the midwife remarked that she was too ignorant to understand the use of analgesia during labour:

"The sister did not respect the woman's wishes of a natural birth. She refused her the right to have labour and birth without analgesia."

"Another woman was strapped to a monitor and nobody checked her. The night staff slept from 11 at night until five in the morning. The patients were not monitored. As a result the woman, who was disorientated and confused, fell out of bed."

Lack of emotional support of patients who had a fetal death

A woman who was nursed by one of the learner midwives in the postnatal ward had delivered a stillbirth. The woman spent most of the time curled up, crying quietly in her room and her visitors were restricted to one visit per day. The learner midwife attempted to talk to her, but failed due to a language barrier. She made the midwife aware of the woman, hoping that the she would attend to her instantaneously, but she did not do so:

"I felt sorry for her as it seemed that she felt all alone on this earth and no professional came to speak to her about what had happened. She was given no support whatsoever."

The participants referred to an incident when a woman was admitted with the history of loss of fetal movements. The doctor used the ultrasound to confirm the intrauterine fetal death. The learners mentioned that it was an emotional complication for them and for the woman who was already in labour. One participant mentioned that the mother of the baby was not supported and elaborated:

"Because the fetus was dead, the sister disregarded the emotional care that she ought to have given to the mother. She mishandled the patient and never said a word to her. The foetus was put in the sluice room for some time, before it was dispatched to the mortuary."

Midwife-related incidents reflecting caring and uncaring

Midwives' passion for work and competence indicated caring, whereas unsafe practice, negligence, cruelty and unprofessional behaviour indicated uncaring.

Midwives' passion for work and competence

The participants perceived acting professionally in one's work as demonstration of caring behaviour. One participant stated:

"The midwife at the clinic was very professional and passionate about her work. She was proud of her caring behaviour, had good communication skills and knew her work. The patients felt comfortable with her."

The participant and the midwife attended a birth where the mother delivered a baby with exomphalus. The midwives provided the woman with privacy, acted promptly and managed her as an emergency. The participant elaborated:

"They covered the intestines with saline, covering everything. The sisters were running around, helping the 'poor' baby, and then they called the paediatrician for assistance."

Unsafe midwifery practice and negligence

Unsafe midwifery practice by some of the midwives' behaviour was noted by the participants. A woman in labour had forgotten to take the Nevirapine tablet as was prescribed. The midwife was irritated about the incident. The participant mentioned:

"The midwife sent her back home to get the nevirapine. The patient subsequently delivered at home."

Practising unsafe procedures was perceived by the participant as uncaring behaviour. The learner midwife observed:

"The midwives were screaming at the patient, calling her names because she was 15 years old. The sister summoned the strongest nurse on duty to come and perform the fundal pressure procedure to help the baby out."

Participants narrated that sometimes the midwives failed to perform their duties according to professional expectations during labour. There was an incident where the midwife continued to encourage the woman to bear down although the duration of the second stage of labour exceeded the normal period. She failed to summon medical assistance, even though the signs of complications were evident. The participants reported:

"The midwife failed to act swiftly and appropriately to a potential complication. I asked her if she should not perhaps call the doctor; she said the baby will be out soon. As a result of this behaviour, the baby suffered brain trauma."

Cruelty and unprofessional behaviour

In another incident, the woman in labour asked several times for a vomiting bowl. As she was denied this, she vomited on the floor. According to the participant, the midwife exclaimed on realising what had happened:

"'Clean these vomitus, the cleaners won't remove the vomitus for you'. This was unacceptable and unprofessional."

In another incident, the learner midwife reported the unit

manager to the nursing service manager that the blood was taken for HIV testing from a woman without counselling:
"The positive results were given to the same patient without providing privacy or showing respect or pre- and post-counselling. The nursing service manager ignored the complaint."

Discussion of the findings

Incidents of care reflecting caring and uncaring

Watson et al (2005) refer to caring as a two-dimensional concept, whereby the first dimension refers to labour, which includes roles and functions, the second dimension refers to love, which is the affect aspect of caring, which includes compassion, emotions, nurturance and comfort. This study revealed the same meanings of caring as it was apparent that learner midwives observed that caring has both physical and emotional aspects. The physical meaning was perceived as providing analgesia, rendering holistic care, while viewing the respect for people's individuality and nurturing as the emotional part. The learner midwives mentioned that some of the midwives demonstrated caring by promoting comfort, alleviating pain during labour, and by providing analgesia. As caring promotes comfort, cures and heals, there is a significant interconnectedness of midwifery and caring (van der Wal, 2005).

'Presence' describes a special way of being there or being with the other person and involves creating an environment of trust and security for clients (Pembroke and Pembroke, 2008). Relational presence refers to presence in the spiritual capacity that enables a midwife to be a companion and a friend to the woman and emphasises a personal connection with the labouring woman. This supports the findings of this study that the learner midwives identified caring as a physical attendance and presence to the women. They mentioned that by being there and not leaving the woman alone during labour and staying close to her when there is a need, means caring.

According to Mulaudzi et al (2001), communication forms the most important link to the attributes of caring as demonstrated by positive communication between women and their partners and by giving health information to women. Caring enables care providers to gather knowledge of the one cared for through trust and faith; it is 'other-regarding' (Kennedy et al, 2004: 17). It is evident from the study that the learner midwives observed that some of the midwives demonstrated caring by communicating well with women, giving them health education, accommodating and acknowledging the presence of the women's partners during labour. Kennedy (2000) refers to this type of caring as a two-way process, which provides the carer and the one who is being cared for the opportunity for personal growth.

According to the learner midwives' perceptions, some of the midwives disrespected women's cultural practices and wishes. Lack of respect to cultural norms and practices were demonstrated when some of the midwives commented explicitly that traditional waist girdles worn by women in labour were 'dirty things' and the husband accompanying his wife in labour was compelled to witness the delivery against his will and cultural values. This is against the expression of caring as stated by Leininger in Karaöz (2005) that although caring is universal, it has expressions and procedures that vary according to different cultures. The midwives failed to provide a socio-cultural and spiritual environment in which dignity, comfort, peace and trust are cherished as proclaimed by Watson's carative of caring (Watson, 2004). Midwives' caring must be culturally competent and sensitive to those in their care.

The knowledge and understanding that the learner midwives had about making decisions in partnership with the women meant caring without coercing women to agree, respecting their individuality, uniqueness and being sensitive. In contrast, the learner midwives perceived the midwives' caring behaviour as domineering and imposing their own beliefs on women, which is apparent when midwives denied them the right to a natural birth. The action of the midwives is in opposition to an important attribute of caring stated by Pembroke and Pembroke (2008) in their study about spirituality of presence in midwifery, which states that in a caring relationship, women in labour must be given control of the management of their labour. The similar notion is echoed by Fehr (2001) in a paper about challenges facing the midwife in the millennium that a positive birth experience will occur if the woman is allowed to be in control; her body will work best and labour will progress well. The status quo is characterised by an unfavourable uncaring environment, which does not contribute to women's recovery (Bluff and Holloway, 2008).

Further, midwifery caring is valued by human relationships, which is informed by sharing, sincerity and concern. According to the learner midwives' perceptions, some of the midwives demonstrated insensitive behaviour by not providing emotional support for mothers with fetal loss. Therefore the uncaring behaviour the learner midwives observed, nullified Watson's carative factor of cultivating sensitivity to one's self and to others by promoting spiritual practices of the other's ego and beyond (Jesse, 2006). The uncaring behaviour of the midwives was further against Watson's human caratives of caring in developing and sustaining a helping-trusting relationship between the one cared for and the carer.

Midwife-related incidents reflecting caring and uncaring

According to Watson's third carative factor, caring means cultivating sensitivity to oneself and others, by promoting spiritual practices and going beyond the ego (Jesse, 2006). In addition, it was noted from the study findings that caring was also observed by learner midwives related to sustaining a helping-trusting, authentic relationship between the one cared for and the carer (Jesse, 2006). They observed that some of the midwives went beyond the call of duty. They reported that some of the midwives exhibited concern, competency and compassion as they assisted the baby who had exomphalus post delivery.

Caring has an ethical perspective, as it deals with what ought to be done in a given situation. Caring in midwifery is not only about carrying out the right procedure at the right time and place, in the correct manner. True caring is based on the attitude of nurturing with the emotional part accompanying the procedure being performed (van der Wal, 2005). Caring is therefore aimed at doing good and right. The findings of this study further revealed that the learner midwives observed negligence and unethical behaviour from some midwives. For example, one woman delivered alone at home after being sent back to fetch the nevirapine before she could receive attention.

Unsafe midwifery practice, negligence, cruelty and unprofessional behaviour were some of the uncaring behaviours. Most of the learner midwives stated that fundal pressure was a common practice in one of the midwifery institutions, thus they are socialised into practising inappropriate procedures. Irrespective of the lack of literature based on the use of fundal pressure, its manoeuvre, legal, professional or regulatory standards, (Nyasulu, 2004; Lowdermilk and Perry, 2006), it is evident that the midwives still performed this practice.

On the contrary, compared to what the learner midwives had learned from the theoretical facilitation about caring behaviour, they observed that some of the midwives performed duties in an uncaring way, as though they feared no reprisal from their seniors. For example, one midwife tested a woman for HIV status without pre-counselling and disclosed the results to her without providing privacy, but the reporting of the incident to the managers proved futile. Similar research findings were evident in the study conducted in Ireland (Begley, 2001) investigating the relationship between midwives and learner midwives in practice. It was found that repeated exposure to an uncaring clinical practice environment socialised the learner midwives into uncaring, which does not promise quality caring midwives produced in future (Begley, 2001).

Recommendations

The recommendations are related to practice and research:

- There is a need to address vigorously the caring practice of midwives in all health institutions
- Managers need to be held accountable for setting and maintaining acceptable caring standards. Caring defines midwifery practice – where there is no caring, there is no high-quality midwifery care
- Midwifery education must emphasise the affective aspect of the role of the midwife
- Midwifery is comprised of theoretical and clinical components and these need to be integrated into the curriculum.

Conclusion

Although some of the midwives displayed caring behaviours which were what the learner midwives expected during midwifery practice, uncaring behaviours were definitely exhibited. The negative role modelling of uncaring behaviours by the midwives socialised the learner midwives negatively. Consequently, it is difficult for the learner midwives to internalise caring and take it as part of their daily practice. If learning inappropriate behaviour is to be avoided, attention needs to be paid to role modelling in clinical midwifery practice.

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Factors influencing the utilisation of postnatal care at one week and six weeks among mothers at Zomba Central Hospital in Malawi

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Abstract

Background. Two thirds of all women that deliver in an urban hospital in Malawi do not return for postnatal care (PNC) at one and six weeks. Factors that influence their postnatal visit are not well established.
Aim. To investigate factors influencing the utilisation of postnatal care, at one and six weeks among mothers at Zomba Central Hospital in Malawi. Specifically, the study investigated factors that promote or hinder women from attending PNC.
Method. A descriptive quantitative, cross-sectional study was conducted to elicit the factors. Data were collected using a structured interview. A convenience sample of 154 mothers attending the under-five clinics with infants between eight and twelve weeks participated in the study. Ethical approval was obtained from the Malawi College of Medicine Ethical Review Board. Data were analysed using SPSS.
Findings. Over 75% of participants were between 20 and 30 years of age. Lack of advice by midwives to return for PNC was the main factor that hindered such care. Awareness of postnatal services, mothers' educational level, and growth monitoring promoted attendance at one week and six weeks. These findings have implications for training and practice. The implication for training is that training institutions should emphasise the importance of PNC at one and six weeks. With reference to practice, supervisors of midwives should ensure mothers are booked for for postnatal care and are advised of its importance.

Key words: Postnatal care, postnatal period, maternal mortality, puerperium, evidence-based midwifery

Introduction

Globally, more than half of maternal deaths occur after childbirth (Ronsmans and Graham, 2006). Postpartum haemorrhage and sepsis are the leading cause of maternal deaths (Khan et al, 2006). Maternal mortality remains high in Malawi despite the implementation of interventions such as safe motherhood, emergency obstetric care, and basic emergency obstetric care. According to the *Malawi Demographic and Health Survey* (2011), maternal mortality rate is at 6.7 per 1000 live births.

The puerperium places many demands on the mother and there may be a carry-over of problems from pregnancy, labour, and after delivery. Both the genital and the urinary tract are prone to infections because of the process of labour (Beischer et al, 1997). Follow up of the mother within the first week is critical for detecting postpartum infections. In Malawi, 78.2% of women in urban areas deliver at a health facility. Although postnatal services are free, 69% do not return for one week and six weeks postnatal care (PNC) (National Statistical Office (NSO) and UNICEF, 2008). Factors that influence PNC at one week and six weeks are not well established. However, global studies have investigated barriers to utilisation of PNC. In Nepal and Palestine, Dhakal et al (2007) and Dhaher et al (2008) found that lack of knowledge, distance to the nearest clinic, and not feeling sick enough to go back to the hospital were clear factors. Other contributing factors included number of children, education, and employment. Women who had fewer children utilised PNC more frequently than those with more children. The results also showed that women who had higher education utilised postnatal services more frequently than those with no education. In addition, women who were employed were empowered to take part in decision-making about health care.

In Malawi, information about PNC is scant. There are no published studies on factors that influence PNC. In one unpublished dissertation, Jonazi (2008) found that many mothers at an Urban Health Centre did not attend six weeks PNC because they felt that it was not as important as the one week PNC. The purpose of this study was to explore factors that influence PNC at one and six weeks. A cross-sectional survey using a structured questionnaire was conducted to elicit factors that influence PNC.

Literature review

There are several factors that promote the utilisation of PNC, which includes the mother's age, educational level, increased income, male involvement in reproductive health, place of delivery, and attendance of antenatal care. The mother's age may sometimes have a positive influence on PNC services because older women have increased reasoning capacity (Chakraborty et al, 2002; Jonazi, 2008). The *Malawi multiple indicator cluster survey* (MICS) report of 2006 (NSO and UNICEF, 2008) reported that education of mothers plays a major role in determining attendance for postnatal PNC. It was reported that women with secondary education or higher are more likely to go for PNC within 42 days after delivery (54.0%), compared to women with no education (29.0%). Women who are working have better financial status and ability to access postnatal services since they are empowered to make decisions on when to go for PNC (Dhakal et al, 2007; Chakraborty et al, 2002; Nankwanga, 2004; Mullany et al, 2006). A study carried out in urban Nepal by Mullany et al (2006), discovered that male

involvement in reproductive health decisions and practice, especially during antenatal health education, increased postpartum care utilisation among women. Dhakal et al (2007) reported that place of delivery influenced utilisation of PNC like private hospitals, which offer individualised care to clients and inform them on danger signs for their own and the babies before discharge. Several studies have found a strong association between attendance of antenatal care and utilisation of PNC (Nankwanga, 2004; Dhakal et al, 2007; Iqbal Anwar et al, 2004). The authors reported that the level of prenatal care is indicative of levels of PNC women seek for themselves and their children in the first year after delivery.

Lack of awareness of PNC among mothers, distance and lack of transport are some important factor contributing to low utilisation of PNC (Nabukera et al, 2006; Nankwanga, 2004; Jonazi, 2008; Lagro et al, 2006; Dhakal et al, 2007). In addition, the authors reported that lack of knowledge affects women's capabilities to make their own decisions about seeking health care and constrains their ability to exercise their reproductive rights as well. Abu-El-Haija et al (2005) conducted a cross-sectional study in two semi-urban areas in northern Jordan where they investigated the pattern and determinants of PNC utilisation. Results showed that utilisation of PNC was positively related to home delivery, delivery by a traditional birth attendant, advice to women by provider to seek PNC, and presence of postnatal health problems. Studies done by Dhakal et al (2007), Nankwanga (2004), Bryant et al (2006), El-Gilany and Hammad (2008), Titaley et al (2009), Moore et al (2002), and Mrisho et al (2009) contended that many women do not utilise PNC because of poor roads, lack of bridges, poor communication, poverty, or lack of money.

The study aims to investigate factors influencing the utilisation of PNC, at one week and six weeks among mothers at Zomba Central Hospital in Malawi. Specifically, the study aimed to investigate factors that promote or hinder women from attending. The sample was drawn from women who attended the under-five clinic, so nothing is known about women who did not attend. The consent rate was 100% and this is worrying as it could imply coercion.

Objectives of the study were to assess the mothers' knowledge about PNC at one week and six weeks, to determine factors that promote or hinder PNC at one week and six weeks, and to determine the characteristics of mothers who attend or do not attend one week and six weeks PNC.

Design

The study used a cross-sectional descriptive quantitative design and the rationale for the approach was to obtain a detailed description of factors that influence mothers to attend or not to attend the one week and six weeks PNC. Nola Pender's health promotion model (Pender et al, 2002) guided the study to determine factors that either promote or hinder utilisation of postnatal services. The model is used as a guide to explore the biophysical process that motivates individuals to engage in behaviours that influence an individual's decision to make use of the available health services. The model suggests that the use of health services is a function of the pre-disposition to use the services, factors that enable or impede use, and need for the service.

Setting

The study was conducted at Zomba Central Hospital in the southern region of Malawi. The hospital was selected as an area of study because it offers PNC to mothers after discharge from the hospital and patients from other health centres from the district. It also offers an under-five clinic, which was an appropriate place to interview women about PNC. The site was convenient because 2008 hospital statistics (Ministry of Health, 2008) indicated that few mothers attended PNC, but they do bring infants to the under-five clinic.

Ethical approval

Permission to conduct the study was obtained from the Malawi College of Medicine Ethical Review Board (protocol number: P.11/09/843). Permission to access participants was sought from the hospital director and chief nursing officer of Zomba Central Hospital. A convenience sample of 154 mothers who were attending the under-five clinic with babies from eight weeks up to 12 months of age was chosen and the sample size was obtained as proposed by Lemeshow et al (1990). Participants were informed that participation was voluntary and that their withdrawal or refusal to participate would not affect their entitlement to health services. At the end of the explanation, participants were asked to sign a written consent form before participating in the study.

Inclusion criteria

The inclusion criteria for the study were those mothers:

- Willing to participate
- Having their second child or more
- With their last child alive
- Attending the under-five clinic
- With their child between the ages of eight weeks and 12 months.

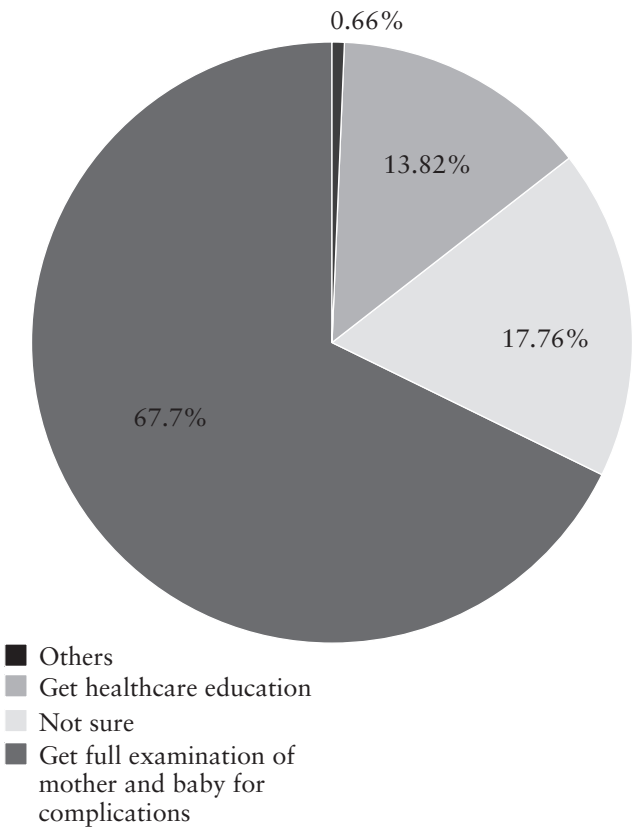
Validity

The research instrument was given to supervisors for acceptance and to check whether it was sufficiently comprehensive in seeking the proper range of responses, was appropriate in terms of space and length, flow of questions, and whether the questions had face validity.

Reliability

Reliability of the tool was ensured by accurate and careful phrasing of each question to avoid ambiguity and leading respondents to a particular answer. Respondents were informed of the purpose of the interview and of the need to respond truthfully. In addition, a pilot study was conducted on five clients, which identified problems with some questions. The questions were rephrased for the actual study.

Figure 1. Knowledge on how one-week postnatal check-up contribute to the health of the mother (n=152)



Data analysis

Data was analysed using SPSS software version 13.0. Descriptive statistics were used to analyse the data. Chi-square test was done to determine any association between demographic characteristics and attendance of PNC.

Findings

Demographic characteristics of the participants

The majority of women (77.3%) were aged between 20 and 30 years of age. Most of the participants 92.2 %(142) were married and 66.2% had less than three children. A large number of participants (40.0%) were protestant and 63.0% attained primary education. More than two-thirds of the participants (63.0%) were not employed. Almost half of their husbands (56.0%) were employed. All participants reported to have attended the antenatal clinic and (99.0%) were aware of postnatal services.

Knowledge on how one week and six weeks postnatal check-up contribute to the health of the mother

Regarding perceived benefits to health, participants related to how the postnatal check-up promotes the health of the mother (see Figure 1), 67.8% (n=103) of the participants identified a full examination of mother and baby as a service that helps to identify complications which may be treated.

Participants identified important reasons for six weeks PNC included: to confirm if their body has returned to normal – 33.8% (51), vaccination, cord care, and weight check. On the other hand, 27.8% (42) of participants were

Figure 2. Knowledge on how six-weeks check-up contribute to the health of the mother (n=151)

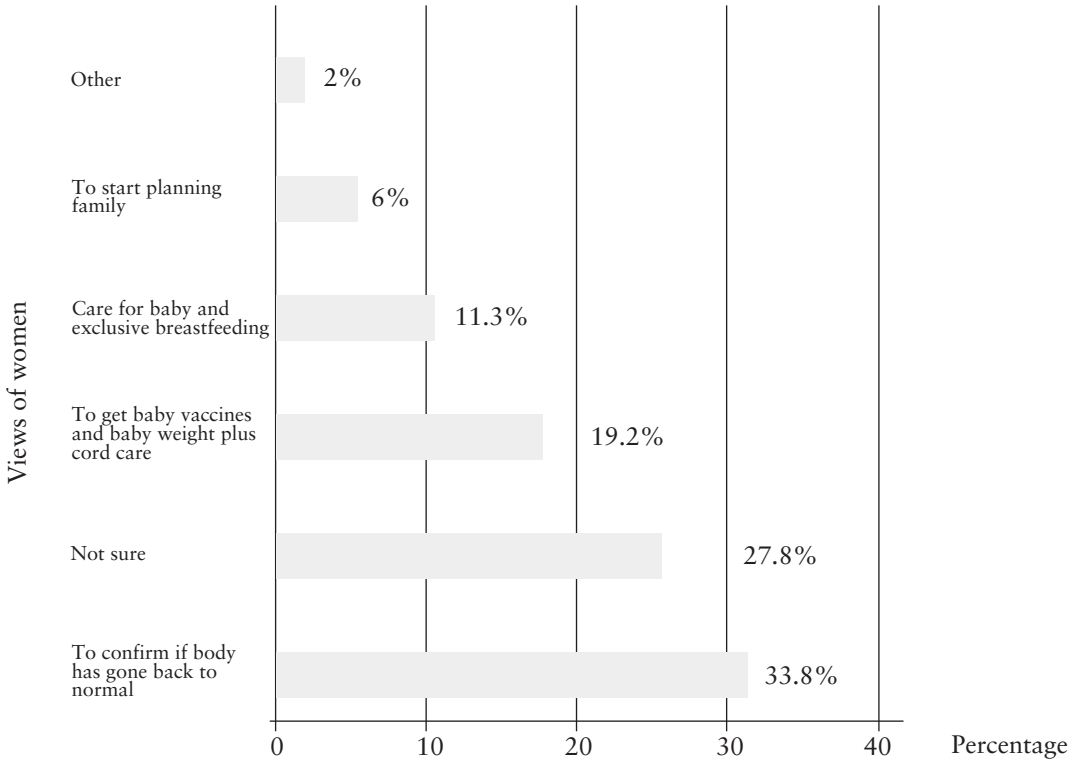
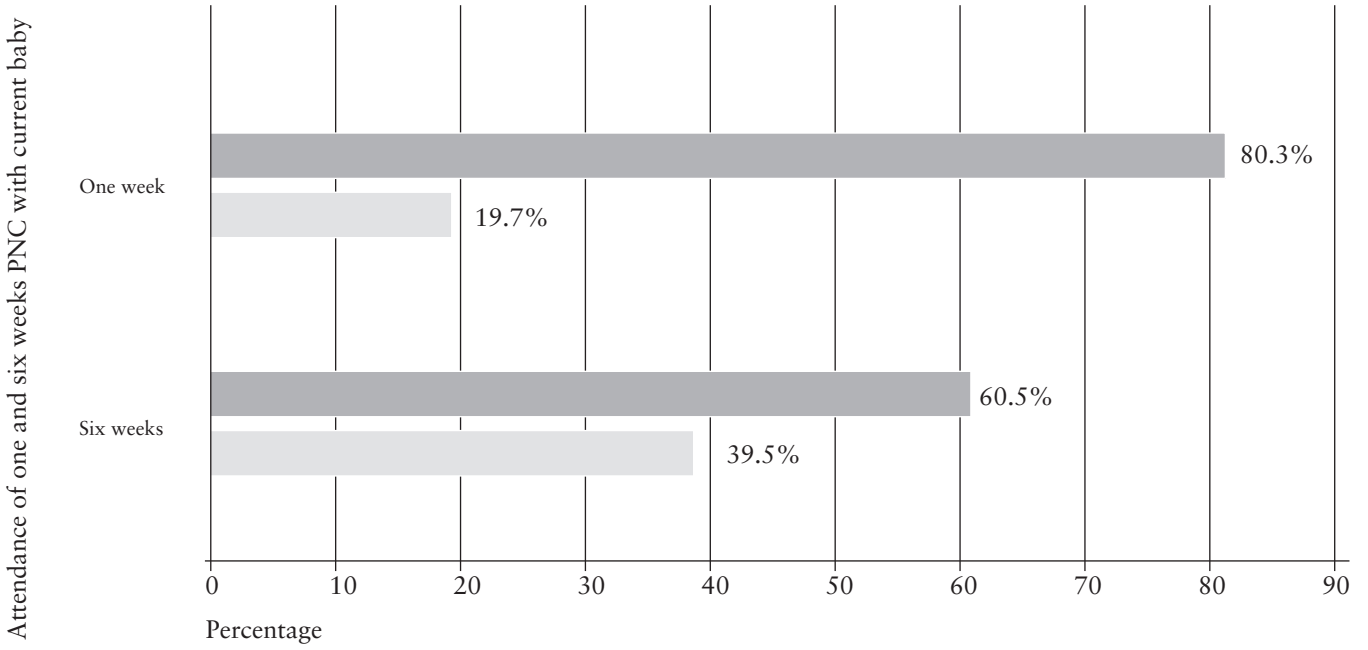


Figure 3. Attendance of one week and six weeks postnatal check-up with the current baby (n=152)



not sure how the six weeks PNC promotes the health of the mother (see Figure 2).

Attendance of one week and six week postnatal check-up with current baby

Results indicated that 80.3% (122) of the participants attended the postnatal check-up at one week, while 19.7% (30) did not attend. On the other hand, 60.5% (92) of the participants attended the six week postnatal check-up and 39.5% (60) did not attend (see Figure 3).

Factors that promote PNC at one week and six weeks

A total of 83.0% (112) of the participants attended PNC because the midwife advised them to do so during discharge from the postnatal ward. The other reasons were: baby growth monitoring, 11.9% (16); sickness which needed assistance by the midwife, 3.0% (4). The rest of the participants reported that they visited the clinic because they were advised by friends, because of previous experience, for family planning and for caesarean wound checking.

Factors that hinder PNC at one week and six weeks

The following are some of the factors which were found to hinder PNC at week one and at six weeks: lack of advice from health workers specifically six weeks PNC (29.2%, n=45), sickness in the family (10.4%, n=16) – either husband or child was admitted in hospital and no time to go for PNC (2.6%, n=4). Some 51% of the participants did not attend PNC.

Attendance of antenatal clinic and PNC

All participants reported to have attended antenatal clinic and (99.0%) were aware of postnatal services. Results indicated that 80.3% (122) of the participants attended PNC at week one, while 19.7% (30) did not attend. On the other hand, 60.5% (92) of the participants attended six weeks PNC and 39.5% (60) did not attend.

Discussion

Knowledge of importance of one week and six weeks PNC

The study revealed that almost all participants (98.7%) were knowledgeable about the importance of one week and six week PNC. These findings are similar to a study by Makumbe (2001), whereby 89.0% of the participants had adequate knowledge about PNC. However, in this current study, knowledge did not correspond with women's attendance of one week and six weeks PNC. Most participants (60.5%) did not attend six weeks PNC. The mothers did utilise the knowledge of importance by attending one week PNC (80.3%). The low utilisation of six weeks PNC might have been contributed by midwives' failure to stress the importance of six weeks PNC before participants attend family planning and under-five clinic. This is an indication that healthcare providers do not give detailed information on the importance of PNC at six weeks as it is done at week one.

The results in this study show an improvement in utilisation of PNC (80.3%) at one week and 60.5% at six weeks as compared to those reported in the *Malawi demographic and health survey* (MDHS) (2011). The findings in the MDHS indicated that 31.0% of participants in Zomba District attended PNC. The results are similar to Nankwanga (2004), who found a high rate of utilisation of PNC (70.0%). The author attributed the high rate to various government programmes, which involved the dissemination of maternal and neonatal health information.

Factors that promote one week and six weeks PNC

In this study, participants reported different factors that promoted one week and six weeks PNC. Most of the participants (83.0%) attended PNC because the midwife advised them to do so during discharge from the postnatal ward. On the other hand, participants also reported that they went for a check-up to weigh their babies, and some attended because they were sick and they wanted to get assistance from the midwife.

It is well known that a mother's educational level has a positive impact on PNC utilisation. The findings of this study reveal a high percentage of participant's attained formal education – 63.0% had primary education, 29.9% had secondary education, while 6.5% had no education. Although many participants in this study attained primary school education, the participants were able to make decisions regarding their own health. This was confirmed because 83.0% did not ask for permission to attend PNC. These findings may have contributed to the high numbers of participants who attended PNC especially at week one (80.3%). Findings of this study are similar to MICS (2008), which reported that educational level of mothers played a major role in utilisation of PNC. It was reported that 51.0% of women with high educational level are more likely to be seen by skilled health personnel than 25.0% of those without education. Other studies also found out that highly educated women have increased awareness of health problems, know more about availability of healthcare services and use this information more effectively to maintain or achieve good health (Jonazi, 2008; Chakraborty et al, 2002; Titaley et al, 2009; Iqbal et al, 2004).

Studies have reported that increased income in families has a positive effect on utilisation of PNC. It is reported that women who are working have better financial status and ability to use postnatal services (Dhakal et al, 2007; Chakraborty et al, 2002; Nankwanga, 2004; Mullany et al, 2006). However, the results of this study did not show any relationship between employment of the mother and utilisation of PNC since 63.0% of the participants were not employed. Husbands' occupation might have contributed to high utilisation of one week PNC, since 84.3% of the husbands were employed. These results are similar to Dhakal et al (2007), Chakraborty et al (2002), Nankwanga (2004) and Mullany et al (2006). The authors reported that the occupation of the husband was another influential factor in utilisation of PNC. It is reported that husbands contribute to family income, which in turn contributes positively to PNC services.

Factors that hinder one week and six weeks PNC

The following factors were identified as barriers to PNC: lack of knowledge on the importance of PNC, sickness in the family, seeing no need to attend PNC, attending a funeral, and forgetting the date. Lack of advice from the midwife specifically regarding the importance of six weeks PNC was reported by nearly half of all participants (45.0%). Results of this study indicated that most of the participants were not informed about the six weeks PNC at the one-week check-up, but instead they were referred to under-five clinics at six weeks. These results are similar with the studies by Nabukera et al, (2006), Nankwanga (2004), Jonazi (2008), Lagro et al (2006) and Dhakal et al (2007). These authors reported that participants are not informed about PNC during antenatal visits and inadequate information is given during discharge from hospital.

Some participants (16.0%) identified sickness by the participants themselves, husband and baby as one of the factors hindering PNC. Some participants reported that they did not see any need to visit the clinic, there was no time to go and actually report that they felt well. The results indicate that the participants did not attend the six weeks PNC because of lack of advice from the midwife after the one-week check-up (45.0%). The results of the study are similar to those of Makumbe (2001), who reported that women with low levels of knowledge about PNC are less likely to attend check-up at six weeks, because of their negative perceptions.

Limitations of the study

Women may have over-reported their use of PNC in order to please the interviewer, since they were interviewed in a healthcare setting. There may be sampling restriction in the study since all participants were recruited through the under-five clinic. Results may not be generalised to other regions of Malawi, since it only involved one hospital.

Implications for midwifery care and education

Midwives are key to fostering PNC at one and six weeks, therefore midwives should ensure that all postnatal mothers are educated about the importance of PNC and the information should be incorporated in the existing midwifery curricula both at in-service and pre-service level. Results of the study will guide development of strategies for continued midwifery care after discharge and up to six weeks.

Conclusion

The utilisation of postnatal care at week one was high when compared to week six. The study found that many participants preferred to go for the one-week postnatal check-up because they feel it is more important than the six-weeks postnatal check. The participants are not informed about the importance of six-weeks postnatal check-up after visiting the hospital for the one-week check-up. Most of the participants who attended the postnatal check-up were informed by the midwife during antenatal care and the same advice was stressed during discharge from hospital. The significant factors that were found to influence the utilisation of postal care at one week and six weeks were awareness of postnatal services, educational level of participants and baby growth monitoring. Other factors that contributed to non-utilisation of postnatal care were sickness in the family, no time to go for check-up, as well as seeing no need to attend the postnatal care. Results also show that age of the mother did not influence utilisation of postnatal care.

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Preceptorship for midwifery practice in Africa: challenges and opportunities

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Abstract

Background. Commonly, preceptorship is an individualised teaching-learning method in the practice or field setting, whereby students or novice midwives are paired with experienced practitioners to develop or improve their skills.
Objectives. This paper provides a synopsis of trends in preceptorship documented through focus group discussions held with key midwives and stakeholders in the African countries of Ethiopia, Ghana, Uganda and Zambia, where the International Confederation of Midwives and United Nations Population Fund are in partnership with the health sector to strengthen midwifery systems.
Method. A qualitative study design was used as the main method for data collection. Data were collected from 100 respondents including midwifery tutors (25), preceptors/practitioners (25), retired midwives/midwifery consultants (20), young midwives (15) and relevant maternal and child health stakeholders (15). The study used one-on-one interviews, observation of skills laboratories, preceptor sites, desk reviews and review of country-based 2008 to 2010 needs assessment reports.
Findings. The quality of pre-service education of midwives falls short of the enabling environment and adequate numbers of committed and well-informed preceptors to ensure optimal competency-building. There is a need for action.
Implications. Current weak preceptorship trends in midwifery pre-service education in Africa will undermine country-based efforts to reduce maternal and infant mortality due to limited practical skills and poor attitudes to care. This calls for innovative, coordinated and sustained approaches to improving on students and young midwives' practical skills.

Key words: Preceptorship, African midwifery research, clinical experience, evidence-based midwifery

Introduction

The International Confederation of Midwives (ICM) and the United Nations Population Fund (UNFPA) have been collaborating since 2008 on a joint programme known as the 'Investing in Midwives Programme' (IMP) and others with midwifery skills to accelerate progress towards millennium development goal (MDG) 5. The aim of this collaboration is to improve the state of maternal health towards achieving MDG 5 in Africa, Asia and Latin America. The IMP focuses on four major areas for strengthening midwifery services: education, association strengthening, regulations, and advocacy. The programme has made major strides, and is now operational in 26 countries in Africa, Asia and Latin America. The impetus to establish the IMP was informed by the stark statistics in MDG 4 and 5 in Africa and the critical workforce shortage of midwives needed to achieve these goals.

Midwifery pre-service education systems in most of the programme countries are driven by political decisions to train more midwives to meet human resource needs. But the effort of training more midwives is challenged by limited infrastructure, few tutors, and large student numbers, outdated teaching/learning materials, unstandardised curricula across schools in the country, poorly-resourced clinical sites, and too few preceptors (ICM and UNFPA, 2009).

The rationale for determining current preceptorship systems and influencing factors on them was identified as an important step to inform strategic plans for strengthening midwifery. A 2008 to 2010 various assessment of midwifery systems in 12 African countries had been conducted as a prelude to initiating the UNFPA/ICM IMP in Africa, Asia, Latin America and the Caribbean. Since the inception most of the countries have reviewed and improved outdated curricula to include: 1) relevant topics relating to emerging diseases and conditions such as HIV/AIDS; 2) ICM global standards and basic essential competencies for pre-service education; 3) training of tutors and midwifery clinicians; 4) supply of teaching/learning materials and equipment to address gaps in skills training; 5) library and information and communication technology improvements, among other plans. This study explored the status of preceptorship in Ghana, Ethiopia, Uganda and Zambia between March and September 2010 as a follow-up to that initiative, with a view to assessing current systems of preceptorship in supporting students to acquire clinical skills for competent quality care. It also appraised continual concerns from senior midwives on the deteriorating attitudes to care, coupled with poor clinical skills exhibited by new graduate midwives posted to the clinical facilities.

The aim of the study was to document the state of preceptorship in selected programme countries to serve as a body of knowledge that will inform the design of effective preceptorship guidelines as a contribution to quality midwifery pre-service training in Africa. The objectives of the study were to: a) assess the preceptorship patterns in study countries and their benefits to student training; b) appraise senior midwives' perception of midwifery preceptorship and practice from the past and their observations or experiences of current preceptorship; c) document challenges to quality preceptorship; d) recommend strategies for improving on preceptorship systems in programme countries specifically and Africa in general.

Mainly, qualitative methods were employed for the study through focus group discussions held with midwives and stakeholders in stated countries. Observations made by senior midwives in a general forum held in Ghana in 2009 to discuss midwifery strengthening in the West African sub region served as key data to inform the study.

Literature review

The literature search included journal articles, grey literature, and book references. Programme reports were consulted for background information and journal articles were searched for relevant titles and abstracts using key words, such as 'preceptor', 'preceptorship', and 'clinical experience'. In order to limit the search, qualifying words were also used to ensure focus. The review focuses on definitions, approaches, challenges of preceptorship, attributes and attitudes of preceptors to students' training and effects on knowledge and skills acquisition.

The term 'preceptorship' originated within religious practices in 15th and 16th century Europe, but re-emerged in nursing in the 1960s in the US to describe the teaching of nurses (and midwives) within a clinical environment (Myrick and Yonge, 2003). Preceptorship emerged from the need to teach junior or newly engaged staff of hospitals what the administrative, management and clinical procedures were. This apprenticeship-style was used to support hospitals' needs, rather than to address the educational needs of individual nurses (Myrick, 1988).

Different but related definitions exist for preceptorship. In simple terms, it is a method of student teaching that gives the student the opportunity to experience day-to-day practice with a role model and resource person. Such a role model is a person who is always available within the practice area and willing to impart knowledge and skill. Furthermore, it is a supervised clinical experience that allows students to apply knowledge gained in the didactic portion of a programme to clinical practice (University of Texas School of Nursing, 2011; Myrick and Yonge, 2003; Ohrling and Hallberg, 2001).

Clinical preceptors are relevant to student development in diverse ways. They serve as the bridge for the integration of theory and practice; create opportunities for students' socialisation into the art of the profession; and act as role models, facilitators and consultants to gradually build student competencies and confidence at work through insightful guidance and sharing of experiences (Fullerton and Ingle, 2003; Jordan and Farley, 2008; Licqurish and Seibold, 2008). However, for their work to be effective, much depends on guidance and continual updates from the teaching faculty to both students and preceptors on the achievement of educational objectives through synthesis in practice (Oklahoma Board of Nursing, 2010).

The organisation of preceptorship systems share similarities and differences across continents. Burns et al (2006) describe the nature of preceptorship organised in the US as involving a set number of hours assigned to supervised clinical practice. In such a situation, the preceptor, who may be an experienced nurse practitioner or a physician, develops a one-to-one relationship with the student and as part of teaching, assigns the student to patients' assessment, diagnosis and care plans for preceptor validation before the student implements the plan with their support. The preceptor further engages the student in reflective discussions to determine implications of care on patient prognosis and provides constant evaluative feedback and support to the student as well as the faculty. The result is that over the period of assignment, the student would have increased knowledge and skills, refined practice efficiency and become increasingly independent in managing patient care.

There are challenges associated with this approach in that teaching is conducted in a setting where the ward dynamics are ever-changing, with different patients presenting with unpredictable conditions and complexity with variable demands on the time and skills of the preceptor (Burns et al, 2006).

In contrast to the US approach, findings of a study by Ohrling and Hallberg (2001) state in Sweden, most preceptors held discussions with their student at the beginning of the practice period on goals and expectations. By so doing, the preceptors gained insight into the students' previous experience and learning needs. As part of the process, preceptors sometimes employed study guides in identifying students' goals for learning. They then tried to follow the students' wishes when planning their learning. The challenge noted with this approach was similar to that of the US situation, as since the ward was a special environment, it called for continual daily or weekly adjustment to set procedures and plans to ensure student objectives were met.

In a related dimension, Lennox et al (2008) describe mentoring, preceptoring, and clinical supervision as supportive approaches to educational preparation of students and further elaborate on their differences as a way of ensuring more consistent standards of support.

Though preceptorship is reportedly a tried and tested approach to bridging the gap between theory and practice for skills development, preceptor attributes and attitudes to teaching and skills mentoring go a long way to determine the extent of achievement of educational objectives of assigned students. In their studies on students' clinical practice, placement and competencies, Burns and Paterson (2005) and Khomeiran et al (2006) report that interactions between preceptors and students are important for student learning while expert clinical teaching is vital for the development of skills and knowledge for midwifery and nursing students. The ability of the preceptor to teach effectively, applying good teaching methodologies, such as critical thinking methods for competency building, is crucial for the achievement of objectives. The preceptor's ability to foster a positive interpersonal relationship that focuses on passing on an exemplary professional ethical code of conduct and clinical skills, willingness to be a preceptor, leadership qualities and assertiveness are also important for successful and impactful preceptorship (Myrick, 2002; Mamchur and Myrick, 2003; Licqurish and Seibold, 2008).

Published literature so far indicates that much documentation on preceptorship in student learning exists mostly from developed countries, while little information is available in relation to trends in the African setting.

The ICM/UNFPA IMP was established with the goal to 'increase and improve skilled attendance (midwives) at birth in low-income countries by developing the foundations for a strong midwifery workforce'. It recognises the need to strengthen preceptorship systems in programme countries as a means to graduating competent midwives for quality care towards achieving MDGs 4 and 5.

In *The state of the world's midwifery* report (UNFPA, 2011) at the 29th ICM Triennial Congress in South Africa (June 2011), findings from 58 countries with high rates of maternal, fetal, and newborn mortality indicate that although there have been modest improvements in the training and deployment of midwives to increase access and quality of services, there

remain many challenges and barriers that affect the midwifery workforce, its development and its effectiveness. It outlines a triple gap, encompassing competencies, coverage and access.

In the executive summary of *The state of the world's midwifery* report (UNFPA, 2011), Ban Ki-Moon, the UN secretary-general, states: 'In most countries there are not enough fully-qualified midwives and others with midwifery competencies to manage the estimated number of pregnancies, the subsequent number of births, and the 15% of births that generally result in obstetric complications.' Preceptorship in the 12 IMP countries in Africa, with extension plans to six more countries, is critical for competency building if the midwifery profession in Africa is to sustain its mark in maternal, newborn and child health (MNCH) services. The vision is to develop highly skilled, confident, assertive midwives and positions to advocate for such services.

Therefore, this study set out to investigate preceptorship systems in programme countries, to provide information about the success and challenges to student midwives in Africa.

Method

Having reviewed the literature surrounding preceptorship, common strategies of choice used in the studies have been qualitative or quantitative in nature ranging from grounded theories using in-depth interviews (Licqurish and Seibold, 2008) to reviews of grey literature and books and publications (Lennox et al, 2008), and structured interviews (Lange and Kennedy, 2006; Jordan and Farley, 2008). Qualitative methods, similar to those used by Licqurish and Seibold (2008) were chosen, including the use of interview guides to inform focus group discussions and in-depth interviews with 100 key informants and respondents with backgrounds as midwifery tutors (25), preceptors/practitioners and policy leaders, such as regulators and directors of nursing and midwifery services (25), retired midwives/midwifery consultants (20), young midwives (15) and relevant maternal and child health stakeholders (15) through in-depth interviews and focus group discussions. Other supporting techniques included observation of skills laboratories and preceptor sites to determine resources available, desk reviews, and reviews of country-based needs assessment reports to identify relevant information on preceptorship.

The qualitative methods were chosen to afford the opportunity for close personal interactions to derive respondents' views, perceptions, impressions, and expectations surrounding preceptorship in their countries, with reference to improved competencies for better MNCH services. The methods allowed for an understanding of the educational and clinical social world from the point of view of the respondents while also acknowledging the wider structural influences helping to produce the adaptive experiences associated with preceptorship (Layder, 1998).

In the conduct of this study, efforts to reduce the limiting factors were what led to the use of multiple techniques including observation of skills laboratories and preceptor sites to determine resources available and desk reviews. Another technique employed was the review of country-based needs assessment reports to identify relevant information on preceptorship. These methods were employed to confirm and enhance information generated from the in-depth interviews.

The sample was accessed through country midwife advisors who were requested to invite the respondents to the in-country focus group meetings facilitated by the author. In the sessions, respondents were put in groups ranging from six to ten people. Independent respondents were contacted directly through letters or telephone calls for their participation. Of the 120 people invited to participate, 20 declined due to their changed schedules.

Data analyses were done thematically by the author. By this method, categories of data that emerged from the transcribed text in the form of patterns, processes, common ideas and differences and found to be related to the specific issues raised in the discussion guides were grouped together as a basis for generating themes or interconnections relevant to the research topic (Bryman, 2001; Braun and Clarke, 2006). Key themes that emerged included preceptorship, 'the good old days' and preceptor selection, learning environments, tutor communication, student attitudes, roles and responsibilities, clinical supervision and clinical skills. These eight themes were further categorised under four main broad headings namely: 1) current state of preceptorship; 2) contributions to good midwifery services; 3) current challenges to preceptorship; 4) changing the face of preceptorship in Africa. These headings were chosen for ease of presentation and coordination of the data. Findings and discussions are outlined guided by these headings.

In order to assure data reliability, the author was supported by an assistant (country midwife advisor or representative) to take notes from the discussions while at the same time the author took notes on the proceedings of the meeting including respondents' reactions and comments. Data generated from the author and that of the assistant were compared with each other to ensure completeness while references were also made to previous assessment reports as secondary sources of data to confirm findings or to add on to the findings.

Ethical issues

Permission was sought from the respective bodies and partners and verbal consent was obtained from participants.

Findings

Preceptorship

Preceptorship, according to all respondents, was being carried out in study countries to pass on new knowledge, trends and skills to students and to teach, build, direct and strengthen students for future leadership as midwifery advocates.

However, the extent of implementation varied and may be non-existent in certain training institutions. For example, Zambia had developed preceptor guidelines for potential preceptors to guide actions while respondents from other countries indicated that there were no nationally approved policies providing standard guidelines to preceptorship. In a statement, a participant in Ethiopia noted:

"There are no uniform strategies and evaluation of what we do in preceptorship; clear guidelines, protocols or uniform process to follow are lacking though we are aware that we have a responsibility to pre-service education."

Rather, principals and tutors of the institutions generate their own directives based on experience. Training may or may not

be offered to preceptors to enable them to fit effectively into their roles.

The choice of preceptors was reported as those available in the clinical facilities and not by choice and willingness, experience, competencies or personal attributes. One participant in the Ghana discussion stated:

"Preceptorship at clinical sites is done by few experienced midwives because most midwives are not interested to be preceptors."

A participant in Uganda reported:

"We are providing preceptorship on a small scale knowingly or unknowingly. There is a lot of competition and selfishness as midwives do not want to share knowledge gained."

On who are selected to be preceptors, findings indicate that by description, preceptors are registered midwives (with or without bachelor degrees) or nurses assigned to clinical facilities and offering care as part of their day-to-day services. These midwives and nurses are generally not members of the faculty of the training institutions, but are staff that may be requested, by virtue of their presence in the facility, to pass on skills to various categories of students who will be posted to the site. Requests for service may be by a letter submitted by the student on posting to the site, delivered by the director of nursing at the facility, or by personal contact with a tutor of the training institution. Where the institution has a formalised system in place, preceptors may be invited by the institution to participate in preparatory seminars or updates at least once a year. Students are assigned to the facilities with specific expectations and may be given log books for preceptors to endorse objectives achieved for the time period. It was further reported that preceptors commonly used the apprenticeship method where the students were assigned to midwifery tasks as an apprentice to a more experienced midwife. Opportunities for one-on-one meetings to assess daily performance and objectives achieved may not occur. Opportunities for generating critical thinking tasks may never be a focus of the process. Respondents from Ethiopia added that often preceptorship offered to students on rural posting were by young and inexperienced midwives who have had no supporting senior midwives to build competencies.

'The good old days': contributions to good midwifery

Respondents recounted times past when midwifery services boasted highly competent senior midwives who ran the clinical facilities with skill, commitment and dexterity. These midwives were perceived as role models who portrayed high standards of the code of ethics of midwifery practice, exuded confidence and defended the profession. Their judgments were also respected and an enabling environment for quality care was available. Respondents from the key informants' interviews gave vivid descriptions. In Ghana a key informant stated:

"In the good old days, midwifery was a call or a vocation. Now it is an income-generating profession where people who are not *really interested are trained and paid to work."*

Another added:

"In those days, there was commitment coupled with effective supervision, good working relationship with other professionals in the healthcare team."

In Ethiopia, the group of discussants indicated that midwives were the queens of the ward. Midwives loved their profession and had power to change students. Midwives were in charge of the wards and knew what they were about. But, over generations, these attributes have been lost as schools recruit students who have no interest but because the government has assigned the course to them.

In Uganda and Zambia, the majority of respondents reported that in the good old days, student numbers were small; staffing was adequate, proper orientation was given and care plans were followed to the letter. Equipment was available, the health system functional, and it was prestigious to be a midwife.

Current challenges to preceptorship

Findings from the study indicated several challenges militating against effective preceptorship for competency building in midwifery in all countries studied. These challenges ranged from young and inexperienced midwives, inadequate numbers of midwives in the clinical sites due to high turnover, heavy workload and limited competent tutors to implement strong preceptorship approaches. Other challenges included lack of interest to be preceptors due to no remuneration or perceived self-benefit, large student numbers that push training institutions to post students across the nation to areas that tutors are unable to follow up. An Ethiopian participant asserted:

"Preceptors are expected to role model but because of low preceptor-student ratio, capacity is limited. Also, preceptors and tutors are disinterested because of lack of confidence and knowledge to perform competently."

There are small-sized skills laboratories that challenge tutors' abilities to prepare students for skills training before their release to the clinical sites. There are ill-equipped and overpopulated clinical sites due to the fact that students from various institutions and professions are all assigned to these few facilities to demand attention from the few clients. Policies and standardised guidelines from the regulatory bodies on preceptorship are largely unavailable, except in Zambia, which had developed a training guide for preparation. The most common challenge reported was the persistence of poor attitudes of midwives at clinical sites.

Countries reported that such challenges affect supervision and contact with preceptors. These challenges are reportedly the underlying causes for the changing face of midwifery from that of the 'good old days' to the present state. Some experienced midwives also saw mentoring as an added burden.

Changing the face of preceptorship in Africa

Preceptorship was observed by respondents in the study countries as a very important approach to student training and acquisition of skills. Respondents strongly indicated the need to revisit the concept of the good old days. They called for a multi-pronged approach to addressing the weakening state of preceptorship in countries. Respondents indicated that preceptorship should be implemented within a wider milieu where strong mentoring and clinical supervision systems are running in synergy within a nationally approved framework or policy. An Ethiopian participant noted that to change the face of preceptorship, countries must develop preceptorship guidelines; improve the competencies of tutors and midwifery clinicians who act as preceptors and mentors; lobby governments for

improved clinical sites, equipment and supplies and identify willing role models for leadership training and asignment.

In Zambia, respondents said that to change preceptorship, African countries should develop clear guidelines, re-introduce continual professional education of midwives to keep them abreast with knowledge and skills and reinforce clinical meetings that create opportunities for discussing cases and their management. Procedure manuals should also be made available to all, including students for reference.

In Ghana, respondents indicated the need for clear assignment of roles for the various stakeholders who need to play significant roles in ensuring success of preceptorship. Retired midwives, chief nursing and midwifery officers, midwifery associations, nursing and midwifery councils, training institutions and midwives in clinical practice were recognised as interconnected partners in achieving an improved preceptorship system.

Discussion

Evidence from the analysis on the current state of preceptorship suggests that it is recognised as crucial for students' competency building as indicated by Fullerton and Ingle (2003), Jordan and Farley (2008), Licqurish and Seibold (2008). However, contrast exists in the manner preceptorship is organised in study countries when compared to the organised systems in the US and Sweden. Ohrling and Hallberg (2001) and Burns et al (2006) indicate different forms of organised systems to students competency building governed by set guidelines coupled with continual evaluative mechanisms to influence daily and weekly plans to preceptorship and informed by students' learning needs. Findings suggest that preceptorship systems are at various degrees of implementation in study countries, which may not contribute to effective competency and professional confidence building. There are unstandardised systems where midwifery clinicians may be assigned as preceptors to support and facilitate students for skills acquisition without prior orientation to the expectations of the training programme or regular updates to ensure relevance of knowledge.

Moreover, preceptors are assigned to the task without necessarily expressing their willingness to be a preceptor. This finding is incongruent to the assertions of the North Carolina Board of Nursing and that of the University of Texas School of Nursing (2011) where, within their definition of preceptorship, it must be conducted in the purview of a structured system where preceptors agree to function to provide supervision to a student for a specified period of time using identified learning objectives. The evidence from the study further points to the lack of policies that govern preceptorship implementation in contrast to the provisions outlined by the Oklahoma Board of Nursing *Preceptor policy* (2010), the University of Texas School of Nursing policy (2011) and Myrick and Yonge (2003). In this study, Zambia was the only country with documented guidelines on training preceptors developed by the Nursing and Midwifery Council to direct actions. Respondents from the other countries indicated that training institutions recognise the role of preceptors and take the initiative to also conduct training based on available resources to orient preceptors to their tasks and teaching methodologies. Though this is a good initiative, according to the Oklahoma Board of Nursing *Preceptor policy* (2010), not all 'preceptors' scattered across the nations in the study benefit from the training, which is commonly ad hoc.

Reflecting on the relevance of preceptors in students' skills training as documented by various authors (Gray and Smith, 2000; Jackson and Mannix, 2001; Papp et al, 2003; Donaldson and Carter, 2005), the present situation in the study settings calls for initiatives that will direct an effective selection of preceptors capable of meeting student needs, especially in the areas of bridging the knowledge gap between theory and practice; role modelling, competency and confidence building through insightful guidance and sharing of experiences, as outlined in the Oklahoma Board of Nursing *Preceptor policy* (2010).

In the study countries and in Africa, however, cognisance needs to be taken of the political, social, and economic terrain within which training programmes occur and the fact that resources are not easily available. However, the development of well thought-out guidelines on preceptorship and their implementation in countries is a necessity that should be pursued if well-qualified midwives are to be deployed to health facilities to provide the much needed care.

The study also revealed that attitudes to midwifery services were poor as senior midwives reminisced about the 'good old days' and the professional recognition they earned from the general public and colleagues in other professions. The recognition was because of their ability to meet the healthcare needs of clients and effectively facilitate students in midwifery and nursing in acquisition of knowledge, skills, professional socialisation and assertiveness (Burns and Paterson, 2005; Khomeiran et al, 2006).

As supported by Myrick (2002) and Mamchur and Myrick (2003), positive interpersonal relationships by preceptors are critical to passing on exemplary professional ethics, a code of conduct, and clinical skills. It is important for regulators and stakeholders to conduct research in the study settings to determine the extent to which current preceptors contribute to the current poor attitudes among midwifery clinicians. The study will also need to determine the extent to which students are observing the right attitudes from good role models (Donaldson and Carter, 2005). This has implications for training and professional socialisation for optimal care.

The future

Findings of the study show that there is a lack of standardised, synergised preceptorship systems in study countries, though there are pockets of efforts by certain institutions to run adhoc preceptorship systems. Much information exists on preceptorship trends in developed countries but there is very little documentation on the trends in sub-Saharan Africa.

This study has documented the current preceptorship trends in four countries in Africa that hitherto had not been focused on and described in the literature.

The ICM/UNFPA initiative is supporting country-based initiatives to strengthen midwifery education, regulation, and associations in 26 programme countries. In countries such as South Sudan there is a need for the development of an entirely new programme to promote preceptorship for effective student education in view of their political history. Developing generic

preceptorship guidelines by the ICM/UNFPA programme, informed by the systems and processes utilised by the developed countries, will generate a culturally-sensitive approach to preceptorship that can be adapted by African countries to promote professional excellence in midwifery.

Lennox et al (2008) in their paper *Mentorship, preceptorship and clinical supervision: three key processes for supporting midwives* clearly distinguish between the three processes and their professionally supportive relationships. Success can be counted if the synergy of the quadriad of the midwifery educator, regulator, clinician and association leadership is connected in such a way as to clearly define individual roles, responsibility and commitment in preceptorship, mentoring and clinical supervision towards midwifery strengthening. The quadriad will focus on:

- Identification and strengthening of preceptors to include innovation in teaching
- Developing and promoting standardised guidelines for programmes implementation
- Granting opportunities for retired midwives as school-based preceptors or clinical instructors. This is being tested in Ghana but needs modifications
- Supporting tutors to take up clinical responsibilities in health facilities to maintain and improve skills and act as buffers to preceptors. Ghana has made a policy on this but implementation has not been strongly enforced
- Strengthening student adherence and devotion to professional and ethical code of conduct
- Promoting peer exchanges and communities of practice, through local and regional interactions
- Twinning and establishment of projects through north-south; south-south collaboration
- Championing the preceptorship, mentoring and clinical supervision processes by chief nurses, midwives, regulators, association leaders, departmental heads, midwife tutors and other influential organisation, such as the UN, ministries, parliament, FIGO and WHO
- Setting up a monitoring and evaluation system to continually test, inform and direct progress
- Continually advocating for political commitment to competency-based training of midwives.

Conclusion

With the clarion call on most African countries to meet the MDGs 4 and 5, midwives cannot afford not to exhibit professional excellence coupled with the right attitudes. Preceptorship facilitated by long-term mentoring and strong clinical supervision in regular practice is core to success.

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Information for authors

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News and resources

RCM debate on the third stage of labour

The RCM hosted a debate on whether midwives should abandon the practice of physiological management of the third stage of labour. It took place at the National Liberal Club in London, where experts debated the topic and the audience voted on the motion at both the start and end of proceedings. At the beginning of the evening, 21% of the audience voted in favour of abandoning physiological management. After speeches had been made and discussions had taken place, there was a slight change in perception with 17% in favour of abandoning. For information on upcoming events, please visit the RCM website events page.

NICE fellowships and scholarships

Applications are now open for the 2012 NICE fellows and scholars programme. The programme recognises the achievement and promise of NHS health professionals and contributes to their professional development. It is also aimed at fostering a growing network of health professionals linked to NICE, who will help to improve the quality of care in their local areas. Applications are now open and those who wish to be considered must apply by 5pm on 25 November. Those who are successful should be able to begin their fellowship or scholarship activities by 31 March 2012. NICE has published a list of eligibility criteria on its website and there is also a frequently asked question section, which includes details on the fellowships and scholarships.

The RCM launches new strategy

The RCM research strategy was launched in October to reflect the RCM's recognition that research is critical to evidence-based midwifery. At the launch Cathy Warwick, the RCM's CEO, said that implementing research in practice is a priority for the RCM. As an outward-facing plan, research members, practitioners and the wider research community will be able to engage to ensure the provision of high-quality relevant research, leading to better care for mothers and babies. The strategy is available on the research section of the RCM website.

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