JAN REVIEW PAPER

Expert intrapartum maternity care: a meta-synthesis

Soo Downe[1], Louise Simpson[2] & Katriona Trafford[3]

Accepted for publication 2 August 2006

[1]Soo Downe BA MSc PhD RM
Professor of Midwifery Studies
University of Central Lancashire,
Preston, UK

[2]Louise Simpson BA RN RM
Integrated Team Midwife
East Lancashire NHS Trust,
Queens Park Hospital,
Blackburn,
Lancashire, UK

[3]Katriona Trafford RN RM
Delivery Suite Coordinator
East Lancashire NHS Trust,
Queens Park Hospital,
Blackburn,
Lancashire, UK

Correspondence to Soo Downe:
e-mail: sdowne@uclan.ac.uk

DOWNE S., SIMPSON L. & TRAFFORD K. (2007) Expert intrapartum maternity care: a meta-synthesis. *Journal of Advanced Nursing* 57(2), 127–140
doi: 10.1111/j.1365-2648.2006.04079.x

Abstract

Title. Expert intrapartum maternity care: a meta-synthesis

Aim. This paper reports a meta-synthesis exploring the accounts of intrapartum midwifery skills, practices, beliefs and philosophies given by practitioners working in the field of intrapartum maternity care who are termed expert, exemplary, excellent or experienced.

Background. Expertise in nursing and medicine has been widely debated and researched. However, there appear to be few studies of practitioners' accounts of expertise in the context of maternity care. Given current international debates on the need to promote safe motherhood, and, simultaneously, on the need to reverse rising rates of routine intrapartum intervention, an examination of the nature of maternity care expertise is timely.

Method. A systematic review and meta-synthesis were undertaken. Twelve databases and 50 relevant health and social science journals were searched by hand or electronically for papers published in English between 1970 and June 2006, using predefined search terms, inclusion, exclusion and quality criteria.

Findings. Seven papers met the criteria for this review. Five of these included qualified and licensed midwives, and two included labour ward nurses. Five studies were undertaken in the USA and two in Sweden. The quality of the included studies was good. Ten themes were identified by consensus. After discussion, three intersecting concepts were identified. These were: wisdom, skilled practice and enacted vocation.

Conclusion. The derived concepts provide a possible first step in developing a theory of expert intrapartum non-physician maternity care. They may also offer more general insights into aspects of clinical expertise across healthcare groups. Maternity systems that limit the capacity of expert practitioners to perform within the domains identified may not deliver optimal care. If further empirical studies verify that the identified domains maximize effective intrapartum maternity care, education and maternity care systems will need to be designed to accommodate them.

Keywords: expertise, maternity care, meta-synthesis, midwifery, nursing, qualitative research, systematic review

Introduction

Basic competencies for intrapartum care have been described for trained midwives (International Confederation of Midwives 2005), and for intrapartum carers in general (Safe Motherhood: Family care international 2002). A recent paper has described the attributes of the 'good' midwife (Nicholls & Webb 2006). However, there do not appear to be any

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

agreed characteristics for non-medical experts in maternity care settings. This has particular significance in the intrapartum period, given the potential for mortality, morbidity and for the promotion of maternal and infant wellbeing. In this paper we explore this topic as the first step of a planned programme of work.

Background

Millions of women give birth every year. While the vast majority experience childbirth safely, hundreds of thousands do not, especially in low-income countries (Betran *et al.* 2005). This has led to international debate about safe motherhood. Paradoxically, the dominant world-wide risk averse approach to childbirth has been criticized for generating a significant rise in unnecessary intrapartum interventions, and, especially, caesarean section (World Health Organisation: Department of Reproductive Health and Research 1997). So-called 'skilled care' has been proposed as a solution to both the safety and the excessive intervention issues (World Health Organisation: Department of Reproductive Health and Research 1997, Safe Motherhood: Family care international 2002). While most authorities agree that universal provision of licensed, educated or trained midwives would be optimal, economic necessity has led to an acceptance that traditional birth attendants (also termed parteras), may be a pragmatic solution in some contexts (Kruske & Barclay 2004). A perceived need for extra support during labour has also led to the rise in so-called doulas, who offer companionship and advocacy to childbearing women, with or without formal training (Ballen & Fulcher 2006).

In some jurisdictions, such as the UK, the only practitioners able to take clinical responsibility for labouring women are medical doctors, and those who have been formally educated and licensed as midwives (Nursing and Midwifery Council 2004). In other legislatures, such as the US, there is a plurality of provision (American College of Nurse Midwives (ACNM) 2005, MANA 2006). We were interested in exploring expert non-medical intrapartum care in the context of this range of provision.

There is a substantial body of literature around expertise for medical practitioners (Custers *et al.* 1996, Eraut & Du Boulay 2001) and for nurses (Benner 1984, Benner *et al.* 1996, Price & Price 1997). However, we could not locate any authoritative research-based texts on non-medical intrapartum expertise. Our aim, therefore, was to examine this topic through studies of intrapartum practitioners who were termed expert, exemplary, excellent, or experienced. Although we knew of many quantitative studies exploring optimal maternity care practices, they tended to be designed to assess the clinical outcomes of specific aspects of care, such as 'continuity', or the predictors of positive outcome, such as women's satisfaction with care (see, for example, Nicholls & Webb 2006). We limited our search to qualitative studies as we aimed to undertake a very focused review of a specific attribute ('expertise') from the perspective of individual caregivers themselves, and not as predefined by professional projects, researchers, or policymakers. We believed that this would permit an interpretation of maternity care expertise that was as unimpeded as possible by taken-for-granted assumptions, as well as offering the potential to reveal any possible conflicts in perceptions of expertise within and between maternity care groups. Given the capacity of qualitative designs to capture rich individualized data, we designed our study as a meta-synthesis.

We did not limit the inclusion criteria to a specific professional group, in recognition that a range of non-medical practitioners provide intrapartum care across the world. This was in keeping with our desire to look at the notion of expertise in this area without the assumptions brought by specific professional projects. During our thematic analysis, we used the techniques of reciprocal and refutational translation to look for similarities and differences between studies (and thus between professional groups).

Search methods

The research comprised a systematic review and a meta-synthesis. We included all relevant English Language research published between 1970 and June 2006. The decision to commence the search in 1970 was based on the move of childbirth from the home setting to hospitals. This move became marked in high income countries in the 1970s (Arney 1982, Tew 1998). Hospitalization has influenced maternity care provision, and the use of birth technologies, across the world. For example, caesarean section is now the standard mode of birth for some communities in Brazil (McCallum 2005). We concluded that this changing context of maternity care would limit the applicability of studies published before 1970.

The research question was:

> What accounts of intrapartum midwifery skills, practices, beliefs and philosophies are given by practitioners working in the field of maternity care who are termed expert, exemplary, excellent or experienced in intrapartum maternity care

In the text below we have used the term 'beyond the ordinary' as a pragmatic shorthand for 'expertise', 'exemplary' 'excellent' and 'experienced'. Our definitions and exclusion criteria are given in Table 1.

 © 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

Table 1 Definitions and exclusion criteria

Term	Explanation
Qualified midwife	Qualified and licensed midwives
Midwifery student	Students studying courses that meet the criteria for licensing as midwives
Nurse	Qualified and licensed nurses who work in an intrapartum setting but who are not qualified and licensed as midwives
Nurse-midwife	Qualified and licensed nurses who are also qualified and licensed as midwives
Lay midwife	Experienced clinical practitioners who practice intrapartum care, but who are not formally licensed as midwives.
Traditional birth attendant, partera, dai	Experienced local women who practice intrapartum care, but who are not formally licensed as midwives or nurses
Doula	Labour supporters who are not trained or licensed in clinical midwifery practice, but who may have received specific formal training in techniques of labour support
Beyond the ordinary	A high level of knowledge or skill: studies where any of the following terms are used to describe the participants: expert, experienced, exemplary
Exclusion criteria	• Opinion papers • Research that only resulted in quantitative data • Participants not maternity care practitioners according to the definitions above • Participants not identified as '*beyond the ordinary*' according to the definition given above • Papers focused *a priori* on specific aspects (such as intuition) or narrow areas of practice (such as using the ventouse, or undertaking episiotomy) • Studies with inadequate information to establish the quality of the research.

We searched 12 databases, hand searched five journals and regularly scrutinized the contents pages of a further 45 relevant health and social science journals (see Box 1 for details). We contacted relevant e-groups and experts for grey literature. A full list of the initial and final search terms used, and resources searched, is available from the authors. The quality criteria for including studies were based on the Critical Appraisal Skills Programme (CASP 2002) and on Walsh and Downe (2006).

Box 1 Sources for search

Databases/search engines
- CINAHL
- Allied and Complementary Medicine
- British Nursing Index
- EMBASE
- MEDLINE
- Ovid MyJournals
- AMED
- BIDS
- ASSIA
- ProQuest
- Midwives Information and Resource Service (MIDIRS)
- National Research Register

Journals handsearched
- *British Journal of Midwifery*
- *Social Science & Medicine*
- *Midwifery*
- *Birth*
- *Journal of Advanced Nursing*

Contents pages of 45 other relevant health and sociology journals were searched regularly via Zetoc (details available from the lead author).

The reviewing process

The process of reviewing was highly iterative and revisionist (Walsh & Downe 2005). It was closely aligned to qualitative constructionist epistemologies.

Stage 1. Title, abstract and full text review

Two members of the team (LS, KT) independently undertook the search. The total hits amounted to over 15,000. For the overwhelming majority of these papers the titles indicated that they were either not relevant to the study, were not qualitative research papers, or did not include participants meeting our definition of 'beyond the ordinary'. These titles were excluded. Where this was not clear, the abstract was reviewed. After extensive discussion between all three authors, full text papers were obtained for seventeen studies (Table 2). They were initially reviewed blind to each other by LS and KT. Differences in opinion were mediated by SD. The quality of the remaining papers was blind assessed using the Critical Appraisal Skills Programme criteria (CASP 2002). This covers three areas, namely rigour, credibility, and relevance, using ten prompt questions. Ten papers were excluded at this stage. The primary reason for exclusion is given in Table 2.

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

Table 2 Studies identified after abstract review: final inclusion and exclusion

Author, date	Final decision	Reason for exclusion
Davis-Floyd and Davis (1997)	Excluded	No indication that the participants were 'experts'
Guiver (2003)	Excluded	No indication that the participants were 'experts'
Shallow (1999)	Excluded	No indication that the participants were 'experts'
Konstantiniuk *et al.* (2002)	Excluded	Only quantitative data
Stamp (1997)	Excluded	Only quantitative data
Patrick (2002)	Excluded	Only quantitative data
Alexander *et al.* (2002)	Excluded	Specific to ventouse practitioners
Butterworth and Bishop (1995)	Excluded	Only 13% of participants maternity care practitioners
Kennedy *et al.* (2003)	Excluded	Meta-synthesis of American studies (one relevant paper included in this review)
Sookhoo and Biott (2002)	Excluded	Insufficient data to assess quality
Sleutel (2000)	Included	
Kennedy (2000)	Included	
Berg and Dahlberg (2001)	Included	
Lundgren and Dahlberg (2002)	Included	
Kennedy (2002)	Included	
James *et al.* (2003)	Included	
Kennedy (2004)	Included	

Stage 2. Detailed quality review of included studies

A detailed quality assessment based on the checklist of Walsh and Downe (2006) was undertaken for the remaining seven studies. This assesses the appropriateness and coherence of the study scope and purpose, design, sampling strategy, analysis, interpretation, researcher reflexivity, ethical dimensions, relevance and transferability. A summary score was then allocated (see Table 3 for details). A full account of the quality assessment of each study is available from the authors.

Analysis

The analysis involved the following stages: compare and contrast metaphors, phrases, ideas, concepts, relations and themes in the original texts; undertake reciprocal and refutational translations to establish how far the themes arising from the included studies were similar, or different; then synthesize the themes arising from the preceding steps (Noblit & Hare 1988, Walsh & Downe 2005). For each step, we undertook the analysis separately. We agreed on the final analysis by consensus.

Results

Characteristics and quality of included papers

Five of the included studies were undertaken in the USA. Three of these were by the same author. Although each paper contains a report of a different study, a sub-set of the participants appears to overlap all three studies. Two studies were from Sweden, both with the same second author but reporting different studies, with no apparent overlap of participants. Participants included nurses, nurse–midwives and midwives. The quality was generally good, with some weaknesses in the use of techniques to ensure the transparency of the analysis, and in reflexive accounting.

Findings

We initially identified 13 themes from the data (see Table 4). After discussion, we agreed that the data separated out under 'connection' and 'companionship' was of a similar order, and these were combined into one theme (connected companionship). We also noted that, as well as the original value of 'trust' there were values relating to belief (in normal birth, and in women's bodies), and to courage. The original theme of trust was therefore expanded into a theme of 'value'. We noted that issues of role change, profession, and of accommodation to adverse external forces were more about process and context than expertise. We combined these into a parallel concept termed *'reaction to the context of childbirth'*. The 10 themes remaining in the analysis were then subject to synthesis. Three overarching domains were identified: wisdom, skilled practice and enacted vocation. Nurses, nurse–midwives and midwives were represented in each of these domains.

 © 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

Table 3 Characteristics and quality of included studies

Criteria	Sleutel 2000, USA	Kennedy 2000, USA	Kennedy 2002, USA	Kennedy 2004, USA	James *et al.* 2003, USA	Berg & Dahlberg 2001, Sweden	Lundgren & Dahlberg 2002, Sweden
Scope and purpose	To describe labour support techniques and strategies to enhance labour progress and prevent caesarean births Fair links with literature	'to describe exemplary midwifery practice Extensive theoretical literature cited.	Study undertaken 'as a means of corroborating' findings from Kennedy 2000 Very little literature cited	'to expand knowledge on the processes and outcomes of midwifery care' Both directly relevant and theoretical literature cited	'to examine how expert perinatal nurses…view their role in caring for mothers during labour and birth' Some directly relevant literature cited	To describe how midwives experience the care of women who are at high obstetric risk or who have an obstetric complication… Range of directly relevant and theoretical literature cited	To describe midwives experience of the encounter with women and their pain during childbirth Large range of relevant literature cited
Design, methods	Interpretive interactionism Termed a 'pilot study'. Observation and interview	Theoretical framework feminist, and emancipatory. Delphi study	'qualitative' Videotaped interviews	Theoretical framework not explicit Videotaped interviews	Theoretical framework not explicit Tape recorded focus groups	Phenomenology Tape recorded interviews	Phenomenology Tape recorded interviews
Sampling strategy Participants	One labour and delivery ward with 70–100 births/month (Oct 1998–March 1999). Not clear why hospital was selected. One participant interviewed: criteria: min 3 years experience labour and delivery, graduate or equiv level, 'nurturing, caring demeanour' ('expert') Demographics not given	Midwife participants: Midwives who had been honoured for excellence by the ACNM CNM's nominated as 'exemplary' (expert, and excellence, also used in some places in the text) by: – leadership of ACNM and – a stratified random sample of 62 nurse midwifery service directors across the US Midwives nominated by the leadership of MANA. $n = 64/142$ nominations for first round, 52 completed all three rounds) Participants were distributed across 6 ACNM regions of US, 1 from Canada. Years experience 1–45. Age range 39–73. 90% Caucasian. 73% college graduates, 70·5% masters degrees. A variety of birth settings represented. Range of births 3–184 annually	11 'expert' midwives from original 64 in the Delphi study (Kennedy 2000). Not clear why these 11 were selected. Age range 49–62; years in practice 6–29. 64% masters level education. Most worked in hospital: 2 attended home births, and 2 worked in birth centres.	14 midwives (and 4 recipients of care, not included in this review). 11 from original Delphi study (Kennedy 2000). It is not clear if these participants were those in Kennedy 2002. 3 midwives 'theoretically sampled based on emerging findings' Years in practice 6–40. Practiced in ' a variety of settings'.	4 'large mid western' hospitals (births per annum 2800–6500). Selected because nurse-managed labour was the practice model. 8 focus groups 54 nurses: 'at least 5 years intrapartum experience' Demographics: range of years of experience 5–38 Hospitals: rates of intervention higher than in US national statistics	Four hospitals where the care of women at high obstetric risk was differentiated from care of other women 10 midwives (of 11 invited) with at least 5 years experience, and recognized as being 'highly skilled clinicians'. Demographics: age range 41–52, 9–29 years midwifery practice (5–8 years 'high risk').	'Experienced' midwives ($n = 9$) in two hospital settings in Sweden. Not clear why these settings were chosen. Participants chosen as 'experienced' by the head midwife at both sites. Demographics: age range 38–52, 12–28 years midwifery practice.

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

Table 3 (*Continued*)

Criteria	Sleutel 2000, USA	Kennedy 2000, USA	Kennedy 2002, USA	Kennedy 2004, USA	James *et al*. 2003, USA	Berg & Dahlberg 2001, Sweden	Lundgren & Dahlberg 2002, Sweden
Analytic strategy	Emergent, iterative Examples given of how analysis evolved, large amounts of data provided. Triangulation between participants' account and observational data Some evidence of saturation (though only one participant): evidence of accounting for disconfirming data. Participant and external expert verification of findings noted	Content analysis, using NUD*IST, and measures of central tendency using SPSS. Data triangulated between qualitative data and ranking statements. Not clear if saturation was reached, or if disconfirming data were sought and accommodated. On-going analysis verified with a research jury.	Emergent, iterative, using constant comparative analysis, based on grounded theory Not clear if saturation was reached, or if disconfirming data were sought and accommodated. No mention of participant or external verification of findings	Narrative analysis using Atlas ti, and based on codes and themes. Findings triangulated with Delphi findings The authors state that they reached data saturation. It is not clear if disconfirming data were sought and accommodated Analysis undertaken by all four authors collaboratively. The final synthesis was also discussed with experienced researchers outside the research team. The process is fully explained	Inductive coding & thematic methods of analysis Findings triangulated between the four centres Data saturation and a search for disconfirming data not noted. Analysis undertaken by research team and 'two independent' researchers.. Findings reviewed by 3 focus group participants.	Analysis used method described by Giorgi 1997. This involved the identification of meaning units, transforming the meaning units, synthesizing and summarizing, and the formulation of a general structure of the phenomenon. Triangulation not apparently part of the method. Not clear if saturation or disconfirming data sought. No mention of participant or external verification of findings (although the first author notes that '*the other researcher was not a midwife which contributes to objectivity*'.	Analysis used method described by Dahlberg *et al*. 2001: reading and re-reading text, identifying 'meaning units', unpacking the meaning of the text, and relating the meaning units to each other. The 'subjects naive description' was then transformed into 'language meaningful for midwifery'. Triangulation not apparently part of the method. Not clear if saturation or disconfirming data sought. No mention of participant or external verification of findings (although the authors state '*the interviews were 'primarily' analysed by the interviewer*).
Quality rating	B	A	B	A	B	B	B

Key to quality rating: A, no or few flaws. The study credibility, transferability, dependability, and confirmability[33] is high; B, some flaws, unlikely to affect the credibility, transferability, dependability, and/or confirmability of the study; C, some flaws which may affect the credibility, transferability, dependability, and/or confirmability of the study; D, significant flaws which are very likely to affect the credibility, transferability, dependability, and/or confirmability of the study.

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

Table 4 Emerging themes and concepts

Themes, first iteration	Themes, final iteration	Core concept	Relevant papers
Education Experience Knowledge	Education through training and experience Knowledge	Wisdom	Kennedy (2000) Berg and Dahlberg (2001) James *et al.* (2003)
Competence Confidence Judgement Skills	Reflexive competence Confidence Judgement Technical skills	Skilled practice	Sleutel (2000) Kennedy (2000) Berg and Dahlberg (2001) Kennedy (2002) Lundgren and Dahlberg (2002) James *et al.* (2003) Kennedy (2004)
Trust Intuition Connection/companionship	Values (belief, courage, trust) Intuition Connected companionship	Enacted vocation	Sleutel (2000) Kennedy (2000) Berg and Dahlberg (2001) Kennedy (2002) Lundgren and Dahlberg (2002) Kennedy (2004) James *et al.* (2003)
Role changes 'Profession'	Role changes 'Profession' 'ironic intervention'	Parallel concept: Reaction to context of childbirth	Sleutel (2000) Kennedy (2000) Berg and Dahlberg (2001) James *et al.* (2003)

Summary of domains and themes

Wisdom

Education through training and experience. There was very little reference in the studies to formal midwifery or maternity care education. It seemed to be taken for granted as a core requirement. The more important capacity seemed to be the ability to reflect on and integrate both experiential and formal education into a basis for on-going knowledge development. James *et al.* (2003) term this process '*the ability to use the past in the present*' (p. 818).

The quality and diversity of education and experience, coupled with the reflective capacity of the practitioner, enabled the development of expert practice. Further, expert learning encompassed a kind of intellectual curiosity (Kennedy 2000), a continuing search for more educational opportunities, and an intelligent questioning of the taken for granted.

Knowledge. Berg and Dahlberg (2001) note the expert's ability to accommodate both embodied and theoretical knowledge. They refer to '*sensitive knowledge*' (p. 263) and '*sensitivity for the spontaneous*' (p. 261). These phrases express the capacity of the midwives in their study to demonstrate '*a developed ability to use ones senses*'. As one of their respondents says:

> I have to hear what she is saying. I have to hear, I have to feel, absorb what it is she wants, what she's afraid of, what she is going through…I can feel it in the air, fell it in the vibrations, you can see it in her body language, hear how she breathes, speaks (p. 263)

James *et al.* (2003) note that labour care nurses displayed '*the intuitive nature of nursing care* (p. 818)'. This was bound up in an intimate knowing about the process of labour built up by years of experience, and underpinned by '*deep understanding*'. Knowledge was not a superficial consequence of book learning, but a much more deeply felt and expressed consequence of consciously living with and learning from birth:

> Expert nurses were open to rethinking a situation, emphasizing the importance of constantly assessing and reassessing a woman's labour. An expert nurse was not threatened when her planned interventions proved ineffective, or required modification (p. 819)

This illustrates an acceptance of uncertainty, and awareness that there are no 'preset patterns' in birth. Eraut (1994) has hypothesized that there are two types of professional knowledge. Type A (public knowledge) is subject to external quality control and built into educational programmes, examinations and qualifications. It is about knowing that, not knowing how. Type B (professional personal knowledge) is a synthesis of both knowing that, and knowing how. This appears to be expressed in the papers included in this section.

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

Synthesis. The two themes in this section seemed to coalesce into something that was beyond intellectual knowledge, repeated years of experience, or book-learning education. This led us to the concept of wisdom. Although some nursing theorists (Lauder 1994, Litchfield 1999), and alternative midwifery publications (Tritten 1992) have paid attention to wisdom, it appears to have fallen out of favour recently. The following quote summarizes the way in which we want to use the term:

> Wisdom is a state of the human mind characterized by profound understanding and deep insight. It is often, but not necessarily, accompanied by extensive formal knowledge. Unschooled people can acquire wisdom, and wise people can be found among carpenters, fishermen, or housewives. Wherever it exists, wisdom shows itself as a perception of the relativity and relationships among things. It is an awareness of wholeness that does not lose sight of particularity or concreteness, or of the intricacies of interrelationships. (Meeker 1981)

Skilled practice

Reflexive competence. The classic analysis of Benner proposes that the route to expertise starts as a novice, and progresses through the competence and proficiency (Benner 1984). However, controversy surrounds the concept of competence (Worth-Butler *et al.* 1995). At the basic level, this may mean only the performance of routine clinical skills according to standard procedures and guidelines. In contrast, the skills noted in Kennedy's (2000, 2002) studies suggest dynamism and contingency:

> When you bump the boundaries (of normal) my job is to gently guide you back…I was a guest, and I was invited to be an expert, but only if they needed me to be one. (Kennedy 2002, p. 1759)

This speaks of a reflexive competence that can deal with uncertainties and rapid changes in labour, and which is not dependent on standard protocols, and routine techniques. Kennedy suggests that the expert midwife '*orchestrates labour*', and '*creates/manoeuvres the birth space for women*' (Kennedy *et al.* 2004). This is an active process that provides a kind of guardianship. It creates what Walters and Kirkham (1997) have termed a '*safe space in which the mother is the main actor*'.

All of the authors of the studies included in our meta-synthesis noted that the experts in their studies needed to be skilled in clinical techniques. However, they also seemed to possess anticipatory and preventative competence. They predicted likely events, both in the labouring women, and in the surrounding environment, and worked with these predictions to optimize outcomes. This allowed them to let go of the births they attended: paradoxically, in being the experts, they no longer needed to claim their expertise. As James *et al.* (2003) state, they were able to '*let the woman own the labour*'. Lundgren and Dahlberg (2002) express something similar when they comment that the practitioners in their study *'met the woman as a unique individual in an open-minded way'*. However, they were also highly responsive to pathology when necessary, '*seizing the women*' when they found that labour exceeded their ability to cope.

Confidence. A person who is objectively competent may lack confidence in their abilities, and an over-confident person may over estimate their capacities. Generally, however, confidence and competence did co-exist in this review. Kennedy (2000) noted that the midwives in her study had the confidence to make decisive decisions. In a later study (Kennedy 2002), there is a rather different construction of confidence, termed *'the art of doing 'nothing' well'*. This phrase expresses a confidence to not act. The contingent nature of acting or not acting echoes the points made above about reflexive competence. As James and colleagues state:

> The confident nurse stepped away from the technology and towards the woman. (James *et al.* 2003, p. 819)

Berg and Dahlberg (2001) note that the midwives in their study undertook 'balancing' in a number of areas, including the facilitation of mutual confidence with the medical staff. While this appears to be a benign observation, in some cases friction between different philosophies of labour led to practitioners acting in ways which did not reflect their beliefs about birth, and which potentially undermined their confidence in their particular expertise (Sleutel 2000, Berg & Dahlberg 2001). These aspects are explored in more detail below under '*Reaction to context of childbirth*'.

Judgement. From a risk-aversive perspective, the more complex a judgment needs to be, the more likely it is an error will be made. The main justification for the production of protocols, guidelines and nomograms is to minimize these risks. However, an adverse consequence of this increasing standardization is a restriction of creativity, and a decreased capacity to respond to and innovate in novel situations. Eraut and Du Boulay (2001) note that professional experts often have to take decisions in situations that are ill-structured, uncertain, shifting, subject to high stakes, involve multiple players, and that are contextualized by time stress and organizational goals and norms. Arguably, labour consistently demonstrates these characteristics. Expert maternity care practitioners therefore have to negotiate both the

 © 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

uncertainty and complexity of the actual process of labour as well as negotiating the organizational and inter-professional hurdles that accompany maternity care in the twenty-first century. This was particularly evident in the study of Sleutel, where the key concept was that:

> Intrapartum nursing care reflected both a medical model of controlling and hastening birth, as well as a supportive, nuturing and empowering model of practice that used independence, clinical judgements, and advocacy. (Sleutel 2000, p. 38).

In two of the studies, judgement is both a result of independent decisions by the practitioners, and of accommodating external forces, such as '*dealing with the pressures to speed up the labour process*' (James *et al.* 2003), or of using one set of interventions to avoid more invasive procedures (Sleutel 2000). Where practitioners were free to make judgements on the basis of labour itself, these decisions were made along a spectrum that was conceptualized by Lundgren and Dahlberg (2002) as '*waiting for the woman*' at one extreme, and '*seizing the woman*' at the other. The expertise lay in balancing these two extremes, and in setting up and judging the labour (termed'*orchestrating*' by Kennedy (2002) so that overt decision-making that interrupted the flow of the birth only needed to happen when pathology was unavoidable.

Crucially, the use of expert skills was framed by an acceptance of accountability for the judgments made (Kennedy 2002).

Clinical skills. Skills encompassed both technical capacity, and emotional intelligence. Technical skills were evident in both the use of equipment and emergency procedures, and, more subtly, in keeping birth physiological (Sleutel 2000, Kennedy 2002). James *et al.* (2003) note that practitioners could call upon a '*bag of tricks*'. These included '*technological skills and judgment*, and '*hands on*, *high touch supportive care techniques*'. While touch can be positive or negative (Kitzinger 1997, El-Nemer *et al.* 2005), in James and colleagues study it was clearly framed as supportive, and protective of physiological processes. Clinical skills included observation, assessment, and positioning of the woman (Sleutel 2000), and reading women's bodies without resorting to external measurement and machine recordings (Lundgren & Dahlberg 2002). Emotionally supportive skills included warmth, nurturing, gentleness, kindness, caring, and positive encouragement (Kennedy 2000, Sleutel 2000, Berg & Dahlberg 2001, Lundgren & Dahlberg 2002, James *et al.* 2003).

Synthesis. While is logical to assume that an expert is skilled in the area of their expertise, the nature of 'skill' may be less obvious. Our reading of the texts we located is that skilled practice was made up of reflexive competence, confidence, judgement and the capacity to use technical skills. Eraut and Du Boulay (2001) note that theorists working in the area of 'naturalistic decision-making' have moved from a context-independent position of decision-making as a purely psychological process, towards one of context-dependence. For example, Lipshitz (1993) notes that decision-making is influenced by the different contexts in which the decision is made; the practitioners assessment of relevance in the particular situation; and use of complex mental imagery (such as illness scripts) as well as analytical reasoning. It may be that this is the kind of skill base used by expert maternity care practitioners. Indeed, we would theorize from our findings that some practitioners may use 'salutogenic' (described as wellbeing by Downe and McCourt (2004) scripts, as well as 'illness' scripts. In particular, this may explain some of the data in Berg and Dahlberg (2001) in the context of women at high risk. This theory remains to be tested in future research.

The subtle and complex activities that were geared around keeping birth normal included hands on-high touch techniques, the orchestration observed by Kennedy (2002), and the enactment of the '*sensitive knowledge*' noted (Berg & Dahlberg 2001). The drive seemed to be '*the struggle for the natural process*' even in the context of women at high risk (Berg & Dahlberg 2001).

Enacted vocation

Values (belief, trust, courage). Belief includes both belief in women's capacity to give birth, and in the process of childbirth as fundamentally physiological. This was expressed as '*following the mother's body*' (Sleutel 2000), '*belief in women's bodies*' (James *et al.* (2003), and '*belief that women's body was capable*' (Lundgren & Dahlberg 2002). For the women at high risk in Berg and Dahlberg's study, the authors noted the midwives' '*support of the natural processes, particularly*…in apparently hopeless cases…'. This contrasts strongly with the critique of technological childbirth processes expressed by Emily Martin (2001), who argues that modernist technocratic childbirth systems treat women's bodies as if they are faulty and need fixing.

Trust was both a consequence and a cause of the strong belief in normality. A number of the authors talk about the mutuality and reciprocity of the trust between labouring women and midwives (Berg & Dahlberg 2001, Lundgren & Dahlberg 2002, Kennedy *et al.* 2004). As Kennedy and colleagues note:

> the mutuality between the midwife and the women is foundational, leading to an engaged presence by the midwife (Kennedy *et al.* 2004, p. 17).

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

This serves as a virtuous circle, reinforcing trust and belief in the midwife, and empowering the midwife to offer it back to the next labouring woman. As Davis-Floyd and Davis (1997) note: *'Mothers and midwives mirror one another – it's a dance – the woman has to trust the midwife and the midwife has to trust her woman for that bouncing back'* (p. 337).

The final value we located was courage. Berg and Dahlberg (2001) comment that midwives needed to be courageous to act in accordance with intuition, especially in the context of the women at high risk in their study. Similarly, James *et al.* (2003) observed that, in order to be an advocate for labouring women in a setting where there were pressures to intervene, labour ward nurses had to *'have the guts to do what you believe to be right and in the best interest of the woman and her baby'* (p. 820). Beyond the everyday need for courage in decision-making, Kennedy *et al.* (2004) notes that midwives had a *'commitment to revolutionalising systems where necessary'*. Courage also extended to an acceptance of responsibility and accountability for the consequences of actions undertaken.

Intuition. One respondent in Kennedy's first study commented that an expert midwife has *'an uncanny knowing when to step in and when to let be'* (Kennedy 2000, p. 9). The gestalt capacity for intuition is also noted in other reports (Berg & Dahlberg 2001, Lundgren & Dahlberg 2002, James *et al.* 2003). Benner deconstructed the concept of intuition in nursing practice, and concluded that *'the expert performer no longer relies on an analytic principle (rule, guideline, maxim) to connect her or his understanding of the situation to an appropriate action. The expert nurse…*now has an intuitive grasp of each situation' (Benner 1984, p. 31–32). Benner expressly refrains from seeing this process as mysterious. For her, intuitive expertise is built on the knowledge, understanding and experience that precedes the intuitive leap. For Davis-Floyd and Davis (1997), learning to trust intuition is an ongoing process, with intuitive thinking dominating as expertise increases. However, arguably, an expert midwife cannot rely on intuition alone. As Kennedy notes:

> The midwives' discussion on intuition centred on a concern that the exemplary midwife cannot rely on this alone in clinical practice. It does not exempt the midwife from expert knowledge or clinical experience…'the intuitive knowledge backs up the findings as it provides the practitioner with a motive to investigate the cause'. (Kennedy 2000, p. 10)

Connected companionship. Being 'present' for the woman during the birth process but not actually 'doing' anything physical is seen as a fundamental component of the expert midwife in Kennedy's studies (Kennedy 2002, Kennedy *et al.* 2004). Benner describes the process of 'prescencing' as being with, as opposed to doing for, a patient (Benner 1984, p. 57). Kennedy emphasizes this interpersonal connectivity by using term '*engaged presence*'. This describes more than just being present in the room with a labouring woman. It is the essence of a relationship or 'connection' the expert midwife has with the woman. Sleutel (2000) sees it as supportive, nurturing and empowering, James *et al.* (2003) and Berg and Dahlberg (2001) both talk of 'being attuned', and Lundgrun and Dahlberg (2002) of *'being an anchored companion'*. These notions of companionship are accompanied by qualities that express a relationship of profound caring. This is far removed from objective professionalism. It is also more than a maternalistic relationship, in which the midwife 'does for' the labouring woman. In order to be connected the midwife must '*know and understand*' the woman as a unique individual (Kennedy 2000), working with her as a partner in the birth process, where both midwives and woman are co-responsible (Lundgren & Dahlberg 2002).

Synthesis. The notion of vocation has fallen from favour as skilled practitioners have pursued the aim of professional credibility. However, in gaining the status of profession, with the consequent super-valuing of higher level education, the qualities and values of vocation may well have become overlooked. As the practitioners in our review became more expert, they appeared to (re)value and to express qualities such as trust, belief and courage, to be more willing to act on intuitive gestalt insights, and to prioritize connected relationships over displays of technical brilliance. This did not, however, result in denial of responsibility. On the contrary, in some of the accounts, the enactment of vocation led these experts to move outside of and beyond normative childbirth practices, and so to become more exposed to critique. Equally, while stepping back and doing less may seem to be less skilled than stepping in and doing more, Kennedy succinctly describes the expertise of enacted vocation in this way:

> working to create an environment of calm, trusting in the normal birth process, and being present during labour may appear to be nothing, or inconsequential, but, in reality, it is likely to be very significant. (Kennedy 2002, p. 1760)

Parallel theme: Reaction to the context of childbirth

Role change, professional conflict and 'ironic intervention'. We have separated out this theme, as it is less to do with expertise *per se* than with the way expert practice is

 © 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

moderated, or even distorted, by context. This was most strongly evidenced in Sleutel's (2000) analysis. Sleutel's key concept is that '*intrapartum nursing care reflected both a medical model of controlling and hastening birth, as well as a supportive, nurturing and empowering model*' (p. 38). This paradox was expressed by the apparently oppositional concepts of '*following the mother's body*' and '*hastening and controlling labour*'. Sleutel notes that this led to practitioners using interventions they did not really support in order to avoid the (to the practitioners) larger risk of caesarean section for women who would otherwise have transgressed rigid technocratic labour norms. A similar practice was noted in Annandale's study of a birth centre (Annendale 1988), and it is the term Annandale coined to describe this situation that we have used here, namely '*ironic intervention*'. The risk here is the disruption of the virtuous circle of trust and belief, which we discussed above, and a downward spiralling of the potential for physiological birth and, indeed, for safe motherhood. Similar observations are hinted at in other papers in the review, although they are not expressed as fully there (Berg & Dahlberg 2001, James *et al.* 2003).

Discussion

Limitations

Although we identified many hundreds of papers that addressed expertise on the basis of opinion, and many quantitative papers assessing specific aspects of maternity care delivery, we found very few that fulfilled our search criteria of being good quality qualitative research studies. We are confident that our extensive search strategy and our reading of all the titles generated limited the risk that we have missed any significant English language research studies in this area. However, we may have missed relevant studies published in other languages. We acknowledge that our data set was limited: three of the papers were by the same author (Kennedy 2000, Kennedy 2002, Kennedy *et al.* 2004) two others had the same co-author (Berg & Dahlberg 2001, Lundgren & Dahlberg 2002), and only two countries are represented (USA and Sweden). We have noted that disparate criteria for 'expertise' were used, and that they included both those with and without formal midwifery qualifications. Following the critique of Nelson and McGillion (2004) we recognize the risk of reification, or of circular reasoning. Practitioners are likely to label as 'expert' those practices that they value, or that they feel may benefit them if they are valued by others external to their group. We could have looked to other judges, such as labouring women themselves, or obstetricians, or hospital managers, or government health officials. However, each of these groups would also have only given a partial and particular view on maternity care expertise. The exclusion of quantitative studies may have limited the scope of our work, as there were far more of these studies in the general area of maternity care provision than there were of qualitative studies. However, we believe the view we present stands on its merits as our particular construct of the rich and in-depth accounts of a particular set of practitioners working in the field of intrapartum maternity care who are practising in ways deemed 'expert, exemplary, excellent, or experienced'. Our interpretation of the data may or may not have resonance for others in the field of maternity care, or for healthcare practitioners working in other fields.

Implications of findings

The findings of this review suggest that the overlapping concepts of wisdom, skilled practice and enacted vocation may offer a basis for a theory of expert intrapartum non-physician maternity care. We did not note any large variations between professional groups, although this topic remains to be fully explored in future primary research. Our interpretation has some resonance with the attributes of a 'good' midwife described by Nicholls and Webb (2006). Tangentially, our study also raises the question of how experts manage dissonance between disparate philosophies of care. Practitioners working in the intrapartum setting in many countries are being accommodated, willingly or unwillingly, into technocratic, industrialized models of care in the name of safety (Crabtree 2004, Mead 2004, El-Nemer *et al.* 2005). These models of care are based on assumptions that birth is inherently pathological, and that rule-based management can minimize the risks. They are somewhat at odds with the domains of expertise identified in this study, which are more aligned with a skilled and flexible response to complex and uncertain circumstances. In the Egyptian context, we have termed this 'skilled help from the heart' (El-Nemer *et al.* 2005).

Our findings have significant resonance with the work of Benner. Her more recent publications have built on her 'novice to expert' taxonomy, incorporating aspects of reflection-in-action, of caring, and of ethical and moral practice in the context of complexity (Benner *et al.* 1996, Benner *et al.* 1999). For us, this conception of the expert may be a consequence of wisdom, skilled practice and enacted vocation. From a feminist science perspective, such an expertise requires the exercise of 'hand, brain and heart' (Rose 1983). From a practical perspective, it requires the ability to minimize harm and maximize wellbeing at the complex level of the individual, within systems that demand rule-based

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

What is already known about this topic

- Nursing and medical expertise has been widely debated and researched, but the nature of non-medical maternity care expertise has not been systematically examined.
- A wide variety of practitioners provide intrapartum maternity care.
- Opinions about maternity care expertise are influenced by debates on safe motherhood on the one hand, and on the need to minimize unnecessary routine intrapartum interventions on the other.

What this paper adds

- Although there is a large opinion- and theory-based literature on non-medical intrapartum expertise, only seven qualitative research studies in this area have been published in English between 1970 and June 2006.
- A synthesis of the findings of these studies resulted in the identification of three domains of non-medical intrapartum expertise: wisdom, skilled practice and enacted vocation.
- Systems of maternity care that are designed to accommodate these domains in maternity care experts may optimize childbirth outcomes for women and babies.

responses to minimize risk at the population level. Davis-Floyd and Davis offer some possible examples of this in their exploration of 'postmodern' midwifery (Davis-Floyd & Davis 1997), and Lane proposes 'hybrid midwifery' (Lane 2002). However, evidence from studies of why midwives leave the profession, such as that undertaken in the UK by Ball *et al.* (2002), suggests that the currently predominant technocratic system of intrapartum maternity care does not permit a significant minority of practitioners to exercise their expertise. If this is replicated in other settings, there are implications for safe motherhood initiatives in countries where there are severe shortages of trained maternity care practitioners (World Health Organisation 2006), and for jurisdictions with excessively high rates of unnecessary intervention.

Conclusion

In the literature included in this review, intrapartum practitioners who are termed 'expert', 'exemplary', 'excellent' or 'experienced' demonstrated specific skills, attitudes, or characteristics that have not previously been identified together. Maternity systems that limit the capacity of expert practitioners to perform within the domains identified may not deliver optimal care. If further empirical studies verify that the identified domains are essential for effective expert intrapartum maternity care, education and care delivery systems will need to be designed to allow practitioners to develop and express them.

Author contributions

SD was responsible for the study conception and design. SD, LS and KT were responsible for the drafting of the manuscript. LS and KT performed the data collection. SD, LS and KT performed the data analysis. LS obtained funding and SD supervised the study.

References

Alexander J., Anderson T. & Cunningham S. (2002) An evaluation by focus group and survey of a course for midwifery ventouse practitioners. *Midwifery* **18**, 165–172.

American College of Nurse Midwives (ACNM) (2005) *Membership With ACNM*. Retrieved from http://www.midwife.org/members.cfm on 6 July 2006.

Annendale E.C. (1988) How midwives accomplish natural birth: managing risk and balancing expectations. *Social Problems* **35**(2), 95–110.

Arney W.R. (1982) *Power and the Profession of Obstetrics*. University of Chicago Press, Chicago.

Ball L., Curtis P. & Kirkham M. (2002) *Why do Midwives Leave?* RCM and DTI Partnership Fund, London.

Ballen L.E. & Fulcher A.J. (2006) Nurses and doulas: complementary roles to provide optimal maternity care. *Journal of Obstetric and Gynecologic Nursing* **35**(2), 304–311.

Benner P. (1984) *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*. Addison-Wesley, Menlo Park, California.

Benner P., Tanner C.A. & Chesla C.A. (1996) *Expertise in Nursing Practice – Caring, Clinical Judgement, and Ethics*. Springer Publishing Company Incorporated, New York.

Benner P., Hooper-Kyriakidis P. & Stannard D. (1999) *Clinical Wisdom and Interventions in Critical Care: A Thinking-In-Action Approach*. W.B. Saunders Company, Elsevier, Oxford.

Berg M. & Dahlberg K. (2001) Swedish midwives care of women who are at high obstetric risk, or who have obstetric complications. *Midwifery* **17**, 59–66.

Betran A.P., Wojdyla D., Posner S.F. & Gulmezoglu A.M. (2005) National estimates for maternal mortality: an analysis based on the WHO systematic review of maternal mortality and morbidity. *BMC Public Health* **12**(5), 131.

Butterworth T. & Bishop V. (1995) Identifying the characteristics of optimum practice: findings from a survey of practice experts in nursing, midwifery and health visiting. *Journal of Advanced Nursing* **22**(1), 24–32.

CASP (2002) *10 Questions to Help You Make Sense of Qualitative Research*. Retrieved from http://www.phru.nhs.uk/casp/critical-

 © 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

appraisal-tools.htm on 6 July 2006. Copyright; Milton Keynes Primary Care Trust.

Crabtree S. (2004) Midwives constructing 'normal birth'. In *Normal Birth, evidence and debate* (Downe S., ed.), Elsevier, Oxford, pp. 85–99.

Custers E.J., Boshuizen H.P. & Schmidt H.G. (1996) The influence of medical expertise, case typicality, and illness script component on case processing and disease probability estimates. *Memory and Cognition* **24**, 384–399.

Dahlberg K., Drew N., Nystrom N. (2001) *Reflective Lifeworld Research*. Studentlitteratur, Lund, Sweden.

Davis-Floyd R.E. & Davis E. (1997) Intuition as Authoritative Knowledge in Midwifery and Homebirth. In *Childbirth and Authoritative Knowledge* (Davis Floyd R.E. & Sargent C.F., eds), University of California Press, Berkeley, pp. 315–349.

Downe S. & McCourt C. (2004) From Being to Becoming: Reconstructing childbirth knowledges. In *Normal Birth, Evidence and Debate* (Downe S., ed.), Elsevier, Oxford, pp. 3–24.

El-Nemer A., Downe S. & Small N. (2005) She would help me from the heart': an ethnography of Egyptian women in labour. *Social Science and Medicine* **62**(1), 81–92.

Eraut M. (1994) *Developing Professional Knowledge and Competence*. Falmer Press, London.

Eraut M. & Du Boulay B. (2001) *Developing the Attributes of Medical Professional Judgement and Competence. Report to the Department of Health*. Retrieved from http://www.cogs.susx.ac.uk/users/bend/doh/reporthtml.html on 6 July 2006.

Giorgi A. (1997) The theory, practice and evaluation of phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology* **28(2)**, 235–260.

Guiver D. (2003) *What is the Epistemological Foundation of Midwife Led Care?*. Unpublished doctoral dissertation, De Montfort University, Leicester, England.

International Confederation of Midwives (2005) *Definition of a Midwife*. Retrieved from http://www.medicalknowledgeinstitute.com/files/ICM%20Definition%20of%20the%20Midwife%202005.pdf on 6 July 2006.

James D.C., Simpson K.R. & Knox G.E. (2003) How do expert labor nurses view their role? *Journal of Obstetric, Gynecological and Neonatal Nursing (JOGNN)* **32**(6), 814–823.

Kennedy H.P. (2000) A model of exemplary midwifery practice: results of a Delphi study. *Journal of Midwifery & Women's Health* **45**(1), 4–19.

Kennedy H.P. (2002) The midwife as an 'instrument' of care. *American Journal of Public Health* **92**(11), 1759–1760.

Kennedy H.P., Rousseau A. & Low L.K. (2003) An exploratory meta-synthesis of midwifery practice in the United States. *Midwifery* **3**, 203–214.

Kennedy H.P., Shannon M.T., Chuahorm U. & Kravetz K. (2004) The landscape of caring for women: a narrative study of midwifery practice. *Journal of Midwifery and Women's Health* **49**(1), 14–23.

Kitzinger S. (1997) Authoritative touch in childbirth: a cross cultural approach. In *Childbirth and Authoritative Knowledge: Cross Cultural Perspectives* (Davis-Floyd R., Sargent C., eds), University of California Press, Berkeley, pp. 209–232.

Konstantiniuk P., Kern I., Giuliani A. & Kainer F. (2002) The midwife factor in obstetric procedures and neonatal outcomes. *Journal of Perinatal Medicine* **30**(3), 242–249.

Kruske S. & Barclay L. (2004) Effect of shifting policies on traditional birth attendant training. *Journal of Midwifery & Women's Health* **49**(4), 306–311.

Lane K. (2002) Midwifery: a profession in transition. *Australian Journal of Midwifery* **15**(2), 26–31.

Lauder W. (1994) Beyond reflection: practical wisdom and the practical syllogism. *Nurse Education Today* **14**(2), 91–98.

Lipshitz R. (1993) Converging themes in the study of decision making in realistic settings. In: *Decision Making in Action: Models and Methods* (Klein G.A., Orasanu J., Calderwood R. & Zsambok C.E., eds), Ablex, Norwood, NJ, pp. 103–137.

Litchfield M. (1999) Practice wisdom. *Advanced Nursing Science* **22**(2), 62–73.

Lundgren I. & Dahlberg K. (2002) Midwives' experience of the encounter with women and their pain during childbirth. *Midwifery* **18**(2), 155–164.

MANA (2006) *What is MANA*. Retrieved from http://www.mana.org/about.html on 6 July 2006.

Martin E. (2001) *The Woman in the Body: A Cultural Analysis of Reproduction*. Beacon Press, Boston.

McCallum C. (2005) Explaining caesarean section in Salvador da Bahia, Brazil. *Sociology of Health and Illness* **27**(2), 215–242.

Mead M. (2004) Midwives practices in 11 UK maternity units birth'. In *Normal Birth, Evidence and Debate* (Downe S., ed.), Elsevier, Oxford, pp. 71–83.

Meeker J.W. (1981) *Wisdom and Wilderness*. Retrieved from http://www.cop.com/info/meekart.html on 6 July 2006.

Nelson S. & McGillion M. (2004) Expertise or performance? Questioning the rhetoric of contemporary narrative use in nursing. *Journal of Advanced Nursing* **47**(6), 631–638.

Nicholls L.C. & Webb C. (2006) What makes a good midwife? An integrative review of methodologically-diverse research. *Journal of Advanced Nursing* **56**(4), 414–429.

Noblit G. & Hare R. (1988) *Meta-ethnography: Synthesising Qualitative Studies*. Sage, Newbury Park.

Nursing and Midwifery Council (2004) *Midwives Rules and Standards*. Retrieved from http://www.nmc-uk.org/aFrameDisplay.aspx?DocumentID=169 on 6 July 2006.

Patrick D. (2002) *The Midwives' and Mothers' Intuition in Labour Study: Is Instinct Extinct on the 21st Century Delivery Suite?* Unpublished Master's degree dissertation, The University of Nottingham, Nottingham, England.

Price A. & Price B. (1997) Making midwifery decisions. *Modern Midwife* **7**(10), 15–19.

Rose H. (1983) Hand, Brain, and Heart: A Feminist Epistemology for the Natural Sciences. In *Sex and Scientific Inquiry* (Harding S. & O'Barr J., eds), University of Chicago Press, Chicago, pp. 73–90.

Safe Motherhood: Family care international (2002) *Skilled Care During Childbirth: Information Booklet*. Retrieved from http://www.safemotherhood.org/resources/pdf/skilled_care/Skilled_Care_Info_Booklet_Eng.pdf on 6 July 2006.

Shallow H. (1999) *An Exploration of Midwives' Experiences of Becoming Integrated within Teams: With an Emphasis on their Experience of Providing Continuity of Care*. Unpublished masters dissertation, Sheffield University, Sheffield, England.

Sleutel M. (2000) Intrapartum nursing care: a case study of supportive interventions and ethical conflicts. *Birth* **27**(1), 38–45.

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd

Sookhoo M.L. & Biott C. (2002) Learning at work: midwives judging progress in labour. *Learning in Health & Social Care* **1**(2), 75–85.

Stamp G.E. (1997) Care of the perineum in the second stage of labour: a study of views and practices of Australian midwives. *Midwifery* **13**, 100–104.

Tew M. (1998) *Safer Childbirth? A Critical History of Maternity Care*. Free Association Books, London.

Tritten J. (1992) Giving voice to wisdom (editorial). *Midwifery Today* **23**, 1.

Walsh D. & Downe S. (2005) Meta-synthesis method for qualitative research: a literature review. *Journal of Advanced Nursing* **50**(2), 204–211.

Walsh D. & Downe S. (2006) Appraising the quality of qualitative research. *Midwifery* **22**(2), 108–119.

Walters D. & Kirkham M. (1997) Support and control in labour: doulas and midwives. In *Reflections on Midwifery* (Kirkham M.J. & Perkins E.R., eds), Balliere Tindall, London, p. 109.

World Health Organisation (2006) *Working Together for Health*. Retrieved from http://www.who.int/whr/2006/en/ on 6 July 2006.

World Health Organisation: Department of Reproductive Health and Research (1997) *Care in Normal Birth: A Practical Guide*. WHO, Geneva.

Worth-Butler M., Murphy R. & Fraser D. (1995) The need to define competence in midwifery. *British Journal of Midwifery* **3**(15), 259–262.

© 2006 The Authors. Journal compilation © 2006 Blackwell Publishing Ltd