



ROYAL
COLLEGE
OF MIDWIVES

ISSN: 1479-4489 June 2009 Vol.7 No.2

EVIDENCE
BASED
MIDWIFERY



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COLLEGE
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June 2009
Volume 7 Issue 2

EVIDENCE BASED
MIDWIFERY IS
A STANDALONE
PEER-REVIEWED
JOURNAL
PRODUCED BY THE
ROYAL COLLEGE OF
MIDWIVES

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Evidence Based Midwifery
Royal College of Midwives
15 Mansfield Street
London W1G 9NH
United Kingdom

Publishers:
Redactive Media Group

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Practice: a battlefield where the natural versus the technological

Key words: Birth technology, doctoral midwifery research, technocratic, natural, evidence-based midwifery

In 1999, I introduced my doctoral research with a statement about modern childbirth taking place in a veil of tension between the technocratic and natural models of childbirth. Technocratic – where events and midwives' reactions may be largely guided by electronic and other devices, and a natural model in which the midwives' role is to provide security and support for the mother as she births according to her own body's timetable. The literature provided a key to understanding the diversity of public perception of technology, with the scientific philosopher Ellul (1963: 83) stating: *'Technology produces values of unimpeachable merit, whilst simultaneously destroying values no less important – impossible to state that technology brings about absolute progress or regress.'*

Habermas (1984) proposed the silent infiltration of technology into society and argued that purposive rationality had become the *'dominant belief system due to society valuing and demanding technical efficiency'*. The revelatory power of technology was embodied when *'...user and recipient of technology become integrated with the machinery to form an interpretative and transparent relationship and the human body experience becomes hermeneutically transparent in that it can be interpreted in a similar way as a text'* (Ihde, 1990: 90).

The literature was not without critics like Reynolds (1991), who warned about the abuse of technology allowing humanity to destroy natural cycles on one hand while building fabrications of it on the other. Healthcare literature provided a similar pattern of oppositional views with Donnison (1977) proposing that technology enables men to dominate the processes of childbirth. Oakley (1987) said expert technological knowledge enables the medical profession to control childbirth. However, other writers such as Wajcman (1991) perceived technology to be empowering, giving women control over their childbirth experience, while Doyal (1995) perceived the 'technologisation' of childbirth to be a demonstration of patriarchy, male domination of women and the medicalisation of childbirth by male obstetricians. This view was supported by Dover and Gauge (1995), who reported that technology de-skills midwives and undermines their professional expertise, and midwives were being accused of *'trusting the technology too much'* (Hemminki and Merilainen, 1996: 1569).

This controversial background formed the context of my research involving an observation programme, comprising 17 case studies conducted across midwifery units in Northern Ireland – a postal survey targeted all practising midwives (1086 with a 60% response rate). Complementary fieldwork involved the survey of computer competence among new entrants to midwifery/nursing courses (731 with a 100% response rate) and in-depth interviews with midwifery managers (10).

The observation studies confirmed the midwife as in a key position in relation to exercising judgement and assuming responsibility for a woman and her baby's welfare when technology is used – the technology did not undermine the midwife's position, rather it appeared to focus and strengthen it. Women and their partners used the cardiotocography machine as an electronic

window to provide them with evidence of their babies wellbeing and it aided them in the processes of delivery. Midwives' willingness to use technology was affected by their level of training, perceived competence, and confidence.

Often students perceive technology to be an important aspect of their work and are motivated to use it. Those with no training in computers scored significantly lower on confidence ($p < 0.001$) and motivation ($p < 0.001$). Midwifery managers considered midwives ought to be assessed for technical competence as part of their undergraduate education. There was a belief that those who were very proficient in technology usage would enable labouring women to be more independent and less dependent on the midwife as *'truly competent midwives use machines as tools and allies to support and enhance decision-making skills'* (Sinclair, 1999).

The role of the midwife in the modern labour ward demands specialist skills in technology. Midwives need to be highly competent in the use of induction technologies 'hardware', as well as the 'software' required to support women in natural childbirth. These skills need to be clearly identified and appropriately addressed through curriculum development.

Ten years later, the battle continues and entrenchment has become part of the fabric of practice, with some holding fast to man-managed labour in a consultant-led environment or woman-led labour in a midwife-led unit.

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Professor Marlene Sinclair, editor

PhD, MEd, BSc, DASE, RNT, RM, RN.
Professor of midwifery research at the University of Ulster, Northern Ireland.



Reflections on engaging in participatory research

Valerie Hall DPhil, MSc, PGCEA, MTD, ADM, RM.

Head of Centre for Nursing and Research, University of Brighton, Mayfield House, Falmer, Brighton BN1 9PH England. Email: v.hall@bton.ac.uk

The author would like to thank all her colleagues who helped in the writing of this paper, in particular Dr Kay Aranda and Carol Mullineux. Very special thanks go to her gypsy colleagues, Marya, Avril, and Henry; and to Zoe from the charity Friends, Families and Travellers. The author would also like to pay a special tribute to Corrina Adams as a valued and committed peer-researcher whose devastating and untimely death during the project will remain a powerful reminder of the need to undertake research of this kind.

This paper was the fifth professor of midwifery research paper given at the Doctoral Midwifery Research Society (DMRS) on 6 February 2009 at the University of Ulster. Please visit the DMRS website: www.doctoralmidwiferysociety.org

Abstract

Background. From its origins in the consumer movement, users' involvement in public services has moved from a 'consumer' approach towards a 'citizen with rights approach'. Service user or public involvement in research has mirrored this movement and is now beginning to challenge traditional power structures.

Aim. This paper describes the recent growth of service user or public involvement in health research and aligns it to the emergence of a new paradigm that provides a framework to underpin this type of participatory research. Ways in which participatory research methods can facilitate a move from a consumerist approach to a more democratic model of involvement are discussed.

Methods. This type of research approach is criticised for its lack of neutrality and objectivity and these criticisms are acknowledged and explored. However, it is argued that the very act of incorporating the direct experiences of service users and the public into the research process enables an authentic view of health care and justifies its place in the hierarchy of evidence. The ideology and the realities of doing participatory research are examined through a description of a current research project based on this methodology.

Findings and conclusions. The paper concludes by proposing that working in this way requires the researcher to personally address power differentials and to acknowledge and embrace the potential for cross-cultural challenges. These challenges not only redefine the role of the researcher, but also the type of knowledge that is produced.

Key words: Participatory research, service user involvement, public involvement, peer-researcher, professional knowledge, evidence-based midwifery

Introduction

'Life is not a spectator sport... participation is fundamental to the nature of our being, or an ontological given' (Wicks et al, 2008: 19).

Although my research journey began long ago, it is only recently that I have come to see just how deeply my personal beliefs about the nature of knowledge influence the way that I conduct research. My epistemological and ontological position comes from the beliefs and values that I hold as a person and as a midwife, making my research journey both personal and academic. My professional beliefs about working with women and offering services that are inclusive of all women led me to want to do research that focuses on the direct experiences of women and their families, an approach akin to the Buddhist philosophy of *'locating self in the experience of the world'* (Wicks et al, 2008: 18). More recently, my research interests have led me to think about the relationship between the people being researched and the researcher, thoughts that have become more focused because of recent initiatives in encouraging service users to get involved in healthcare research.

This paper describes the emergence of a new paradigm in research that provides a framework to underpin ideas

about participation. It proposes that the recent initiatives to involve service users in research have developed alongside this emerging paradigm and are supported by it. How the view of the service user has changed over the last few years is described and how participatory research methods can facilitate a shift to a more democratic model of involvement. Participatory research is not without its critics and it is argued that criticisms regarding lack of objectivity are rooted in a reductionist scientific world-view that may deny the multifactorial nature of health care and marginalise the experiences of those who use it. Distinctions between the various levels and types of service-user involvement are drawn and a current research project is described in order to exemplify some of the underpinning principles of this research approach. The underlying emancipatory principles of participatory research are reaffirmed, but to embrace them requires a radical departure from traditionally-held views of the nature of professional knowledge.

What is participatory research?

The concept of participatory research is used in slightly different ways by different authors, but common to all these uses is a set of principles that define its purpose. The author's approach to participatory research is positioned within the new



paradigm research that grew from a colloquium of like-minded researchers formed in the late 1970s (Reason and Rowan, 1981; Reason, 1988; Reason and Bradbury, 2008). It is based on post-positivist thinking and is critical of a mechanistic and reductionist scientific world-view (Reason, 1988: 3).

This new paradigm takes naïve enquiry as the starting point for the whole research process and argues for co-operation and collaboration between participants and researchers throughout. The approach allows for a broader more creative engagement with research – one that values non-traditional sources of knowledge, accessing internet chatroom debates for example, and dissolves hierarchical boundaries between people and also between discipline areas. This potential for multidisciplinary working is particularly salient in view of the multifactorial view of health that is required to tackle inequalities (Commission for Social Determinants of Health (CSDH), 2008). However, the radical nature of these proposals cannot be underestimated. Inherent in any attempt to break down barriers is the challenge that this inevitably poses to those who traditionally hold power, either individually or collectively through an organisation or state authority.

Participatory research is often located in the action research domain (Lewin, 1951), because of its aim to integrate research and action. However, it departs from Lewin's original focus on bringing about local change and instead concentrates on the interrelationship between knowledge and power (Denis and Lomas, 2003). Participatory research embodies qualities that take it beyond a cyclical action research model, and moves it towards emancipatory objectives. How far down this road it travels depends on an individual research design, but at any level it has resonance with feminist principles of equality and inclusion. Participatory research attempts to establish a different dialogue between participants and researchers (Randall and Southgate, 1981). It aims to be collaborative in nature (Torbert, 1981), it is sometimes emancipatory (Barnes and Mercer, 1997), but in every case it draws on the experience of being human, which applies equally to all involved in the research. Often, what is learned by individuals who are involved in the process is as valuable as the outcome. As McIntyre (2008: 1) puts it – it is '*a living dialectical process changing the researcher, participants and the situation in which they act*'.

Action research can also aspire to these principles, indeed Deery's (2005) research into midwives' support needs, facilitated the collaboration and participation among midwives to produce a model of clinical supervision. However, because of its philosophical origins much of the research using participatory methods relates to community engagement initiatives (Barnes et al, 2007), disability research (Barnes and Mercer, 1997) and research with vulnerable groups, particularly people with learning disabilities (Ham et al, 2004; Brooks and Davies, 2007) and those with mental health issues (Faulkner and Morris, 2003; Beresford, 2006a) and hard-to-reach groups (Elliot et al, 2002; Coe et al, 2008).

Latterly, the importance given to involving service users in all types of health research has grown (Department of

Health, 1999; 2000; INVOLVE, 2004). This is evidenced by the setting up of INVOLVE a national advisory group, funded by the National Institute for Health Research (NIHR) with a remit to support and promote active public involvement in the NHS, public health and social care research.

This sea change has its roots in the 'consumer movement', characterised by the view that patients should have more choice about the care they received and where they received it – for midwifery this was epitomised in the *Changing childbirth* debates of the 1990s and strengthened in *Maternity matters* (Department of Health, 2007). However, as Beresford (2007) highlights, there are ideological differences between a managerialist/consumerist approach with an emphasis on seeking the views of service users as customers, and a democratic model of participation. More akin to the democratic model is the shift proposed in the Declaration of Alma-Ata (World Health Organization (WHO), 1978), which stated that people not only had a right, but also a duty to participate in and plan their own care, reflecting a 'citizen with rights' approach that is mirrored within participatory research ideology. Many of these earlier values are strengthened in the WHO report on primary health care (2008). They are further reinforced by the acknowledgement in the final report of the CSDH (2008) that improvements in health are based on social empowerment.

As the ways of viewing the nature of involvement in research have changed, so has the name participants are given. Earlier terms such as 'user involvement' implied stakeholders such as commissioners, but more recently the term 'service user' has been adopted to mean the inclusion of people who use, have used or are eligible to use health and social care provision (Beresford, 2007). Within the NHS the broader term of 'public involvement' is used to reflect the diversity of people who may be involved. It includes not only services users, but also the organisations representing them, and parents or informal carers. This term also seeks to embrace the rich diversity of people in a multicultural society who may have different needs and concerns (INVOLVE, 2009).

This broader definition of public involvement underpinned earlier research looking at the effectiveness of midwifery education in meeting the needs of disadvantaged clients (Hart et al, 2001). At that time the idea of involving the public was relatively new, but given the ethical issues of researching disadvantaged women, the author recruited representatives from the now disbanded Maternity Alliance, a voluntary organisation aimed at promoting health and well-being for all pregnant women, Oasis – a service for women substance misusers and their children and a service user to the steering group. Although the project stopped short of involving these colleagues in data collection and analysis, they were involved in helping to determine and disseminate the findings. The findings of the research were used to create a learning model to help midwives to learn about disadvantaged clients (Hall, 2004).

Criticisms of participatory research

While public involvement in research is considered to be so important that many research bodies require evidence of

its inclusion within funding applications, there are still tensions around the value of such research and its place within the hierarchies of evidence. Public participation is expected in all types of research design including randomised controlled trials, so perhaps it is not fair to say that research involving the public *per se* is not valued, but rather that the methods based on valuing people's life experience and experiential knowledge are more open to challenge. Many prestigious authors of qualitative research have countered criticisms regarding lack of objectivity and scientific rigour (Miles and Huberman, 1994; Denzin and Lincoln, 2005; Hammersley, 2008), but the more fundamental question is: how can we truly understand health care without taking a holistic approach that is shaped and guided by the experiences of the people who use it? Beresford (2006b) takes this further and talks of the centrality of 'direct experience' in knowledge development particularly in the field of service user-led research. He argues that prioritising the values of neutrality, objectivity and distance means that the knowledge of service users is automatically seen as less valuable, credible and legitimate and that this further oppresses and invalidates people who are often already disadvantaged. He believes that service users are also beginning to challenge the notion that researchers are better placed to interpret experience of research participants because of their distance from it. He argues that the shorter the distance between the direct experience and the interpretation, planned as a part of user involved or led research, then the less distorted, inaccurate and damaging the resulting knowledge is likely to be (Beresford, 2003).

Others have criticised the broader concept of service user or public involvement stating there is no evidence of its impact and therefore of its worth. Moreover, it is a complex concept and as INVOLVE (2007a) explains, impact can be defined in a number of ways, for instance: impact on research funding/commissioning strategies, on the elements of the research process, research ethics processes, on the service users involved, on the researchers, and on changes to services. Some researchers (Oliver et al, 2008; Smith et al, 2008) have begun to scope the types of service user and public involvement, but as only a small proportion of NHS researchers are currently actively involving 'consumers' (Barber et al, 2007), the evidence base will take time to grow. However, it is important to acknowledge that the means by which this evidence is gathered and the criteria by which it is judged will determine whether the democratic ideology underpinning involvement is valued or a managerialist perspective is maintained.

Degrees of service user or public involvement

Not all research involving service users or the public can be considered as participatory and it is important to be clear at the outset about the degree of involvement that is intended. Arnstein (1969) described a ladder of participation starting at the bottom with non-participation and with each subsequent step on the ladder relating to an increasing degree

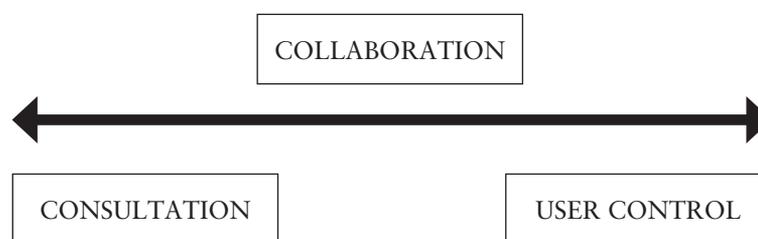
of participation culminating in 'citizen' control. However, the ladder model implies that all research should aspire to be 'citizen' led and by implication if it is not, then it has somehow failed. INVOLVE has proposed a simpler model with three dimensions which by turning the 'ladder' on its side more realistically reflects the spread of research engagement that contributes across all research designs (see Figure 1). Oliver et al (2008) suggest that further dimensions are necessary to fully analyse public involvement in research and they categorise participation not only in terms of the degree of involvement, but also in terms of specifying service user input as individual or as a representative organisation and also identifying the background of the people initiating the research. This model is helpful for determining finer details of the impact of public involvement in research, but it is rather complex for day-to-day use in a research project.

The author's view is that it is not helpful to label involvement in research as consultation, collaboration, or user control, because in reality it is often a mix of all these things. Therefore, the INVOLVE model is expanded by superimposing the various stages of the research process onto the three key determinants and adding a fourth, because in reality there is sometimes no involvement at particular points in the research process (see Table 1). In this way the research team can map the research and take an overview of the involvement providing an opportunity to spot ways of including a user-led element to an otherwise collaborative piece of work. Conversely, it is important to recognise and acknowledge that there may be elements of collaborative research in which service users are not actively engaged but are consulted. It is important to be clear and honest about the degree of involvement at each stage, because if expectations are not met this can lead to dissatisfaction with the whole process (Faulkner, 2004).

What might a participatory research project look like?

In order to exemplify some of the philosophical points raised above, this section describes the day-to-day research processes undertaken in a current project looking at gypsies and travellers' use of urgent care services. The research was collaborative from the outset with Friends, Families and Travellers (FFT), a charity supporting and representing this group of people. Early on, it was agreed that the project should be based on participatory research principles. It was planned using Beresford's idea of shortening the distance between the direct experience of the gypsies and travellers and

Figure 1. Model of involvement (INVOLVE, 2004)



its interpretation, by employing peer-researchers from their local community.

Working with FFT as a charity that employs members of the gypsy and traveller community meant that problem-regarding the lack of reimbursement of service users when writing bids (Staniszewska et al, 2007) was overcome, but also in paying them once it started. The researchers wanted to recruit the peer-researchers as soon as possible, because although the broad outline of the research design was in place, the researchers wanted to involve them as much as possible in the detailed work on the final design. In order to be clear about expectations on both sides, a job description was written. In addition to attending the steering group meeting and contributing to the study design, the peer-researchers would recruit participants from their community, interview the participants, contribute to data analysis, and contribute to the writing of the research report. Formal interviews were not held, but used the job description to discuss the boundaries of their involvement and confirm what they agreed to do.

The other important strategy was to bring together a number of people from different agencies to form a constituent group that acted as the research steering group and provided a multidisciplinary focus, more broadly addressing social determinants of health. Gypsy and traveller colleagues felt that to bring together representatives from the city council, as well as health services meant that the research would be more reflective of the problems they ex-

Table 2. Members of the steering group in the gypsy and traveller project

Gypsy and traveller peer-researchers
Representative from the charity Friends, Families and Travellers
Representative from the local primary care Trust
Representative from the ambulance and out-of-hours service
Equalities and inclusion officer for the local city council
Equalities and diversity officer for the local NHS Trust
GP
Midwife working with vulnerable families
Health visitor outreach worker
University researchers

perienced in relation to their health and would increase the impact of the findings (see Table 2 for membership of the steering group).

The first full meeting started with a presentation and a discussion on the principles and values of the method and asked for commitment to being part of the process to make the steering group a dynamic environment that supported the principle of participatory research. The steering group was introduced to the degree of involvement grid (see Table 1) and used it to map gypsy and traveller involvement in the project. The steering group members felt that although the research was mainly collaborative, they wanted to include at least one element of gypsy and traveller control. To achieve this, it was decided to try to appoint a member of the local gypsy and traveller community as the chairperson of the steering group. FFT was able to suggest someone whom it had worked with previously and who had already been trained in the role. The strategy proved successful and was extremely positive lending a very different feel to meetings, which were no less professional in terms of what was achieved, but much more in tune with the issues that mattered to the gypsy and traveller community.

The other important area was the empowerment aspect of participatory research, defined by Heron (1981) as learning and self-development for all those who are involved in it. The research team tried to ensure that the peer-researcher contribution was authentic and not just limited to gaining access to the community and validating the findings. A series of training sessions were delivered at critical points during the research process, so that the peer-researchers were supported in what they were being asked to do. Moreover, the training was intended to help them understand the rationale behind what was being done so that they could challenge the processes and suggest alternatives. Framework analysis (Ritchie and Spencer, 2002) was used as a method of data analysis, because its structure allowed comments on the questions that were set out to be answered, but also it allowed the peer-researchers to draw out the issues important

Table 1. Example of a degree of involvement grid based on the gypsy and traveller project

Public involvement	None	Consultation	Collaboration	Control
Research idea		x		
Preparing bid		x		
Initial research design		x		
Establishment of steering group		x		
Chair of steering group				x
Ethics approval		x		
Ongoing research design			x	
Data collection			x	
Data analysis			x	
Data interpretation			x	
Validating findings and recommendations			x	
Writing report			x	
Dissemination			x	
Plans for future			x	

to the gypsy and traveller community.

Following analysis of the first set of interviews, the peer-researchers were unhappy that the interview schedule did not seem to be eliciting the information that they felt was relevant to the research question. After talking this through, it was realised that the notion of trying to maintain rigour by keeping the same interview schedule throughout was questionable in terms of capturing the experiences that the community actually thought important. Data collection and analysis has yet to finish, but it continues to be done concurrently to ensure that peer-researchers remain close to the data and shortening the temporal gap between direct experience and interpretation.

A training session has been recently offered on writing up and dissemination of results in which creative ways of involving everyone in the process was discussed. As a result, a strategy to enable the peer-researchers was identified to comment on their participation in the research using a story-telling technique, which is consistent with the gypsy and traveller culture. The training was facilitated in an informal and relaxed style and checking with the peer-researchers that it moved at their pace and met their needs. It is believed it helped the peer-researchers to be as involved in the research process as they had wanted, but more than this it had allowed everyone to get to know each other and learn from each other's lives during this short time. However, the close relationships developed does raise questions about what happens next once the project is completed – how can the peer-researchers progress their research careers and what moral obligation do organisers have to help them? This dilemma is well recognised in the report of the TRUE project (Lockey et al, 2004), but there are no easy answers.

The emancipatory aspect of participatory research concerns us all and following Habermas (1987), the process is not just about freeing people from the domination of others, but also about helping individuals recognise and acknowledge forces that limit their own understanding. It is too early to say how much the constituent group and the research team have changed as a result of the research process, but there have been genuine attempts to step into the world of others and see how things look from their perspective. The author has begun to learn experientially the good practice guidance offered by INVOLVE (2007b). In particular, unthinking adherence to academic protocols keeps the author

in her comfort zone, but could undermine the emancipatory nature of the research. As in the example of the interview schedule given above, sticking to normal protocol may have resulted in conclusions that are at best limited, but at worst may have led to the distorted knowledge that Beresford (2006b) talks about.

Conclusion

Participatory research is defined not just by the degree of service user or public involvement, but also by more subtle issues such as the quality of the relationship between the participants and the learning that has occurred for all involved.

The process of trying to do participative research raises major issues regarding power relationships not just between individuals, but also between the individual and the organisation or the state, that are played out in pragmatic issues such as lack of proper acknowledgement and reimbursement for involvement. It is also played out through rigid NHS and higher education institution policies regarding qualifications for employment and other contractual matters. Many researchers try to get round these issues by working with charities and voluntary organisations representing service users, who can more easily employ them. But ultimately there remains a dichotomy between rhetoric and the reality of enabling non-traditional researchers to be properly recognised for their contribution.

The worth of this type of research and its place in traditional hierarchies of evidence is also questioned. The type of knowledge generated through this method puts the views and needs of the service user or public at its centre. Therefore, it is often multidisciplinary and multi-agency and does not fit easily within the traditional body of knowledge held by individual professional groups. Including the public in research also contests the notion of authority and expert knowledge held by the professionals in those groups. While some professions may be more open to acknowledging a need for the inclusion of this type of knowledge, it remains a challenge for all of us.

Despite the difficulties that also contribute to the sometimes pessimistic views of the service users themselves (Turner and Beresford, 2005), participatory research offers a way forward, helping design and deliver research that truly reflects and values the concerns of those who use maternity services.

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Student midwives' experience of bullying

Patricia Gillen¹ PhD, PGDipNursEd, MSc, BSc, RM, RGN. Marlene Sinclair² PhD, MEd, DASE, BSc, RNT, RM, RN. W George Kernohan³ PhD, CPhys, CMath, FIMA, BSc. Cecily Begley⁴ FTCD, PhD, FFNRC SI, MSc, MA, RNT, RM, RGN.

1 Lecturer, School of Nursing, University of Ulster, Jordanstown Campus, Shore Road, Newtownabbey BT37 0QB Northern Ireland. Email: p.gillen@ulster.ac.uk

2 Professor of midwifery research, Institute of Nursing Research, University of Ulster at Jordanstown, Newtownabbey BT37 0QB Northern Ireland. Email: m.sinclair1@ulster.ac.uk

3 Professor of health research, Institute of Nursing Research, University of Ulster at Jordanstown, Newtownabbey BT37 0QB Northern Ireland. Email: wg.kernohan@ulster.ac.uk

4 Professor of nursing and midwifery/director, School of Nursing and Midwifery, Trinity College Dublin, 24 D'Olier Street, Dublin 2 Ireland. Email: cbegley@tcd.ie

A summary of this study was presented at a meeting of the Doctoral Midwifery Research Society.

This study was funded by the RCM's Ruth Davies Research Bursary.

Abstract

Aim. To define and examine the nature and manifestations of bullying in midwifery as experienced by a cohort of student midwives in the UK.

Method. A self-administered survey questionnaire developed from the literature review and the findings of the concept analysis and administered to 400 student midwives.

Findings. The findings report the existence of bullying in both the practice and to a lesser extent, the university settings and highlight the permissive culture that underpins this phenomenon. Half of the 164 student midwives who responded had either witnessed or experienced bullying. Most often the bully was a midwife or the mentor. However, university lecturers and personal tutors were also identified as bullies.

Implications. It is imperative that awareness of bullying in the workplace is raised at all levels within the profession. Key stakeholders need to acknowledge the presence of bullying within the profession and seek ways to minimise its existence.

Key words: Bullying in midwifery, student midwives, bullying in the workplace, horizontal violence, evidence-based midwifery

Introduction

This paper reports on phase four of a study that examined the nature and extent of bullying in midwifery. It presents the findings of a survey questionnaire that confirms and validates the concept analysis of bullying (Gillen et al, 2004) including the definition, defining attributes, antecedents and consequences of bullying.

Background

Bullying in midwifery is a complex workplace phenomenon that requires careful examination and exploration. The literature review (see Table 1) provided a range of evidence, which may be aligned within three key stages of bullying in midwifery: before, during and after. The first stage (pre-bullying) relates to all that happens before bullying begins – those factors that in some way contribute to bullying in midwifery. The second stage (bullying) includes the definition, nature and manifestations of bullying in the workplace. The third stage (post-bullying) is the one where the effects of bullying may be seen, with possible implications for the individual who has been bullied, but also their profession and the organisation in which they work.

Bullying in the workplace has been identified by midwives as a priority for research in Ireland and Australia (Fenwick et al, 2006; McCarthy et al, 2006). In the current climate, as the profession is struggling to recruit and retain midwives (Davies, 2005), bullying has emerged as a reason why midwives may leave the profession (Ball et al, 2002; Curtis et al, 2003). Research in the area of bullying at the student midwife stage early in a midwife's career was thus considered timely and of the highest importance. As novices to the

profession, student midwives have not yet had the opportunity to be socialised into the profession. Therefore, they are able to observe and form opinions about the types of behaviour they are exposed to, both in the clinical setting and the university.

The literature review, which is a common starting point for some but not all research, identified a number of methodological challenges. These include lack of consensus on definition, uncertain time frames, frequencies of bullying behaviours and failure to provide a firm theoretical basis for the instrument development. This lack of consensus of terminology and agreement on the word bullying is one of the challenges for researchers trying to understand the phenomenon and interpret research results.

The concept analysis by Gillen et al (2004) addressed these challenges and provided a firm basis for this and further research. It identified four defining attributes of bullying: the repeated nature of the behaviour, the negative effect on the victim, the difficulty for the victim in defending themselves from the bully and intent of the bully. These attributes are what set bullying behaviour apart from other similar type behaviours that workers may be exposed to in the workplace. In particular, the issue of abuse of power by the bully and a power imbalance between the perpetrator and the victim are what make it difficult for victims to defend themselves from a bully (Mikkelsen and Einarsen, 2001; Tehrani, 2001). This allows for the behaviour to be repeated.

The identification of the antecedents and consequences of bullying are an important part of the process and identified the significance of perception by the victim as a key aspect of bullying. The consequences of bullying have

Table 1. A summary of key research papers

Author, date	Publication	Aim/research Question/focus	Sample/location	Method	Summary of findings
Ball L, Curtis P, Kirkham M. (2002)	<i>Why do midwives leave?</i> RCM: London.	To determine the reasons why midwives leave the profession	Midwives; n=28; UK	Interviews	A total of 12 out of the 28 midwives who were interviewed indicated that their managers were bullies. One of the reasons given by a small but significant minority was bullying
Begley CM. (1999)	Student midwives' views of 'learning to be a midwife' in Ireland. <i>Midwifery</i> 15: 264-73.	To explore the opinions, feelings and views of student midwives and their two-year education programme	Student midwives; n=125; Ireland	Individual and group interviews, diary-keeping and questionnaires	The students' views of their education programme are reported, including authoritarian and oppressive attitudes by teaching staff
Begley CM. (2001)	'Knowing your place': student midwives' views of relationships in midwifery in Ireland. <i>Midwifery</i> 17: 222-33.	To explore the opinions, feelings and views of student midwives and their two-year education programme with a focus on interpreting and understanding their experience	Student midwives; n=125; Ireland	Individual and group interviews, diary-keeping and questionnaires	Students were distressed by staff attitudes and behaviours including being blamed for staff midwives' mistakes. They were aware of being at the bottom of the hierarchy with a lack of caring shown to them by those higher up. The 'cyclical nature' of the behaviours was recognised by the author and the inherent difficulties of achieving change within a strong hierarchy
Begley CM. (2002)	'Great fleas have little fleas': Irish student midwives' views of the hierarchy in midwifery. <i>Journal of Advanced Nursing</i> 38(3): 310-7.	To explore the opinions, feelings and views of student midwives and their two-year education programme	Student midwives; n=125; Ireland	Individual and group interviews, diary-keeping and questionnaires	Hierarchical system identified by students, which was located within a 'male-based power structure' (p310). Students were encouraged to adapt to and accept the hierarchy as an inherent part of midwifery
Curtis P, Ball L, Kirkham M. (2003)	<i>Why do midwives leave? Talking to managers.</i> RCM: London.	To receive feedback from managers on findings of Ball et al (2002) study	Midwives (from E grade to head of midwifery); n=56; UK	Interviews	In this follow-up study, managers accepted certain bullying type behaviours did take place, but were keen to play down their importance and blamed colleagues who were over-sensitive (p30) or who took the behaviours personally
Hadikin R, O'Driscoll M. (2000)	<i>The bullying culture.</i> Books for Midwives: London.	To ask midwives about their experiences and ascertain the context within which the bullying took place	Not stated; UK	Case studies	Identified a culture of bullying within every level of the NHS. Midwives recalled occasions when they had been undermined, belittled, controlled, victimised, sent to Coventry, had work devalued and been passed over for promotion. Midwives left their jobs as a way to escape the bully
Kirkham M, Stapleton H. (2000)	Midwives' support needs as childbirth changes. <i>Journal of Advanced Nursing</i> 32(2): 465-72.	An examination of supervision of midwives in England with midwives describing their support needs	Midwives; n=168; UK	In-depth ethnographic interviews	Midwives found it difficult to trust colleagues, managers and supervisors of midwives. In part, this was a result of midwives either fearing or experiencing horizontal violence
RCM. (1996)	<i>In place of fear: recognising and confronting the problem of bullying in midwifery.</i> RCM: London.	To determine the prevalence of bullying in midwifery, determine the profile of victims and culprits, identify the causes, effects and form that bullying takes	Midwives and student midwives; n=1000; UK	Questionnaire survey	Response rate of 46% (n=462). More than four out of ten respondents (43%; n=197) had experienced bullying, although it should be noted that no time frame or frequency of behaviour was stipulated. Midwives reported anxiety, irritability, depression and contemplated leaving their job and the profession as a direct result of bullying
RCN. (2002)	<i>Working well: a call to employers.</i> RCN: London.	Two-part questionnaire; questions on bullying/harassment and assault were included in part one. Focused on the frequency of bullying behaviour, who the bully was and what action had been taken	RCN full members; n=6000. Only one midwife responded; UK	Questionnaire survey	One in six nurses had been bullied in the past year and three in five NHS staff have witnessed bullying in the last two years

far-reaching negative effects that impact not only on the individual, but also on the profession of midwifery and the organisation in which they work. The defining attributes, antecedents and consequences in conjunction with other research instruments identified in the literature review (RCM, 1996; Hoel and Cooper, 2000; Quine, 2001) informed the development of the student survey questionnaire used in this study.

Ethical considerations

Beauchamp and Childress (2001) elucidated the ethical principles of respect for non-maleficence, beneficence, justice and autonomy, with an overall emphasis on doing no harm and doing good. All participants gave informed consent and all data were anonymised and kept secure, under the provisions of the Data Protection Act 1998. As this was research into a sensitive topic, arrangements were put in place to ensure that participants were given information about and had access to counsellors, if they became distressed. They were free to withdraw from the research at any time without any pressure to continue. Ethical approval was granted by the University of Ulster.

Aim

The aim of this study was to define and examine the nature and manifestations of bullying in midwifery as experienced by a cohort of student midwives in the UK.

Method

A quantitative approach was chosen as it is an effective means of accessing a large dispersed sample and is the method of choice when undertaking large incidence studies (RCM, 1996; RCN, 2002). Some open-ended questions were included in the survey instrument to provide rich, illuminative data on the bullying that was witnessed and experienced by these students.

Section one of the questionnaire focused on the profile of the student midwife respondents; the second section on the working relationships of these students and their enjoyment of the clinical and university settings; the third section concentrated on the phenomenon of bullying including the nature and manifestations of bullying as reported by the student midwives.

The questionnaire was designed to elicit the manifestations of bullying both as an objective (witnessed) and subjective (experienced) phenomenon through the reports of the student midwives who were exposed to the bullying behaviour either as a witness or a victim. The answers provide some detail of the nature and manifestations of bullying in the lives of these student midwives.

Validity, reliability and rigour

The steps taken in the development of a questionnaire are vital to the enhancement of the instrument. The questionnaire was developed using the researchers' own professional knowledge and experience, the literature review and the defining attributes of bullying as they emerged from the concept analysis (Gillen et al, 2004). In addition, cross-referencing of bullying behaviours with other questionnaires

into workplace bullying (RCM, 1996; Hoel and Cooper, 2000; Quine, 2001) also assisted in determining the characteristics of bullying behaviour. Piloting of the questionnaire was considered an important step in ensuring the validity of the instrument, and was undertaken with midwives and experts from academia. It was also reviewed by the research committee of the RCM. As it was being distributed at the RCM student conference, it was considered important that the College had the opportunity to review it in terms of the face validity and appropriateness of the questions. Some minor adjustments to questionnaires were made following the piloting and review by the RCM research committee. The reliability of the instrument was measured using Cronbach Alpha ($r=.89$).

Findings

The self-administered questionnaire survey was distributed at a student conference ($n=400$) in England in November 2005 and retrieved data from 164 (41%) student midwives. The quantitative data were analysed using SPSS (version 11.5). The qualitative data were analysed and categorised under the defining attributes of bullying.

Section one: background information

The students who responded to the questionnaire were all female and were predominantly in the 31- to 40-year age group (46%, $n=78$), 17% were between 25 and 30 ($n=28$), 10% ($n=16$) were between 18 and 25 and the remainder were aged 41 and over.

The majority of the sample were white, female Caucasians and a small proportion (0.6% ($n=1$)) came from each of the following ethnic origins: white/black Caribbean; white and Asian; Asian (including Indian and Pakistani); Caribbean; African and Chinese. Most of the students ($n=103$, 63%) were either married or living with a partner, with just over a quarter of the participants indicating that they were single and a small percentage were divorced or separated.

The majority of the student midwives ($n=147$, 90%) were undertaking a three-year course (direct entry) with 13 of the students undertaking the 18-month course (a postnursing registration course) with only three students on the four-year course. The majority were studying in England (93%, $n=153$), with nine in Scotland, two in Wales and none from Northern Ireland.

There was a broad range of academic achievement. The highest level of academic achievement for just over a quarter of the respondents was A-Levels. Nearly a quarter of the respondents had a degree or a diploma and three students held a Master's degree.

Section two: working relationships

Section two was a short section comprising four questions about the student midwives' perceptions of their working relationship with their colleagues and enjoyment of their time at university and in clinical placement. This information was believed to be important, as it would help to determine if student midwives differentiated between good and bad working relationships and bullying.

Table 2. Reasons given for non-enjoyment of placement

Reason for non-enjoyment of placement	Example of reason given
Dependent on mentor/not always getting to work with mentor (n=6)	"I have experienced regular lack of consistency with mentors" (no 101)
Dependent on who you are working with (n=2)	"The placement experience varies dramatically" (no 12) "It just depends on who you are working with" (no 158)
Midwives not comfortable with students/not friendly (n=3)	"I find that not all midwives are comfortable with students or are too busy to explain things/procedures etc" (no 5)
Feeling unsupported (n=5)	"I haven't generally been well supported in practice" (no 126) "I am disturbed by the lack of support for newly-qualified staff and blatant bullying of them" (no 162)
Thought of placement causes anxiety (n=1)	"The incident (being spoken to on occasions in front of staff and mothers in a derogatory manner) cast a shadow over my experience and I felt nervous going to work" (no 164)
Never sure what the experience will be like (n=4)	"I have been on lots of placements... some have been enjoyable, some less enjoyable" (no 4)

to the midwifery manager. She was extremely unsupportive and blamed me – no debriefing or further enquiry – made me feel very frustrated, angry and saddened. I was made to feel you are just a student, sit down and behave yourself" (no 16).

The following comments demonstrate how midwives sometimes belittled the student midwives:

"Made to feel stupid in front of woman and partner" (no 108).
"Spoken to with lack of respect and views not accepted" (no 112).

One particular episode of behaviour that was of particular concern was an instance of physical abuse:

"I had a bag of clinical waste (sealed) thrown at me in the sluice." (no 47).

The hierarchy of midwifery was evident to these student midwives:

"G Grade stating that I was only a student and should obey her" (no 38).

"At handover, the ward sister made me feel uncomfortable and I had to give up the chair I was on and sit on a harder one, so she could have the padded swivel one" (no 51).

The vast majority of the respondents (94%, n=154) said that they enjoyed their clinical placement. One of them stated that she enjoyed never knowing what the day will bring: "I enjoy being with women... and feeling useful" (no 1).

There was a small number of student midwives (4%, n=6) who did not enjoy their placement and the reasons for this are categorised in Table 2. It is clear that the reasons for non-enjoyment of placement were mostly linked to the way they were treated by their midwifery colleagues.

The majority of respondents (81%, n=133) enjoyed going to the university. However, those who did not gave reasons that ranged from finding academia a chore to identifying a bullying culture within the university (see Table 3).

Section three: bullying

A definition of bullying was included at this point in the questionnaire. The RCM (1996) adopted a definition used by the MSF Union (1995) for their questionnaire survey of midwives on the issue of bullying. Bullying was defined as 'Persistent, offensive, abusive, intimidating, malicious or insulting behaviour, abuse of power or unfair penal sanctions, which makes the recipient feel upset, threatened, humiliated or vulnerable, which undermines their self-confidence and which may cause

The majority of the students reported that they had a good working relationship with their colleagues, including the midwife that they worked with and the other student midwives that were in their group. However, many of the student midwives reported having been treated badly by a mentor (43%, n=70), ward sister (42%, n=69) and a doctor (38%, n=62).

Over a third of the respondents cited doctors as someone who had treated them badly, and nearly a quarter of the respondents indicated that they had been treated in a way they did not like by relatives.

Some of the examples of being treated poorly by colleagues are similar in nature to bullying behaviours. Over half of the students (55%, n=90) gave examples of being treated badly. Many of the responses included examples of verbal abuse from other staff and clients, some of which are included below:

"Spoken badly to; made to feel small and not appreciated" (no 22).

"Spoken down to and belittled in front of clients" (no 65).

"Degraded and shouted at in front of others" (no 76).

"Ridiculed by doctors for being a direct-entry student and not doing nursing first" (no 160).

Some of the students felt unsupported by their midwifery colleagues. One of the respondents recalled:

"There was a critical incident in practice that I reported



Table 3. Reasons for non-enjoyment of university

Reason for non-enjoyment of university	Example of reason given
Course too academic (n=3)	<i>"I just find academia a chore... I just want to do the job"</i> (no 96)
Lack of support (n=5)	<i>"I don't feel that there is enough support emotionally or financially"</i> (no 72)
Lectures boring/uninformative/disorganised (n=9)	<i>"Lectures are too didactic, uninspiring and out of touch with what is going on in practice..."</i> (no 10)
Problems with disruptive students (n=7)	<i>"...other students are not enthusiastic to learn"</i> (no 80)
Commuting (n=4)	<i>"I have a long distance to travel for just a few hours every day"</i> (no 113)
Overwork (n=1)	<i>"It is difficult to combine the university workload with clinical practice"</i> (no 78)
Bullying culture within university (n=2)	<i>"There is a patriarchal and bullying culture at the university"</i> (no 69)

them to suffer stress' (MSF Union, 1995: 3).

This was followed by a number of closed and open-ended questions. The first question in this section sought to determine the number of respondents who had experienced bullying.

Over one-third of the students reported being bullied. An important objective measure of the phenomenon of bullying is that of witnessing the behaviour. Again, more than a third (36%, n=59) of the student midwives reported that they had witnessed their colleagues being bullied. Examples of the behaviours witnessed include:

"Verbal belittling of fellow students by a notorious group of G grade midwives" (no 2).

"Shouting at midwives in front of mothers and staff in a malicious and intimidating way, if they ask for help" (no 6).

"Ostracising certain midwives, racism and spreading rumours" (no 77).

"The ward sister on the antenatal clinic treated a fellow student so badly and undermined her so much that the student left the course" (no 90).

"There is a gang culture within the unit, and sometimes a midwife for whatever reason, has just not been accepted by the midwives and has through bitchy behaviour suffered and left the unit" (no 88).

Bullying behaviours witnessed by the student midwives provide corroboration of the nature and consequences of bullying behaviour as it manifests itself within the profession of midwifery. They witnessed behaviour that was directed at midwives and student midwives and were aware of the impact that it had on them and the women for whom they were providing care. Of those who had been bullied,

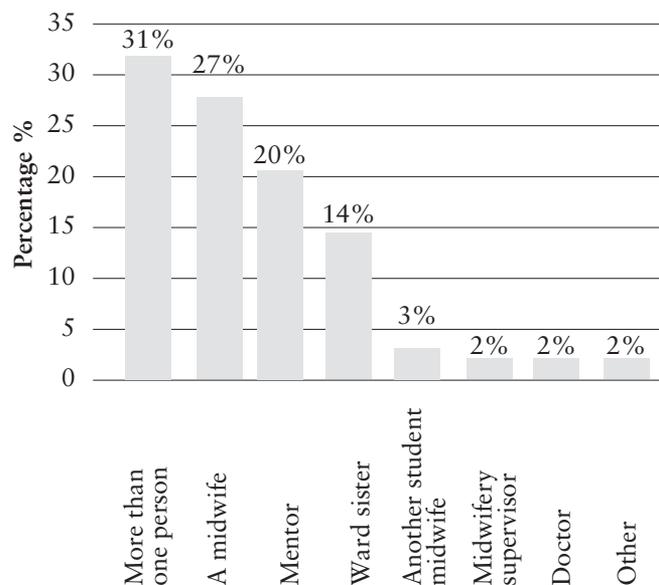
nearly half (49%, n=29) had also witnessed bullying of their midwifery colleagues.

It was important to determine who the bully was (see Figure 1). The student midwives who reported being bullied were most often bullied by more than one person and the person most likely to be the bully was a midwife, closely followed by the mentor. They also identified that the person who bullied them, bullied others.

There are many terms commonly cited within the literature to illustrate bullying behaviours (see Figure 2). It was important to identify which, if any, of these behaviours the student midwife had been exposed to. The behaviour that the respondents experienced ranged from intimidation, belittling of work, undervaluing effort, withholding information to lies. Other behaviours included belittling direct-entry midwives.

More than half of those who had been bullied (53%, n=31) believed that the bully had intended to bully them, and a further 17% (n=10) were unsure if the bully had intended to bully them or not. Some of the student midwives felt that if they confronted the bully that it would stop their behaviour. However, the bully's behaviour did not always stop and this was seen as proof that the behaviour was intentional: *"It was clear that she knew what she was doing and how it made me feel because I told her, and she continued to do it"*

Figure 1. Designation of the bully



(no 13).

Other student midwives connected the intention of the bully to their personality:

"She does it so often, it is natural to her" (no 39).

"She is like this with students and staff and I have reached the point where I wonder is it just her personality" (no 162).

The behaviour and the intention behind it were also linked with the culture:

"I think that some midwives view it as an initiation or to test how tough you are" (no 21).

"She has old-fashioned views and considered her behaviour helpful" (no 86).

The intentional nature of the bullying behaviour was also attributed to some midwives not liking students:

"I don't think she likes students" (no 91).

While other student midwives perceived the intent as a power-based behaviour:

"Just felt like a power trip" (no 68).

"She in my opinion wants to be in control and have the power in the student/midwife relationship" (no 140).

These comments provided some insight into the intentional nature of the behaviour as perceived by these student midwives.

There is a limited amount of literature about the corroborative evidence from other sources than the victim, that bullying has actually taken place. Of those student midwives who had been bullied, 61% (n=36) acknowledged that someone had witnessed the bullying behaviour. Most often the bullying behaviour was witnessed by a midwife (61%, n=22), another student (24%, n=7), women (13%, n=5), university lecturers (8%, n=3), mentors (8%, n=3), healthcare assistants (6%, n=2) and relatives of the women that were being cared for (6%, n=2).

Those who witnessed bullying behaviour did very little about it. Reassurance was offered on seven occasions and university lecturers intervened in two separate incidents and helped the student midwives to bring the issue to the Union. The respondents found it helpful when someone supported them in some way:

"It was good to talk about the situation and what to do next time it happens" (no 80).

The repeated nature of the behaviour is an important attribute in bullying and it is clear that this student midwife (no 80) expected the behaviour to happen again. Nearly a third of the students who had been bullied (31%, n=18) indicated that they were bullied not very often (there is no way of

determining the frequencies experienced, except that the frequency does not fit within the given categories), with 15% (n=9) indicating that they were bullied two to three times per week and 5% (n=3) one to two times per month. In addition, 9% (n=5) of the students reported being bullied daily.

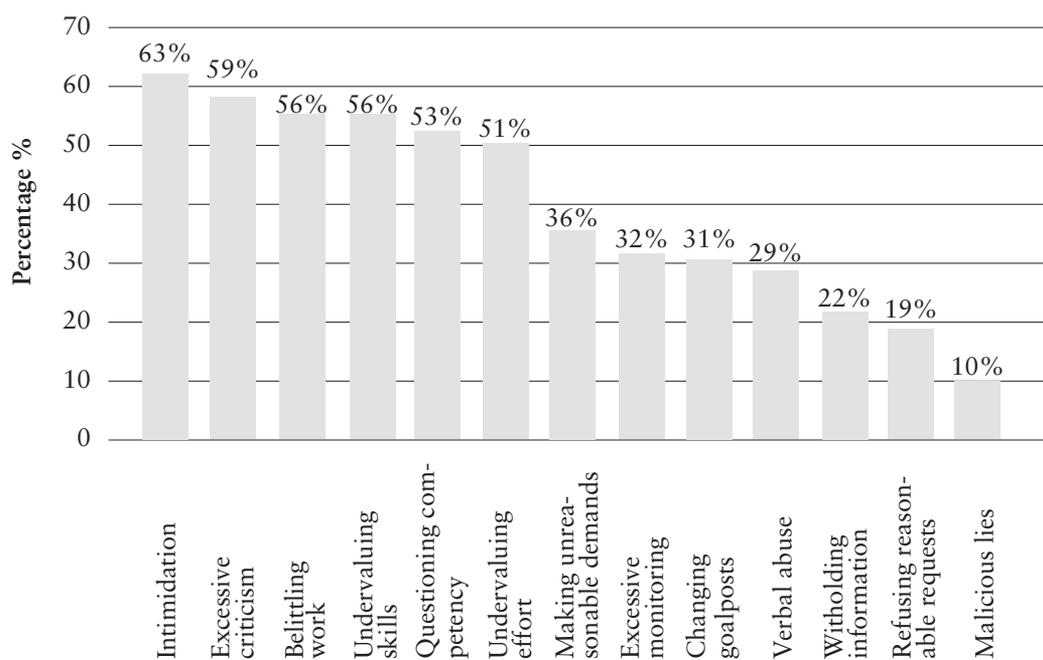
However, regardless of frequency of the behaviour, the effect of the behaviour was recognised and included loss of confidence (71%, n=42) and 61% (n=36) reporting a loss of self-esteem. The student midwives who had been bullied also reported anxiety (51%, n=30) and thought about leaving the course (42%, n=25). The detrimental effect of bullying on their physical and mental health was also apparent with 27% (n=16) losing sleep, 17% (n=10) taking time off work and 12% (n=7) indicating that it made them feel unwell. In addition, of great concern is the revelation by one of the student midwives that she had contemplated suicide as a consequence of being bullied.

Many of the students did try to do something about the bullying behaviour they had experienced, with the majority (90%, n=53) speaking to other student midwives and 64% (n=38) choosing to speak to family and friends. Some 39% (n=23) spoke with their mentor and 14% (n=8) spoke with a supervisor of midwives. Nearly a quarter of them (24%, n=14) had tried to speak to the bully about their behaviour.

Limitations

This study involved a self-selecting sample of UK (mainly English) student midwives and findings can thus not be generalised to other cohorts of students in the rest of the UK, or other parts of the world. However, the findings have resonance with many other international studies on poor relationships and workplace violence among midwives, lending credence to the view that bullying in midwifery is a global phenomenon.

Figure 2. Nature of the bullying behaviour



Discussion

Bullying has a detrimental and long-lasting effect on midwives, student midwives, the profession of midwifery and the organisation. This research aimed to define and examine the nature and manifestations of bullying in midwifery. It was a four-phase study that used a mixed-method approach to provide a rigorous examination of bullying in the workplace generally and, more specifically, within the context of midwifery. The results of the student questionnaire presented in this paper provided confirmation that student midwives recognised the phenomenon of bullying among their colleagues and in their place of work. Over half the students (55%, n=90) gave examples of being treated badly, one-third reported that they had witnessed their midwifery colleagues being bullied, and over 50% stated that they suffered intimidation, excessive criticism, belittling of their work, undervaluing of their skills, questioning of their competency and undervaluing their effort. These results are similar to those of a previous study in Ireland, where students spoke of staff being unkind and correcting or belittling them, often in front of others, and being subjected to excessive criticism (Begley, 2001). The example of physical violence in the present study is mirrored in the example from Begley's work (2001), where one student suffered bruises to her arm from a staff midwife's strong grip during a reprimand.

Other work from Turkey also demonstrated that midwifery and nursing students suffered from staff being condescending, belittling and humiliating them and making derogatory comments about higher education (Lash et al, 2006). Even qualified midwives in the UK have experienced poor working relationships, with conflict identified between junior and senior midwives and some evidence of workplace harassment (Hunter, 2005). A UK study on breastfeeding found that conflict over differing breastfeeding practices caused some midwives to feel intimidated (Furber and Thompson, 2008). An explanation for this may be that authoritarian behaviour appears to be greater in midwifery than nursing, as a UK study that compared the views of 29 midwives with that of 180 nurses in relation to their work environment found that the midwives had less autonomy, less supervisor support, less focus in their roles and greater work pressure than did the nurses (Carlisle et al, 1994). There is some suggestion in the literature that this may be due to the increasing medicalisation of maternity care, where the midwife's role is eroded, causing lowered self-esteem and poor morale (Reid et al, 2007), which is then taken out on more junior staff (Begley, 2002). Power imbalances in midwifery also reinforce organisational structures and policies, while disempowering more junior staff (Hollins-Martin and Bull, 2006).

This study found that students were most often bullied by another midwife, usually their mentor or ward sister, similar to Begley's work, which showed that students were intimidated or experienced hostile behaviour from senior members of staff (Begley, 2001; 2002). Studies from the UK and other countries also concur with this (Hunter, 2005; Lash et al, 2007) showing that, interna-

tionally, qualified midwives are taking out their frustrations on more junior staff, findings that occur in the UK nursing profession too (Randle, 2003). The prevalence of these behaviours is recognised by the UK midwifery profession, and a number of papers in recent times have challenged the bullying culture and made recommendations as to how it should be changed (Robertson, 2004; Leivers, 2004; Wilkins and Hawkins, 2005). Unfortunately, changing a culture of bullying is far from easy; those who have been bullied tend to continue on to bully others (Hadikin and O'Driscoll, 2000; Begley, 2002; Randle, 2003), as they have learnt those behaviours through seeing them and know of no other way of managing people. It will take considerable and concerted effort on the part of qualified staff, managers and students themselves to change these established practices.

The effects of bullying behaviour were recognised by students in this study and included a stated loss of confidence by 71% of them, with 61% reporting a loss of self-esteem. Those who had been bullied reported anxiety (51%) and 42% of them thought about leaving the course. Begley (1997: 463) also reported that 54% (n=64) in her study stated that they thought of leaving the course in the first three months, and 50% (n=59) thought of leaving at some stage from the fourth month to the end of their programme. In 27% of cases, the reason for thinking of leaving in the first three months was because of poor interpersonal relationships with a member of staff, and many spoke of a loss of confidence too. Harassment in the workplace has been identified as a reason for leaving the midwifery profession (Ball et al, 2002), although one study of 36 students who had left two different UK programmes over a two-year period did not identify bullying or adverse interpersonal relationships as causing them to leave (Green and Baird, 2009).

Nearly a quarter of the student midwives in the present study (24%) had tried to speak to the bully about their behaviour, in contrast to the students in Begley's study (2001), who used passive methods of coping and did not confront their seniors. This difference may be an indication of the differing times the studies were conducted (Begley's in 1997 and the present study in 2005) or due to differences in culture between Irish and English women.

Despite the evidence of bullying and poor interpersonal relationships, the majority of these students (95%, n=154) did enjoy their clinical placements, but those that did not cited reasons that were linked to the way they were treated by their midwifery colleagues. Similarly, the students in Begley's study consistently spoke of 'bad days' as days when they were reprimanded or suffered from negative attitudes from staff, whereas 'good days' all involved experiencing satisfaction from caring for women (Begley, 1998).

Conclusion

Bullying in midwifery is a global phenomenon, and has been identified as a key aspect for future midwifery research in Australia (Fenwick et al, 2006; Reid et al, 2007). Given the

considerable effects felt by students in this study and the apparently widespread nature of the phenomenon, it is recommended that leaders in the midwifery field should take proactive measures to highlight the incidence, and decrease the occurrence of bullying behaviours among staff. All qualified midwives should examine their own behaviour and endeavour to relate in a more collegial manner with students who are, after all, the future hope of the midwifery profession.

Recommendations

There needs to be a proactive approach to bullying, including a move towards a change in culture that actively dis-

courages bullying at all levels within the profession. A first step may be achieved through an increased awareness of what constitutes bullying and an acknowledgement by the profession that it is unacceptable. Those responsible for the education of midwives and student midwives should ensure that the nature and manifestations of bullying is an integral part of curricula, including how to deal with bullying and how best to offer support to colleagues. Key stakeholders such as the RCM, RCN, NHS Employers, the NMC and midwives need to face up to the fear that surrounds this phenomenon and take a proactive approach, which clearly labels bullying as a behaviour that is not acceptable within 21st century midwifery.

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Can the use of behavioural intervention studies support change in professional practice behaviours? A literature review

*Kim Russell*¹ MA, BSc, RM, RGN. *Denis Walsh*² PhD, MA, RM, RGN.

¹ Senior lecturer in midwifery and women's health, Institute of Health and Society, University of Worcester, Henwick Grove, Worcester WR2 6AJ England. Email: k.russell@worc.ac.uk

² Associate professor of midwifery, University of Nottingham, Nottingham City Hospital, Postgraduate Centre, Hucknall Road, Nottingham NG5 1PB England. Email: denis.walsh@nottingham.ac.uk

Abstract

Background. There is an expectation that Western healthcare systems should be based on current research evidence, as illustrated by the global introduction and acceptance of evidence-based clinical guidelines. The successful introduction and acceptance of practice innovations requires a comprehensive strategy that addresses organisational and individual concerns. It therefore seemed appropriate to explore the use of psychological behavioural change theories in relation to developing midwifery practice.

Aim. To summarise the research base relating to the use of identified psychological theories in realising behavioural change in professional practice.

Method. A systematic search of the literature involved accessing 17 databases and ten journals between January and April 2007. The search terms 'midwi*' and 'nurse-midwi*' were used in combination with the trans-theoretical model, theory of planned behaviour and self-efficacy. No midwifery papers from the UK were identified. Due to the paucity of literature, the search terms were modified to include doctors, nurses and other professional groups. Following this change, one Canadian paper on nurse-midwives was identified along with four papers from the US, the Netherlands and the UK.

Findings. The review found a lack of literature in relation to the application of behavioural intervention studies to practice. The papers reviewed reported variable success in incorporating innovations into professional practice. Educational workshops were the most commonly used intervention and were most effective when active participation, goal-setting and planning for change were included.

Conclusion. Modern healthcare systems demand that practitioners are up to date with current evidence, in order to offer quality of care, but at a time of limited resources, strategies that support professional development are essential. Given the paucity of literature in this area, it is hoped that this review has highlighted the potential for the use of behavioural intervention studies in supporting innovations in midwifery practice.

Key words: Systematic review, theory of behavioural change, tailored interventions, professional practice, evidence-based midwifery

Introduction

There is an expectation that Western healthcare systems should be based on current research evidence (Gerrish et al, 2006), as shown by the global introduction and acceptance of evidence-based clinical guidelines (McKenna et al, 2004). However, Shaneyfelt (2001) calculated that newly-qualified doctors would need to read 20 articles a day, all year round to maintain their present knowledge. Gyatt et al (2000) also found that practitioners were unable to keep abreast of innovations in practice, despite the use of systematic reviews and clinical guidelines. This may be why many medical and healthcare practitioners resist incorporating evidence into their own clinical practice (Gyatt et al, 2000), and why task-orientated routines prevail (Grol and Grimshaw, 2003). It is not surprising, therefore, that a gap between evidence and practice has been consistently found in healthcare research (Grol, 2001). However, successful implementation of evidence into clinical practice has been shown to improve quality of care (Sackett et al, 2000), as well as choice (Tolson et al, 2005) for patients and clients. The successful introduction and acceptance of practice innovations requires a comprehensive strategy that addresses organisational and individual concerns (Rogers et al, 2000). It also requires that interventions are tailored to specific groups and contexts (Hardeman et al, 2002). Behavioural change theory recognises the importance of the environment on individual and group behaviours, and focuses on measuring

behaviour and behaviour intention over time (Gross, 2005). It therefore seems appropriate to explore the use of psychological behavioural change theories and tailored intervention studies in relation to developing evidence-based midwifery practice.

To place the reviewed literature in context, it is necessary to provide an overview of the psychological change theories concerned, namely self-efficacy (Bandura, 1986); the theory of planned behaviour (TPB) (Ajzen, 1991); and the trans-theoretical model (TTM) (Prochaska and DiClemente, 1983).

Self-efficacy

In 1963, Bandura and Walters developed a form of social learning theory to include the concepts of observational learning and vicarious reinforcement. Later, Bandura (1986) proposed that behaviour can be predicted by the beliefs individuals hold about their capabilities and that these self-perceptions help determine what people do with the knowledge and skills they have. Bandura (1986) called these perceptions self-efficacy beliefs. Self-efficacy beliefs help determine how much effort people will expend on an activity, how long they will persevere when confronting obstacles, and how resilient they are when faced with adverse situations (Schunk and Hanson, 1985). Consequently, a high sense of self-efficacy beliefs may support a high level of optimism and accomplishment, whereas low levels may lead individuals to be pessimistic about their own abilities.



The theory of planned behaviour

This theory differs from Bandura's self-efficacy beliefs theory in that a person's intention, rather than level of confidence is believed to be the best predictor of behaviour (Ajzen, 1991). The main conviction is that individuals will weigh up their personal feelings, attitudes, and perceived social pressure before arriving at and carrying out their intention to change their behaviour or not (Ajzen, 1991). The TPB can predict intentional behaviour, because behaviour can be deliberate and planned (Ajzen, 2002). Central to behavioural intention is the relationship between one's attitude, subjective norm and behavioural control. The subjective norm is defined as an individual's perception of whether people important to them think the behaviour should be performed (Ajzen, 1991). The degree of opinion on any given behaviour is weighted by the motivation that an individual has to conform or not, to the wishes of the majority (Ajzen, 2002).

The trans-theoretical model

TTM is an integrative model of behavioural change that enables examination of the relationship between 'specific cognitive behavioural and motivational mechanisms' (Keller and McGowan, 2001). It is a model of intentional change focusing on the decision-making of the individual (Prochaska and DiClemente, 1983). Prochaska and DiClemente (1983) view behavioural change as a process involving a series of five stages: precontemplation, contemplation, preparation, action and maintenance. These stages identify an individual's readiness to change a particular behaviour. TTM has been used widely in changing clients' smoking and addictive behaviours (Prochaska and DiClemente, 1983; Keller and McGowan, 2001). In relation to the stages of change, recognisable patterns have been identified (Velicer et al, 1996), which show that the move from preparation to action is more likely to happen when the perceived pros outweigh the cons (Prochaska, 1994). Keller and McGowan (2001) argue that the use of early interventions, which highlight the pros of the desired behaviour may help individuals move from the contemplation to action stage more quickly.

Search design

The aim of this literature review was to explore the use of psychological theories in realising behavioural change in clinician's clinical practice. A systematic review of the literature was chosen in order to evaluate all available evidence, make comparisons between relevant studies and produce recommendations for professional practice (Sackett et al, 2000). An advantage of this method is that it supports the adoption of a systematic, objective, transparent process of data collection to answer a specific question (Rees, 2004).

Search methods

A systematic search of the literature involved looking at 17 databases and ten journals and using the search terms 'midwi*', 'nurse-midwi*' in combination with the TTM, TPB and self-efficacy beliefs to address the research aim. The following databases searched between

January and March 2007 were: CINAHL, PsycINFO, Academic Search Elite, Cochrane, MEDLINE, OVID, PubMed, Digital Dissertations, MIDIRS, Applied Psychologists Association, Ingenta, *Journal of the American Medical Association*, Oxford University Press, Index Thesis, EPOC and ERIC.

The following journal databases were also searched: *British Journal of Educational Psychology*, *British Journal of Midwifery*, *British Medical Journal*, *Family Medicine (US)*, *Journal of Advanced Nursing*, *Journal of Education Psychology*, *Journal of Midwifery and Women's Health*, *MIDIRS*, *Midwifery*, *Quality in Healthcare Journal*.

No midwifery papers from the UK were identified. However, a paper concerned with changing nurse-midwives' practice behaviours in Canada was included (Davies et al, 2002). Due to the paucity of literature in midwifery practice the inclusion criteria was changed to include doctors, nurses and other professional groups (see Table 1).

Search outcome

This resulted in 10,000 'hits' being recorded, but unfortunately the majority of results were concerned with changing clients' unhealthy behaviours and so were excluded from the review. Relevant papers were identified by reviewing the title and abstract against the inclusion criteria. This method identified 20 relevant papers. These full-text articles were reviewed. Eight papers were identified as meeting the inclusion criteria and suitable for quality appraisal. These are Adeyinka and Ayeni (2006), Baker et al (2001), Bower et al (1997), Davis et al (2002), Davies and Hodnett (2001), Den Ouden (1995), Miller and Mount (2001), and Taylor and Kiser (1998).

Quality appraisal

Each paper was reviewed using the Critical Appraisal Skills Programme (CASP) tool for quantitative studies (CASP, 2004). The paper by Adeyinka and Ayeni (2006) was excluded, because insufficient data were provided to assess the quality of the research evidence, and because it did not include behavioural change. Miller and Mount (2001) focused on the use of self-concept theory to improve counselling techniques and therefore did not meet the inclusion criteria. Davies and Hodnett (2001) did use self-efficacy, but did not measure changes in behaviour and so were also excluded from the review. Five

Table 1. A summary of the inclusion and exclusion criteria for paper selection

Inclusion criteria	Exclusion criteria
Research papers written in English	Non-English research papers
Research papers published between 1980 and 2007	Papers published before 1980
Midwives, nurse-midwives, doctors and other professionals	Client or patients
Use of TPB, self-efficacy, TTM in combination or alone	Other behavioural change theories
Identified theories used to measure behaviour or intention	Behavioural change or intention not measured

Table 2. A summary of the research interventions, behavioural change methods and outcomes for each study

Study	Theories used	Participants	Intervention	Behavioural change methods
Bower et al (1997)	Theory of planned behaviour (TPB) Self-efficacy used to measure confidence levels	Family practice physicians enrolled on an Advanced Life Support in Obstetrics (ALSO) course (n=55). Not randomised	Two-day training course about managing potential emergencies in a labour ward environment. Questionnaires prior to and after the two-day course	<ul style="list-style-type: none"> • Psychomotor skills rehearsal • Social encouragement/support • Persuasion • Information • Clinical guidelines • Modelling • Barriers to change not assessed
Taylor and Kiser (1998)	Adult learning theory: cognitive, psychomotor and affective domains. Self-efficacy not mentioned. Used the term 'comfort' to describe levels of confidence	Family physicians enrolled on an ALSO course (n=142). Self-selected	Two-day training course about managing potential emergencies in a labour ward environment. Questionnaires pre-course and completed at six and 12 months	<ul style="list-style-type: none"> • Didactic lectures • Information, modelling by others • Skills rehearsal • Persuasion • Clinical guidelines • Barriers to change not assessed
Baker et al (2001)	TPB and trans-theoretical model (TTM), but used a range of psychological theories to produce a tailored diagnostic model	GPs – 1239 invited to take part (n=192 control group; n=210 intervention group). Randomised	Implementation of guidelines on accessing suicide risk. Over a 12-month period, outreach one-to-one visits and support in the use of the new clinical guideline	<ul style="list-style-type: none"> • Educational interventions • Encouragement • Reinforcement • Barriers to change identified six weeks after guidelines issued
Davies et al (2002)	Self-efficacy, TPB and goal-setting theory mentioned, but it was not clear how these theories were applied to the study	Maternity nurses, four tertiary and regional maternity hospitals (two units were the control, two units received the intervention)	Workshops on the value of electronic fetal monitoring (EFM) in low-risk women and labour support. Questionnaires and interviews pre- and post-intervention and clinical audit	<ul style="list-style-type: none"> • Educational workshops • Clinical guidelines • Work book • Identified barriers to change after interventions were put in place
Den Ouden (1995)	TPB and goal-setting theory	Business project managers, large multi-national organisation (n=243). Not randomised	Change professionals' decision-making. Project one-month training course. Self-completing questionnaires pre- and on start of the course. Interviews at six months	<ul style="list-style-type: none"> • Goal-setting • Education that focused on attitudes, knowledge and skills • Barriers to change not measured

research papers Baker et al (2001), Davies et al (2002), Bower et al (1997), Den Ouden (1995) and Taylor and Kiser (1998) met the inclusion criteria and were deemed to be of satisfactory quality. A description of the psychological theories used and the interventions and behaviour change outcomes of each study have been summarised in Table 2.

Results

Davies et al (2002) adopted a tailored approach to reduce the frequency of electronic fetal monitoring (EFM) in four Canadian maternity units – nurses in two maternity units received interventions with the remaining units acting as controls. Davies et al (2002) mentioned that educational workshops were designed to influence nurses' self-efficacy in the use and frequency of EFM and time offering labour support. A number of interventions including educational workshops, workbooks and clinical guideline development were introduced to maternity nurses over a six-month period. They also had regular meetings with stakeholders and unit managers at an organisational level. The results obtained were mixed, with a reduction in EFM identified in one of the intervention and control maternity units; leaving the au-

thors to conclude that tailored interventions had a limited effect on maternity nurses' use of EFM.

Baker et al (2001) studied GPs' perceived barriers to the use of the guidelines on assessing suicide risk, by undertaking in-depth interviews six weeks after they were introduced. GPs in the control group were issued with the same guidelines, but received no interventions. For each identified barrier, Baker assigned a particular psychological theory followed by the introduction of an intervention to each identified barrier. Psychological theories included self-efficacy, TTM and the TPB. The interventions were introduced four to six weeks after the interview to encourage adoption of identified guidelines. Baker et al (2001) calls this a diagnostic model. Michie et al (2005) proposed a similar method, but called their framework a causal model. Both models are designed to address individual barriers to change by using psychological theories and tailored interventions to specific groups of practitioners.

Baker et al (2001) collected data prior to the interviews, after interventions and at 12 months. They found that GPs significantly increased the number of patients assessed for suicide risk; unfortunately it was unclear if the interventions or a

Change in intention	Change in behaviour
Yes: increased levels of confidence between pre- and post-course data were found	Not investigated
Not investigated	Yes: practitioners significantly more likely to perform some, but not all skills
Not investigated	Yes: increased use of clinical guideline
Not measured	Yes: mixed results. Changes in nurse's use of EFM and labour support in both the control and intervention groups
Yes	Yes: early behavioural change rather than intention is the best indicator of long-term change

better recording system were responsible for this change. GPs' adherence to the clinical guideline did not increase significantly. These findings raise two important points: first, that a one-to-one diagnostic approach may be effective in changing practitioners' behaviour; secondly, that actions need to be clearly identified at the beginning of the study if changes in behaviour are to be interpreted effectively and conclusions made (Prochaska and DiClemente, 1983).

Taylor and Kiser (1998), Bower et al (1997) and Den Ouden (1995) used educational programmes to change professionals' decision-making. Bower et al (1997) and Taylor and Kiser (1998) looked specifically at developing US physicians' clinical decision-making and obstetric skills through a two-day Advanced Life Support in Obstetrics (ALSO) course. ALSO courses focused on skills

practice, lectures, role-modelling, social support and encouragement, and included cognitive and psychomotor testing at the end of day two. Bower et al (1997) referred explicitly to Ajzen's (1991) TPB, which included a detailed framework of how the course might influence participating doctors' intention to provide maternity care. Taylor and Kiser (1998) wished to build on Bower et al's (1997) work, but no reference to TPB was apparent. Instead, Taylor and Kiser (1998) based their research on educational learning, which focused on addressing individuals affective learning domain (Quinn, 2000) and levels of comfort when undertaking obstetrical emergencies. No definition of comfort was offered, but it appears that this term relates to participants' level of confidence and therefore could be linked to Bandura's self-efficacy theory (1986).

Taylor and Kiser (1998) aimed to identify behaviour change over a 12-month period, whereas Bower et al (1997) focused on behavioural intention. Den Ouden (1995) also measured behavioural intention and behaviour following a month-long project management course for project business managers. This educational intervention aimed at changing participants' knowledge, attitudes, and skills in project management. Questionnaires were

completed by participants one week prior to the start of the course and at the end. At six months, participants were invited to attend for interview and to complete the final questionnaire. Den Ouden (1995) found positive correlations between behavioural intention and behaviour, but correlation between earlier (one month) and later behaviour change (six months) was more significant. Den Ouden (1995) concluded that early behavioural change rather than intention was the best indicator of continued change. He also stressed the need for educational interventions to address routine or habitual behaviour, because he argues automatic behaviour often involves less control: 'To start to learn, maybe one needs to unlearn' (Den Ouden, 1995: 32).

Bower et al (1997) and Taylor and Kiser (1998) sent out questionnaires prior to and following a two-day ALSO course. Taylor and Kiser (1998) sent out additional postal questionnaires at six and 12 months to ascertain changes in behaviour. Bower et al (1997) found that course participants were more confident in performing emergency skills, but were unable to demonstrate a significant change in behaviour intention due to the small sample size (n=55), and problems with the selection of participants. Taylor and Kiser (1998) on the other hand found significant changes in aspects of participants' clinical practice, namely the increased use of ventouse, ultrasound scanning and amino-infusion.

Discussion

Limitations

Although many research papers were identified during the literature search only five papers were found that fulfilled the inclusion criteria. It is also acknowledged that the papers reviewed focused mainly on US and UK medical practitioners. This suggests that more research in the UK on the use of tailored interventions based on psychological theory is needed to gain an understanding of its application to midwifery practice. The authors are confident that the extensive search strategy and reading of all relevant titles generated, limited the risk that any significant English language studies in this area have been missed.

The following questions generated from the findings of the literature review will frame the following discussion:

- How effective are tailored interventions in changing individual practice behaviours?
- How important is it to identify barriers to intended change?
- What type and number of interventions are most effective?
- When is the best time to evaluate changes in practice behaviours?
- How effective are tailored interventions in changing individual practice behaviours?

How effective are tailored interventions in changing individual practice behaviours?

Tailored interventions either follow a randomised controlled trial (RCT) design or use an intervention group with a control population (Eccles et al, 2003). Data are usually collected in both populations prior to and following the planned interventions (Eccles et al, 2003). Changes in performance or scores in the study population are assumed to be due to the intervention (Murray, 1998). Behavioural intervention studies aim to improve quality of care and understanding of the mechanism of behaviour change (Michie et al, 2005; Hardeman et al, 2002;

Baker et al, 2001), but the effectiveness of tailored interventions in changing practice behaviours remains uncertain and the need for rigorous trials (including process evaluations) are needed (Shaw et al, 2005). This view is supported by Ory et al (2002), who emphasised that tailored intervention studies are at an early stage of development and their effectiveness is unclear. Interestingly, in health promotion research, the use of tailored interventions has become widely used because of perceived effectiveness in changing behaviours. Shaw et al (2005) identify three problems with existing healthcare research literature – not identifying barriers to intended change, absence of rationale for choice and implementation of interventions used and poor application of psychological theories.

How important is it to identify barriers to intended change?

A number of research studies profess to adopt tailored interventions, but often fail to identify barriers or include limited information on how barriers to change were identified (Shaw et al, 2005). Hardeman et al (2002) agree, arguing that researchers expend much effort in planning interventions, but fail to link these to barriers to the intended change. This is true of the literature reviewed in this study. Baker et al (2001) made it clear how barriers to change were identified, but Davies et al (2002) did not explain if barriers had been identified. In the remaining studies (Den Ouden, 1995; Taylor and Kiser, 1998; Bower et al, 1997), barriers in the intervention groups were not investigated.

The Effective Practice and Organisation of Care group (EPOC cited in Shaw et al, 2005) offered classification to barriers to change: sense of competence, patient expectations, financial disincentives, clinical uncertainty, perception of liability, standards of practice and administrative constraint. EPOC's classification may be useful in identifying barriers in research with health practitioners, but it also raises questions. For example, it is unclear if barriers can be generalised from group to group or if some barriers are more important than others. What is clear from current evidence is that barriers to the intended change should be linked to specific interventions if behavioural change is to be achieved.

What type and number of interventions are most effective?

Eccles et al (2002) recognise that tailored intervention studies tend to adopt either an RCT design or one where controls are put in place before and after the intervention. In the latter, the researcher identifies a population and uses a similar group as a control. Analysis compares post- and pre-performance and any changes are presumed to be due to the intervention (Eccles et al, 2002). Baker et al (2001) adopted an RCT design and Davies et al (2002) used control groups. It is apparent that interventions are primarily concerned with changing individual behaviours, but there is no consensus on the number of interventions that should be used (Shaw et al, 2005). Oxman et al (1995) suggests that the use of a number of strategies increase effectiveness. However, Robertson et al (1996: 54) argue that the number of interventions should be determined by 'the obstacles to change', which have been identified in the study population. The most popular intervention used was professional education programmes and workshops. Den Ouden (1995), Bower et al (1997) and Kiser and Taylor (1998) focused on educational approaches alone to change behaviours. All studies included educational workshops

that encouraged audience participation and practical application of knowledge and skills to professional practice. The uses of interactive teaching approaches have been identified as more effective than formal lectures in changing participants' behaviour (Oxman et al, 1995). However, it is unclear if short or protracted educational interventions are more or less effective (Shaw et al, 2005). Den Ouden's (1995) educational programme ran for one month, but it is unclear how many hours participants attended for. He included goal-setting, which encouraged participants to develop implementation intentions (Gollwitzer, 1993).

Hardeman et al (2000) identified that goal-setting and self-monitoring could be effective in bridging the gap between intention and behaviour. Thomson O'Brien et al (2001: 8) identify the need for further study into the 'specific attributes of workshops that may contribute to their effectiveness, including group size, the opportunity to practise skills and the use of follow-up sessions'. Both Bower et al (1997) and Taylor and Kiser (1998) ran ALSO workshops. Baker et al (2001) and Davies et al (2002) used a variety of interventions, which included clinical guidelines, outreach visits and organisational change. Baker et al (2001) reported some change in practitioners' professional practice, whereas Davies et al (2002) obtained mixed results.

When is the best time to evaluate changes in practice behaviours?

Changes in human learning and behaviour 'is a long slow road' (Berwick, 1996: 621), but unfortunately, no consensus on the best time to evaluate participants' behaviour has been identified (Hardeman et al, 2002; Eccles et al, 2003; Shaw et al, 2005; Gross, 2005). Hardeman et al (2002) identified that follow-up after the intervention had been introduced was often short, with the average length of time six months. In the papers reviewed, it appears that the studies that were most effective used a number of evaluation points (Baker et al, 2001; Den Ouden, 1995; Taylor and Kiser, 1998). Davies et al (2002) evaluated their interventions after six months, but concluded that this short period of time may have been why their results were inconclusive. It is suggested that it is not only the timing of evaluation, but the number of evaluation points that appear to be important in demonstrating changes in professional practice (Eccles et al, 2003). This may be because a number of evaluation points make it easier to attribute changes to the intervention rather than other factors (Eccles et al, 2003). Den Ouden (1995), Baker et al (2001) and Taylor and Kiser (1998) all used time series evaluation designs and were able to demonstrate changes in practitioners' behaviours.

Conclusion

Modern healthcare systems demand that practitioners keep up to date with current evidence, in order to offer quality of care. But at a time of limited resources and staff shortages, strategies that support professional development and changes in clinical practice are essential. Further work is required on evaluating the effectiveness of behavioural tailored interventions in changing health professionals' practice behaviours – they are at an early stage of development and, at present, their effectiveness is unclear. Given the paucity of published literature in this area, it is hoped that this literature review has highlighted the potential for its use in supporting innovations in midwifery and nursing practice and make a contribution to the debate in this area.

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Using evidence to reduce the rate of episiotomy in a Dubai hospital

*Sylvia Fernandes*¹ MSc. *Ebenezer Ellen Benjamin*² MSc. *Grace Edwards*³ PhD, MEd, Cert Ed, ADM, RM, RGN.

1 Senior staff nurse, Delivery suite, Al Wasl Hospital, Dubai, United Arab Emirates. Email: sfernandes@dha.gov.ae

2 Professor in nursing, College of Nursing, Christian Medical College and Hospital, Vellore 632004 India. Email: eben_ellen@yahoo.com

3 Midwifery research and development specialist, Al Wasl Hospital, Dubai, United Arab Emirates. Email: gedwards@dohms.gov.ae

Abstract

Background. A retrospective survey of birth statistics in Al Wasl Hospital in Dubai in 2006 found that episiotomy was routinely performed on a wide range of women including primigravida, women who had instrumental deliveries, pregnancies with abnormal presentation, fetal distress, large babies, and multigravida women with a perceived rigid perineum. The rate of episiotomy for all women was 64%. Despite this high rate, five women (0.2%) also suffered third and fourth degree tears.

Aim. This study was undertaken to assess the existing practice of performing episiotomy and to develop multidisciplinary evidence-based guidelines, which could be introduced to change practice around the routine use of episiotomy.

Methods. A review of the literature was undertaken, which questioned the use of routine episiotomy. The authors set out to change practice by utilising a systematic quality improvement model called FOCUS-PDCA, a nine-step process guide to improving quality. By using this model and engaging with medical and midwifery staff, guidelines were produced.

Findings. As a result of cooperation and compliance from all staff, the rate of episiotomy fell from 64% in 2006 to less than 20% in 2008, with no increase in the incidence of third- and fourth-degree tears.

Key words: Episiotomy, FOCUS-PDCA, liberal perineal trauma, third-degree tears, evidence-based midwifery

Introduction

Midwifery practice is underpinned by clinical experience, intuitive clinical reasoning and research. Until recent times, there has been a dearth of evidence around normal childbirth, but there is a growing pool of research, particularly from midwives that is providing strong evidence on which to base practice. One area of research is around the use of episiotomy.

Although first mentioned in 1742 by a Scottish midwife for use in difficult births (Ould, 1742), episiotomy did not become routine until the 1920s following a paper by DeLee (1920), which described the use of episiotomy for instrumental births.

The use of episiotomy varies across the world. In the US, high rates of episiotomy with no clinical evidence base prompted Thacker and Banta (1983) to undertake an interpretive historical review of episiotomies from 1860 to 1980. They found that episiotomy rates increased with the move away from home births and into hospital and could find no clearly defined evidence to support routine use. They recommended that carefully designed controlled trials of benefit and risk should be carried out on the use of episiotomy. A subsequent review by Woolley (1995) found similar results.

In the UK, one seminal piece of research conducted by Sleep et al (1984) changed practice. A review of current practice at that time found that episiotomy rates within the UK ranged from 14% to 96%, with no clear rationale. These authors conducted a large randomised controlled trial (RCT) study with 1000 women. Half of the midwives were asked to avoid episiotomy unless there was evidence of fetal distress (restricted group), the other half were asked to avoid perineal tears (liberal group). Their results

showed that the episiotomy rate in the restricted group had fallen to 10%, while the rate in the liberal group was 51%. However, there was no difference in neonatal outcome, no difference in pain at ten days and three months, and women with perineal tears reported less pain than those with episiotomy.

Since then, many other research studies have reinforced the findings of Sleep et al (1984). Despite mounting evidence, US episiotomy rates remained around 60% and prompted a systematic review of the evidence by Repke (2003), who concluded that there is no evidence to support the prophylactic use of episiotomy in protecting the pelvic floor (a widely used indication in the US) and that a policy of restrictive episiotomy should be adhered to. This was reinforced by another US systematic review by Hartmann et al (2005), who concluded that outcomes with episiotomy were probably worse since a proportion of women who would have had perineal injury would now have a surgical wound.

The research resulted in significant changes in clinical practice in many places and the most recent UK evidence-based guidelines (National Institute for Health and Clinical Excellence (NICE), 2007) recommend that episiotomy should only be performed because of clinical need.

In addition, a Cochrane review of six RCTS with over 5000 women (Carroli and Belizan, 2000) found that there was less posterior perineal trauma, less suturing and fewer complications with restrictive episiotomy. There was also no difference for most pain measures and severe vaginal or perineal trauma, but there was an increased risk of anterior perineal trauma with restrictive episiotomy. The advice from the review reinforced that episiotomy should only be performed for clinical reasons. Furthermore, the



World Health Organization WHO, 2003) also supports the restricted use of episiotomy as there is no evidence that routine episiotomy decreases perineal damage.

Al Wasl Hospital in Dubai, United Arab Emirates has around 8000 deliveries per year. It was noted by the authors that there was a wide variation in practice around episiotomy use for normal vaginal births, with some clinicians routinely performing episiotomies as part of their practice. A review of the Al Wasl Hospital statistics in 2006 showed that 64% of mothers had episiotomy during delivery, this rate is similar to a recent report in Jordan where Hatamleh et al (2008) reported 66% rate of episiotomy. Although there is no optimal level for episiotomy, the WHO suggests that rates should be below 20% and nearer to 10% (WHO, 2003).

Episiotomy was routinely performed on a wide range of women including primigravida, women who had instrumental deliveries, pregnancies with abnormal presentation, fetal distress, large babies, and multigravida women with perceived rigid perineum. The statistics also suggested that many of the women who had episiotomies had extended episiotomies and a proportion of these were classified as third and fourth-degree tears. This would support the findings of a study by Nager and Halliwell (2001), which suggested that episiotomy is the overriding determinant of perineal laceration length and recognised anal sphincter disruption.

This study was undertaken to assess the existing practice of performing episiotomy and to develop multidisciplinary evidence-based guidelines, which could be introduced to change practice around the routine use of episiotomy.

Method

It was acknowledged by the authors that implementing evidence-based practice is often challenging as clinicians may be reluctant to relinquish traditional practice. Klein (1995) described the difficulties in obtaining funding to challenge the notion of routine episiotomy in the early 1980s as many clinicians viewed pregnancy as a 'pathological state' and episiotomy of little importance. In addition, work by Qian et al (2001) suggested that evidence-based practice is usually successfully implemented only with positive support from the hospital director and national guidance.

In order to ensure a systematic, logical approach to investigating the use of episiotomy, a management system called FOCUS-PDCA was used. This is a nine-step process guide to quality improvement, made popular by Deming in 1950 (Walton, 1986), who is considered by many to be the father of modern quality control. This system was widely used in industry, but adapts well to healthcare settings as a systematic tool for improving clinical care. The systematic approach includes the following steps:

Find a process opportunity

- Organise a team who understands the process
- Clarify the current knowledge of the process
- Uncover the root cause of the variation/problem
- Start the plan, the 'do check act cycle'
- Find an opportunity for improvement.

Find a process opportunity

The Cochrane review (Carroll and Belizan, 2000) was used as the clearest evidence of the benefits of restrictive episiotomy compared to routine episiotomy. Routinely collected statistics at Al Wasl Hospital showed that 64% of mothers had episiotomy during vaginal delivery in 2006, so this was a major issue that affected almost two-thirds of all women. Therefore, the opportunity to reduce the rate of episiotomy was identified and appropriate action taken.

Organise a team who understands the process

It was essential to ensure that the team identified to address this issue was a multidisciplinary team comprising midwives, nurses and medical staff to ensure the change process was owned and endorsed by all staff. In Dubai, the majority of midwives are nurses who have undertaken an additional six months' training in their own country before coming to work in Dubai. Maternity care tends to be medically led and is very much influenced by doctors. The medical consensus was that episiotomy prevented anal sphincter tears and there was a reluctance to change this perspective, despite presentation of the evidence. This presented a challenge in changing a practice that was primarily in the domain of midwives.

The team that was established was committed to implementing the evidence around episiotomy and developed the following two objectives, which were to:

- Restrict the use of episiotomy unless clinically indicated
- Reduce the episiotomy rate to less than 20% in line with WHO (2003) recommendations.

Clarify the current process

In the multidisciplinary meeting, the current practice of performing routine episiotomy was discussed and clarified and the international research evidence around the use of episiotomy was highlighted. The hospital statistics for 2006 were presented, which showed the reasons why episiotomies were performed. This included routine episiotomy for all primigravida mothers, instrumental deliveries, abnormal presentation, fetal distress, large fetus, and multigravida women with a rigid perineum or history of perineorrhaphy.

Understand the problem

A retrospective study of all episiotomies in 2007 was undertaken to ascertain the rate and reason for episiotomies. The statistics also showed that many of the women who had episiotomy had extended tears and/or perineal trauma. In addition, Al Wasl Hospital did not have a proper guideline for performing episiotomy.

Select the improvement

The team decided to write guidelines for staff performing episiotomy based on the best available evidence and to plan an education programme for staff to prepare them for the new guidelines for practice. Following on from this approach, the PDCA cycle was initiated.



Figure 1. Episiotomy rates at Al Wasl Hospital, Dubai from December 2006 to November 2007

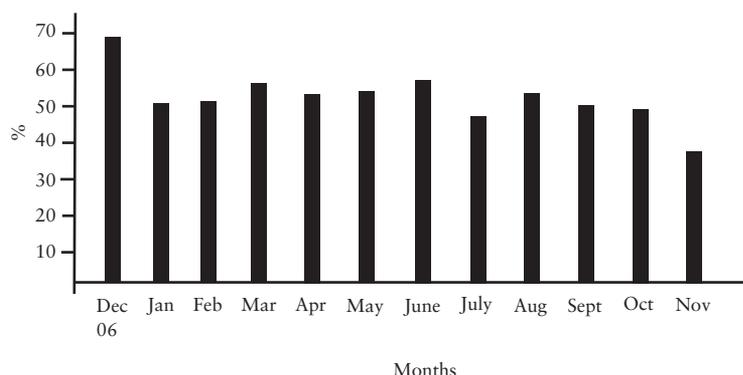


Figure 2. Episiotomy rates from December 2007 to December 2008

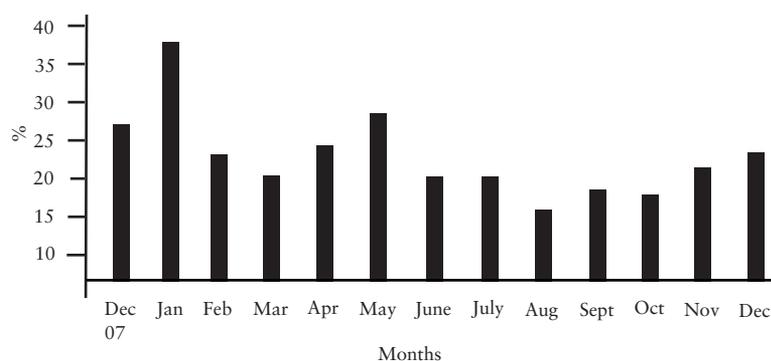
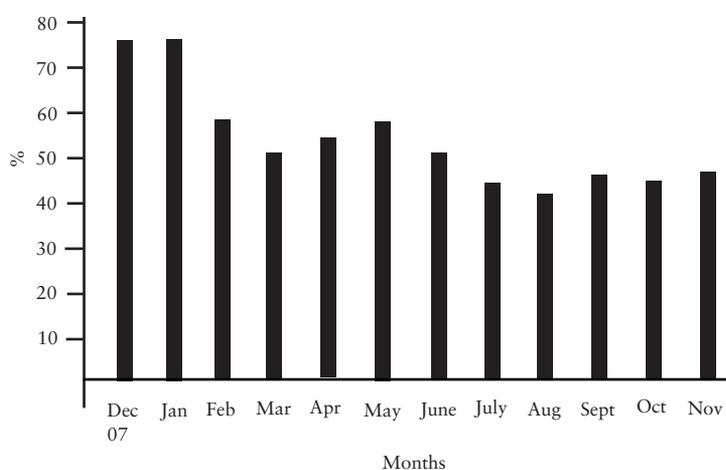


Figure 3. Episiotomy rates in primigravida mothers from December 2007 to November 2008



Plan for improvement

The guideline for performing episiotomy was prepared, which incorporated the research evidence and stated that episiotomy was only indicated in cases of fetal distress and for clinical indications such as shoulder dystocia and instrumental delivery.

Education sessions were conducted for all staff. Time

was allowed to discuss the rationale behind current practice and to ensure that staff understood the reason for change. This included acknowledging staff's concerns and anxieties around perineal tears and the perceived risk of an increase in third-degree tears.

Do the improvement

Following the completion of the education programme, midwives in the delivery suite were instructed to follow the guideline for performing episiotomy and to record the reason for performing episiotomy in the delivery record. The steering group, which was a multidisciplinary team comprising midwives, nurses and medical staff evaluated the reasons for episiotomy and followed up to confirm the compliance to the guideline.

Check the results

Monthly statistical data from the delivery record were collected and staff who did not comply with episiotomy guidelines were interviewed to elicit their reasons for not doing so. Counselling and support was also offered to help staff to change their practice.

Act to hold the gain

The aim of continued evaluation and support was to maintain the policy of restricted episiotomy to be as close to the international standard of less than 20% as possible.

Results

Data were retrospectively collected from December 2006 until November 2007. The new policy was introduced on 1 December 2007 and all staff were educated around the new policy. The episiotomy rate for the year preceding the introduction of the policy was 52.2% with a decrease in November 2007 to 36.5%. It was felt that this reduction occurred because of the publicity and education around the use of episiotomy (see Figure 1). A prospective study of the episiotomy from December 2007 until November 2008 showed that the overall episiotomy rate had declined to 22.4% (see Figure 2). This decline was especially marked for primigravida women, where the rate of episiotomy fell from 92.5% in 2006 to, on average, 58.8% in 2008 (see Figure 3).

Interestingly, one of the concerns expressed by staff was a perceived risk of the increase of third-degree tears if the use of episiotomy was restricted. In 2007, prior to the introduction of the policy, there were eight (0.14%) third-degree tears compared with ten (0.2%) for the year 2008 and all were associated with episiotomy. This rate is well below the expected occurrence of anal sphincter injury of



1% (RCOG, 2007).

Further analysis of the indications for episiotomy was undertaken. In 2008, the major indication for episiotomy was fetal distress.

Discussion

This survey supports the restrictive use of episiotomy compared with routine use of episiotomy. By changing the clinical practice from liberal to restrictive episiotomy, the prevalence in Al Wasl Hospital reduced from 64% in 2006 to 52.2% in 2007, which further declined to 22.4% in 2008. This reduction was particularly marked in primigravida where the study showed that in 2007, 92.5% of primigravida mothers underwent episiotomy during normal birth with a decline to 58.8% in 2008. The ten third-degree tears that occurred after the implementation of the policy were all associated with episiotomy. These findings support the study by Nager and Helliwell (2001), which compared routine versus restricted episiotomy in a prospective study and found that episiotomy was associated with more second degree perineal trauma and that episiotomy added nearly 3cm to perineal laceration. Thorpe (1996) also suggested that episiotomy, particularly midline episiotomy remains the single greatest risk of a woman sustaining a third or fourth-degree perineal trauma.

It is important that the impetus of this change of practice is maintained. Clinical concerns will continue to be acknowledged and addressed appropriately and further education sessions are being planned to explore the management of the second stage of labour and how this will affect perineal care. At present, midwives in Al Wasl do not suture episiotomies or tears and competency-based programmes are being planned to address this issue.

There is no reliable evidence that liberal or routine use of episiotomy has a beneficial effect, but there is clear evidence that it may cause harm (Lede et al, 1996). By utilising the best available evidence, midwifery practice at Al Wasl Hospital has been successfully changed for the first time by midwives themselves.

Conclusion

This paper highlights how midwives in Dubai have addressed an issue that many Western midwives may have considered an historical one. It serves to reinforce the need for using the best available evidence in an objective way to change practice. This is not an easy task as many midwives and nurses in Dubai find it difficult to challenge medical opinion and are reluctant to change their practice. All the midwives and nurses are expatriates, mainly from the Indian sub-continent, and, as such, tend to conform to the dominant medical model. There are only five Western-trained midwives from a total of 700 midwives and nurses. In addition, the medical staff have trained in various countries, but the American influence is strong and as such does not fully support midwifery practice. In the education sessions, time was spent not only on discussing the evidence, but also discussing change management, assertiveness and challenging poor practice. However, it has been very important to be culturally sensitive and understand that culture may present barriers to changing practice. There is much work to be done in this area.

The challenge is maintaining the impetus generated through this project and to continue to address practice issues by engaging with medical colleagues to ensure care given to women is woman centred, appropriate and evidence based.

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Exploration of factors influencing women's breastfeeding experiences following a caesarean section

*Catherine McFadden*¹ MA, RN, RM, IBCLC. *Lisa Baker*² MPhil, DipHE, RM, RN. *Tina Lavender*³ PhD, MSc, RM, RN.

¹ Liverpool Primary Care Trust, 1 Arthouse Square, 61-69 Seel Street, Liverpool L1 4AZ England. Email: kate.mcfadden@liverpoolpct.nhs.uk

² Liverpool Women's NHS Foundation Trust, Crown Street, Liverpool L8 7SS England. Email: lisabaker@cbaker141.wanadoo.co.uk

³ Department of Midwifery Studies, University of Manchester, Oxford Road, Manchester M13 9PL England. Email: tina.lavender@manchester.ac.uk

This research was funded by the hospital that the study was conducted in.

Abstract

Aim. The purpose of this study was to explore factors influencing women's breastfeeding experiences following caesarean section (CS).

Method. An in-depth qualitative study was undertaken, underpinned by the theoretical perspective of symbolic interactionism. This study explored factors that were identified by women, not the researchers. The principles of a grounded theory approach were utilised to enable a structured analysis. This exploratory study was designed to capture the breastfeeding experiences of two different groups of women. A purposive sample of ten women was recruited from a hospital in the north west of England. The first group consisted of five mothers who had their babies with them on the postnatal ward. The other group of five women had babies that were admitted to the neonatal unit. Women were interviewed on one occasion during the postnatal period. The interviews were audio-taped and transcribed verbatim. Data were managed with the aid of a qualitative software package and analysed following coding with a manual method.

Findings. The analysis revealed three themes: maternal vulnerability, supportive care and regaining closeness. The findings suggest that the care mothers' experience during and after their CS might limit or in fact add to the emotional and physical trauma and impact on their feeding outcome.

Conclusion. The authors conclude that existing services appear to provide inadequate support for women who are breastfeeding, following caesarean section. Future services require engagement with women and the development of a women-centered approach.

Key words: Breastfeeding, caesarean section, qualitative, supportive care, skin contact, evidence-based midwifery

Background

Breastfeeding is undisputed as providing optimum nutrition for infants. However, nationally breastfeeding rates remain poor (Bolling et al, 2007). Failure by health professionals to provide individualised care for women in the postnatal period has been identified as one contributing factor (Truman, 2000). Dykes (2004) also highlighted the lack of anthropological research related to feeding practices in the postnatal period. The overall caesarean section (CS) rate in England and Wales in 2003 to 2004 was 21.5% (Thomas and Paranjothy, 2001). The rate varied greatly between different units, from 10% to 65% (Department of Health, 2005a). Nevertheless, CS has an impact on numerous women's experiences, this is likely to include breastfeeding. Yet despite this, the National Institute for Health and Clinical Excellence (NICE) (2004) made little reference to breastfeeding, but suggested that health professionals should inform women who have a CS that they should not have any increased difficulties. In contrast, other researchers have suggested that CS may have a negative effect on breastfeeding outcome (Kroeger and Smith, 2004; Baxter, 2006). Furthermore, there appears to be a gap in the existing evidence, which explores

feeding outcomes following CS (Janke et al, 1988; Hirose et al, 1996; DiMatteo, 1996; Tamminen et al, 1983; Sener et al, 2003).

Previous studies exploring breastfeeding outcomes have examined isolated factors, for example, mode of delivery and the effects of anaesthesia on infants' outcomes and mothers' psychosocial outcomes in relation to breastfeeding (Hirose et al, 1996; DiMatteo et al, 1996; Sener et al, 2003; Janke et al, 1988; Ng et al, 2004). However, they failed to recognise that influences on feeding outcomes following CS may be multifaceted. The factors that may affect breastfeeding are mothers' immobility, delayed lactogenesis, supplementation with breastmilk substitutes, lack of privacy, lack of skilled breastfeeding support from health professionals and maternal and baby separation (Truman, 2000; Renfrew et al, 2000; Cloherty et al, 2004; Shakespeare et al, 2004; Erlandsson and Fagerberg, 2005; Hedberg-Nyqvist, 2005).

In a climate of rising CS rates and relatively low breastfeeding rates in the UK, it is imperative to conduct robust qualitative research projects to capture women's views and experiences of breastfeeding following CS (Department of Health, 2005b).



Aim

The purpose of this study was to explore factors influencing women's breastfeeding experiences following CS, with the particular focus on the experience of women post-CS trying to establish breastfeeding.

Introduction

The study was conducted in a large inner city university hospital in north-west England, which provides care for a mixture of socioeconomic groups of women and has approximately 8000 births per year. The unit is implementing the Unicef UK Baby Friendly best practice standards (Rowe-Murray and Fisher, 2002). However, the rates of skin contact with babies vary depending on mode of delivery; rates following CS are 60% compared to 83% following vaginal deliveries. Audit results revealed that 100% of mothers were rooming with their babies in the low dependency ward compared with 65% of mothers in the high dependency ward. A supplementation audit in 2005 revealed that 38% of mothers requested supplementation for their babies.

Methodology

Ethical approval

The methodological quality of this study met the requirements of the ethics committees for the University of Central Lancashire and the local research ethics committee.

Throughout the study, the authors ensured that the following ethical principles were adhered to: beneficence, non-maleficence, autonomy, justice, informed consent, privacy, confidentiality and anonymity.

The interviews were transcribed verbatim by the primary researcher (CM) and participants were given pseudonyms.

Sample

The sample was a purposive sample of ten mothers, the size determined by the study's timescale. Purposive sampling was applied to ensure that the women had the relevant experiences and knowledge (Bowling, 2002) to the area of inquiry. Women who experienced an elective or emergency CS and had a live birth were eligible for recruitment to this study. The purposive sample consisted of five mothers who had their babies with them on the postnatal ward (ward group) and five mothers who had their babies admitted to the neonatal unit (neonatal group).

Clinical experience suggests that mothers in both groups have increased problems breastfeeding after CS. All mothers in this study were initially situated in the high dependency ward, which was designed to care for post-operative mothers and mothers with medical conditions. The mothers who had their babies admitted to the neonatal unit were included as this provided insight into long-term maintenance of lactation and the establishment of preterm breastfeeding. The diversity of the sample was to gain insight into the experiences of women in different settings.

Recruitment

Women who were eligible were initially approached by midwives or neonatal nurses and given verbal and writ-

ten study information. This initial contact was informal and only women who expressed a wish to participate were then approached by the authors. A further discussion took place prior to obtaining written consent. All ten women approached consented.

Data collection

Demographic details were collected from computer records. The mothers were interviewed on one occasion, between two and 52 days into the postnatal period at a convenient time and place. The timescale was tailored to the needs of the mothers and their babies. Interviews were audiotaped with written consent. One-to-one interviews with women in the postnatal period enabled exploration of their own views and experiences of establishing breastfeeding following surgery. This ensured that the women who had experienced the phenomena being explored were recruited (Morgan, 2004). The interviews took place in a private room in either the ward area or in the neonatal unit and lasted between 45 and 60 minutes. The semi-structured interviews had open questions – for example, why did you decide to breastfeed? How long do you intend to breastfeed for? Have you breastfed before? How long did you breastfeed for? What type of support do you have? Have you experienced any difficulties?

Semi-structured interviews allowed women to be given a voice (Denzin and Lincoln, 1998), while maintaining some focus. A reflective diary was also kept by CM and was utilised during the analysis. CM wrote up the diary after each interview and referred back to the notes during analysis. The notes were used as an *aide memoir*; for example, the venues, the mother's body language and whether or not the babies were present and being fed during the interview.

Analysis

The theoretical perspective of symbolic interactionism was considered to be appropriate for this study, as it requires social interaction and an interpretative process between the researchers and women (Blumer, 1969). The authors acknowledge that their personal experiences could have introduced bias into the study, however, symbolic interactionism directs the investigators to take on the views and standpoint of those studied (Denzin, 1992). The authors were all registered midwives, one was a lactation consultant and the others were experienced qualitative researchers.

The principles of a grounded theory approach were utilised to enable a structured analysis. The interviews generated a large amount of data and a qualitative software package MaxQda (2004) assisted with organising the data into manageable units. The analysis was ongoing throughout data collection using a constant comparative technique (Carter, 2004). Questioning and data validation continued throughout the study (Strauss and Corbin, 1990; Kingdon, 2005). The analysis was undertaken using an open-coding mechanism to identify emerging themes. The data were collated independently to reduce bias and then discussed until the authors were able to reach a consensus regarding

the emerging themes.

The criteria for ensuring quality included respondent validation, reflexivity and relevance. Respondent validation was sought and a summary of the findings was sent to interviewees for respondents to check for accuracy (Lincoln and Guba, 1985). The authors did not receive any comments from the respondents that challenged the authenticity of the results. Reflexivity was also necessary throughout the research process to place the women's views in the context of the authors and ensure that the authors' views were not influencing the mothers (Carter, 2004; Kingdon, 2005). The relevance will be judged by the extent to which the findings add to current knowledge (Mays and Pope, 2000).

Findings

Both groups of mothers (n=10) (ward group and neonatal group) had babies who had been delivered by CS and were trying to establish breastfeeding.

The mothers' personal profiles are illustrated in Table 1. The women's profiles illustrate the diversity of the group, enabling the authors to gain insight into the complexities of their breastfeeding experiences. The indication for CS, method of anaesthesia and baby's birth condition appear to have contributed to mother and baby separation and timing of lactation initiation. The mothers in the ward group were interviewed between the second and fourth post-operative day. The mothers in the neonatal group

were interviewed later, when their babies were between five and 52 days of age.

Three women from the ward group had previously breastfed their babies; one of whom had been successful and continued to breastfeed for one year. The other two women had discontinued breastfeeding at between three and six weeks because of perceived milk insufficiency and nipple trauma. Only one mother had previously breastfed in the neonatal group and she had been successful and fed until her baby was two years of age. This information was obtained at the interview and from records.

Emergent themes

The analysis has revealed three themes: maternal vulnerability, supportive care and regaining closeness. The mothers in both groups reported similarities in their experiences. However, following further analysis, the mothers also reported specific issues within their groups. These commonalities and differences will be discussed. The themes will be highlighted with the support of verbatim quotes from the women.

Maternal vulnerability

Women appear to have a specific vulnerability during their hospital stay. The factors, which appear to be relevant to women are maternal and baby separation, isolation, lack of privacy, unrealistic expectations and lack of confidence in parenting skills.

Table 1. Sample demographics and baseline details

Name*	Ethnicity	Age	Occupation	Parity	Previous breastfeeding experience	In-utero transfer	Gestation (weeks)	Weight (g)
Ward group								
Heather	Asian British	33	Doctor	0	N/A	N/A	40+5	2950
Ann	White British	38	Auditor	1	Yes, successfully fed for two years	N/A	39	3260
Elizabeth	White British	37	Not available	0	N/A	N/A	41+6	4040
Mary	White British	35	Barrister	1	Yes, unsuccessfully fed for six weeks	N/A	38+2	3520
Victoria	White British	36	Design manager	1	Yes, unsuccessfully fed for three weeks	N/A	38+6	3775
Neonatal unit group								
Susan	White British	27	Nursery nurse	0	N/A	Yes	24	585
Sharon	Black African	33	Doctor	0	N/A	N/A	29+6	1365
Sarah	White British	35	Leisure centre inspector	1	Yes, successfully fed for one year	Yes	31	2285/1550
Gillian	White British	38	Printer finisher	0	N/A	N/A	30+3	880
Elaine	White British	38	Financial manager	0	N/A	N/A	37	1610

*Pseudonyms have been used to ensure anonymity

Maternal baby separation

Some mothers who had separation appeared to have experienced psychological distress, evidenced from the mothers' responses and demeanours during interviews. Initial separation occurred to mothers who required general anaesthesia or if the baby needed to be transferred to the neonatal intensive care unit.

Mothers clearly alluded to concerns regarding the need to see their babies and get feeding started early. Elaine (ward group), for example said:

"It's what I've read as well, that you should really do it within the first hour, so I was always very keen to try as soon as possible."

Susan (neonatal group) was unable to breastfeed due to her baby being born preterm and was worried about expressing:

"At the beginning it wasn't difficult, it was just frustrating for me that nothing much was coming out...the night time feed I was expecting to get quite a bit [of milk] and I only got a couple of drops and I was quite embarrassed."

Both groups required support to breastfeed or express. Being immobile and unable to hold their babies magnified their need for support, as explained by Heather (ward group):

"It's difficult because postoperatively... you know after you have had an operation, I think the staff have been very supportive because physically I can't do as much as someone who is more mobile. You know in regard to latching on and watching to see if baby is feeding and I think I've received excellent care so I can't really fault anything, but actually that's the most disappointing thing – having to have an operation."

The authors would also suggest that separation following CS might negatively affect the establishment of breastfeeding.

Isolation

Mothers in both groups described features suggestive of feelings of isolation. Being left to cope alone was a constant comment. These concerns appeared to be more evident at night time. They felt that they did not have the skills to quieten their babies and this added to their anxieties. The approach taken by the ward staff at night appears to either reduce or heighten mothers' fears. Women are often very tired following CS, breastfeeding can be time-consuming and women usually need assistance with positioning and attaching their babies.

Elizabeth (ward group) describes her feelings during the night:

"The day staff have been really good, but the night staff tried to take him for me twice last night just to give me an hour...and he was brought back twice which is fair enough but you're at the end of your tether and I was walking around like lady with the lamp with him along the corridor last night."

Mothers in both groups made comments about the ward being very busy and the unacceptable workload of the midwives. Even though there were people around them, they felt unsupported in breastfeeding and isolated at times.

Lack of privacy

Mothers agreed that the hospital lacked privacy and the environment was not conducive to breastfeeding. Mothers reported that they felt uncomfortable trying to breastfeed in a ward which lacked privacy.

Elizabeth (ward group) felt the environment was not conducive to breastfeeding:

"Really we need somewhere to go as well because there was hardly anywhere last night. When I needed to just take him off somewhere and be on my own with him. I used the television room but it wasn't the best of environments really."

Victoria (ward group) felt that it was important to normalise breastfeeding:

"You could maybe go to watch TV and breastfeed at the same time. I could be watching Eastenders."

Sharon (neonatal group) came from a country where breastfeeding is the norm and women are well supported within that society. However, she explains her experience in this neonatal unit in the UK:

"I think it is important to understand the culture. You know people get offended if you breastfeed in public. If it was just a breastfeeding room, we wouldn't mind about screens. It's nice to talk to mums and laugh so it's more natural."

Many mothers are immobile and dependent following CS. This might have contributed to their feelings of vulnerability and may have undermined their confidence in breastfeeding and parenting skills.

Unrealistic expectations

Mothers appeared to have underestimated the emotional and physical effects of the surgery in relation to breastfeeding. They were unprepared for catheterisation, intravenous infusions, pain, immobility and establishing breastfeeding. These barriers may have contributed to their feelings of being unable to cope with their newborn babies and having little confidence in their ability to breastfeed successfully. These concerns were heightened in the neonatal group.

Mary (ward group) describes her first CS:

"Oh yes one of the things I underestimated massively last time was the effect the general anaesthetic had on me and Peter (pseudonym for first child)... you underestimate anyway the fact that caesarean section is abdominal surgery. I think most women feel like you've got to get on with it really...it's best the baby coming out but you forget that it is major surgery...normally speaking you would be told if you had an general anaesthetic [that] it would take you at least ten days to get over the general anaesthetic, well you don't have ten days to get over anything (laughs) when you've got a baby."

Lack of confidence in parental skills

Women in both groups appeared to lack confidence in their abilities to breastfeed and care for their babies. They indicated that frequent feeding was due to their poor parenting skills rather than normal feeding patterns of babies. However, the mothers who had previously experienced a CS

appeared to cope better with the emotional and physical demands following a subsequent CS.

Mary (ward group) commented on her previous difficulties with her first baby:

"It was latching on...he initial thing of getting him to get on and stay on. Him appreciating what he needed to do and me being so agitated that I probably wasn't giving him the help that he needed to feed properly."

Mary stopped breastfeeding at six weeks because of the pain and trauma to her nipples.

Sarah (neonatal group) had a set of twins and she commented on the difficulties she had experienced dividing her time and caring for her sick and well babies. She explained:

"You don't know which one to spend time with and then you feel guilty because you've spent time with the other one but the one that's better obviously you spend time with it because you're breastfeeding it."

Mothers often lack confidence in their parental skills when they have had sick and preterm babies. The mothers in the neonatal group still had similar concerns as the ward mothers, but in addition they were often shocked by the vulnerability of their babies. This appeared to put additional pressure on them. They described themselves as spectators watching the health professionals in control.

Many mothers in this study focused on expressing their breastmilk. They understood that this task could only be done by them. Most of the mothers had unrealistic expectations when initiating their lactation. Some mothers expected copious amounts of breastmilk rather than a few drops of colostrum.

Supportive care

This theme will be subdivided into physical and emotional support.

Physical support

All women reported being highly dependent on ward staff following their CS, and were given assistance to initiate breastfeeding or express milk for their sick and preterm babies.

Victoria (ward group) described asking for help on her first night:

"The first night because you're unable to move it's just amazing...just by pressing a button and they all run and do anything you want too. It's great...it's such a help you can feel that you don't need to ask for anything."

In contrast, some women had concerns that their physical needs were not met. They felt very reliant on the ward staff to take them to the neonatal unit and at times they perceived that it was not a priority for the staff.

Elaine (neonatal group) comments about the lack of manpower:

"There's no-one to take you in a wheelchair. I wasn't too thrilled to be honest."

Emotional support

Mothers reported clear differences between the levels of

support available from the ward and neonatal staff. Mothers in the ward group reported to have received most support from the ward staff, their partners and their families. The mothers in the neonatal group commented that they had received most support from their partners, families, neonatal staff and the infant-feeding advisors.

Heather (ward group) commented on her family support for breastfeeding:

"I come from a family of fans and my mum's breastfed all of us. My sisters have had kids and they were successful breastfeeders." She goes on to say *"definitely my family and my husband...he gets a gold star"*.

Sharon (neonatal group) commented on the excellent support she received in the intensive and high dependency units. However, once her baby was admitted to the low dependency room, she felt unsupported. Sharon explains:

"To start with you are left all by yourself when you go there, you don't have a clue what is going to happen about breastfeeding. The interaction and bonding you have with the staff is not the same...other mums are trying actively to breastfeed and none of them have found it very supportive."

Sharon goes on to make a comment about establishing preterm breastfeeding:

"It's very different and so many times I think I'll just give a bottle and go home."

Sharon's comment has highlighted the pressure mothers are under when they are establishing breastfeeding in a neonatal unit. Mothers are aware that their baby would probably establish bottle-feeding quicker and therefore could go home sooner.

The needs of both groups appear to differ. The ward group appears to need more physical support while they master parental and breastfeeding skills. Whereas the neonatal group require more psychological support because of their baby's condition. Some mothers described their feelings of disbelief, which were similar to the type described during bereavement. Those who had their babies on the neonatal unit had similar concerns about their parental skills and establishing breastfeeding, but their baby's condition was paramount. Initially, they commented about being disorientated and they described feelings that resonate with the grieving process. They appeared to have feelings of guilt that their babies had been born sick or preterm.

Regaining closeness

Mothers all reported their overwhelming need to see, touch, hold and feed their babies after delivery. They have identified their experiences of immediate skin-to-skin contact as a major factor in their birthing experience. Elaine (neonatal group), for example, said:

"Well actually in day one, sorry day two, I went round and popped him down and had skin-to-skin contact immediately, which was fantastic I was so desperate to get to hold him."

Heather (ward group) was disappointed that she required a CS, however, when asked if she had skin contact and help to initiate breastfeeding she was very positive:



"Yes 2½ hours. It was brilliant, brilliant straight after the operation. I was in recovery and they stripped her off and they got her onto my chest and it was lovely... really nice."

Susan (neonatal group) was unable to have skin contact for several weeks because her baby was born at 24 weeks' gestation and weighed only 585gm. Her baby required intensive care and had to be nursed in an incubator.

Susan explained the techniques she utilised to express and encourage her milk ejection reflex:

"Sometimes if you found it hard to express, it may be better for you to be by your baby so you can smell her little comforter or you can touch her. I don't know whether it works like or if it's just in my head."

The approach and treatment the mothers received in theatre, including routine skin contact and assistance to initiate breastfeeding appears to have a huge impact. The care the mothers' experience during and after their CS might limit or in fact contribute to psychological and physical trauma of the operative delivery and impact on feeding outcome.

Discussion

Health professionals are expected to tackle health inequalities, including increasing breastfeeding initiation and duration rates (Department of Health, 1998; 1999; 2000; 2002; 2005c; 2007). The evidence is clear that breastfeeding has short- and long-term benefits, but women are experiencing difficulties establishing breastfeeding within society (Bolling et al, 2007). The evidence related to feeding following CS is limited, therefore it is essential to conduct good-quality qualitative research projects (Robson, 1993; Morgan, 2004). In addition, and in support of the Department of Health guidance, the authors feel there is a moral obligation to capture women's views and experiences of breastfeeding following CS (Department of Health, 2005b), which has been attempted here by exploring the experiences of two groups of mothers breastfeeding following CS.

Like others (Dykes, 2003; Baxter, 2006; Lavender et al, 2006), the findings highlighted that the mothers universally needed both physical and emotional support. However, differences were apparent between the two groups. The ward group appeared to need physical support while they mastered their parental and breastfeeding skills, whereas the neonatal group appeared to require more psychological support because of their baby's condition. This last finding is similar to previous work presented by Hopper (2000) and Hedberg-Nyqvist (2005). The findings identified the diversities and commonalities between the two groups. The study's findings also resonate with those of Gamble and Creedy (2005), who found that maternal and baby separation can have a negative effect on the mother's emotional wellbeing.

Limitations

The women in this study sample were older than the general hospital population and the majority had high-status

occupations, such as doctor and barrister. The acknowledge the sample was atypical of a socially-deprived area; however, the women are representative of the socio-economic groups who are more likely to initiate breastfeeding (Bolling et al, 2007).

The authors acknowledge that family members have significant influence on feeding outcomes; however, the authors designed this study to gain insight from the women's perspective only.

Recommendations

Mothers in both groups identified that the hospital ward and neonatal unit were not conducive environments for breastfeeding. Unless these issues are resolved, women will continue to struggle in an environment they have identified as not fit for purpose.

To meet the needs of both groups, the authors would suggest that future services should involve mothers in service developments (Department of Health, 2005b).

Midwifery services should routinely provide antenatal preparation, that is, workshops and preoperative clinics that discuss breastfeeding. Intrapartum care needs to ensure that women are fully informed and involved in the decision-making process (Kirkham and Stapleton, 2004).

Mothers in both groups identified the importance of skin contact. The authors would suggest that this was a significant finding. All staff caring for women, including theatre recovery staff, require training in breastfeeding management and minimising maternal/baby separation. This intervention may limit psychological and physical trauma of surgery and positively impact on feeding outcome.

The neonatal group were shocked by the vulnerability of their babies; this concern resonates with the work by Hopper (2000). It was a worrying finding that these mothers had a significant degree of disorientation following CS. In addition, the enormity of the task of maintaining lactation for weeks or months can prove too daunting for some mothers (Callen and Pinelli, 2005). It is essential that health professionals listen to mothers and acknowledge these concerns. The hospital could consider establishing a buddy scheme whereby volunteers are available to give emotional support for mothers in addition to health professional care. This type of peer support has been delivered by the Little Angels, a breastfeeding support group in the north west of England (Little Angels, 2008).

Preterm babies benefit from introductory sessions at the breast and these are helpful for mothers to gain confidence in breastfeeding skills. Transition from nasogastric tube feeding to full breastfeeding, for example, requires support from confident neonatal staff familiar with breastfeeding management techniques.

Conclusion

The findings of this study suggest that the care the mothers experience during and after their CS might limit or in fact contribute to psychological and physical trauma of surgery and impact on feeding outcome.



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Information for authors

Evidence Based Midwifery is published quarterly and aims to promote the dissemination, implementation and evaluation of midwifery evidence at local, national and international levels. Papers on qualitative research, quantitative research, philosophical research, action research, systematic reviews and meta-analyses of qualitative or quantitative data are welcome. Papers should be sent to: maura@redactive.co.uk in MS Word, and receipt will be acknowledged. Suitable papers are subject to double-blinded peer review of academic rigour, quality and relevance. Subject area and/or methodology experts provide structured critical reviews that are forwarded to authors with editorial comments. Expert opinion on matters such as statistical accuracy, professional relevance or legal ramifications may also be sought. Major changes are agreed with authors, but editors reserve the right to make modifications in accordance with house style and demands for space and layout. Authors should refer to further guidance (RCM, 2007; Sinclair and Ratnaike, 2007). Authorship must be attributed fully and fairly, along with funding sources, commercial affiliations and due acknowledgements. Papers that are not original or that have been submitted elsewhere cannot be considered. Authors transfer copyright of their paper to the RCM, effective on acceptance for publication and covering exclusive and unlimited rights to reproduce and distribute it in any form. Papers should be preceded by a structured abstract and key words. Figures and tables must be cited in the text, and authors must obtain approval for and credit reproduction or modification of others' material. Artwork on paper is submitted at the owner's risk and the publisher accepts no liability for loss or damage while in possession of the material. All work referred to in the manuscript should be fully cited using the Harvard system of referencing. All sources must be published or publicly accessible.

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News and resources

Themed issue of EBM

Evidence Based Midwifery is planning a themed issue to focus on 'Lessons learned from working in the research field'.

It is seeking papers on all types of research and from all healthcare researchers. The maximum word count is 3000, with a submission deadline of 31 August 2009.

Please contact the journal's deputy editor Maura O'Malley at: maura@redactive.co.uk for further details.

Healthcare Commission's legacy report

The Healthcare Commission has released a legacy report following its disbandment in March this year after five years as a regulator. The report outlines its approach to regulation, how such regulation contributed to better outcomes and quality of health care, and the lessons learnt over the last five years.

The activities of the Healthcare Commission have now been merged into the Care Quality Commission.

The full report can be accessed online at: www.nhshistory.net/Healthcare_Commission_legacy_report.pdf

First Dutch chair of midwifery studies

Professor Simone Buitendijk has been appointed professor of midwifery studies at the University of Amsterdam. It is the first chair of midwifery studies in the Netherlands and is sponsored by the Royal Dutch Organisation of Midwives. It is hoped the position will create a 'scientific stimulus' for midwifery care in the country.

DMRS conference

The Doctoral Midwifery Research Society is holding a conference at the University of Ulster, Jordanstown, Northern Ireland between 2 and 3 September 2010 with the theme 'Appropriate use of technology in childbirth'. A call for papers will follow shortly.

Evidence Based Midwifery editorial panel members

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