

Midwifery Practice in the Third Stage of Labour

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Abstract

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MIDWIFERY PRACTICE IN THE THIRD STAGE OF LABOUR

This thesis investigated practice variation among midwives during the third stage of labour. The study aimed to identify and explain the variety of ways midwives managed the third stage and to see if it was possible to identify midwife characteristics associated with different third stage management practices. Initially emphasis was placed on models of midwifery care in labour and the mechanism by which midwives developed expertise in third stage management.

A qualitative approach was used based upon the principles of grounded theory with the constant comparative method utilised to collect and analyse multiple types of data simultaneously.

Fifty one midwives employed in two NHS trusts were interviewed with the practice of a further seven midwives observed. An analysis of computer records also took place together with analysis of twenty eight editions of two midwifery textbooks published throughout the 20th century.

Multiple types of third stage management were described with inter and intra practice variation revealed among midwives. The complexity of third stage care was exposed through the identification of 22 aspects to third stage practice with between two and five care options available for each aspect.

A theory of contingent decision making for the third stage of labour was revealed which explained how midwives adopted different forms of care through a complex decision making process which was contingent on the learning opportunities midwives were exposed to, the context in which practice decisions were made and the philosophical underpinnings of midwifery care. Practice variation was explained within this multi-factorial framework.

The thesis highlights the difficulties in standardising midwifery practice and questions the validity of doing so. In this study practice variation in third stage care was a reflection of the individuality of midwives and the way midwives chose to individualise the care of women. In light of this a reappraisal of comparative studies in third stage management is needed together with an evaluation of the role of practice guidelines which attempt to standardise practice.

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Glossary of terms

Aspects to care	Refers to a portion or part of a package of care in third stage practice identified by interviewed midwives. Eg: 'Handling of the cord during placental delivery' is an aspect of third stage care
Categories of practice	Refers to the two types of practice midwives referred to when managing the third stage of labour. These were normally called 'active management' and 'physiological management'.
Childbirth	The action of giving birth to a child which includes the first, second and third stages of labour.
Controlled Cord Traction	A way of actively managing the third stage of labour that included applying cord traction together with guarding of the uterus as soon as the uterus was contracted, without waiting for signs of placental separation and descent.
Crowning of the baby's head	When the head no longer recedes between uterine contractions and the widest transverse diameter (biparietal) of the baby's head is born.
Guarding	The midwife places her left hand on the woman's abdomen above the symphysis pubis and applies pressure while conducting cord traction.
Medicalisation	The sociological term medicalisation describes the increasing tendency for medicine and the medical profession to expand its claims over the lives of individuals by treating normal conditions as disorders requiring medical treatment.
Medicalisation of childbirth	The medical control of women's birth experiences
Modified Brandt Andrews	A way of actively managing the third stage of labour that included waiting to observe for signs of placental separation and descend before guarding the uterus and applying cord traction
Options for care	Refers to the choices interviewed midwives identified they chose from when managing each aspect of care. Eg: In the aspect of care 'handling of the cord during placental delivery', the options of care included 'no handling of the cord' and various ways of applying 'cord traction'.
Reductionist	The practice of analysing a complex phenomenon in terms of its simple or fundamental constituents especially when this is said to provide a sufficient explanation.

Routinised care	A sequence of actions which follow a fixed procedure while giving care
Syntometrine	A commonly used uterotonic drug with the active constituents syntocinon 5IU and ergometrine 0.5mg
Uterotonic	A drug that causes the uterus to contract. For example preparations such as ergometrine, syntometrine and syntocinon. The term uterotonic has been used interchangeably with oxytocic in this thesis to refer to drugs with a contractile effect on uterine musculature
Oxytocic	A drug with an oxytocic like effect. Oxytocin is a naturally produced hormone which causes regular rhythmic contractions of the uterus and affects mostly the upper uterine segment of the uterus. In this context the use of the term oxytocic refers to any drug which causes the uterus to contract which can include synthetically produced oxytocin (syntocinon) as well as combinations of drugs which include other uterotonics such as ergometrine. The term oxytocic has been used interchangeably with uterotonic in this thesis.

AUTHOR DECLARATIONS

1. During the period of registered study in which this dissertation was prepared the author has not been registered for any other academic award or qualification.
2. The material included in this dissertation has not been submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.
3. The programme of advanced study of which this dissertation is part has consisted of:
 - a. Research methods modules
 - b. Supervision tutorials
(All of the above were undertaken in the Faculty of Health and Life Sciences, De Montfort University)
 - c. Education in the use of Atlas ti and Endnote plus computer software
 - d. Attendance at relevant research conferences.
4. Guidance for the structure of this thesis was provided by the De Montfort University Research Degree Regulations (De Montfort University 2000) and a text by Allison and Race (Allison and Race 2004)
5. Endnote 6 has been used to format references in the text and in the bibliography

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Publications arising from the thesis

Refereed papers and books

- Harris, T. (1998). "Gaining approval for clinical research in third stage management." British Journal of Midwifery 6(8): 532-534.
- Harris, T. (2001). "Changing the focus for the third stage of labour." British Journal of Midwifery 9(1): 7-12.
- Harris, T. (2004). The third stage of labour. Mayes' Midwifery. S. MacDonald and C. Henderson. London, Bailliere Tindall.

Conference papers

- Harris, T (2000). Oral presentation. "Midwifery practice in the third stage of labour." Midwives Marking the Millennium: the Diversity of Practice International Conference. 8-9th June Highcliffe Hotel, Bournemouth
- Crompton, A. and T. Harris (2000). Oral presentation "Defining and understanding birth to skin-to-skin" Are Midwives losing the art of keeping birth normal conference 27th November Hayes Conference Centre, Swanwick, Derbyshire
- Harris, T. (2001) Oral presentation "The use of an egalitarian paradigm in a qualitative research project entitled midwifery practice in the third stage of labour" 2nd International Qualitative Evidence-Based Practice Conference 14-16th May 2001 Coventry
- Harris, T. (2002). Lecture "Midwifery practice in the third stage of labour" International Confederation of Midwives 26th triennial Congress April 14-18th 2002 Vienna Austria Centre, Vienna.
- Harris, T. (2002). Oral presentation "The use of qualitative research to inform midwifery practice" International Confederation of Midwives 26th triennial Congress April 14-18th 2002 Vienna Austria Centre, Vienna.
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- Harris, T. (2002) Oral presentation. "The use of qualitative research to inform midwifery practice on the third stage of labour". 3rd Annual International Research Conference: Transforming healthcare through research, education and technology 13-15th November 2002 University of Dublin Trinity College, Dublin
- Harris, T. (2002) Oral presentation. "Practice variation among midwives during the third stage of labour". 3rd Annual International Research Conference: Transforming healthcare through research, education and technology 13-15th November 2002 University of Dublin Trinity College, Dublin
- Harris (2002) Poster presentation. "Normality for the third stage of labour: a critique of active management in women at low risk". 3rd Annual International Research Conference: Transforming healthcare through research, education and technology 13-15th November 2002 University of Dublin Trinity College, Dublin

Chapter One: Introduction

1.1 Introduction

Childbirth is a complex physiological, sociological and psychological event. In the UK midwives play a significant role in the support and care of women during childbirth and have autonomous practitioner status in the care of women experiencing normal birth (Nursing and Midwifery Council 2004). The decisions midwives make whilst supporting and caring for women at this time are highly significant and influence a variety of childbirth outcomes (Raynor and Bluff 2005).

The process of giving birth is normally divided into stages. During the first stage (the labouring stage), uterine contractions dilate the cervix and position the fetus ready for birth. During the second stage (the birthing stage) the baby descends and is born and during the third stage the placenta and membranes are expelled (Henderson and Macdonald 2004).

For a woman and her family, the most significant moment during childbirth is normally the baby's birth, which is accompanied by a sense of achievement that labour is over and that mother and child have successfully negotiated the process. For midwives the birth of a baby is also important. However, whilst many parents see this as the end result of their childbearing experience, midwives have a continuing role in managing delivery of the placenta and membranes.

This thesis explores midwifery practice in the third stage of labour with particular reference to practice variation. This chapter will define the key concepts involved, identify how I became interested in this area of practice and provide a rationale for its investigation. This is followed by discussion of how a holistic perspective considering physiological, sociological, psychological and political issues

was adopted and how the aims for the study emerged. The chapter concludes with an outline of the remainder of the thesis with a précis of the contents of each chapter.

1.2 Key concepts

The third stage of labour is defined as the period immediately following a baby's birth until the placenta and membranes have been delivered (Harris 2004). The stage is characterised by reference to two specific events; the baby's birth and delivery of the placenta and membranes. Physiologically the third stage of labour only exists as an abstract concept, socially constructed to allow the exploration of one aspect of the childbirth process in detail. It is only one part of a complex inter related process; an extension of what has gone before (the process of labouring and giving birth) and what will happen afterwards (the control of bleeding and the return of the uterus to its non pregnant state). In recognising this, the potential influence of this phase on other aspects of childbirth and vice versa is acknowledged.

Management of the third stage of labour is the process by which expulsion of the placenta and membranes is brought about and involves interaction between the woman giving birth and her attendants.

Approaches to third stage management are normally categorised into two types; active management and physiological* or expectant management (Enkin, Keirse et al. 2000). Active management involves intervention in the normal physiological processes and generally includes early cutting of the umbilical cord, administration of a drug to make the uterus contract (a uterotonic drug) and umbilical cord traction to deliver the placenta (Rogers, Wood et al. 1998). Physiological management generally involves limited intervention in the normal physiological processes and the woman, by her own efforts and aided by gravity, brings about expulsion of the placenta and membranes (Rogers, Wood et al. 1998).

*The term physiological management rather than expectant management has been used throughout this thesis as this reflects the term most commonly used by interviewed midwives.

Within the UK active management remains the most common form of care for the third stage of labour, with the majority of women having active intervention at this time (Green, Coupland et al. 1998). However there is significant inter and intra professional debate about the benefits of such an interventionist approach in women at low risk, with some evidence suggesting mixed strategies or variation in practice are emerging as a result (Prendiville and Elbourne 1989; Gyte 1994), Gyte refers to this type of management as piecemeal (Gyte 1994).

The decision about how to manage the third stage of labour predominantly rests with the midwife present at the birth rather than the woman herself (Green, Coupland et al. 1998). Whilst some women may be offered a choice between active and physiological management, midwives play a pivotal role in guiding that choice and then implementing the decision made. The focus on the midwives' rather than women's decision making in this context is therefore justified.

1.3 Personal reflection

I became interested in midwifery practice variation in third stage care at the beginning of my career as a midwife in 1982. During the early 1980s active management of the third stage of labour was so routinely used in the U.K. it was viewed as a normal part of the birth process despite a lack of research evidence to substantiate such an approach (Myles 1985). Active management dominated to such an extent that women were informed about, rather than offered, this form of care. This reflected how childbirth was socially constructed at the time within a medicalised framework of hospital based practice and intervention driven care with women passive recipients of medical/midwifery care, which was regarded as the safest option for childbirth (Myles 1985; Tew 1990).

As a newly qualified midwife I moved from London to a maternity unit in the Midlands. Shortly after arriving, I noticed my midwifery colleagues practiced differently from the midwives I had worked with during my training in another part of

the country. I particularly noticed practice variation in third stage care. In a national climate where almost all women experienced active management for the third stage, I became aware that there was variation in what was meant by this term and how care was managed as a result. Midwives in my new place of employment adopted a type of active management called modified Brandt Andrews, with which I was unfamiliar.

I had been taught controlled cord traction; a way of managing the third stage that included administering cord traction as soon as the uterus was contracted. While I was taught to be aware of signs of separation and descent of the placenta, (a gush of vaginal bleeding and lengthening of the cord), I was also taught not to wait for these signs as they could be unreliable, easily missed and cause unnecessary delay.

The majority of midwives I worked with after qualifying, managed the third stage of labour with signs of placental separation and descent playing an important role. Midwives intentionally waited for these signs and did not apply cord traction until they had occurred. When asked why they waited, midwives said that they wanted to avoid the placenta being torn away from the uterine wall by early cord traction. They viewed waiting as a mechanism to ensure the placenta and membranes separated and descended naturally.

I had not been taught this form of active management and was unwilling to change my practice on the available evidence, so continued to use controlled cord traction. While I rationalised that waiting for signs of separation might be somewhat less interventionist, I was also aware that delay could increase the risk of a retained placenta. However my interest was triggered in both practice variation in general and third stage practice variation in particular.

Two years later I moved to a community midwifery post and undertook an Advanced Diploma in Midwifery course. It was during this period that Levy published a small study which investigated waiting for signs of placental separation in active management (Levy and Moore 1985). This study supported both the advocates of cord traction and the supporters of the modified Brandt Andrews approach, in that no

difference in blood loss rates were found when comparing the two methods. The study also confirmed variation in third stage practice among study midwives.

Following a period of time working in the USA as a parent educator, I returned to midwifery in England in the early nineties and became a midwifery lecturer. In my absence management of the third stage of labour had become a popular topic of discussion among midwives. In the preceding decade midwives and women had begun to challenge the dominant interventionist approach to third stage care (Inch 1985; AIMS 1986) and an alternative to this was re-emerging (physiological management), based upon the premise that a healthy woman had the ability to birth her placenta without interference (Stewart 1982; Stroud and Cochrane 1990). In response to the lack of available evidence as to which management was most effective, two large randomised controlled trials sought to compare them. These were published in 1988 and 1990 respectively (Prendiville, Harding et al. 1988; Begley 1990). Results from the studies suggested that active management shortened the third stage of labour and reduced maternal blood loss. These outcomes were used to justify the continued use of active management for the majority of women despite side effects of the approach being noted (Prendiville, Harding et al. 1988; Begley 1990).

While these studies appeared to offer conclusive evidence of the superiority of active management, debate emerged as to the reliability and validity of the findings, based around professional boundaries. Some midwives and lay groups actively criticised the studies, while doctors defended them. This debate was the focus of teaching on the subject at the time. I began to tentatively support the critical camp, based upon the commentary of authors such as Gyte (Gyte 1989; Gyte 1991a; Gyte 1991b; Gyte 1992; Gyte 1994) and supported by my own personal beliefs about childbirth and intervention. I believed birth was a physiological event in healthy women and that intervention, whilst appropriate in certain at risk situations, was not necessary for all women. This stance emerged despite my own predominantly interventionist approach to management of the third stage of labour.

In this climate my interest in third stage practice variation began to resurface as a result of the stories student midwives shared with me about their experiences in practice. Students told me that midwives practised differently from one another and that individual midwives did not always practice the same way each time they managed the third stage. Students perceived their role was to adapt to the practice of each midwife they worked with, which meant they were often directed to do different things in different situations with different midwives. From my own experience, I had been aware of inter practice variation among midwives working in different units in different parts of the country, but not inter and intra practice variation among midwives working in the same area.

Students described variation in timing of cord clamping, timing of administration of syntometrine (a commonly used uterotonic drug in active management), the application of guarding (placing a hand above the symphysis pubis and applying pressure to the abdomen while conducting cord traction) and when and how traction of the cord was applied.

Student anecdotes were then substantiated by a personal experience, when I observed a midwife assisting a woman giving birth on delivery suite. I can recall my surprise at the midwife's delay in giving the syntometrine (several minutes after the birth of the baby) and delay in applying cord traction (approximately 10 minutes later). The midwife was an advocate of minimal intervention in childbirth and she confided in me afterwards that had I not been present she would have opted not to give the syntometrine at all.

These experiences and my understanding of the literature fired my interest in practice variation in third stage care among midwives. No descriptive studies of third management had been completed prior to the published comparative studies and practice variation in third stage care, whilst being described in the literature, had not previously been investigated. I wanted to explore this area more fully, to see if there was evidence of widespread variation in third stage practice and to find out why this was occurring. In addition, I postulated that if there was variation in third stage care, the

reliability and validity of comparative studies undertaken in the 1980's could have produced unreliable evidence, their results challenged on the basis that multiple rather than two types of third stage management existed. Also I was interested in the extent and development of practice variation among midwives.

1.4 Practice variation

The concept of clinical practice variation among healthcare professionals is not a new concept. It is well recognised that the behaviour of individuals involved in health care varies and can have a significant effect on the health and wellbeing of recipients of care (Dowie and Elstein 1988). How practice variation is viewed can also vary.

A positive view is that to meet the needs of individuals, practice must vary. Offering the same labour care to a young unsupported woman of fifteen having her first baby and to a thirty year old woman having her third, will not necessarily meet the needs of either. Care has to be planned within a holistic framework which considers the physiological, sociological, psychological and spiritual needs of individuals. This person focussed approach ensures particular needs are met and potentially influences outcome.

Practice variation can also be viewed as a response by midwives to learning in and from practice. As a midwife travels through her* career she learns not only from research based evidence but from the experiences she is exposed to, the people she works with, the clients she cares for, and outcomes of the care she offers. In this way she may develop into a highly skilled proactive practitioner, utilising her experiences to adapt and develop her practice. This process also allows for new developments in practice to be implemented and integrated into care packages if appropriate. In this way the danger of care becoming rigid and routine is avoided and the creative nature of practice behaviour is acknowledged.

*The use of the feminine pronoun has been used throughout this thesis to reflect the gender of the majority of midwives in clinical practice and in this study. There was no intention to use sexist language or to undervalue the role male midwives play in the midwifery profession. British Sociological Association guidelines on non sexist language have been used throughout this thesis (British Sociological Association 2004).

A critical view raises concerns about quality of care when there is practice variation and highlights the importance of evidence based practice. In a litigation conscious health arena, practice variation is often viewed in terms of substandard care (Dowding and Thompson 2002; Editorial 2002). If minimum standards of care are not set, women may be exposed to sub optimal care during childbirth with a potential to affect adversely the outcomes for mother and baby. In an attempt to address practice variation in England, the National Institute for Clinical Excellence was established to develop national clinical practice guidelines based upon the best available evidence (Department of Health 1997). Whilst such an approach can help to inform midwives about evidence for practice, particularly in students and those newly qualified midwives, there are a number of concerns.

Guidelines can be outdated as soon as they are written due to the speed at which evidence is produced.

Guidelines can be viewed as edicts or protocols, to be followed to the letter. In this way innovative practice may be strait jacketed and individualised care may become an outmoded concept as standardising practice becomes the norm.

The process by which guidelines are developed can be challenged on the grounds that a medical and technology based focus is being taken. This is reflected in the dominance of medical representation and influence on guideline committees (National Institute for Clinical Excellence 2003; Rogers 2003). Professions with less political power, such as midwifery may be seen as controlled by the medical establishment who have traditionally had greater political influence (Stephens 1998). Therefore guidelines reflect a medical rather than a midwifery focus.

Knowledge from medicine is also being used to develop guidelines with the experiment and the randomised controlled trial remaining the gold standards to inform practice (Royal College of Obstetricians and Gynaecologists 2000), with limited recognition of the value of other ways of knowing. Such strategies are linked to standardising rather than individualising care. However some guidelines are now being

written which reflect innovative developments in practice, based upon experience. However these tend to be used to push forward the interventionist agenda of medicine rather than the non-interventionist agenda of midwifery as reflected in the guidelines on routine anti-D prophylaxis (National Institute for Clinical Excellence 2002).

The quality of evidence from research can also be challenged. For example there has been limited exploration of third stage practice variation which may have affected the design of large randomised trials comparing third stage management approaches.

Exploring practice variation among midwives adds to the debate about the use of clinical guidelines in practice and may challenge the current apparent consensus that practice variation is an *example of substandard care rather than a reflection* of holistic highly skilled practice.

1.5 Approach

1.5.1 Holism

Currently childbirth in the UK predominantly takes place in hospitals (Office for National Statistics 2004a) and technological advances have led to a significant amount of intervention in the normal process of giving birth (Office for National Statistics 2004b). The medicalisation of childbirth incorporates issues such as power and control and values and beliefs held by women and midwives alike. Within this context the third stage of labour and its management can be viewed not merely as a physiological event, but also as being socially, psychologically and politically constructed. The way childbirth is categorised reflects this. For example the terms active and passive management in third stage care refer to the action or inaction of the midwife rather than the woman experiencing childbirth. The implication being that the midwife's position as medical expert is privileged in third stage care above that of the woman. As it is the woman giving birth, a more appropriate use of the terms might be in reverse: to see active third stage as the woman being active in completing the process herself, with

passive referring to the woman being submissive to the ministrations of the midwife. Another example is the way labour is normally described in the literature as a series of stages; the first stage, the second stage and the third stage (Henderson and Macdonald 2004). This classification system was constructed by healthcare professionals. An alternative classification system could have been developed which identified pregnancy as the first stage of labour, labour as the second stage and birth as the third stage. Alternatively labour could have been divided into numerous other stages dependent on other parameters such as the dilatation of the cervix. To a certain extent this already happens with descriptions such as latent, active and transition phases in the first stage of labour (Henderson and Macdonald 2004). These stages divide up a complex physiological process into meaningful units for investigation and management (a reductionist strategy). They compartmentalise a process which more closely reflects a continuum, with no recognition that the boundaries between stages are often blurred, both physiologically and in practice. There is also a danger that each stage is seen in isolation, when in fact what has gone before may significantly affect the next stage in the process.

The intention in this thesis was not to compartmentalise childbirth, but, as the terminology was well known in practice, it was used to focus upon a discrete part of a highly complex physiological sociological and psychological event to explore midwifery practice in depth. Therefore a holistic approach to investigating a small part of midwifery practice was adopted.

Holism comes from the Greek word *holos* meaning entire (Pearsall 2001). An holistic approach considers the whole of something or someone and not just a part and is a term often used in midwifery to reflect how midwives aim to meet not just the physiological needs of women but also their social, psychological and spiritual needs (Tiran 1999). In this context a holistic approach reflects consideration of all aspects that might influence midwifery practice in the third stage of labour so that an in depth understanding of the variety of issues involved when midwives choose an approach to third stage care can be examined. This incorporates consideration of physiological as well as psychological, social and political issues.

1.5.2 Underpinning beliefs

In over twenty years as a midwife my philosophy of care has moved, from accepting intervention in childbirth as the norm to challenging its indiscriminate use. This is based upon a fundamental belief that for healthy pregnant women, childbirth is a normal life event requiring no intervention. In addition I also believe that technology and intervention in childbirth has its place, but only in supporting women whose childbirth experiences deviate from the normal. My beliefs also acknowledge the difficulties we have as midwives in asserting ourselves as a profession to practice autonomously within a normality framework because of the decades of obstetric influence over childbirth, the dominance of hospital birth in our society and the socio-political challenges faced by midwifery as a disadvantaged gender group. This research project was situated within this context.

1.6 Research aims

I began this project with the aim of exploring the concept of practice variation in third stage management among midwives, focussing on what midwives do and why they do it. A number of aims for the project emerged from these two questions as a result of reflecting on my personal experiences in practice and understanding of the literature on third stage care (see table 1.1) .

Table 1.1 Project aims

- To identify and explain the variety of ways midwives manage the third stage of labour.
- To identify characteristics associated with different third stage management practices.
- To identify and explain models of midwifery care in labour.
- To identify and explain how midwives develop expertise in management of the third stage of labour.

These aims were used as a springboard to investigate practice variation, but were not used to confine what could be investigated as I wanted to adopt an inductive

exploratory approach to the investigation, allowing aspects of relevance in understanding third stage practice variation to emerge from within the study

1.7 Thesis structure

This thesis is presented as a series of chapters.

Chapter two presents the results of a literature review on the third stage of labour. This chapter identifies how physiology, history and research inform the practice of midwives in third stage care. Evidence of practice variation is substantiated with the presentation of an analysis of 55 published descriptions of third stage practice from which a simple typology of third stage management was identified based upon midwife activity levels and administration of an uterotonic drug. Finally an iceberg model of evidence for practice is proposed which suggests that midwives use evidence hidden from view to inform their practice and it is this hidden evidence that may provide some insight into why variation in third stage practice exists.

For the study, a qualitative approach based upon the principles of grounded theory was chosen. The methodology offered the opportunity to find answers to questions that centred on social experience, how it was created, and how it gave meaning to human life (Denzin and Lincoln 1994; Streubert and Carpenter 1995); to holistically explore the lived experience of midwives during the third stage of labour reflecting the multiple realities of participants. Chapter three explores the journey I took in choosing this methodology and the principles of grounded theory adopted for the study. Principles included using an inductively driven analytical framework rather than an over formulaic rigid coding process, using extant theory to guide rather than restrict data collection, valuing the importance of reflexivity and relationality and focussing on developing a substantive theory of practical relevance to midwives in clinical practice.

Chapter four describes the research design used for the study. This includes discussion of the overall research strategy, the research environment, ethical

considerations, sampling technique, data collection methods, data management and data analysis strategies. How a grounded theory is developed and what it looks like is also explained together with how the descriptive and analytical elements of the study are reported.

The study was undertaken in one health authority in England and involved midwives employed by two NHS Trusts. Data collection tools included semi-structured interviews (n=51), information taken from women's medical records, computer generated data on third stage practice outcomes and field notes and analytic notes made by myself during data collection and analysis. In addition non-participant observation was piloted (n=7) but abandoned for a number of practical and methodological reasons.

In response to emerging hypotheses pointing to an oral tradition of knowledge transfer among midwives a content analysis of multiple publications of two midwifery textbooks published in the 20th century was undertaken. This was completed in an attempt to discover whether current practice was grounded in the past and passed down from midwife to midwife or was newly developed.

Through a process of theoretical sampling and comparative analysis a large amount of information was collected which provided rich detailed description of practice variation. A theory of contingent decision making for the third stage of labour among midwives was generated from the data which provided understanding of how practice variation in third stage care occurred.

Chapter five presents midwives descriptions of third stage care and the reasons they gave for their practice. Evidence is drawn predominantly from interview data, with reference to observation data, and computer generated statistics of third stage practice outcomes. In detail third stage management is deconstructed and rebuilt in all its richness.

The chapter is organised around the 22 aspects to third stage care described by interviewed midwives and the two to five options for practice midwives identified were available for each aspect.

The complexity of third stage management is revealed together with the extent of inter and intra practice variation among the majority of participants. It is proposed that models of care for third stage practice can best be represented by reference to an interventionist-non interventionist practice continuum which reflects the multiple approaches to third stage management.

In chapter six a theory of contingent decision making for third stage practice is presented to explain and understand inter and intra practice variation among study midwives. The substantive theory generated revealed a basic socio-psychological process which guided third stage practice variation among midwives, which was labelled deciding/actioning care/making choices. Using the words of midwives, an analysis of the data collected revealed a highly complex decision making process which included three key influences on practice; the learning experiences midwives were exposed to, midwives' value and belief systems and the context in which care took place. These three categories influenced third stage care and provided an explanatory framework for midwifery practice variation, highlighting the complex nature of decision making at this time and how it is contingent on a number of influencing factors.

In chapter seven the theory generated from the study is discussed in relation to the wider literature on practice variation and decision making and the implications of the study findings to clinical practice. Issues such as the re-evaluation of current evidence for third stage practice, the recognition of the uniqueness of practice and the potential strengths and limitations of attempting to standardise practice are explored, together with an appraisal of how the proposed substantive theory fits within the framework of currently available evidence on clinical practice variation. The limitations of such a case study approach is outlined, whilst identifying the potential to apply the theory proposed to midwives in other practice settings and practice situations.

Conclusion

This chapter has defined what is meant by the third stage of labour, discussed midwifery care in third stage practice and highlighted the relevance of investigating practice variation. A reflective account of how I became interested in this area of practice has been provided together with a rationale for why investigating practice variation is important in the climate in which midwives now work. Why a holistic approach was adopted for the study has been outlined together with the identification of values and beliefs about childbirth I brought to the project. The aims for the project have been identified together with discussion about how they emerged. This has been followed by reference to the structure of the thesis including a summary of each chapter.

Having provided an overview of the key concepts involved in this thesis, chapter two provides a more detailed appraisal of the literature which evaluates the evidence on which third stage practice is based, and investigates evidence of practice variation in third stage care.

Chapter Two: Literature Review

2.1 Introduction

It is suggested that grounded theory studies do not begin with a literature review (Glaser and Holton 2004). However as a midwifery lecturer I brought to the project an understanding of the literature on the third stage of labour and its management. While I directly avoided searching for theories to explain practice variation (in keeping with grounded theory), I did conduct a review of the literature on third stage care to provide a contextual background to the project and to investigate whether the literature supported the concept of practice variation. Understanding of the literature was then used to guide initial data collection in the study. This chapter presents the results of the literature review.

The chapter begins with an outline of the search strategy for the literature review. This is followed by an analysis of the literature which informs third stage care. The notion that there are two ways of managing the third stage of labour is then challenged with the presentation of an analysis of 55 published descriptions of practice from which a simple typology of six approaches to third stage management is derived. Finally, from analysis of the literature, an iceberg model of evidence for practice is proposed which suggests that midwives use evidence hidden from view to inform their practice and it is this hidden evidence that may provide some insight into why variation in third stage care exists.

2.2 Search strategy

The strategy used for the literature review was to conduct an in depth analysis of the published literature pertaining to management of the third stage of labour which included reviewing textbooks published in the preceding five years and journal articles

published in the preceding 50 years. The aim was to review the evidence on which third stage practice was currently based and to target descriptions of third stage practice in the literature, seeking to assess whether there was any documentary evidence of practice variation in third stage care.

The literature was searched in a number of ways. Initially an electronic search of the Cumulative Index to Nursing and Allied Health (CINAHL), British Nursing Index (BNI), Medline(pubmed), Applied Social Science Index and Abstracts (ASSIA) and Cochrane Library were undertaken. The search term 'third stage' revealed several thousand articles and was not specific enough to third stage management. Therefore 'third stage of labour' was used and then 'third stage of labour' and 'management' which revealed 310 references. Those references referring to animals, management of complications and those limited to discussion of drug therapies for third stage management were excluded following review of each abstract. Additional references were identified from the reference list of review articles, and a manual search of Index Medicus and The British Nursing Index was also undertaken using the term third stage of labour as the key term. In this way earlier references were identified. Alongside the search for articles, four local university libraries were searched using the computerised search engines for relevant books on midwifery, obstetrics and the third stage of labour. Books tended to have chapters on the third stage of labour and therefore needed to be reviewed to identify if relevant. There were only two publications that focussed on the third stage of labour as the main topic.

Copies of all relevant articles were photocopied and filed in alphabetical order by first author's surname. Copies of any relevant textbooks were acquired. All references were recorded in Endnote 6 reference manager. Articles not available locally were sourced through the British Library.

A systematic approach to the analysis of the articles/book chapters was undertaken. Each piece of literature was read in detail and a highlighter pen used to mark key information. A sheet of paper was then fixed to the front of each article. The sheet included the full reference, descriptions of third stage management given in the

article or book and evidence given supporting management approaches described. Once the reference had been added to Endnote 6, a code was used to identify this on the sheet. This made accessing key information easier at a later date.

From the descriptions of management, eleven aspects to third stage care were identified. To assist in analysis, descriptions of third stage management were tabulated according to these aspects.

While reviewing recently published midwifery textbooks, it emerged that evidence informing third stage practice could be categorised into physiology evidence, historical evidence and research based evidence.

2.3 Evidence for midwifery practice in third stage care

Within the current climate in midwifery, the importance of evidence based practice is paramount (Fullerton and Thompson 2005). Midwives are being asked to justify their actions based upon rational decision making strategies supported by evidence (Fullerton and Thompson 2005). An exploration of midwifery texts (Silverton 1993; Beischer, Mackay et al. 1997; Sweet and Tiran 1997; Bennett and Brown 1999) suggested evidence for third stage practice is derived from physiology, the development of an interventionist culture in third stage care and research studies comparing management approaches. These three aspects were used to frame discussion of the literature on the third stage of labour.

2.3.1 Physiology informing practice

The literature identified that physiologically the female body is designed to expel the placenta and membranes and control bleeding following the birth of a baby. There was evidence to suggest an understanding of the physiological processes at work during the third stage of labour underpinned midwifery practice; detailed reference to

was made to these processes in midwifery textbooks (Myles 1953; Silverton 1993; Sweet and Tiran 1997; Bennett and Brown 1999). An exploration of physiology provided some understanding of what influenced a midwife's management during the third stage of labour. The literature revealed the following description of the physiological processes involved.

Separation of the placenta usually begins with the contraction which delivers the baby's trunk and is completed with the next one or two contractions. As the baby is born there is a marked reduction in the size of the uterus due to the powerful contraction and retraction of the uterine musculature. The placental site therefore greatly diminishes in size. Initially the mechanism of placental separation was thought to be brought about by the bursting of decidual sinuses under pressure and the subsequent forming of a retro placental blood clot which tore the septa of the spongiosa layer of the decidua basalis, detaching the placenta from the uterine wall (Brandt 1933). However Dieckman et al (1947) and more recently Herman et al (1993) suggested separation was caused by the active placental site uterine wall thickening and reducing in size causing the placenta to "shear off". Blood collecting on the maternal surface of the placenta was interpreted as an incidental finding. Botha, (Botha 1968) suggested formation of a retro placental blood clot was not a physiological event, but occurred as a result of cord clamping.

Herman et al (1993) using ultrasound technology identified four phases to the third stage of labour; the latent phase, the contraction phase, the detachment phase and the expulsion phase. More recently Krapp et al (2000) described three phases, being unable to differentiate between Herman et al's contraction and detachment phases. These three phases have now been accepted as describing the process of placental detachment and expulsion (Herman 2000) (see table 2.1).

Detachment of the membranes begins in the first stage of labour, when separation occurs around the internal os. In the third stage of labour complete separation of the membranes takes place assisted by the weight of the descending placenta, which peels them from the uterine wall.

Table 2.1: Three phases to the third stage of labour (Herman 2000)

Latent phase

The placenta free uterine wall thickens under the influence of intermittent contractions, with minimal thickening of the uterine wall over the placenta.

Median duration 141 seconds (range 5-790).

Detachment phase

Gradual thickening of the uterine wall over the site of placental attachment. The myometrium adjacent to the lower edge of the placenta contracts, thickens and reduces its surface area overall.

This leads to a shearing off of the placenta in that area. The wave of placental wall thickening and placental separation continues upwards and outwards until the whole placenta is detached.

Median duration 50 seconds (range 15-100)

Expulsion phase

The upper uterine segment contracts strongly forcing the placenta to fold in on itself and descend into the lower segment and from there to the vagina. Gravity and maternal effort brought about by stimulation of the pelvic floor, leads to expulsion of the placenta and membranes.

Median duration 80.5 seconds (range 2-385).

In the work by Krapp et al (2000) median length of the third stage was calculated to be approximately 6 minutes in both active and physiological management. This was in contrast to evidence from comparative studies which claimed a significant reduction in the length of the third stage with an active management approach compared to physiological management (Prendiville, Elbourne et al. 2000). This may suggest that activities on the part of practitioners while managing the third stage may directly influence events and variation in that practice may also be relevant. For example cord clamping is an intervention routinely practiced in active management of the third stage of labour. If the umbilical cord remains intact during the process of placental separation blood can pass to and from the infant until cord pulsation has ceased (Yao 1974). The amount of blood gained or lost by the baby will depend on its position (above, at or below the level of the uterus) and uterine activity (Harris 2001) (see appendix one). It is suggested that if the cord is clamped early, the resulting extra fetal blood retained in the placenta prevents it from being so tightly compressed by the uterus. As a result contraction and retraction of the uterus may be less effective, and maternal blood loss

increased, leading to a greater retro placental blood clot being formed (Levy 1990; Edwards 1999). Variation in management of the cord by the midwife combined with variation in where the baby is placed while the cord remains intact may explain why length of third stage varies so much in the literature.

During the process of separation descent and expulsion of the placenta, a number of clinical signs may be seen. As the placenta separates a small amount of blood oozes from the placental bed and tracks down between the membranes and appears as a gush of blood per vagina (sign of separation). Abdominally the uterus rises and the descended placenta can appear to resemble a full bladder as it lies in the lower uterine segment (sign of descent). Lengthening of the cord may be seen (sign of descent). The placenta then appears at the vulva in one of two ways. If the placenta appears fetal surface first with the membranes trailing behind (like a jelly fish or inverted umbrella) it is referred to as a Schultze presentation. Any blood lost during the third stage collects on the maternal surface of the placenta and is encased by the membranes. Over 80% of placentae are delivered this way (Akiyama, Kohzu et al. 1981). A Matthew Duncan presentation is less common and associated with slower placental separation (McDonald 2003); the placenta slips from the vagina sideways and the maternal surface appears at the vulva first. This type of presentation is associated with more bleeding as blood which oozes from the placental site of attachment, is not encased in the membranes and escapes via the vagina.

Following expulsion of the placenta several mechanisms come into play to control bleeding from the maternal sinuses at the site where the placenta was attached. The empty uterus fully contracts and the uterine walls come into apposition. The myometrium continues to contract and retract intermittently. The interlacing muscle fibres seal the torn decidual vessels which run through them. These fibres are often known as “living ligatures” as they constrict the torn blood vessels. The process of blood clotting at the placental site of attachment is then initiated and the area quickly becomes covered with a fine protective fibrin mesh (Bennett and Brown 1999).

Any factor which interferes with the normal physiological processes can influence the outcome of the third stage of labour. This includes a variety of complications of pregnancy and childbirth (Long 1986) as well as the action of individual midwives (Long 1986; Logue 1990). Uterotonic drugs given prior to and during the third stage of labour directly influence uterine contractility. The midwife's action or inaction can help to reduce the risk of bleeding during the third stage (Logue 1990). A woman's ability to avoid complications will also be based on her general health and by avoiding predisposing factors such as anaemia, ketosis, exhaustion and hypotonic uterine action (Bennett and Brown 1999).

Without any intervention the body is designed to bring about delivery of the placenta and membranes with sophisticated mechanisms to control bleeding. Actively intervening alters these physiological mechanisms and impacts on third stage outcomes. Intervening may lead to excessive maternal blood loss (Logue 1990) and may also affect the adaptation of the baby to extra uterine life (Edwards 1999). Therefore consideration needs to be given to the rationale for intervention, when a healthy woman with no pre-existing complications is physiologically designed to manage this phase of childbirth. Consideration also needs to be given to how such an interventionist strategy became so dominant (Green, Coupland et al. 1998).

2.3.2 Historical development of active management in third stage practice

In current clinical practice, for the majority of midwives, the third stage of labour is regarded as a time of potential hazard when unexpected and life threatening events can occur (Sleep 1993; Elbourne 1996). This perspective is reinforced within the midwifery literature, which focuses on the third stage as a period fraught with danger requiring skilled handling.

"Yet for the mother, this (the third stage) has the potential to be the most dangerous stage of labour when the skill and expertise of the midwife will be crucial in facilitating a safe, healthy outcome"
McDonald 1999:465.

Similar statements appear in the majority of midwifery textbooks, highlighting the risk perspective being perpetuated among students and midwives alike, and the necessity for management of some kind (Beischer, Mackay et al. 1997; Sweet and Tiran 1997). This focus on risk, on things likely to go wrong, stems historically from the early half of the 20th century when postpartum haemorrhage (PPH) was a significant cause of maternal mortality and morbidity and the medicalisation of childbirth was seen as an attractive innovation without risk. This was justified in the nineteen thirties when the death rate from PPH was 3 women per 10,000 births (Moir 1955). However since then there has been a rapid decline in deaths attributed to PPH. In the triennia 2002-2004 a rate of 3 per year was reported (Lewis 2004). Whilst many authors wish to attribute this to uterotonic drugs and active management (Moir 1955; Prendiville and Elbourne 1989), other factors which may have influenced the decline have also been acknowledged (Prendiville and Elbourne 1989) such as improvements in socio economic conditions, the introduction of free primary health care, and the development of antibiotics and blood transfusions.

It is still suggested that the most significant cause of PPH is the failure of the uterus to contract and control blood loss from the placental site of attachment (Akins 1994). The fear of this happening has led to the routine use of uterotonic drugs and interventionist strategies which accelerate the third stage of labour, deliver the placenta quickly and control bleeding (active management). Whilst concern with excessive bleeding may continue to be legitimate for developing countries, where PPH remains a significant cause of maternal mortality and morbidity, within the UK this is not the case and raises the question whether the maintenance of such a focus on risk needs to be re-evaluated (Edwards 1999).

The sociological term medicalisation describes the increasing tendency for medicine and the medical profession to expand its claims over the lives of individuals by treating normal conditions as disorders requiring medical treatment. The medicalisation of childbirth refers to the medical control of women's birth experiences

(Teijlingen, Lowis et al. 2000). The risk focus that has evolved in relation to the third stage of labour can be associated with this medicalisation process. Oakley suggests,

“The professional obstetrical view that childbirth is a pathological process and women are passive objects of clinical attention has become an integral part of the way in which the community as a whole sees childbirth”

Oakley 1993:119

Oakley's viewpoint is illustrated in the way active management of the third stage of labour has come to dominate childbirth (Green, Coupland et al. 1998) and is a reflection of its medicalisation. Women are no longer seen as capable of birthing the placenta and membranes without intervention and the ritual of intervention is well established and accepted by the majority of women (Green, Coupland et al. 1998).

Historically childbirth was not a medical event. It was an event that took place in the community. When a woman was about to give birth she called upon a midwife and her closest female friends and family to attend her (Wilson 1995). Midwives were trained by apprenticeship, known as wise women and lived within the communities they served. They came from a variety of backgrounds and were often known as bold, self confident assertive characters (Wilson 1995). Childbirth remained outside the medical arena until the seventeenth century, and viewed as a normal process, midwifery care emphasising support rather than intervention (Rhodes 1995).

Intervention in the third stage of labour is not a new concept. Hippocrates (460 BC) mentions the value of getting a woman to sneeze in order to expel the placenta (Rhodes 1995). Aristotle (384-322 BC) advised cord traction, “to bring away the after-birth for it can prove dangerous if it is not speedily done” (Aristotle cited in Hibbard 1964:1485). It was not until Galen (131-201 AD) that it was understood that the uterus was the driving force which brought about delivery of the baby and placenta; prior to this it was assumed the fetus kicked his/her way out (Rhodes 1995). There is little else recorded about the third stage of labour until the 16th century when midwifery textbooks (written by doctors) began to appear (Rhodes 1995). In 1596 the discovery of the cause of a disease called St Anthony's Fire led to the identification of ergot (a black fungus spoiling rye in wet and cold weather) (Moir 1955). It is highly likely that many

midwives already knew about the uterotonic properties of ergot and used it for abortion and childbirth (Rhodes 1995). However for the majority of women the basis of midwifery care during this period was “gentle, conservative watching over labour” (Rhodes 1995:21). This is supported by the work of William Harvey (1578-1657) and Percival Willughby (1596-1685) (Rhodes 1995).

“The midwife’s office, or duty, in a natural birth is no more, but to receive the child and afterwards to fetch the afterbirth if need require”
Willughby cited in Rhodes 1995:27

During the 17th century, with the advent of the obstetric forceps, medical interest in childbirth, including the third stage, emerged (Rhodes 1995). In the 18th century Smellie advocated that the cord be cut immediately if the baby cried at once or delayed if the baby was slow (Smellie 1752). Bleeding of the cord was also carried out (if the child had convulsions). There was no tying of the maternal end of the cord, as this allowed drainage of blood from the placenta to reduce its size. The placenta was withdrawn by gentle pulling on the cord and if this failed a hand was inserted into the vagina to remove a separated placenta. Elizabeth Nihell (b 1723) was a midwife who practiced at the same time as Smellie. She was incensed by the interventionist approach he advocated and wrote a critique in response advocating no intervention (Nihell 1771). John Harvie who succeeded William Smellie also advocated delivery of the placenta “without violence” (Harvie 1767). He associated cord traction with uterine inversion and regarded pulling on the cord and manual removal as hurrying methods to be avoided. He described for the first time the abdominal changes that occurred at separation of the placenta (the uterus becoming smaller, more mobile and rising up in the abdomen) and noted that if these signs were waited for, the placenta delivered easily with some abdominal pressure. In difficult cases he recommended waiting an hour before applying cord traction or performing manual removal. Edward Rigby (1747-1821) went on to describe the physiology of the third stage and supported the premise of waiting for signs of separation before expediting delivery of the placenta (Rigby 1784).

During the 19th century the third stage continued to be managed along the lines suggested by John Harvie. Signs of separation were awaited and the separated placenta

was delivered by using the contracted uterus as a plunger to push out the placenta (Rhodes 1995). However cord traction and manual removal were still used.

In an effort to prevent the routine use of manual removal Carl Sigmund Credé (1819-1892) in 1864 proposed a method for removal of an adherent placenta (Credé's manoeuvre) (Credé 1864). This involved taking the body of the uterus in both hands abdominally, and squeezing hard to force the placenta out. This reduced the risk of infection (as it did not involve entering the uterine cavity) but could be very shocking and cause collapse. However routine manual removal continued in some practices throughout the 19th century (Rhodes 1995).

It was at about the same time that liquid ergot came widely into use for reducing the length of the third stage and to prevent postpartum haemorrhage (Rhodes 1995). Due to the variable amounts of active ingredient in ergot and its oral administration, this was not always effective.

During this period it was still thought that vaginal bleeding came from the placenta rather than the maternal circulation. However 90% of women experienced little bleeding during childbirth. For the remaining 10% it was virtually routine that manual removal and then packing of the uterus with linen occurred (Rhodes 1995).

Whilst the descriptions of third stage management available during this period are predominantly interventionist, it cannot be assumed that this is how the majority of midwives practiced. These records were written by the first obstetricians who managed for the most part, complicated births. It is apparent from a textbook written specifically for midwives, published at the turn of the 20th century, that non interventionist strategies were also widely used. Jellett describes delivery by the natural efforts of the woman with no action on the part of the midwife (Jellett 1901). However he also suggested this management was tedious, taking about two hours (perhaps as a result of confinement of women to bed during childbirth), and advocated a Harvie type approach with the use of abdominal compression following placental separation (this was called the Dublin method). Jellett (Jellett 1901) regarded both cord traction and manual removal as dangerous, the latter being influenced by the growing understanding of the causes of

infection. Thus there was a move away from routine manual removal of the placenta and cord traction. From this point on, manual removal was only used when the placenta did not separate and conducted under general anaesthetic.

In the nineteen thirties Brandt (Brandt 1933) critiqued the use of the expulsion method of placental delivery and regarded it as unnatural. He described a technique first suggested by Dickinson Pomeroy to control post partum haemorrhage, which Brandt adapted to aid delivery of the separated placenta. This included no touching of the abdomen for 5-10 minutes following delivery of the infant then the use of a hand placed above the symphysis pubis to detect placental separation by the absence of cord tension. He then proceeded to deliver the placenta by downward pressure just above the symphysis pubis. The cord was held taught during this procedure but traction was avoided. This led to placental delivery within 8 minutes.

The work of Brandt (Brandt 1933) and Andrews (Andrews 1940) began the resurgence of interest in cord traction as a means of delivering the placenta and membranes used later in combination with a uterotonic to expedite delivery and reduce the incidence of excessive bleeding. Further changes to the management of the third stage during the 20th century relate directly to the isolation of the active ingredients of ergot and pituitary extract and the introduction of their routine use as a prophylaxis.

As previously identified, ergot had been known about for centuries (Inch 1989). Liquid ergot, given orally, was used widely by midwives throughout the 17th, 18th and 19th centuries (Rhodes 1995). Unfortunately its effectiveness depended upon the quantity of active ingredient in the solution used, which was variable throughout this period. In addition its effects were delayed due to the oral route and it had the potential to be extremely dangerous. The vaso constrictive nature of the drug led to burning sensations of the hands and feet with a reddened complexion and had the potential to ultimately lead to gangrene (Moir 1955). This tended to limit its use (Inch 1989). At the turn of the century the active ingredient of ergot, ergotoxine, was isolated, followed by ergotamine in 1918 (Inch 1989). A more effective water soluble form, ergometrine (also known as ergonovine, ergotrate and ergobasine) was isolated in 1935 (Dudley and Moir

1935) and a revival of interest in the drug began. It could now be given intravenously (acting within 40 seconds) or intramuscularly (acting within 6 - 7 minutes). Following this, ergometrine became widely used after the third stage of labour (Martin and Dumoulin 1953) and was thought to have no side effects (Inch 1989). It was only later in the 20th century that the effects on blood pressure, nausea and vomiting were recorded, along with the potential to cause the placenta to be retained (Turnbull 1976; Prendiville, Elbourne et al. 1988; Begley 1990; Prendiville, Elbourne et al. 2000)). From the 1950s it became popular to give ergometrine intravenously to women at crowning of the infant's head, to wait for signs of placental separation and then use cord traction to deliver the placenta quickly (known as the modified Brandt Andrews technique (Kimbell 1958). This led to the demise of fundal pressure and the selective use of Credé's manoeuvre for women who had a retained placenta. The rationale for speedy delivery of the placenta was that ergometrine caused a non physiological contraction of uterine muscle, which affected the whole of the uterus including the lower uterine segment and the cervix. If the placenta was not delivered prior to the action of ergometrine taking effect there was a possibility that the cervix would clamp down trapping the placenta within the uterus. This package of care was suggested to reduce postpartum haemorrhage rates from 10% to 3% in the 1950s (Moir 1955).

In the early 1960s Spencer (Spencer 1962) described another way of managing the third stage of labour and called it true controlled cord traction. Ergometrine was given intravenously with the birth of the baby's anterior shoulder. The midwife did not wait for signs of placental separation but applied controlled cord traction in a sustained downward direction as soon as the uterus contracted. Waiting for signs of placental separation was abandoned. Further developments in third stage management were linked to the use of another uterotonic drug, pituitary extract.

Pituitary extract, alongside ergometrine became popular during the first half of the twentieth century. The active ingredient in pituitary extract is oxytocin, a hormone produced by the posterior pituitary gland. A pure form of the extract was isolated in 1954 (Du Vigneaud, Ressler et al. 1954) and synthesised by Boissonnas and named syntocinon. Syntocinon can be given intravenously (with effect within 40 seconds) or

intramuscularly (with effect within 2 ½ minutes). Unlike ergometrine's non physiological effect, syntocinon acts in the same way as naturally produced oxytocin. It produces strong rhythmic contractions, which affect mainly the upper uterine segment.

The benefits of mixing syntocinon (with its quick acting rhythmic contraction effect) with ergometrine (which led to a more sustained contraction) was proposed in the early 1960s. The result was the marketing of Syntometrine (a combination of syntocinon 5IU and ergometrine 0.5mg) (Embrey, Barber et al. 1963; Nieminen and Jarvinen 1963) for intramuscular administration at the birth of the infant's anterior shoulder. This was originally combined with fundal expression to bring about delivery of the placenta (Embrey, Barber et al. 1963), but by 1964 the superior benefits of cord traction were being highlighted (Hibbard 1964). Fundal expression then declined in use and Credé's manoeuvre was abandoned, and regarded as positively dangerous. The placenta was then delivered by cord traction as soon as the uterus contracted following the administration of syntometrine. This came to be known as "active management" of the third stage of labour and its popularity quickly spread (Turnbull 1976). By the mid nineteen eighties active management with syntometrine was used in the majority of maternity units in Britain for the majority of births (Garcia, Garforth et al. 1987). A form of management that was originally intended to treat abnormal cases was 'rolled out' to include all women; advocated for its effect in reducing the risk of postpartum haemorrhage (Inch 1989). As Moore highlighted:

"As so often with developments in obstetrics all mothers come to be treated in the same manner irrespective of the degree of risk"
Moore 1977:120

Whether such an approach was appropriate for all women was not addressed; active management emerged unchecked and with little evidence to support its use in women at low risk. Research based evidence comparing active management with physiological management in the UK did not emerge until active intervention was established as the norm within the majority of birth situations making comparative studies difficult to complete.

It is apparent from the literature that third stage practice has evolved and developed over the last century. The literature describes a variety of ways of managing the third stage of labour and demonstrates how a treatment for postpartum bleeding became a prophylaxis. Until the 1980s third stage practice was situated within this medicalised framework with active management regarded as a part of normal childbirth and seen as improving physiology, despite the lack of evidence to support this assumption. It was only as women and midwives began to question the need to medicalise childbirth that established practices such as active management for the third stage began to be challenged.

2.3.3 Research informing practice

In the 1980s dissatisfaction with task oriented technologically driven practice emerged (Walton and Hamilton 1995), together with a demand that evidence be provided to justify the medicalisation of childbirth, particularly in those women at low risk (Oakley 1983; Beech 1985; *World Health Organisation 1985*). *In third stage* management the evidence for practice did not exist. Active management of the third stage had developed untested and unchallenged. In response to this lack of evidence, two research projects took place (Prendiville, Harding et al. 1988), (Begley 1990). Both were large randomised controlled trials that sought to compare active management of the third stage of labour with *physiological management*. *Results published at the time* seemed equivocal in their support of active management for all women, based upon the conclusion that this approach reduced blood loss and shortened the third stage of labour. A subsequent study also supported these findings (Rogers, Wood et al. 1998). As a result active management of the third stage of labour continued to be recommended.

Despite the findings of comparative studies, debate continued in midwifery over third stage care (Isherwood 1989; Gyte 1994) and women began seeking a choice in the way their third stage was managed (Edwards 1999). While the benefits of active management for women at risk of postpartum haemorrhage were acknowledged, its indiscriminate use for women at low risk experiencing normal birth was challenged

(Odent 1998; World Health Organisation 1999). This was based on a critique of the way in which the comparative studies were conducted and the interpretation given to the results.

A systematic review of four studies which compared active management with an expectant or physiological approach supported the prophylactic use of active management in a hospital birth situation for all women (Prendiville, Elbourne et al. 2000). The implications for home birth were said to be less clear. The review concluded that there was an overall reduction in maternal blood loss of less than 100mls in women having an active third stage of labour over physiological management (mean weighted difference 79.33mls, 95% confidence interval -94.29 to -64.37) (Prendiville, Elbourne et al. 2000). It is questionable whether such a loss in a healthy woman has any clinical significance and this must be weighed against the potential side effects of this approach, both from the drugs given and the activities of the midwife. The same review highlighted that certain uterotonic drugs were associated with raised blood pressure, nausea, vomiting and headaches (Prendiville, Elbourne et al. 2000). Higher rates of retained placenta in active management were also reported (Begley 1990) along with more serious complications such as postpartum eclampsia and cardiac disorders (World Health Organisation 1999). It was suggested that syntocinon replace syntometrine as the drug of choice in active management as some of the complications above were associated with the ergometrine component of syntometrine (McDonald, Prendiville et al. 1993; World Health Organisation 1999). However a more recently conducted systematic review still noted complications with syntocinon suggesting that while its administration was not associated with the more serious complications of syntometrine, it was not without risk (Elbourne, Prendiville et al. 2001).

Critics of studies comparing active and physiological management highlighted a number of factors which may have influenced the results achieved; the lack of skill in physiological management among midwives was a key point. Three out of four studies were conducted in hospitals where active management was the norm (Gyte 1994). Whilst the latest study was conducted at Hinchbrook (Rogers, Wood et al. 1998), where physiological management was said to be more common, statistics were not

available as to the rate of physiological management before the trial began. Milner suggested this was 15-20% in the mid eighties (Milner 1989). Whilst this may denote some expertise, it was still not the management used for the majority of deliveries. Also it could reflect a high level of skill in physiological management in a small number of midwives or a lower level of skill across the whole midwifery workforce. Gyte (Gyte 1994) suggested that due to inexperience in physiological management, midwives developed a further management style, that of the “piecemeal” approach which she described as a combination of elements from both active and physiological management (Gyte 1994). Introducing physiological management to midwives familiar only with active management may lead to higher rates of excessive bleeding in physiological management as midwives attempt to apply interventionist principles to a non interventionist situation. Midwives themselves could also be the cause of the higher blood loss rates seen in physiological management as they intervene in a complex physiological event; a premise supported by Logue who noted significantly higher postpartum haemorrhage rates in more interventionist doctors and midwives (Logue 1990). In the Bristol study rates of postpartum haemorrhage in physiological management declined during the research project period as midwives became more familiar with physiological management, supporting this assumption (Begley 1990).

The superiority of active management is based upon the benefits of the approach in reducing blood loss. The issue of defining what constitutes excessive blood loss has been raised along with the difficulties in estimating amounts lost. It is well recognised that blood loss estimation is inaccurate with high loss often being underestimated (Brant 1967; Razvi, Chua et al. 1996). In addition, as the reduced loss associated with active management has become the norm, midwives may interpret the slightly higher blood loss rates in physiological management as abnormal, which may have influenced study findings. Currently a postpartum haemorrhage is defined as a blood loss in excess of 500ml. However in some countries this is 1000mls and Gyte, a haematologist (Gyte 1992) suggests that healthy women appear to cope well with the loss of such amounts. If this more generous definition had been used in the Hinchingsbrook study no statistically significant difference in postpartum haemorrhage rates would have been found between physiological and active management approaches (Rogers, Wood et al. 1998). In the

Netherlands only 10% of midwives routinely use oxytocic prophylaxis for the third stage (de Groot, van Roosmalen et al. 1996) and rates of home birth are much higher than in the UK. Initial results from the Lente study comparing active and physiological management of the third stage among Dutch midwives pointed to no difference in blood loss rates in excess of 1000mls for active and physiological management arms of the trial (Herschderfer, Diem et al. 1997) . This may add weight to the growing evidence that for low risk women a physiological approach may not significantly increase blood loss following birth, making it a realistic option.

More recently it has been suggested that whilst oxytocics may appear to reduce blood loss at delivery in the short term, the blood saved will be lost later in the postnatal period when the drug wears off (Wickham 1999). Wickham shared her personal experience of observing and caring for postnatal women following both active and physiological management of the third stage. She observed that following active management, women often experienced a heavy blood loss when going to the bathroom for the first time on the postnatal ward. She suggested this heavy loss did not occur in women who had physiological management.

Women are physiologically prepared in pregnancy for blood loss in childbirth by a significant increase in circulating blood volume together with haemodilution. Following delivery the increased blood volume is no longer required and together with haemodilution may support a woman's ability to cope with blood loss. Further studies are required to look at what constitutes normal blood loss following childbirth and the implications of actively reducing it. It cannot be assumed that reducing normal blood loss is in the woman's best interest and is without risk. Actively preventing women from losing blood they are designed to lose may alter the normal haematological changes that occur following birth and may lead to increased risk of postpartum complications such as deep vein thrombosis and pulmonary emboli.

Logue (Logue 1990) explored the concept of variation in practice during the third stage of labour by looking at individual postpartum haemorrhage rates among doctors and midwives in one maternity unit. He found considerable variation in blood

loss rates among individuals, with some staff having consistently higher rates of postpartum haemorrhage than others. He proposed that when managing the third stage,

“more conservative and patient operators show the lowest postpartum haemorrhage rates compared with the more impatient and heavy-handed who show the highest rates”

Logue 1990:511

This implies that the action or inaction of midwives and doctors may have a direct impact on the outcome of the third stage and requires further exploration. This is supported in the literature by reference to the potential dangers of fundal fiddling (kneading or pressing on the fundus intermittently) and inappropriate cord traction leading to uterine inversion (McDonald 1999). While this was a small descriptive study the results highlight the need for further investigation of the influence of practitioner behaviour on third stage outcomes. I am not aware that this has occurred. An analysis of postpartum haemorrhage rates for active and physiological management in individual midwives within published trials could provide evidence of variation in postpartum haemorrhage rates. This may point to a more complex explanation for excessive blood loss in physiological management arms of the studies.

A further factor in the critique of active management is its association with changes in the neonate. Early clamping and cutting of the umbilical cord is a routine part of active management. There is growing evidence to suggest that timing of clamping of the cord may impact on the health and wellbeing of the infant. According to the World Health Organisation (WHO)

“Late clamping (or not clamping at all) is the physiological way of treating the cord, and early clamping is an intervention that needs justification.”

World Health Organisation 1999:51

Delayed cord clamping is associated with the infant receiving more blood back from the placenta (approximately 80ml) (Yao 1974; Dunn 1985); this has a positive effect on iron stores (Pisacane 1996). However if syntometrine is given and the cord not clamped immediately, there is a risk that excessive amounts of blood will be pushed into the baby with the potential for hypervolaemia, polycythaemia and hyperbilirubinaemia to

occur (Edwards 1999). The amount of blood transfused will also depend on the position of the baby following birth. Gravity may encourage the loss of blood and therefore a lower haematocrit. The beneficial effect of continued delivery of oxygenated blood to the infant via the cord following birth has been suggested, particularly in those infants born prematurely or asphyxiated (Dunn 1985). Early cord clamping has also been implicated in increasing the possibility of feto-maternal transfusion, of particular importance in women who are rhesus negative (Lapido 1972).

In a WHO report on care in normal birth it was suggested that:

“Definite conclusions about the value of active management of the third stage in healthy low-risk populations cannot yet be drawn.”

World Health Organisation 1999:50

The report supports the use of prophylactic oxytocin for women at risk of postpartum haemorrhage or endangered by even a small amount of blood loss, but also supports the elimination of the use of routine parenteral ergometrine and suggests that the use of routine oxytocin and/or controlled cord traction be used with caution in normal birth until further research can be carried out as there is currently insufficient evidence to support a clear recommendation. This reflects a subtle change in interpretation of the evidence. There appears to be a move away from the long held belief that intervention in the third stage of labour is appropriate for all women, towards a recognition that whilst intervention may be appropriate for some it may not be for all. Also there is a growing awareness that active management is not without risk and should be used with caution. In this climate midwives are charged with offering women choices for third stage management with the implication that what these choices are may be different depending on the individual midwife's interpretation of what is meant by active and physiological management.

In reviewing the evidence for active management in the third stage of labour, it was apparent that while comparative studies have been interpreted as supporting the routine use of active management in all women giving birth in hospital (Prendiville, Elbourne et al. 2000), critics have highlighted a number of key issues which may have

influenced study findings (Gyte 1994; Harris 2001). In relation to this project two issues were most relevant; a) the reference made to a third approach to management (Gyte 1994) and b) the influence of midwifery management on outcomes for mother and baby (Logue 1990; Gyte 1994; Edwards 1999). These points highlighted the relevance of investigating practice variation among midwives in third stage care and also supported the concept that practice variation was a part of third stage practice among midwives. Further analysis of published descriptions supported the concept of practice variation in third stage care and revealed at least six approaches to third stage management.

2.4 Third stage management descriptions within the literature

Comparative studies were conducted based upon the assumption there were two ways of managing the third stage of labour; active management and physiological management (Prendiville, Harding et al. 1988; Begley 1990; Thilaganathan, Cutner et al. 1993; Rogers, Wood et al. 1998). What emerged from these studies was evidence to suggest a third approach was used by midwives which was called a piecemeal approach (Gyte 1994).

In an attempt to assess the level of practice variation an analysis of published descriptions of third stage management was undertaken. Initially research study protocols (Prendiville, Harding et al. 1988; Begley 1990; Thilaganathan, Cutner et al. 1993; Rogers, Wood et al. 1998) were compared. It was apparent that there was no consensus of what constituted active and physiological management, which implied that there was variation in practice within each approach. To explore this further a more detailed analysis of 55 published descriptions of third stage management was undertaken.

Descriptions of third stage practice published in research studies and the latest midwifery textbooks were reviewed and compared (see appendix two). From these descriptions eleven aspects to third stage care were identified and were used to tabulate management descriptions for comparison (see table 2.2).

Table 2.2: Eleven aspects to third stage practice identified from published descriptions

1. Management type
2. Uterotonic drug administered
3. When uterotonic drug administered
4. Handling of the umbilical cord
5. Position of the baby
6. Detection of a uterine contraction
7. Position of woman
8. Collection of blood
9. Breast feeding
10. Delivery of the placenta
11. Duration

Comparing descriptions revealed that management for the third stage of labour did not fit neatly into two approaches labelled active management and physiological management. Significant differences were found between management descriptions even if they were called the same thing.

Two key factors appeared to influence types of management: whether an uterotonic drug was given or not and how active the midwife was during the third stage of labour. From these two factors a typology of six third stage management approaches was identified (see table 2.3)

Table 2.3: A typology for third stage management

Category	Drug given	Midwife activity
A: Limited active management	Yes	No activity
B: Partial active management	Yes	Some activity
C: Complete active management	Yes	Fully active
D: Complete physiological management	No	No activity
E: Partial physiological management	No	Some activity
F: Limited physiological management	No	Fully active

The limited active management category (category A) included all those definitions where an uterotonic drug was given and there was no midwife activity during the third stage. For example in Gyte's description of piecemeal approach she described a situation where a uterotonic drug was given, the umbilical cord left intact and no cord traction used. Placental delivery was achieved by the woman's own efforts or gravity (Gyte 1994).

The partial active management category (category B) included all definitions where an uterotonic drug was given and there was some midwife activity. For example in the Salford trial (Mitchell and Elbourne 1993), active management included a uterotonic drug, early clamping and cutting of the cord with delivery of the placenta and membranes by maternal effort.

The complete active management category (category C) included all definitions where an uterotonic drug was given and all of the third stage was managed by the midwife. This was the most common definition of active management and included giving an uterotonic drug at or shortly after the birth of the baby, early clamping and division of the cord, and speedy delivery of the placenta and membranes by controlled cord traction.

The complete physiological management category (category D) included all definitions where no uterotonic drug was given and no midwife activity took place. For example in the Bristol trial (Prendiville, Harding et al. 1988) a form of management was used where no uterotonic was given, the cord remained unclamped till after placental delivery and maternal effort was used to bring about delivery of the placenta and membranes without any cord traction.

The partial physiological management category (Category E) included all definitions where no uterotonic drug was given and there was some midwife activity. This was the largest physiological management category. For example Thilaganathan et al (Thilaganathan, Cutner et al. 1993) described a physiological management which included no uterotonic drug given, cutting of the umbilical cord once it has stopped pulsating and maternal effort with delivery of the placenta with the midwife assisting.

The limited physiological management category (category F) included all definitions where no uterotonic drug was given and all of the third stage was managed by the midwife. For example Bider et al (1992) described a form of management which

included no uterotonic drug, immediate clamping and cutting of the cord followed by cord traction to deliver the placenta once the uterus was contracted.

These six groups fitted into three general approaches to third stage practice: The complete interventionist approach, the partial interventionist approach, and the non interventionist approach. The complete interventionist approach (category C) was where uterotonic drugs were given and the midwife was fully active in bringing about delivery of the placenta and membranes. The partial interventionist approach (categories A, B, E, and F) included all piecemeal approaches to management, where the total package of intervention or non intervention was not followed. Uterotonic drugs were either given or not given and there was either no midwife activity or some midwife activity. The non interventionist approach (Category D) was where no uterotonic drugs were given and the midwife did not intervene in the normal physiological processes. The woman actively birthed her placenta.

Despite the creation of a six group typology for third stage management descriptions in the literature, practice variation within each category remained. There were differences in timing of cord clamping, differences in the use of signs of placental separation and descent and differences in how the placenta was delivered; by maternal effort or cord traction. There was no explanation for this variation in practice, where it came from and how it developed. In addition, though much research had been carried out comparing individual aspects of third stage management and some combination of aspects, the exploring of all eleven elements of third stage management had not occurred. The lack of understanding of midwifery practice variation in the literature together with limited investigation of all aspects of care pointed to the need for an in depth examination of third stage management

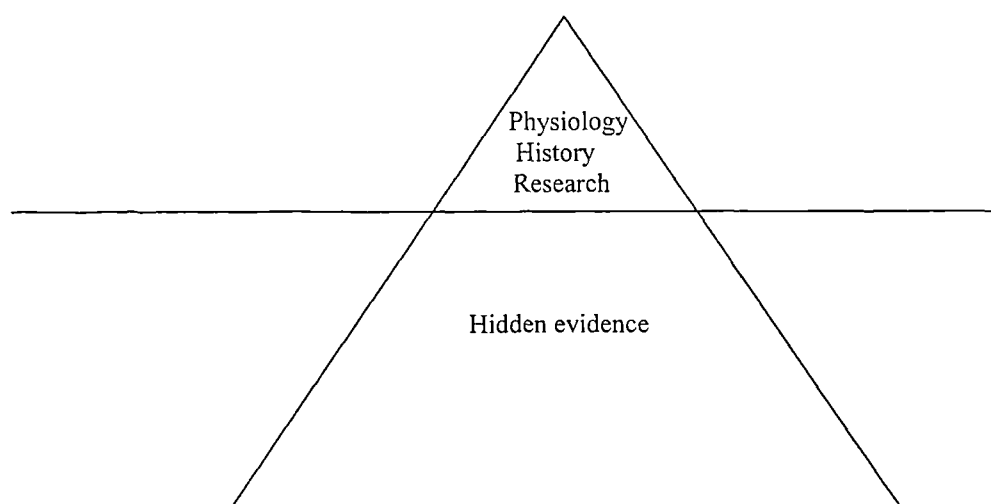
2.5 Revealing what is hidden

Reflecting on the literature review I came to the following conclusions. There was evidence to suggest practice variation occurred when midwives managed the third

stage of labour. I could find no evidence that practice variation had been investigated previously in this context. Whilst physiology, history and current research informed third stage management, it was apparent that other factors were involved in determining how the third stage of labour was managed by midwives. Influences on practice required further exploration to develop understanding of practice variation in third stage care.

I would like to suggest that evidence informing third stage practice can be figuratively depicted using an iceberg model. The iceberg model of evidence for practice in third stage care provides a mechanism to represent both the revealed and hidden evidence informing practice. An iceberg sits in the ocean revealing only a tip of its structure. What is hidden from view is potentially more relevant than what it seen above the water line. What is above the waterline represents the visual evidence on which midwifery third stage practice is based; physiology, history and research. The iceberg below the water line represents the evidence hidden from view and which midwives may be unaware of. The sea and air surrounding the iceberg represents the context in which care is offered to women during childbirth – how childbirth is socially constructed in our society today (see fig 2.1).

Fig 2.1: Iceberg model depicting evidence for midwifery practice in the third stage of labour



This visual depiction suggests that there is a need to look holistically and in greater depth at midwifery practice during the third stage of labour and the factors that may influence the care offered to women. In this way the hidden factors informing practice can be revealed and may give insight into why variation in practice occurs and its significance. Exploring what midwives do and why they do it may help individual midwives to reflect upon their own practice to develop in confidence and expertise. It may also be useful in assisting future researchers to consider how they structure their management protocols and the effect midwives' practice may have on the successful use of those protocols. Finally it could identify key educational needs midwives may have which, if addressed, might improve the quality of care provided to women.

2.6 Conclusion

Reviewing the literature on the management of the third stage of labour provided a rationale for the investigation of third stage practice variation among midwives. It has been suggested that third stage practice cannot be so clearly defined into two management categories with the implication that comparative studies have failed to acknowledge the complexity of third stage practice and need to be re-evaluated within this context. Whilst the literature pointed to the influence of physiology, history and research in third stage practice, I have suggested there is evidence hidden from view which could explain third stage practice variation. The next chapter will discuss how a methodology was chosen to investigate what midwives do during the third stage of labour and why do they do it to reveal understanding of the concept of practice variation in third stage care.

Chapter Three: Choosing a way to research: theory verification, theory generation or a middle ground?

"Our experience is that everyone who uses grounded theory spins it to suit his or her way of thinking, just as everyone who reads a book takes away a somewhat different message"

Scriber and Stern 2001b:xviii

3.1 Introduction

The overall aim of this project was to explore the concept of practice variation in management of the third stage of labour among midwives. It was therefore important to select an appropriate methodology (Walliman 2001). This was a broad and exploratory study in an area of midwifery practice not previously investigated. It aimed to determine the extent of practice variation among midwives and seek an explanation for it, or, simply, to ask, 'what do midwives do during the third stage of labour?' and, 'why do they it?'

Within health care research and midwifery itself, the use of a research approach based upon the verification of existing theory has been almost universally employed throughout the last century. It was only recently that other ways of researching care have been utilised (Biley and Freshwater 1999). Within the available research on third stage management, the hypothetico deductive approach using a quantitative methodology has dominated, results of which have supported an interventionist care strategy (Prendiville, Elbourne et al. 2000). Comparative studies using this model sought to verify the existing hypothesis on which practice was based at the time; that active management of the third stage of labour reduced blood loss compared to physiological management (Prendiville, Harding et al. 1988; Begley 1990; Rogers, Wood et al. 1998). These studies took place when active intervention in the third stage of labour was the norm, and is a significant factor in their critique (Gyte 1994) (Harris

2001). In addition there is evidence to suggest that third stage practice cannot be divided in to two management categories (Harris 2001), with the implication that comparative studies have failed to acknowledge the complexity of third stage care. Results from such studies must then be placed within context in determining the value of their findings.

As outlined in the previous chapter, quantitative research has led to the revealing of only a small part of the evidence on which practice is based. This strategy does not provide an explanation or understanding for the variation in practice, which has been noted by some authors (Prendiville, Harding et al. 1988; Logue 1990) and is apparent in the literature (Harris 2001). In addition how the original hypotheses were generated for these comparative studies is not explicated, with the inherent suggestion they arose from a priori assumptions, common sense and theoretical speculation. Dey refers to this process as arm chair theorising (Dey 1999).

The purpose of this study was to describe and explore variation in midwifery practice in the third stage of labour. Exploring such a complex process requires a holistic rather than a reductionist perspective to seek understanding of the decision making processes at work. The choice of inquiry paradigm reflects this.

Inquiry paradigms can be interpreted broadly, as referring to any number of research approaches or narrowly, referring to only two perspectives, the positivist and subjectivist schools of thought (Sarantakos 1998). As a result for some researchers there are as many paradigms as there are groups of like-thinking individuals, whilst others use this concept to describe the major theoretical directions in the social sciences.

When critically appraising any inquiry paradigm, consideration needs to be given to ontology, epistemology, methodology and method ; Denzin and Lincoln 2000). The journey begins with debating between the positivist and subjectivist traditions which underpin quantitative and qualitative research respectively. This is followed by an exploration of paradigms lying within the subjectivist domain, with a focus on the blurring of boundaries between such philosophical positions. From this

discussion is explicated the inquiry paradigm chosen. Three methodological approaches are then discussed in relation to the project and a rationale for the choice of grounded theory proposed. This is then followed by an in depth exploration of grounded theory and how the principles of grounded theory were used to underpin the research design.

3.2 Choosing an inquiry paradigm

Positivist philosophy was first referred to by August Comte, a French social philosopher (Kolakowski 1993) and is a term used to describe a collection of rules and evaluative criteria about human knowledge which confines knowledge or science to observable phenomena (Kolakowski 1993). The term positivism also overlaps with terms such as empiricism, behaviourism, and the scientific approach to researching (Hughes and Sharrock 1997). The emphasis in this paradigm is on the development of universal laws of cause and effect (determinism), based upon assumptions of a materialist ontology. Reality consists of objectively defined facts, which are observable by the senses, justifiable, verifiable and testable. From these facts then come generalisations which are used to predict reality in given situations (Henwood and Pidgeon 1993); a hypothetico deductive approach based upon reductionist principles. Positivists have an ideal or standard scientific research method which can be applied to a diversity of subject matter (Wright 1993); linked closely to quantitative methodology and the use of mathematical principles for analytic purposes. Quantitative research is defined as

"...involving the systemic collection of numerical information often under conditions of considerable control, and the analysis of that material using statistical procedures".

Polit and Hungler 1995:15

The emphasis is on the value of numeric measurement (Wright 1993). Positivism is a concept of scientific method modelled on the natural sciences, which is interested in testing theories (deduction) and creating a body of scientific knowledge, open to critical scrutiny by others through the ability to replicate findings (Mackenzie 1994).

While a positivist, scientific mode of inquiry has dominated the natural sciences, applying the philosophy to the study of human subjects has been challenged (Parahoo 1997). It is suggested that studying human beings as objects and attempting to generalise when human nature is about free will, choice, chance, morality and emotions is inappropriate (Hughes and Sharrock 1997). In addition the influence of the research act on participants' behaviour is not acknowledged. There is also awareness that positivist research cannot capture human experience holistically and meaningfully from a reductionist perspective. The inherent suggestion is that empirical observations only skim the surface of the behaviour being studied (Parahoo 1997). Other criticisms include the difficulty in maintaining researcher objectivity, the difficulty in accurately measuring what is not available to the senses (emotion, anxiety, experience of pain), difficulty in controlling human behaviour for experimentation and the ethics of doing so. Also that positivists are inappropriately fixated on providing an explanation through generality over understanding or meaning behind events and view explanation through the use of a formal theoretical scheme with no appreciation of diversity of forms of understanding and different kinds of explanations (Lincoln and Guba 1995).

Opposed to the positivist view of research is a broad group of inquiry paradigms collectively termed anti positivism, subjectivism or interpretivism (Rolfe 1994). Researchers within this tradition favour the use of a qualitative approach, examples of such methodologies being ethnography, phenomenology and grounded theory. Qualitative research is described as,

"Multi-method in focus, involving an interpretive, naturalistic approach to its subject matter"

Denzin and Lincoln 1998:3

Emphasis is placed on observation and the subjective experience within context, as opposed to an experimental situation. It is claimed to be a holistic, flexible, creative way of researching involving the use of exploratory research questions; the focus for study emerging from within the project itself as data collection and analysis occur concurrently (an inductive approach). There is no experimental control of participants, who are studied in natural environments. The approach is normally associated with a small sample size as rich detailed description is collected from participants, with

analysis based on words rather than numbers. In this way an insight into the nature of complex phenomena is provided normally based upon the analysis of multiple forms of data. This approach is especially suited to description, hypothesis generation and theory development (Brajtman 2001). Advocates reject the dogma that the positivist approach is the only true and rational way to view reality. A comparison is made between the scientist who makes generalizations about phenomena and historians who look for the individual and unique features of material (Wright 1993). Droyson first drew attention to the polarity of these two paradigms, suggesting that positivists were interested in *Erklaren* (explanation) versus *Verstehen* (understanding), which is associated with the subjectivist school (cited in Wright 1993). The subjectivist researcher does not attempt to remain value neutral. Epistemological assumptions are based on studying the social world within context in a sensitive manner, with emphasis on what is being studied rather than a particular set of methodological principles (Hammersley 1983). It is not enough to explain events but to understand what guides behaviour (Hammersley 1983). These assumptions are recognised as being value laden. Critics regard this as unacceptable subjectivity while others recognise such subjectivity as enhancing the research process. Becoming part of the process under investigation gives insight, puts data within context and provides a rich source of information gathering (Hammersley 1990). However caution is required to not lose sight of the purpose of the research.

Currently evidence for practice in third stage care comes from the positivist tradition. As illustrated in chapter two, this approach, while providing relevant information on aspects of third stage care, had failed to look holistically at the behaviour of midwives during the third stage of labour. An alternative approach was needed to seek out the meaning behind practice, and to offer an explanation for variation in third stage management among midwives which reflected an in depth understanding of the issues involved. A qualitative subjectivist approach provided such a forum and more clearly reflected the needs of the project.

From a personal perspective, I had no clearly defined hypotheses to test, and wanted to focus on questions such as, ‘what is going on here?’ I felt such a broad exploratory perspective was needed to seek out the meaning behind third stage practice

variation. Also to develop explanations for behaviour inductively, from the information collected rather than to be confined by a restrictive inquiry lens. The adaptability of a subjectivist paradigm facilitated this through the use of an exploratory statement of intent: to explore midwifery practice in the third stage of labour focussing on what midwives do during the third stage of labour and why they do it. In addition as a midwife researcher, I brought to the research field an insight into the topic being investigated. Using this approach allowed me to acknowledge the insight I already had in this field and facilitated the use of a methodology that recognised the researcher-participant interaction and its influence on the research process.

Whilst the debate between positivist and subjectivist research identified a lack of commensurability between the two, this did not apply to the plethora of inquiry paradigms within the subjectivist tradition. Efforts have been made to divide these paradigms into basic belief systems such as post positivism, critical theory, constructivism and participatory (Lincoln and Guba 2000). However within each of these groups are reflected such variation that to be a qualitative researcher in the 21st century is to accept that no study will go unchallenged by advocates of alternative approaches (Lincoln and Guba 2000). Discussion has also taken place about the potential to interweave viewpoints where it seems useful to do so and paradigms share similar values (Guba and Lincoln 1998). A review of the commensurability of four inquiry paradigms identified some overlap in ontological, epistemological and methodological issues (Guba and Lincoln 1998) (see appendix three). However some fundamental beliefs, such as views on the nature of truth and reality, cannot be so easily merged. The consensus of opinion, based upon the assumption from the post modern movement that there is no single truth, only partial truths, is to accept that no single conventional inquiry paradigm can exist. Multiple ways of knowing and discovering knowledge are possible (Lincoln and Guba 2000).

In exploring the subjectivist inquiry paradigms for this project it became apparent that no one inquiry paradigm met the needs of the project, the context in which the research was conducted and the values and beliefs that I wanted to adopt as

a researcher. Therefore a decision was made to adopt a pluralistic approach based upon the principles of the subjectivist tradition. The intention was not to create a new inquiry paradigm but to take elements from paradigms within the subjectivist tradition to enhance the scope of the project to achieve its goals. The intention was to create something that worked for the subject under investigation and my needs as researcher within context. There has been some criticism of researchers who choose to slur the boundaries in this way (Baker 1992). However more recently Johnson and others (Johnson, Long et al. 2001) have concluded that purity in qualitative research is in fact rare, as individual researchers apply their own relativist philosophy to the research process. These authors argue for British pluralism in qualitative research claiming there are no real natural laws concerning socially derived knowledge and that modifying approaches may actually add to rigour if well articulated through the use of reflexivity. Therefore a more pragmatic view is emerging which recognises the creative nature of researchers in adapting methodologies to suit a purpose (Scriber and Stern 2001b). This is supported in the early work of Glaser and Strauss who stressed the evolutionary nature of theory (Glaser and Strauss 1967) and in the way Grounded Theory and other methodologies have evolved over time (Strauss and Corbin 1990; Glaser 1992).

3.3 Choosing a methodology

Having identified the underlying paradigm on which this study was based, a review of three qualitative methodologies took place to choose an appropriate methodology. These were phenomenology, ethnography and grounded theory.

Phenomenology as a research approach is rooted in the philosophical writings of Husserl (Husserl 1913/1931). It was created at the beginning of the 20th century, to explore consciousness as experienced by participants. The focus is on the individual's interpretation of their experiences; how they perceive and express what is happening or has happened to them. The role of the researcher is to describe events as perceived and expressed by participants. This is achieved through the bracketing of researcher values and beliefs to prevent them influencing the description of individuals' experiences.

More recently, based upon the writings of Heidegger, (Heidegger 1927/1996) a hermeneutical approach to phenomenological research has emerged, which situates experiences within a contextual framework, the focus moving away from the experience itself to how an individual comes to perceive events in the way that they do, within a personal historical framework (Gadamer 1960/1996). Hermeneutics seeks to understand behaviour through shared meaning principles, with the researcher playing a subjective role and engaging in ones own biases (Schwandt 2000). Hermeneutics aims to get at reality through negotiated meaning, whereby a consensus of what is true can be revealed (Schwandt 2000). The notion of bracketing is abandoned in hermeneutic phenomenology as it is accepted that a researcher cannot be separated from their experiences and this allows for understanding that different people interpret experiences in different ways.

Hammersley identified ethnography as an alternative method and not an alternative paradigm (Hammersley 1983). However there are those who believe it to be a philosophical construct to guide all research practice. Davis describes ethnography as

“The study of detail which enables a culture to be described”
Davies 1995:223

and identifies its value as a method to study the culture of midwifery. The ethnographer is interested in how individuals are influenced by the culture in which they live. The approach relies on collecting naturally occurring data in the field, with no experimental control over participants. Particular emphasis is placed on studying groups together and how individuals interrelate within those groups, focussing on cultural norms and social factors that shape behaviour (Parahoo 1997). It has its roots in cultural anthropology, where early ethnographers went to live and study traditional communities by immersing themselves within these cultures and becoming part of the social group. A variety of ethnographic approaches exist dependent on the perspective or school of thought chosen (Mackenzie 1994). In addition the purpose of ethnography can be viewed in two ways; as a means of cultural description with no theory testing or development, or cultural description which seeks to develop theoretical explanations for behaviour (Layder 1993).

Grounded theory was an approach formulated by Glaser and Strauss in 1967 (Glaser and Strauss 1967) as an alternative to the deductive approach of positivism. It was devised at a time when the positivist school within sociology and other disciplines had become established as the dominant research approach, with theory verification at centre stage and the prior step of discovering relevant concepts and hypotheses de-emphasised. Grounded theory is a well established and utilised methodology in health care research. It is said to be useful for researching areas not previously investigated, where existing research has left major gaps and where a new perspective might be desirable, as in this context (Scriber and Stern 2001b).

Whilst grounded theory may appear similar to ethnography and phenomenology in aiming to describe what is happening in a situation, the approach goes one step further in explaining what is happening through a set of propositions. These propositions form a theory which is inductively derived from the data collected as simultaneous data collection, coding and analysis takes place (Scriber and Stern 2001b). Reference to existing theory/concepts only takes place when a clear theoretical pathway has developed from within the research study. Comparative analysis is used to develop a practically relevant theory, which predicts, interprets and explains behaviour (Glaser and Strauss 1967).

Choosing between phenomenology, ethnography and grounded theory was challenging. There were a number of interpretations of each methodology, approaches shared similar values and beliefs and each perspective offered a relevant viewpoint for investigating midwifery practice in the third stage of labour.

Phenomenology was rejected for two reasons. Whilst I valued the personal interpretation midwives gave for their action, I felt it narrowed the field of inquiry to this personal perspective. In addition, as a researcher, I did not want to bracket my values and beliefs in relation to the project, but accept and embrace their influence on the research process whilst not being confined by them.

Initially ethnography seemed an ideal methodology for investigating the social world of midwifery practice. However on further reflection, I felt the emphasis on culture as the inquiry lens restricted what could be investigated to this element. Whilst the culture of midwifery and the culture in which third stage practice is delivered were important, other explanations for practice variation could be relevant. Therefore I did not want to be confined by a methodology that restricted what I could look at to the socio-cultural elements alone.

This qualitative study has been based upon the principles of grounded theory. Grounded theory provided an approach that did not confine what could be investigated to the individual or cultural elements. In addition it provided a mechanism for describing and developing an explanatory framework for practice variation in third stage care from within the field of study. It allowed the development of a theory with practical relevance to midwives in their everyday working lives. The importance of describing behaviour was recognised as important in informing midwifery practice, at the same time as developing theoretical explanations for practice variation to assist midwives in understanding their practice behaviour. The importance of seeking commonalities among midwives to inform and challenge practice is an essential component of the study. Whilst generalisations are not possible recognising the relativism of any inquiry in depicting the truth, a version of reality can be portrayed which may assist midwives within the study area and elsewhere to reflect upon their practice in the third stage of labour and what factors influence that practice.

3.4 Shaping the grounded theory project

3.4.1 Developments in grounded theory

Grounded theory has evolved as a methodology since its inception in 1967. The methodology has been adapted by the original authors (Strauss and Corbin 1990) and to some extent re-invented by other researchers (Shatzman 1991; Kools, McCarthy et al.

1996; Screiber and Stern 2001b). Some have maintained the original name, others have branched out with a different methodology (for example in Dimensional Analysis) (Shatzman 1991; Kools, McCarthy et al. 1996). This diffusion of grounded theory has been welcomed by some (Screiber and Stern 2001b) and criticised by others, who regard such change as dilution (Glaser 1992; Dey 1999; Glaser and Holton 2004). Benoliel (Benoliel 1996) outlined the evolutionary development of grounded theory by reference to the decades of discovery (1960-70), development (1970-80), diffusion (1980-90) and diversification (1990-2000)

In the 1960s *The Discovery of Grounded Theory; Strategies For Qualitative Research* was first published (Glaser and Strauss 1967). The book described a methodology based upon the concept of generating theory inductively from data, utilising a strategy called the constant comparative method; a process by which qualitative data was collected, coded and analysed as an integrative process with theoretical sampling playing a key role. Research was not directed by a preconceived theoretical framework, though a partial framework of 'local concepts' outlining the structure and processes involved could be used (Glaser and Strauss 1967). In this initial formulation of grounded theory the coding process for analysis of data was not described in detail. Nor were the ontological and epistemological underpinnings of the approach discussed (Milliken and Screiber 2001).

Grounded theory was further developed by Glaser in the 1970s with the publication of *Theoretical Sensitivity* (Glaser 1978). In this account the process of coding data was elaborated with distinctions made between substantive coding and theoretical coding. Eighteen coding families were proposed for theoretical coding, though cues were still always to be taken from the data. Glaser also divided coding into open coding and selective coding.

In the 1980s Anselm Strauss collaborated with Juliet Corbin in the publication of *The Basics of Qualitative Research* (Strauss and Corbin 1990) which marked the decade of diffusion. Strauss and Corbin explained the complex process of comparative analysis and introduced several new concepts to the original theory, namely the use of

one way of theoretical coding (axial coding) with the use of a coding paradigm. The coding paradigm was based around conditions, context, action/interactional strategies and consequences. In addition they proposed a conditional matrix to analyse conditions and consequences. This led to the very public and somewhat acrimonious falling out between the two original authors of grounded theory.

In the 1990s Glaser took exception to the diffusion of grounded theory suggesting Straussian grounded theory was moving away from the inductive nature of grounded theory, towards a deductive perspective. He published a critique of the development in 1992 (Glaser 1992) and went so far as to suggest that a different methodology had been developed and called it full conceptual description. An advocate of Straussian grounded theory, Dey, suggested that Glasserian methodology was fixed, whilst Strauss and Corbin presented a methodology in evolution, influenced by postmodernist thinking (Dey 1999). Other authors suggested Strauss had created an approach which was programmatic and over formulaic (Wilson and Hutchinson 1996; Melia 1996; Glaser 1999). Melia suggested the complex analytic procedures got in the way of analysis and was an example of

"the technical tail beginning to wag the theoretical dog"
Melia 1996:376

She advocated the simpler route whilst also quoting Strauss, who said,

"Yet no inventor has permanent possession of the invention - certainly not even of its name - and furthermore we would not wish to do so"
Strauss and Corbin 1998: 273

This debate led to critical evaluation of the ontological and epistemological roots of grounded theory (not explicated in the original work) which was used to explain variation in the methodology's practical application by various authors (Scriber and Stern 2001b).

Benoliel (Benoliel 1996) suggested that the theoretical and intellectual underpinnings of grounded theory research by nurses were broadened as a result of a

number of factors: the influence of phenomenology and existential thought across a range of interpretive approaches; recognition of the reflexive nature of the investigator-respondent relationship, and; increased collaborative frameworks and hermeneutical approaches within and across disciplines (Benoliel 1996). In light of this, when deciding to use grounded theory as a methodology, researchers needed to clearly delineate the ontological and epistemological beliefs that underpinned the project and how they influenced the methodology and its practical application.

I would like to suggest a fifth era for grounded theory; the decade of resolution (2000 onward). At the beginning of the 21st century grounded theory is at last coming of age. It is a well recognised, valued and used methodology, which embraces its evolutionary principles. Grounded theory researchers embrace the concept of creating something new by generating practically relevant theory to inform practice. In so doing grounded theory as a methodology is advanced to meet the needs of the researcher and their area of interest. There has been a subtle move away from the critique of the nineties, when such adaptation of grounded theory was regarded as ‘slurring genres’ (Baker 1992). A more pragmatic approach has evolved, which recognises the creative nature of researchers in adapting methodologies to suit a purpose (Scriber and Stern 2001b). *Such adaptability is justified and defended by researchers through detailed discussion of their epistemological and ontological underpinnings.*

3.4.2 Ontological and epistemological roots of grounded theory.

Symbolic interactionism is said to be most closely aligned to grounded theory today and is said to reflect the epistemological and ontological underpinnings of the methodology (Chenitz and Swanson 1986). Symbolic interactionism is a theoretical perspective rooted in the philosophy of pragmatism (Blumer 1969; Blumer 1969/1986; Dewey 1922; Mead 1934/1967). Human action and interaction is the central phenomena of interest and the focus for theory development (MacDonald and Scriber 2001). While individuals are influenced by the situations they find themselves in, the reciprocal nature of the relationship between individual and environment is acknowledged. The

symbolic interactionist studies behaviour on the behavioural (interactional) level and the symbolic (meaning) level with analysis complete when both the symbolic and behavioural events in a situation reveal understanding (Chenitz and Swanson 1986). This is achieved through naturalistic inquiry methods. This classic view of symbolic interactionism is critiqued for failing to consider the objective constraints placed upon individuals in reality and the powerful influence of factors such as institutions, moral structures and class struggle (Lewis 1992).

Symbolic interactionism has been linked to philosophical hermeneutics, with Thompson (Thompson 1990) suggesting that symbolic interactionism and grounded theory are informed by hermeneutical philosophy. Hermeneutics was used as an instrument in the critique of positivism and the move towards non positivist theories such as symbolic interactionism (Abercrombie, Hill et al. 1986). Hermeneutics unlike other interpretive traditions such as intentionalism, phenomenology and language analysts, seeks to understand behaviour through shared meaning principles, with the researcher playing a subjective role and engaging in ones own biases (Schwandt 2000). Hermeneutics aims to get at reality through negotiated meaning, whereby a consensus of what is true, can be revealed (Schwandt 2000). This is unlike social constructionism, which rejects the concept of revealing an absolute truth or reality, but stresses that knowledge is not a passive entity, but constructed through the process of individuals giving meaning to experiences (perspectivism) within an historically created, socio cultural dimension (Fay 1996) (see fig 3.1). This perspective embraces the concept that knowledge is

"ideological, political and permeated with values"
Schwandt 2000:198

Constructivism has also been associated with grounded theory (Annells 1996), while other qualitative researchers have utilised a theoretical base which begins with symbolic interactionism but also integrates alternative streams such as phenomenology, feminism, and postmodernism (Flick 1998). It has been suggested by Chenitz and Swanson that symbolic interactionism is like phenomenology as it focuses on the meaning of events to people in natural settings (Chenitz and Swanson 1986).

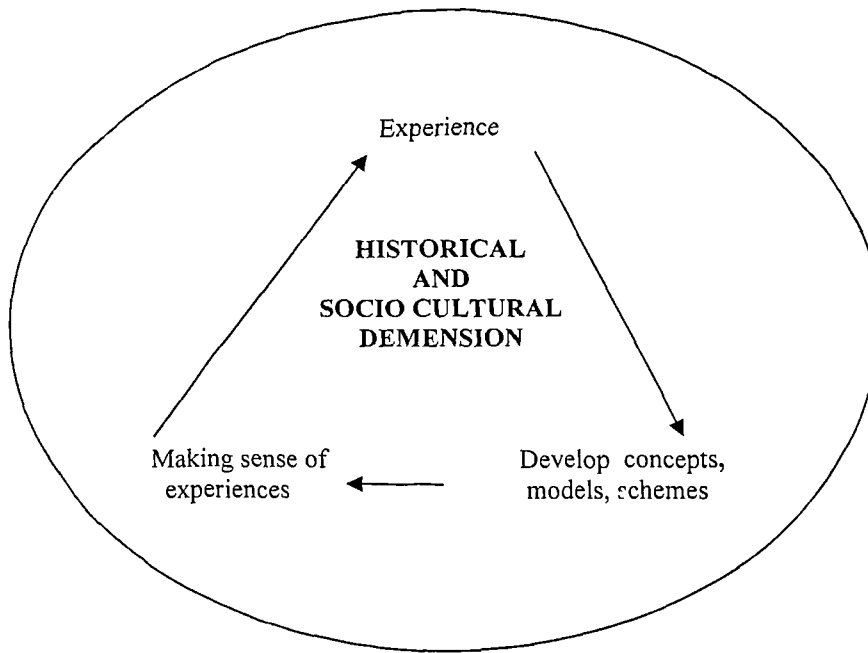


Fig 3.1: Depiction of perspectivism

Ontologically, the pragmatist view expressed by Mead (1934/1967) and Blumer (1969/1986) suggests a critical realist stance (post positivism), based upon the view that reality is out there and can probably, but imperfectly, be revealed. Annells suggests Glasserian grounded theory reflects this, by its reference to concepts of reality and true meaning (Annells 1996). However Glaser does make reference to contextually based reality and shared meaning, which may infer elements of relativism. Straussian grounded theory is traditionally more closely aligned with relativism, where truth is seen as relative rather than concrete and reality is isolated within a contextual framework, with multiple perspectives on reality possible (Annells 1996).

Epistemologically grounded theory has evolved, with evidence of varying epistemological stances (Charmaz 1989; Wuest 1995; Dey 1999). Annells suggests that classic grounded theory adopted a modified objectivist epistemological view of the researcher being separate from the research process (a post positivist stance) (Annells 1996). However this can be challenged, even within the first grounded theory publication, when the inter-relatedness of researcher with subject is clearly outlined,

though it must be acknowledged that positivist principles are also in evidence (Glaser and Strauss 1967). Since then the evolution of the methodology has been aligned with a move towards a more subjectivist epistemology (Annells 1996).

Variation in ontological and epistemological opinion led naturally on to variation in how grounded theory research was conducted. Though the classic grounded theory methodology was associated with the post positivist school, the emphasis by Strauss and Corbin on the creation of locally constructed realities with interpretive underpinnings, pointed it in the direction of a constructivist paradigm (Strauss and Corbin 1998). However development of a procedural coding process with the application of an existing theoretical framework for analysis countered this perspective directing grounded theory back to its post positivist roots. Conversely the Glasserian school stressed the creative nature of grounded theory and the importance of not applying rigid rules and theoretical constructs to the process of analysis; an approach not congruent within the post positivist tradition.

In an attempt to clarify which epistemological underpinnings may be most relevant for exploring midwifery practice in the third stage of labour using a grounded theory methodology, it was necessary to reflect upon what grounded theory would look like within each inquiry paradigm (see appendix four). This process confirmed the blurring of boundaries between the interpretivist approaches. A critical realist grounded theory approach placed the researcher outside the research process and required strict adherence to a set of formulaic procedures; a stance which did not recognise the creative nature of the research process, with the researcher playing a pivotal role in analysis. A critical theorist stance provided a basis for exploring midwifery practice within a socio-political frame where power differences among health professional, the medicalisation of childbirth and the dominance of scientific knowledge over other ways of knowing could be revealed. The aim of research within this paradigm would be emancipatory in nature, would provide midwives with a profession specific knowledge base from which to challenge ill fitting medical theory in women experiencing normal birth. If elements of constructivism were also applied to a critical theorist stance, a socio politically sensitive way of researching would be created with aspects of relativism. Using this

approach would reflect the post-modern agenda, with the creation of context dependent practically relevant knowledge from which to move forward, with no hierarchical stance on what was superior and inferior knowledge (Rolfe 2000). The researcher moves away from an atheoretical stance being possible, and moves towards a researcher as instrument stance, creating an interpretation of behaviour within a given situation (MacDonald and Scriber 2001).

In reality, as is reflected in the original work of Glaser and Strauss who saw process being at the heart of knowledge development (Glaser and Strauss 1967), so too is there development within the research process. Researchers beginning with a leaning towards one particular paradigm of research may find themselves moving towards another as a result of the process of doing the research. Elements of several paradigms may then appear, to create an individualistic way of researching which meets the needs of both the researcher and the subject matter that is being investigated.

3.4.3 Variation in grounded theory

Such ontological and epistemological variation in beliefs underpinning grounded theory, naturally leads on to variation in the methodology. There is significant discussion in the literature about what a grounded theory study should look like, with particular emphasis on whether the methodology should focus on theory generation or a combination of theory generation and theory verification, whether extant theory should be used, whether the methodology should be rigidly or flexibly applied and what grounded theory aims to produce?

The Glasserian school maintains the original ideas about grounded theory as formulated in the 1967 and 1978 publications (Glaser and Strauss 1967; Glaser 1978), stressing the generation of theory through its systematic discovery from data. Glaser (1978) claims this approach prevents the opportunistic use of theory of dubious fit and working capacity by placing understanding and practical application at the centre of the research process and preventing the use of exemplifying. Exemplifying being where logico-

deductive researchers seek examples to fit theory and are confined by it (Glaser and Strauss 1967). Exemplification is criticised for its dependence on verification and in confining developments to existing theory so that new concepts may not be discovered (Johnson 1983). However being able to enter the research field with an empty sheet and recording everything is challenged as being impossible as researchers bring to the research process their prior experience, education and perception of what is happening and view participants through this perceptual lens (Johnson 1983).

The Straussian school moved away from the original thinking behind grounded theory by adding complexity to the process of coding and analysis of data with the application of a conditional matrix. Theory was generated and checked against the data for rigour, using a conceptual framework to guide analysis (a combined inductive / deductive approach). For some authors linking extant theory to data, (either by immersion in relevant literature before the study or referring to extant theory during analysis of data), leads the theory generation process and changes it from theory generation to theory verification (Glaser 1992). Bracketing (putting aside existing theory) has been suggested as a way of addressing this problem (Morse 2001). Conversely others regard the use of such theory as beneficial in providing a guide rather than a guard to the project, ensuring a commitment to answering a particular question rather than commitment to producing a specific answer (Dey 1999). It may also prevent professional literature from becoming cluttered with different terms as well established terms in extant theory are utilised in emerging theory if appropriate (Stern 1996). In addition emerging theory, generated inductively, can be checked against the available evidence once it has been formulated, to cross check findings to add credibility to conclusions while at the same time addressing problems of existing theory leading theory generation. Glaser argues this is unnecessary if the inductive process has been followed (Glaser 1999). He also suggests a commitment to extant theory could lead to relevant questions arising from the data not being addressed, due to the focus on a specific theoretical framework (Glaser 1999). For example the work of an anthropologist, Robbie Davis Floyd, could be used when exploring midwifery practice in the third stage of labour (Davis-Floyd and St. John 1998). Davis-Floyd's work with obstetricians highlighted differing philosophical beliefs that influenced professional

practice, and her research led to the identification of models of care. From this work it could be theorized there is a link between how midwives practice during the third stage of labour and their personal values and beliefs, and this theoretical framework could then be applied within the grounded theory study. *While adopting such a stance* there is a danger that other factors which influence midwifery decision making during the third stage of labour may be missed, leading to the production of theory through the verification mode, with the potential of such theory having been forced to fit existing theory. When this happens, theory verification can be masked as theory generation (Glaser 1992) and the process may not provide a detailed explanation of the area under investigation. However the use of such extant theory could direct the researcher to explore values and beliefs with midwives, as a platform, to begin the study, rather than being a confining framework.

The relative emphasis placed upon the deductive element within grounded theory depends on the focus of the researcher, though it could be argued that deduction is actually a part of the comparative analysis strategy. The researcher informed by the data proposes hypotheses which are tested out on the data and either found to be irrelevant or confirmed, leading to the development of theory. In this way deduction is used to confirm findings within a study and add credibility to those findings. A further point in support of deductive theorizing may be its use in allowing the researcher to theorize about what is missing within the data. However if the principles of grounded theory are followed through to saturation of data, with no new concepts evolving, it could be argued this is unnecessary.

Dey asks whether there is any currency in polarising the inductive/deductive debate (Dey 1999). He suggests a middle ground whereby induction can lead data analysis but deduction can be used as a guide and critic as theory is generated, to enhance the quality of the evolving theoretical framework. Theory is then generated through a process of disciplined imagination (Dey 1999). As a midwife researcher, I would suggest such an approach is ideal as it allows me to bring to the research process existing concepts and theories from my professional background, which led to my interest in researching third stage care. Perhaps the most important aspect of researching

to generate theory lies in the process of making explicit extant theory that may inform the initial research questions. Also to be flexible and creative enough not to be confined by these theories, or to fall into the trap of attempting to fit existing theory to the data, masking theory verification as theory generation. Such an approach was used successfully by Benner in her study *Novice to Expert*, as work with airline pilots informed her initial thinking (Benner 1984). In Glaserian grounded theory it is also recognised that certain ideas or even models can come from sources outside the data (called sensitising concepts) (Glaser and Strauss 1967; Glaser 1978), with the proviso that the generation of theory from such insights must then be linked back to the data or a mismatch between theory and empirical work may occur. In this way the scientific and creative intelligence of the researcher is acknowledged (Glaser and Strauss 1967; Freshwater 2004b).

Hall and Callery (2001) suggest reflexivity and relationality be used in constructivist grounded theory studies to enhance rigour and recognise the subjectivity inherent within the methodology. Reflexivity is a process by which a researcher critically evaluates their effect on the research process (Reay 1996). However taken to extremes this can lead to navel gazing and risks placing the voice of the researcher over and above that of participants (Hall and Callery 2001). Memoing can be used to document researcher-participant interactions on the construction of data as it is collected and reflected within the writing up of the grounded theory project whilst ensuring the focus of attention is still placed upon the voice of participants through detailed reference to their words. In this way voice over and navel gazing may be avoided. Relationality addresses power and trust relationships, focussing on the researcher-participant interaction. Hall and Callery suggest this achieves trust, fosters reciprocity and breaks down the barriers between the gazer and those who are gazed upon (Hall and Callery 2001). It also raises confidence among participants that the findings will accurately portray their reality, as the researcher does not stand outside the process. Thus there is a shift to shared relational power with participants.

Some authors are highly critical of researchers who do not follow, to the letter, the edicts of the forefathers of grounded theory methodology (Wilson and Hutchinson

1996). Others are more tolerant of methodological variation, recognising how authors adapt grounded theory to suit personal viewpoints, (Scriber and Stern 2001b), while cautioning against departing too far from the original authors conception.

"...each time we read something we interpret its meaning. In this way the writings are cast and re-cast in different epistemological contexts so that they gain new or enhanced meaning in time"

Scriber 2001:p108

In addition the evolution of grounded theory is seen as positive in allowing post modernist thinking to be taken into consideration. This is a challenge for the novice researcher who has to negotiate a plethora of ways of doing grounded theory, knowing that each approach will have both its supporters and critics. What appears to be crucial is that researchers make clear their decision making trail when using grounded theory and the epistemological and ontological premises on which these decisions are based, so that critics can be silenced and the grounded theory approach used, legitimised.

Grounded theory can be used to produce formal or substantive theory, though its use in the development of substantive theory is more evident in the research literature (Levy 1999). In exploring midwifery practice in the third stage of labour, the development of a substantive theory may be most appropriate. Midwives are calling for evidence on which they can understand their practice with the development of theory informed by it (Bryar 1995). There is a general trend away from indecipherable grand or general theories, which do not fit or work, towards practice and research based theories with contextual relevance. Currently there is little evidence of grand theories in midwifery (Bryar 1995), with development and testing of mid range predictive theories in midwifery practice apparent (Lehrman 1989). Grounded theory may be ideally suited to producing practice specific, relevant theories, which can bridge the theory-practice gap. This is also in keeping with postmodernist thinking, which refutes the claims of grand theories, and calls for context specific theory and the loss of hierarchical theory typologies which favour higher order theories above micro and middle range theories (Rolfe 2000). Theory which provides easily understandable explanations for practice which are readily accessible, may provide midwives with relevant knowledge to have some control over their actions, improving quality of care.

3.5 Reflection

I found, as a novice researcher, the process of choosing an inquiry paradigm and methodology for this project, tortuous and difficult. When I began the planning process in the mid 1990s, significant interest in qualitative research as a means to investigate health care provision was only just emerging with positivist researchers dominating the field. At this time I negotiated the application for research funding process within the National Health Service and faced the daunting task of having to defend a qualitative project which was reviewed by individuals who were steeped in the positivist tradition. As a result I was cautious in the way I presented the proposal and introduced the principles behind a qualitative project using nomenclature familiar to positivist researchers. In addition I became aware of the need to rigorously document, justify and defend the research approach I adopted, expecting positivist researchers to view the qualitative project with some scepticism.

During my early period as a PhD student I completed two research modules at masters level and then spent a significant amount of time reviewing the literature on interpretivist inquiry paradigms and different methodologies. During this phase it became apparent that I wanted to cross traditional research boundaries, utilising a unique way of researching for the project. As I came to this conclusion, a colleague submitted his PhD and failed on methodological grounds, with the suggestion that mixing methodologies was an influencing factor. This experience led me to be cautious about utilising a pluralistic inquiry paradigm and rigorous in justifying and defending such an approach in my thesis. I was concerned that I would not meet the requirements to successfully complete my post graduate studies if the examiners felt breeching traditional research boundaries was inappropriate. More recently the blurring of boundaries between inquiry paradigms has become established and well recognised as a legitimate way of adapting a methodology to suit a purpose (Johnson, Long et al. 2001). However there remain purists who vociferously challenge such pluralism (Glaser and Holton 2004). For students negotiating the examinations process, it is a challenging situation as the security of an established research approach is denied them and they are

required to defend an approach which is unique and possibly open to criticism. This thesis was written with this context in mind.

Now that I have successfully negotiated the research process and completed the writing of this chapter, I am aware that while I embraced adopting a pluralistic inquiry paradigm and adapted grounded theory to suit the needs of the project, I did so cautiously in anticipation of criticism. However I am confident that I have used both an appropriate inquiry paradigm and methodology for the project, which I am able to defend. This has given me confidence to move forward in my academic career in continuing to utilise such an approach and supporting students who wish to do so.

3.6 Conclusion

This chapter reflects the journey I took when deciding on a methodology for this project. Choosing a methodology involved a long and arduous exploration of the ontological, epistemological, methodological and method principles underpinning a number of research approaches. A discussion of positivism and subjectivism led to choosing a qualitative methodology based upon subjectivist principles. An inquiry paradigm that provided a holistic framework based upon inductive principles was adopted, whereby broad exploratory research questions could be used to seek understanding of practice variation in third stage care among midwives.

While choosing between a number of subjectivist inquiry paradigms, it became apparent that no one inquiry paradigm met the needs of the project or my values as a researcher. Therefore a decision was made to adopt a pluralistic perspective.

A review of three qualitative methodologies led to the choice of grounded theory as a suitable approach to investigate the social world of midwifery practice. Grounded theory provided a mechanism for describing and explaining third stage practice variation among midwives from a socio-psychological perspective, with emphasis on the generation of practically relevant theory.

An in depth exploration of grounded theory revealed evidence of a methodology evolving in different directions dependent on the underpinning ontological and epistemological perspective chosen. The principles of grounded theory chosen for this study reflected the symbolic interactionist and pragmatist principles prevalent in the Straussian school. Constructivist critical theorist principles underpinned the methodology whereby reality was viewed as being co-created within a contextual framework. The over formulaic rigid coding process with the use of the conditional matrix advocated by Strauss and Corbin (Strauss and Corbin 1990; Strauss and Corbin 1998) was rejected in favour of a simpler inductively driven analytical framework more in keeping with a Glasserian perspective. The debate over the use of extant theory led to the recognition that as a midwife researcher I brought to the research project theoretical concepts which could be applied during analysis. However such sensitising concepts were positioned to guide initial data collection rather than using them to formulate a restrictive deductive inquiry lens. The aim being to use a broader more exploratory inductive approach to reveal a more detailed holistic view of all relevant issues pertaining to third stage practice variation among midwives. Extant theory rather than driving the process was used to guide rather than restrict initial data collection and was also used to position the theory developed within the wider literature after the theoretical framework was established.

The original evaluative criteria for grounded theory outlined by Glaser and Strauss in 1967 was adopted for the project (Glaser and Strauss 1967), with the additional recognition of the importance of reflexivity and relationality to the grounded theory study. In this way the decision trail for the adoption of a particular approach to grounded theory was provided to legitimise the approach chosen and place those choices within context.

An exploration of the type of theory to be produced led to a decision to develop a substantive theory, of practical relevance to midwives in their everyday lives; a theory which would give insight as well as offer an explanatory framework for third stage practice variation.

In this chapter a discussion of methodology has led to the identification of a way of researching third stage practice. In the next chapter how the research was designed and conducted based upon this methodology is discussed.

Chapter Four: RESEARCH DESIGN

4.1 Introduction

This qualitative project, situated in a pluralistic inquiry paradigm within the subjectivist domain, was based upon the principles of grounded theory. This chapter describes the way in which the study was conducted, reflecting the perspective chosen.

4.2 Study aims

The project aim was to explore the concept of practice variation in third stage management among midwives, focussing on what midwives do and why they do it. A broad exploratory approach was adopted, whilst acknowledging that as an experienced midwife, I brought to the research process sensitising concepts that guided the initial design of the project, but did not confine the emergence of an explanation for practice variation from within the data collected. Sensitising concepts influencing this project included awareness that third stage practice among midwives changed over time and that models of care and level of midwife expertise could potentially play a part in practice variation (Harris 2001; Davis-Floyd 2001). More specific research aims were derived to guide the project, which reflected these (see Table 4.1). However in keeping with the principles of grounded theory, the focus of the inquiry was adapted as theoretical explanations emerged from the data, rather than being limited by the initial research aims.

Table 4.1: Project aims

- To identify and explain the variety of ways midwives manage the third stage of labour.
- To identify characteristics associated with different third stage management practices.
- To identify and explain models of midwifery care in labour.
- To identify and explain how midwives develop expertise in management of the third stage of labour.

4.3 Research strategy

This project was based upon the principle of theory generation; a grounded theory emerging from the data as collecting, coding and analysis occurred simultaneously. The key characteristics of grounded theory adopted were a focus on process and trajectory identifying stages and phases, the use of gerunds (words ending in -ing) indicating action and change (Glaser 1978), having a core variable or category (a basic social psychological process) that tied stages and phases of the theory together, and use of an abstract process which was unique in making the synthesis of descriptive data readily available through its concepts and relational statements (Morse 2001) . The theory produced was divided into several parts; conceptual categories with one core category which tied all categories together, properties of categories and hypotheses or generalised relations among categories and their properties (see appendix five).

In keeping with the theory generation ethic of grounded theory, immersion in the literature pertaining to the area of investigation was avoided until the project had commenced. During the early stages of the project a literature search was conducted on the third stage of labour and formed the basis of the discussion in chapter two. A deliberate decision was made to avoid reviewing any literature or evidence which offered explanations for practice variation among midwives or other health professionals, in an attempt to avoid being influenced by it when analysing data collected. Extant theory was only referred to when the theoretical framework was complete and used to position the theory within the wider literature. Such an approach is supported by Glaser who warns of the danger of foisting existing theory on data and forcing the data to fit it, rather than allowing theoretical concepts to emerge (Glaser 1992; Glaser and Holton 2004).

Multiple data collection methods were chosen to allow midwives the opportunity to describe and explain meaning and motives for their actions and interactions and led to the collection of predominantly qualitative data from a variety of sources. However quantitative data was also collected adding further detail (see Table 4.2).

Table 4.2: Methods of data collection

- Semi structured interviews
- Non participant observation by researcher
- Field note diary records / memos
- Information taken from the medical records of women who were observed in labour
- Records of third stage of labour outcomes taken from one delivery suite computer data base
- Analysis of chapters relating to the third stage of labour in all editions of two midwifery textbooks published during the 20th century.

The use of multiple methods of data collection is often encouraged in grounded theory to provide the researcher with different viewpoints from which to understand a category (Glaser and Strauss 1967). The methodology also offers a highly flexible approach to data collection as any source for data can be used if it serves to add depth to categories and their properties (Scriber 2001a).

Some authors have challenged the use of certain data collection tools in grounded theory such as focus groups and observation as they provide only a snapshot of what is happening. Morse suggests the need for retrospective, reflective data for understanding relationships, and stresses the need for continuous in depth stories (Morse 2001). In the current context, continuous in depth stories were provided through midwife interviews supported by observation and documentary analysis. Such multiple sources of data provided a rich description of events, whilst also addressing concerns with the snapshot approach. Interview data also emerged as providing the most detailed understanding of third stage practice and practice variation. Initially observation was chosen alongside interviews as a means of checking that midwives did what they said they did during the third stage of labour. However such a cynical view of participants being less than truthful did not sit comfortably with the values adopted in the study, particularly when during the first few interviews midwives revealed their honesty in describing both accepted and unusual elements of third stage practice, together with a range of explanations for them. It was also apparent that despite efforts to be 'a fly on the wall' my presence in the delivery room influenced care. For example midwives focussed my attention on informed choice for syntometrine by discussing it with women

in my presence (during the period of observation). From my own professional experience I was aware that discussions would normally take place in labour. While early observations corroborated what midwives said in interviews I felt the limited amount of information revealed did not warrant my presence in the delivery room. The third stage occurs over a short period of time and behaviour is highly complex. There was little time to clarify with the midwife what she was doing and why during the delivery and afterwards. Also observation was time consuming and for a part-time researcher difficult to achieve. Only seven observations resulted from a four week period of data collection, with cover being provided for 24 hour periods. Therefore a decision was made to stop collecting observation data at this point.

Grounded theory utilises a strategy called comparative analysis (Glaser and Strauss 1967). Comparative analysis is a general research method based upon comparison and usable on any size of research unit (Benton 1996). Using comparative analysis to explore midwifery practice in the third stage of labour began with comparing midwife descriptions of practice to look for factors which influenced care. These factors were given abstract labels and formed the basic categories of the emerging theory. Further comparisons sought to describe the properties of each category in depth and identify any variation within them.

With grounded theory based upon an integrated approach to data collection and analysis, it was not possible to plan ahead how much data to collect for the project, except for the initial sensitising period. As theory emerged from the data, the emerging theory itself pointed to the next data collection step to fill gaps in understanding. This is known as theoretical sampling, and stresses the purpose and relevance to data collection supported by the theory generation ethic. Theoretical sampling was used to discover categories and their properties and to link them into a cohesive theoretical framework, which explained the phenomenon under study. Comparison groups were selected for their theoretical relevance, with no constraint on what type of data and groups of individuals data was collected from; an approach based on the logic of ongoing inclusion - any relevant groups can be incorporated into the grounded theory project. In addition theoretical sampling looks for both similarities and differences in data

collected. This tolerance of variation is regarded as an important strength of grounded theory.

"Variation in sample ensures that bias, while used as a sampling technique, is removed from the final product".

Morse 2001:11

Two types of comparison groups were used in this study, groups to ensure scope of population and groups which enhanced the conceptual level of theory.

Also comparison groups provided control over similarities and differences. Glaser and Strauss suggest there is a need to maximise and minimise similarities and differences in data as this helps generate categories, their properties and interrelationships (Glaser and Strauss 1967). Minimising differences between comparison groups increased the possibility of collecting similar data in a given category while spotting important differences not caught in earlier data collection. Also by doing this, basic properties of categories emerged and a few important differences were found. Also minimising differences established a definite set of conditions under which a category existed - establishing probability for theoretical prediction. This was achieved by interviewing a group of midwives working in the same practice area and midwives with similar numbers of year's experience. Maximising differences among comparison groups increased the chances of collecting different and varied data relevant to a category, while finding strategic similarities. This was achieved by interviewing midwives working in a wide range of environments, of differing levels of expertise, and with differing values and beliefs. Similarities formed the general uniformities of scope within the theory. When developing a substantive theory, basic categories and their properties are established by minimising differences in comparative groups. This is then followed by maximising difference in accordance with the type of theory being developed and the requirements of the emergent theory. This provides a means for generating theoretical properties once the basic theoretical framework has emerged. The scope of the theory is then broadened.

Sampling in this study stopped at theoretical saturation, when no additional data was found which developed categories or properties of a category (Glaser and Strauss

1967; Strauss and Corbin 1990). This was recognised when interview transcripts were completely coded to existing categories and their properties.

During the research process a grounded theory researcher must be theoretically sensitive in order to conceptualize and formulate a theory as it emerges from data. This process is in continual development from the beginning of a project. (Glaser and Strauss 1967) Theoretical sensitivity involves the researcher thinking in theoretical terms about what he/she knows, having the personal and temperamental bent to be theoretically sensitive and to have theoretical insight into an area of research, combined with an ability to make something of those insights. Throughout the project I remained open to theoretical explanations for practice variation recognising in myself the ability to think creatively and in new ways about explanatory frameworks which reflected what was going on in the data.

4.4 The research environment

The research project was conducted in one health authority in middle England. This area was chosen for two reasons. It was convenient to the researcher and more importantly the area included two NHS Trusts providing maternity services in rural and urban locations across the health authority. The two NHS trusts provided hospital and community based maternity services in a variety of locations: hospital, community and midwifery led unit. A variety of models of care for women during pregnancy and childbirth were provided. Women could be cared for by an individual midwife, a group of midwives, hospital based midwives and/or community based midwives. This environment provided an opportunity to explore in depth midwifery practice in one area of the UK, among a wide ranging population and among midwives working in diverse ways in diverse environments.

4.5 Ethical considerations

As a midwife researcher, this project was bound by the professional ethics of midwifery, as laid down in the code of professional conduct (Nursing and Midwifery Council 2002). Ethical challenges included issues of confidentiality, anonymity, legality and professionalism.

Informed consent is a key principle of midwifery practice and these principles informed the research project from the outset. The intention was to be honest and open about the aims of the study, and to encourage the development of partnership principles between myself as researcher and participants. Both midwives and women needed to be able to make an informed decision whether to participate in the study and the potential benefits and limitations to them as individuals of doing so. The important principle followed was not to put undue pressure on midwives and women to participate, but to provide relevant information on the project. The power relationship between researcher as known midwifery lecturer and participating clinical midwives was also considered. The mechanisms used to address this issue are considered later in this chapter.

The conflict between confidentiality or anonymity and legality and professionalism refers to the quandary a midwife researcher faces when exposed to unsafe or inappropriate practice, or a situation in which client care would be detrimentally affected by non participation in care. The priority was to ensure no harm came to clients and that the needs of client and midwife took precedence over the collection of research data. This was addressed by ensuring all midwives knew the role and responsibilities I had as both a midwife and a researcher and by determining a course of action before data was collected if such a situation arose (see appendix six). Anonymity and confidentiality were assured, bound by the professional and ethical issues as outlined above.

4.6 Gaining approval for the study

Seeking the co-operation of two NHS trusts for clinical research was a lengthy process (Harris 1998). This project required approval for a number of activities: access to midwives for the collection of interview data, access to women receiving care from midwives during the third stage of labour to collect observation data, access to the medical records of women observed and access to computer records relevant to third stage outcomes kept on hospital computer databases. This was achieved in a number of stages.

The Senior Midwife and Clinical Director for maternity services at each trust were provided with a copy of the research protocol and asked to approve in principle the collection of relevant data within their directorate. Further clarification was required by one clinical director but approval in principle was given by all managers and advice given as to how to proceed with trust and research ethics committee approval. Referral was also made to each trust's research office (see appendix seven).

All obstetricians were provided with details about the research project and asked to sign a letter of introduction to women booked under their care. One obstetrician declined access to women booked under his care (and did not provide a reason for this decision), but the remainder approved the project and signed a letter of introduction, which was copied on to the final page of the client information leaflet used in collection of observation data (see appendix eight).

The paperwork for each trust office was completed, submitted and approved in tandem with an application for research ethics approval, which was presented by one research office to the local health authority committee on the ethics of clinical research investigation on my behalf. Approval was given on first submission, subject to the midwife responsible for care introducing the researcher to women during the observation period of the study and that the information to women was provided in the form of a request to take part in the study before consent was obtained (see appendix nine).

The above approval process was conducted over a one year period from December 1997. To assist other researchers in gaining approval for clinical research a paper was published outlining the issues involved in the process of gaining approval for this project (Harris 1998) (See appendix ten).

The issue of indemnity insurance for the researcher on trust premises was explored during the approval process with the NHS trusts involved. I did have an honorary contract as a midwife with both NHS Trusts at the time and this contract facilitated approval for indemnity insurance cover as a researcher for the project (see appendix eleven).

4.7 My role as researcher in the research process

I collected all the data for the project. Being a midwife researcher conducting research in midwifery was both an advantage and a disadvantage. My professional role allowed easier access to midwives and also allowed me to target key aspects of third stage practice, which a non midwife may not have been able to identify initially. However I had to acknowledge that as a midwife observer I might miss important elements of third stage practice due to my professional gaze failing to focus on routine aspects of care. Therefore, in observation, I made a deliberate decision to write down everything that occurred during the third stage of labour, rather than focussing on what I thought was important. In interviews, I tape recorded interviews for the same purpose.

My role in interview data collection was to allow midwives to discuss their practice in depth, to clarify statements and seek more detail. I guided discussion generally at first then more specifically, seeking expansion of areas of interest as necessary. I recognised that how well the interview was conducted, recorded and analysed would determine the quality of the results (Marshall and Rossman 1995; Phillips and Davies 1995). Attention was given to the potential for me to seek to validate a personal perception of events rather than drawing upon the thoughts of those being interviewed (holistic fallacy) (Appleton 1995). Therefore in keeping with

grounded theory, both common and unusual elements were explored in midwife discussions.

Adopting a grounded theory perspective positions the researcher within the research process with participants. I played a pivotal role in the development of the grounded theory as it was my sensitivity to theoretical elements within the data that guided the discovery of theory. For example I identified from interview transcripts the key themes of relevance to third stage practice decision making. Rigour was assured by returning to the data to test and validate emerging hypotheses and to assure conceptual categories, properties of categories and the identified basic social psychological process reflected the voice of participants and not created through personal ungrounded assumptions about reasons for practice variation.

4.8 Gaining access

At the launch of the data collection phase of the study all midwives employed by the two trusts were invited by written invitation to participate in the study and given an information leaflet about the project (see appendix twelve). Invitations were placed in envelopes and addressed to each midwife at their place of work. Use of gatekeepers was invaluable in gaining access to midwives and women. Senior midwives, team leaders and core delivery staff were particularly helpful in promoting the project and supporting me in the practice setting. Following the mail shot, they expedited my access to midwives at team meetings, to answer any questions about the project and encourage participation.

During discussions I stressed the aims of the project in an attempt to reassure midwives that the study was not a management tool to assess quality of care. I focussed discussion on the exploratory nature of the project and the sharing of practice elements. No pressure was placed on midwives to participate in the study.

All midwives who agreed to participate were asked for their consent prior to being interviewed or observed. In addition I reminded participating midwives that as a midwife myself I was, as they were, bound by a professional code of practice, which could impact on confidentiality in certain circumstances. Midwives were then given every opportunity to refuse to participate at any time prior to and during the study, even after initial consent was given.

Responses from midwives were mixed. There were those who responded eagerly and contacted me personally to arrange interviews and observation opportunities. Others were somewhat cautious, suspicious of the intentions of the project; concerned that their practice would be judged. As these concerns emerged, a strategy to address them was developed. During informal and formal meetings midwives were encouraged to voice their concerns and to discuss them. The exploratory nature of the study was highlighted and the principle of 'clinicians as experts of practice' emphasised in an attempt to address any perception that as a midwifery senior lecturer I had any superior understanding of the issues in third stage practice and would be judging or assessing the quality of the practice of participants. The interview guide was made available for them to look at and the aims of the project were stressed; to explore practice in all its richness. Consideration was given to the possibility that midwives would feel the need to impress me as a midwifery senior lecturer interviewing them. This was addressed by stressing at the beginning of the interview that the aim was not to assess the interviewee's knowledge and practice on the third stage of labour, that the intention was to record what actually happens in practice and the participants own personal perspective on events. This appeared to reassure the majority of individuals; only one midwife refused to participate in the observation phase of the study and no midwives refused to be interviewed.

4.9 Semi structured interviews

The interview was chosen as an ideal data collection tool for the exploration of new subject areas, to measure specific behaviour, to supplement other data collection tools and to explore more deeply the meaning of events (Donovan 1995; Phillips and

Davies 1995). A semi structured approach was chosen as factual information was needed to describe practice along side the collection of information about how midwives felt about the third stage of labour and their own personal experience of third stage practice events. This provided a balanced approach; to elicit detailed responses from individuals, which could be compared one with another (Sorrell and Redmond 1995) while allowing individual midwives to discuss issues which they thought were most relevant in third stage care. In this way the uniqueness of an individual midwife's experience was acknowledged.

Midwives self selected to be interviewed initially and a snowballing technique was also used as interviewed midwives suggested other midwives whom they felt would have something to offer the project. Purposive sampling was also used initially, in that midwives working in delivery suite, birthing centre and/or home birth settings were targeted as having recent experience of caring for women during labour and delivery. Theoretical sampling guided sampling thereafter, stressing the purpose and relevance of midwives interviewed to the development of theory. For example the location in which volunteer midwives worked was recorded and utilised to ensure that all areas in which midwives were employed were represented. This was to allow exploration of the generated hypothesis that the practice environment influenced a midwife's management of the third stage of labour. This was achieved by seeking out midwives from locations not represented during the volunteering phase, and by additional site visiting in each area to explain the principles of the study in more detail and target specific midwives to enhance development of theoretical concepts. In this way midwives who were employed across all locations within the health authority were interviewed.

As a result of theoretical sampling, midwives were included who worked in a variety of models of care, expressed a variety of values and beliefs about the third stage of labour, cared for women giving birth in a variety of different places, had differing levels of expertise and lengths of service as a midwife, experienced different forms of training, expressed different aims for care, cared for different types of women and were working in the health service employed in a variety of grades and posts.

Minimising and maximising differences between comparison groups helped develop theoretical categories, as well as leading to the identification and exploration of unusual elements requiring further exploration. For example one hypothesis that emerged during data analysis was that midwives with non interventionist beliefs would use a non interventionist practice strategy during the third stage of labour. Several midwives fitted this interpretation of events. However one midwife did not. On further exploration this led to the identification of a further influence on a midwife's behaviour; the place of work. Despite midwives having strong values and beliefs about non intervention for third stage care, such beliefs were not always expressed if a midwife worked in a high risk, technologically driven, medicalised environment. This then led to further exploration of the influence of environment on third stage practice.

Saturation of interview data was not reached until 51 interviews had been conducted. While descriptions of new ways of managing aspects of third stage practice were still emerging in the final interviews, theoretical saturation had occurred, with no new categories or properties of categories emerging to explain practice variation.

When midwives contacted me to participate in the study, any questions about the project were answered before extending an invitation to be interviewed. If a midwife agreed, an interview date was set at a location and time convenient to the participating midwife. A record of the conversation was made in the project diary. This book recorded details of participating midwives, the progress of the study, analytic field notes and memos made after data collection and during the process of constant comparison of data.

Interviews took place at either the midwife's place of work or on university premises. Arrangements were made for interviews to take place in a quiet private office without interruptions. Comfortable seating was arranged so that both myself and the participant sat at the same level facing each other, to ensure eye contact between us. The tape recorder was placed on a desk or table to the side of the researcher out of the direct line of vision of the interviewee. All interviews were tape recorded using a Philips AG6350 machine. Tapes were then labelled with a number and date to ensure

confidentiality. A record of the names of interviewees and their place of work were kept along with their identified number in a separate place from the tapes in a locked filing cabinet.

The interviews were conducted using a semi structured interview guide (see appendix thirteen which was based around eight themes (see Table 4.3).

Table 4.3: Eight themes in semi structured interview guide

- Information regarding the Midwife's training programme to qualify as a midwife
- Current employment information
- Management of the third stage of labour
- Development of expertise in third stage of labour management
- Story telling
- Unit/trust policy on third stage of labour management
- Personal values about childbirth and the third stage
- Personal details

These themes were developed through discussion with supervisors, from reading of the literature on the third stage of labour and drawn from my personal experiences in practice and education. Interviews conducted in the early phase of data collection confirmed the themes identified as appropriate. Specific key points to be explored within those themes have developed as the project has continued.

Often midwives began by outlining their practice and then provided more detail following prompting. This led to the collection of detailed descriptions of practice in midwives own words, with similar themes being explored in each interview, whilst allowing for flexibility in discussion as theoretical concepts emerged. Interviews took approximately 45 minutes to complete. All participants were assured of anonymity and confidentiality and offered a copy of the interview tape. One midwife requested this and a copy was provided. Often midwives wished to talk about the experience of being interviewed and several participants highlighted how the interview was helpful in

providing a forum for reflection. In addition to the interview tape, field notes were recorded to highlight my perception of how the interview had gone and analytical notes on developing theoretical constructs.

The first few interview tapes were transcribed by a secretary. However I found transcribing the tapes myself more beneficial in providing an opportunity to immerse myself in the data collected. This facilitated analysis of data with the emergence of theoretical concepts as I transcribed.

All interviews were transcribed using a word processing package (Word 7) and then transferred into a qualitative data management computer package (Atlas ti 4.2) which assisted in the analysis of data. Using Atlas ti allowed open coding of transcripts to take place whilst maintaining a coded quote's position within the interview transcript (Drisko 1998). This facilitated its theoretical relevance and maintained a holistic perspective on what is often viewed as a reductionist exercise (Freshwater 2004b). Field notes were kept in chronological date order in the project diary.

4.10 Non participant observation

When exploring practice it is well recognised that individuals often say one thing and do another. The use of observation alongside semi structured interviews was an attempt to address this issue. This is a popular research tool in midwifery (Phillips 1996) and has been used by several authors to investigate events during labour to good effect (Kirkham 1983; Hunt and Symonds 1995). It is used when researchers want to know what took place, between whom, when, how often and for how long (Barker 1996). The aim was to define, clarify, redefine and measure events objectively (Barker 1996), with emphasis on the nature of interactions and to provide understanding of events (Porter 1996a).

Observation was conducted in the natural setting (the birthing room) using a non participant observation strategy using a convenience sampling technique. I identified 24

hour periods for observation on delivery suite. Observations were collected over a four week period in July 1998. During this time 26 women were approached to participate in the study, six declined to do so. Of the remaining 20, seven observations took place. Those not observed were women who either moved outside the bounds of normal labour and were therefore excluded, women who gave birth at the same time as another woman being observed, women who did not give birth in the 24 hours observation period, or the researcher was not available or was not called by the midwife at the time of delivery.

A record of when the researcher was available for observation was kept in a green folder on delivery suite along with information for midwives (see appendix fourteen), client information leaflets (see appendix fifteen), consent forms (see appendix sixteen) and red dots for marking client notes. At the beginning of each observation period, the researcher discussed the project with all midwives present on delivery suite and sought their verbal consent to participate in the study and their support in approaching women in early labour. Midwives who agreed to participate approached women they were caring for, who were in early labour and met the observation criteria (see appendix fourteen). Each woman was given a client information leaflet about the project and asked if they would be interested in participating in the study. The midwife who felt uncomfortable about the prospect of being observed but felt unable to verbalise this could also influence the woman to refuse by the way she broached the subject to her. In addition midwives used their clinical judgement about who they approached to participate in the study, excluding those who they felt it were not suitable.

Women who expressed an interest in participating in the study were introduced to the researcher by their own midwife. Additional information on the project was provided, questions answered and written consent obtained. A red dot was then placed on the partogram and the front of the woman's notes to alert midwives to call me at onset of the second stage of labour and also to facilitate retrieval of notes at a later stage if required. The midwife involved in care was also informed that written consent had been obtained, along with the midwife in charge of delivery suite. TSM was then written next to the woman's name on the delivery suite notice board to identify to core staff and midwives that I needed to be called when the woman reached the second stage

of labour. If there was a change of shift prior to the woman delivering, I obtained the consent of the midwife taking over care.

Tension does exist between the requirement that the observer remain objective and detached whilst gaining sufficient access to the social setting for valid data to be collected (Polgar and Thomas 1995). This was resolved somewhat by relieving midwives for coffee breaks and offering to participate in the care of women other than those being researched whilst awaiting opportunities to complete observations. This improved access as I gained clinical credibility among midwives and was also seen to be giving something back at the same time as asking for something for the project.

I was called in to the birthing room at the onset of the second stage of labour or at commencement of active pushing. I positioned myself in a corner of the room *where* my presence would be unobtrusive, whilst still providing a clear view of the actions of the midwife and woman giving birth. I then recorded all events that occurred from the delivery of the baby until the midwife left the room following delivery of the placenta and membranes. I also followed the midwife from the room into the sluice following the third stage and asked questions about the birth and *made notes of this discussion* whilst observing how the placenta and membranes were checked.

Priority was given to clinical care over the needs of the project with observation stopping when a midwife needed help and support (vicarious liability was provided by the trust for clinical practice as part of the researcher's honorary contract as a midwife). I mentioned to midwives when I entered the birthing room, that at any time during the observation period they could ask me for my professional help if it was needed. If this occurred I planned not to include the observation in the study. This happened on one occasion when a woman experienced difficulty in birthing her baby's shoulders. The midwife asked for my assistance and I abandoned the observation immediately and participated in care.

Initially the intention was to use a detailed observation schedule to record events (see examples in appendix seventeen). However whilst piloting these they proved

difficult to use and a record of the whole experience was not made. In addition relevant aspects of practice were being missed by constantly looking for where to put data on the observation schedule sheets. Subsequently a chronological record of events was made by hand with the addition of a line drawing to show the layout of the room and the position of people within it. Following the period of observation the two observation schedules were completed from the chronological record made, with additional information collected from the woman's medical records. In addition I clarified with the delivering midwife any further information needed. I also used a diary (field notes) to make comments and personal observations about the event witnessed and to note the emergence of theoretical concepts. Observation schedules were then transcribed using a word processing package (Word 7) and compared to descriptions of third stage practice provided by interviewed midwives.

4.11 Analytical field notes

Field notes were used alongside semi structured interviews and observations to record my thoughts during data collection and to record any interesting observations together with their potential meaning. Thus the process of analysis began during and immediately following data collection (Porter 1996b). These notes also informed the process of data collection being used to comment upon the quality of the data recorded. Analytical field notes suggested a number of possible themes emerging from the data (see Table 4.4) and these themes informed the collection and conduct of additional data collected.

Table 4.4 : Themes emerging from analytical field notes

- Transfer of one midwife's practice to another midwife
- Influence of highly technological environment
- Variation in practice
- Intervention oriented versus non intervention oriented beliefs
- Rigid versus flexible practice.
- Do midwives offer informed choice?
- Effect of negative and positive experiences on practice.
- Different models of care based upon choice, control and flexibility.
- Development of expertise.
- Lack of structured education in the third stage of labour.
- Confidence in practice.

4.12 Computer generated data on third stage outcomes

To enhance description and evaluation of practice variation in third stage care, computer generated data on third stage outcomes available from trust A were included in the study. Computer generated information relevant to third stage practice was accessed for all deliveries from January 1st 1998 to December 31st 2000. Computer generated information was not available for trust B or the midwifery led unit. The data provided additional evidence of practice variation among midwives and was used to support the findings from interview and observation data.

I was assisted in the collation of computer generated information by a trust employee responsible for managing the software. Details of the number of normal births during the two year period and outcomes for third stage practice of all normal births were printed off from the software management programme itself. Data from the computer software programme presented the information in tabulated form, which did not require transcription for analysis to take place. *Therefore sheets of data were viewed* in their original form, as printed from the software programme.

4.13 Midwifery textbooks

In this qualitative project collection and analysis of data occurred concurrently and led to additional data being collected from other sources to enhance understanding of practice variation and to clarify emerging hypotheses, categories and properties of categories. One hypothesis that emerged from interview data was that practice was being handed down orally from midwife to midwife in practice and that descriptions of current practice could be found in historical records. A review of historical texts took place to test this hypothesis.

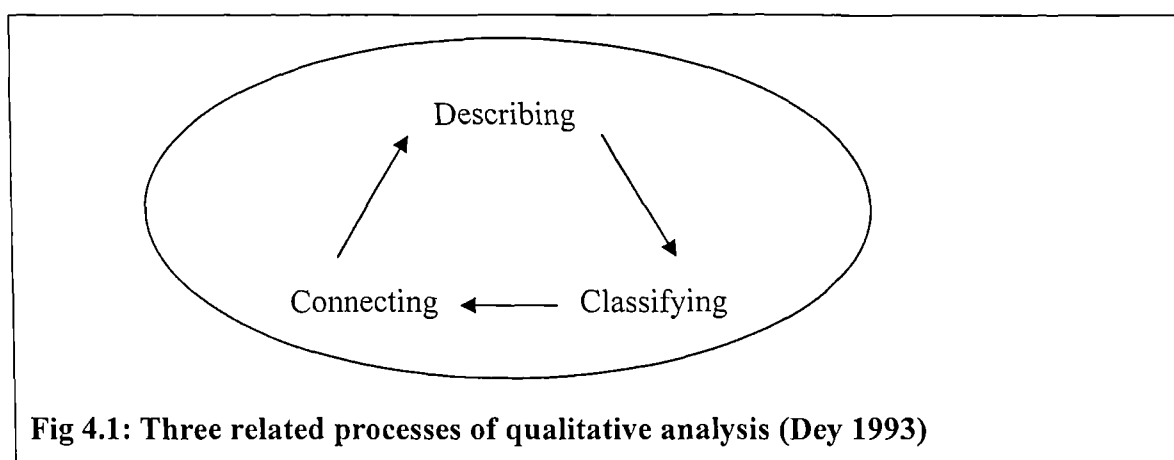
Following a review of midwifery textbooks at the British Library in London, two textbooks were chosen for analysis; 'A Short Practice of Midwifery for Nurses' by Henry Jellett which was published in 1901 (Jellett 1901) and 'A Textbook for Midwives' by Margaret Myles first published in 1953 (Myles 1953). Editions of the

textbooks spanned the 20th century (from 1901 to 1999), were produced in multiple editions (15 and 13 respectively) and were published in large numbers. A total of 28 editions were analysed (see appendix eighteen). The preface, front cover and chapters relevant to third stage practice from each edition were photocopied for analysis.

4.14 The constant comparative method of qualitative analysis

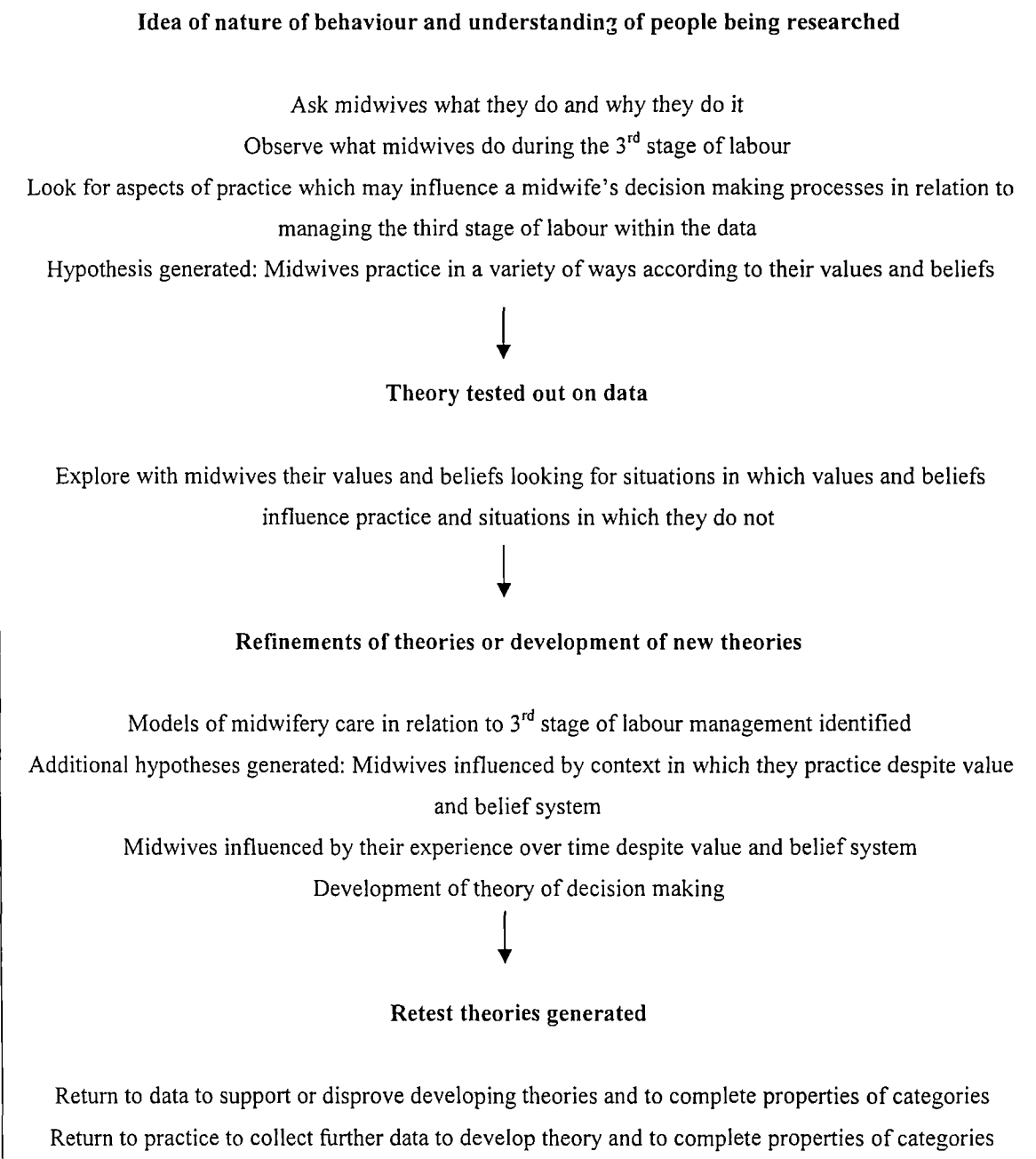
4.14.1 Overview of the constant comparative method

The constant comparative method suggested by Glaser (Glaser and Strauss 1967) was used as an analytical framework for this study. A detailed framework to analyse the data was abandoned in favour of a more flexible approach which allowed emergence of relevant categories from within the data itself rather than having to look for codes which reflected coding families or limited the way the data was viewed through the use of conditional matrices. This involved comparing incidents applicable to each emergent category, integrating categories and their properties, delimiting the theory and writing the theory. These stages were used to frame discussion of how analysis took place using an integrated approach whereby data collection and analysis occurred simultaneously with further data collection being influenced by the analysis of data already collected. In addition the three related processes to data analysis suggested by Dey have been used to underpin the analysis strategy (see fig 4.1).



Interview data was used to build a theoretical explanation for third stage practice variation among midwives, with data from the remaining data collection methods used to test, refine and support the emerging theoretical constructs. A simplified cycle of the analysis process is described in fig 4.2 (Hammersley 1983; Dey 1993; Porter 1996b) with a more detailed decision trail mapped in figure 4.3.

Fig 4.2 : Cycle of data collection and analysis



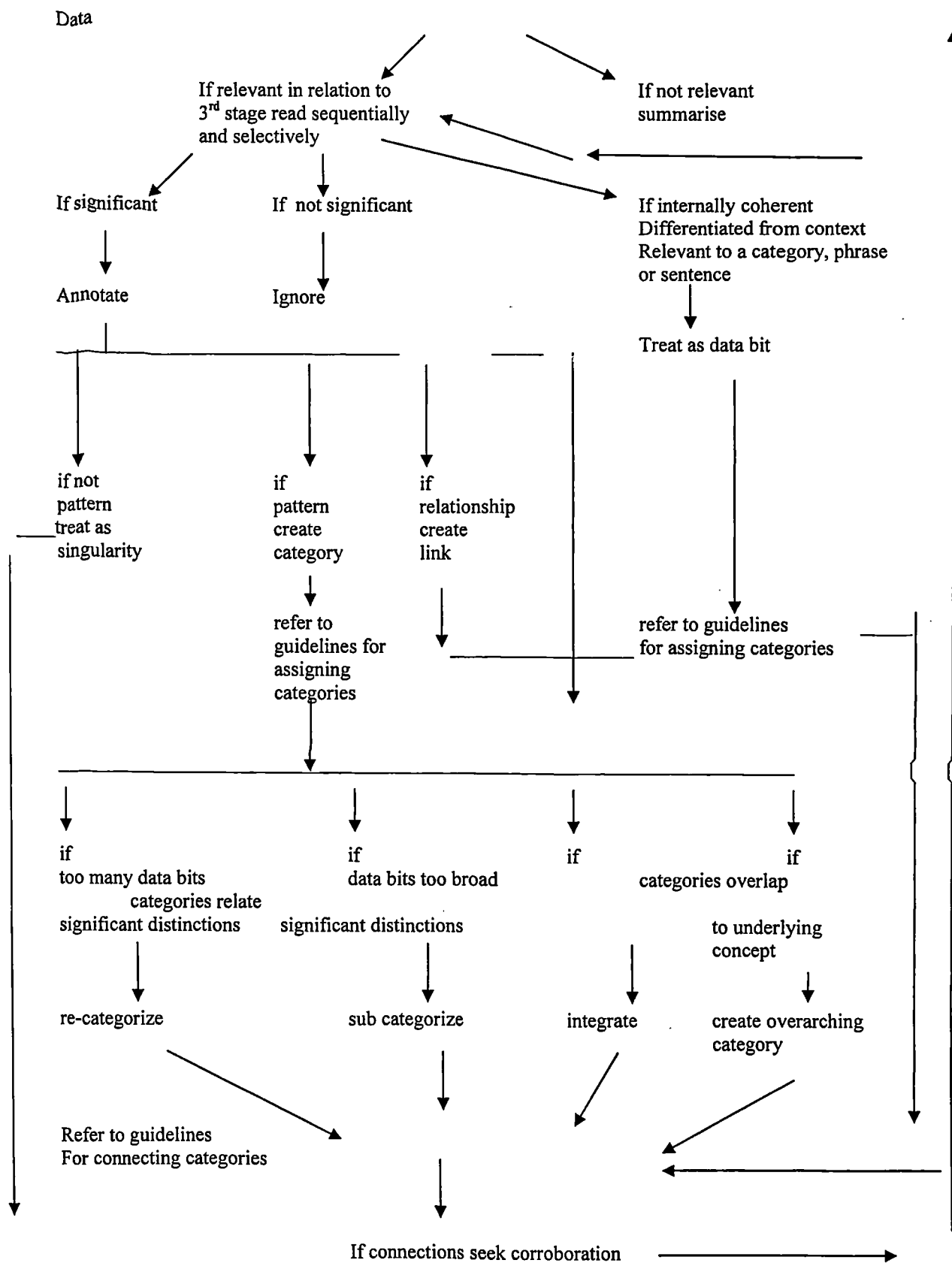


Figure 4.3 :Decision making tree for analysis. (Dey 1993)

Midwifery practice in the third stage of labour was described using four aspects: the context in which care was delivered, events that occurred, the intention of the midwives concerned and the process by which care was organised (Dey 1993). This involved describing the social setting in detail, seeking out midwives perception of events as well as the actual events themselves. Also, being aware that strong social forces influenced the data collected such as obsequiousness towards power, pressure to conform and fear of embarrassment or conflict. As a result consideration was given to what midwives did not say or do as well as what actually occurred.

4.14.2 Comparing incidents applicable to each category.

Analysis began at the time of data collection, with ideas emerging from discussion with individual midwives as to what was happening. Thoughts were recorded as analytical field notes were compared to the interview transcripts that generated them as well as interview transcripts already collected.

Open coding of interview transcripts involved each transcript being read line by line with allocation of chunks of data (sentences and paragraphs) into as many codes or categories as possible (Dey 1999). Interview transcripts from early in the data collection phase were coded according to the themes used in the interview guide as well as emergent themes. Descriptions of third stage practice were coded according to the two management types which midwives referred to when describing their practice. After further data collection these two codes were reviewed and re-categorised by the 22 aspects to third stage care identified within the interview data, with properties of categories emerging as the different ways of managing each aspect of third stage care were revealed. This development of further sub categories within a category is referred to by Dey as splitting (Dey 1993). Explanations for third stage practice variation were also categorised according to the different explanations given. Two types of category began to appear; those which labelled the processes and behaviour observed (substantive categories) and those which were labelled with abstract terms and which offered an explanation for events (theoretical codes) (Glaser 1978).

4.14.3 Integrating categories and their properties

With further data collection, interviews were coded according to categories identified from previous interviews, with additional categories also emerging. As more and more data were collected, data coded to each category were reviewed to compare data bits with one another. This process of comparing led to development of theoretical properties of categories (types, dimensions, conditions, consequences, relation to other categories). As abstracted ideas began to develop, I began recording these through the writing of memos before moving into further data collection. Redundant categories were also integrated into other more relevant categories; this is known as splicing (Dey 1993).

As coding continued, the constant comparison units changed, from comparison of interview with interview to comparison of interview with categories and properties of a category already identified. Similarities and differences within categories began to emerge with hypotheses generated to explain them. These theoretical concepts were then explored in further interviewing, observation, computer generated medical records and historical accounts of third stage practice within the literature. In addition interviews already coded were reviewed to see if evidence of newly developed theoretical concepts were present and had been missed during their initial analysis. For example one emergent explanation for midwives behaviour related to values and beliefs about the third stage of labour. As this influencing factor was revealed, previously analysed interview transcripts were reviewed and recoded. In addition, particular emphasis was placed on exploring values and beliefs in relation to the third stage within future interviews looking for similarities and differences in values and beliefs and their effect on practice. Theoretical questions then guided the collection of further data to fill gaps in categories and properties to extend the theory and create a unified whole. Following this categories or subcategories were linked or associated via the data to explore relationships which sought to explain, rationalise, support, or oppose theory generated. Returning to the example of the importance of values and beliefs to a midwife's practice, some midwives expressed values and beliefs that were associated

with non interventionist practice in third stage care but did not demonstrate the use of a non interventionist approach in practice. A link was then made between expression of values and beliefs and the cultural environment in which midwives worked, based upon the premise that working environment prevented a midwife expressing in her practice her own values and beliefs. This was explored in further data collection and linked both values and beliefs and working conditions to practice behaviour. It was in this way that data bits were deconstructed and rebuilt into a coherent explanatory framework from which to inform practice.

4.14.4 Delimiting the theory.

As the theory developed, features of the constant comparative method curbed the process to prevent the project becoming overwhelmed by data. This occurred at two levels: theory and categories. As the theory solidified, major modifications became fewer as I compared incidents of a category to its properties. Later modifications clarified logic, taking out non relevant properties, integrating elaborating details of properties into major outlines of interrelated categories and most important reduction. Reduction is a process by which underlying uniformities are discovered in the original set of categories and their properties and then theory formulated from a smaller set of higher level concepts. The second level of delimiting was achieved through the reduction in the original list of coding categories according to developing theory. Coding became more selective and focussed to explore the emergent categories and their properties in more depth. Data collection stopped once identification of new categories and their properties ceased. 103 descriptive and analytical codes remained following this process. Codes then merged into nine categories, from which three substantive categories and one core category were identified.

4.14.5 Writing the theory

Bringing the threads of analysis together to form a coherent theoretical framework which explained behaviour began with coded data, a series of memos and a theory. The process began by collating memos on each category, returning to coded data when necessary to validate points, pinpointing data behind a hypothesis or gaps in the theory and providing illustrations. This process allowed for the development of a complex developmental theory, which was closely linked to the data. This was brought about by consideration of significant diversity in the data as part of the process of comparison of similarities and differences. To make sense of such diversity, general abstract concepts were developed to explain the similarities and differences found.

4.15 Analysis of historical records

Data from historical records were analysed to test an emerging hypothesis from interview data, that current third stage practice was based upon the practice of midwives in the past and passed down to midwives via an oral tradition of knowledge transfer. The chapters relevant to third stage practice in the 28 editions selected were analysed using the principles of grounded theory and the method of constant comparison. All editions were reviewed in date order. The first edition was read and a précis made of the contents. The second edition was then read and compared line by line and picture by picture with the first, with any alternations including isolated words highlighted using a highlighter pen. A written précis was also made of the changes made to the edition, compared to the previous edition. This process was repeated for each edition in turn until a document was produced mapping the changes to each edition over time. In addition each edition was positioned alongside the preface that accompanied the edition, which highlighted the recent changes affecting midwifery practice and influencing midwifery care at the time the edition was published.

Descriptions of third stage practice in the texts were tabulated according to publication date and aspects of practice identified by interviewed midwives (see

appendix eighteen). This was used to compare third stage practice descriptions between editions. Also descriptions given by midwives in interview data were compared to the textbook descriptions, with similarities and differences highlighted. An explanatory framework for these similarities and differences emerged and was then tested by returning to the interview and textual data to confirm it represented what was happening.

4.16 Reporting the results

Results have been reported in two chapters. Chapter five presents descriptions of practice variation according to the 22 aspects to third stage care identified by midwives, together with the reasons given by them for these practices. The descriptive findings have been reported in such detail as a means of passing on the collective experience of fifty one midwives with five hundred and seventy six years of midwifery experience between them to others.

Chapter six presents the theory of contingent decision making for third stage practice which emerged from the collected data. Categories, properties of categories and the basic social psychological process discovered during this study are outlined in a diagram, and discussed in detail using the voice of participants to emphasise that the theory has been grounded in the data collected and generated from it. For each category and property of category quotes have been taken from the data to support their inclusion. The substantive theory presented explains and provides an explanatory framework for third stage practice variation among studied midwives.

4.17 Conclusion

Clearly defining the way in which the research project was designed and conducted is a significant feature of the trustworthiness of the project findings. This has been achieved by: making explicit the values and beliefs guiding the project, rigorous

attention to detail in describing the processes of data collection and analysis with the use of matrices and maps, grounding the results of the research in the data collected and returning to the original data and to the field to confirm evolving theoretical constructs. In this way those who read the research will be able to see clearly how it was constructed and the story line of the development of the theory from data.

Chapter Five: Practice variation in third stage care

5.1 Introduction

This chapter presents the evidence of practice variation in third stage care among participating midwives. Evidence is drawn predominantly from interview data, with reference to observation data, and computer generated statistics of third stage practice outcomes. 22 aspects to care were identified by midwives with between two and five options for care available for each aspect, which highlighted both the complexity of, and practice variation in third stage management.

The chapter begins with a description of study participants and their practice environments. This is followed by a detailed description of midwifery practice in the third stage of labour and the reasons midwives gave for their practice. Due to the complex nature of third stage care this discussion is organized around the 22 aspects to care identified during interviews. The chapter concludes with a discussion of how models of care in third stage practice can best be represented by an interventionist-non interventionist practice continuum

5.2 Participants and their practice environment

The study took place in two NHS trusts within one health authority in middle England. The health authority offered care to women living in rural communities, small market towns and an industrial city with a large multi ethnic population. During the study period over nine thousand women per annum registered births across the health authority; 60% from trust A and 40% from trust B (see table 5.1).

Table 5.1: Birth statistics during study period		
	1998	1999
Mothers who delivered registerable births at hospital A	5698	5489
Mothers who delivered registerable births at Hospital B	3769	3877
TOTAL	9467	9366

Of the births managed by trust A, the majority occurred on delivery suite in the hospital based maternity unit with care offered to women by hospital based midwifery teams, delivery suite core staff and community midwifery teams. Less than 5% had a home birth with women supported by community midwives.

Of the births managed by trust B per annum, over 200 took place in a midwifery led unit in a small market town 15 miles away from the main hospital based maternity unit. These women were offered care by midwives working in both the community and the maternity unit. The home birth rate across the trust was less than 1% with women cared for by community midwives. The remainder gave birth on labour ward in the maternity unit, supported by ward based midwives who rotated to delivery suite, labour ward core staff and community midwives offering continuity of care through a small group practice scheme.

Hospital and community midwifery care was organised from two hospital locations. Hospital one (trust A) was situated in the city centre with maternity service provision in a separate building. Midwifery care was organised within a directorate of obstetrics and gynaecology where 214 midwives were employed to work in hospital and/or community locations. There were eight teams of hospital and community based midwives, linked to geographical areas in the community.

Hospital two (trust B) was situated to the west of the city centre with maternity services concentrated in a separate wing. Midwifery care was organised within a directorate of obstetrics and gynaecology where 146 midwives were employed to work

either in hospital, in a midwifery led unit and/or in community locations. A small number of midwives worked across hospital and community settings. Trust B organised care around two hospital midwifery teams, a team of city based community midwives, a group practice team and three teams of community midwives covering discrete geographical areas in the county. Approximately 15 miles from this site was a midwifery led unit attached to a small community hospital situated in the centre of a small market town. Midwives associated with this unit offered low risk labour care to women, and rotated between the unit and community. Both trusts were teaching hospitals and supported medical, nursing and midwifery students.

A number of models of care for pregnant women were available at each trust. In trust A, women could opt to give birth in hospital cared for by either core delivery suite staff or a hospital team based midwife. Core delivery suite staff were responsible for co-ordinating delivery suite provision. Two core staff and approximately seven team midwives were on each shift. One community team of six midwives offered a 'domino' scheme for low risk women, caring for women in their own home at onset of labour and then transferring to hospital to continue care during birth. In integrated midwifery care, groups of midwives worked together across community and hospital boundaries to offer antenatal, intrapartum and postnatal care to a group of women who could be either low or high risk. Continuity of care in labour by a known midwife was unusual, though there would always be a member of the team on delivery suite at any one time. In case holding midwifery care a small group of midwives offered total client care to a small number of women. All women received antenatal, intrapartum and postnatal care from one of the team with high levels of continuity of care achieved. Births took place in hospital or community. Women choosing a home birth were cared for at home by the on call community midwife in the area in which they lived. A second midwife was called at onset of the second stage to assist.

In trust B, women could opt to give birth in hospital cared for by either core delivery suite staff or a hospital team based midwife. Two to four core staff and approximately three team midwives were on each shift. In integrated midwifery care, group practice midwives worked together to offer antenatal, intrapartum and postnatal

care to women who could be low or high risk. Continuity of care in labour was unusual, with women usually cared for by core delivery suite staff or ward midwives working on labour ward. In midwifery led unit care, a group of midwives worked together to offer a continuous service to low risk women during pregnancy, labour and the postnatal period. Continuity of care was achieved for a significant proportion of women. The same arrangements as for trust A were in place for women choosing a home birth.

An example of a typical layout of a hospital delivery room is shown in fig 5.1. At a home birth, the layout was dependent on the home environment. Three discrete areas were important for the third stage of labour: the place where the woman was, the place where the baby was and the position of the midwife in relation to the woman and baby including the midwife's access to any necessary equipment. These areas were important as third stage practice involved interaction between mother, midwife and baby. These interactions influenced third stage care. For example a woman birthing in an upright position influenced where the midwife placed the baby at birth (usually on the bed between the woman's legs) and also influenced the midwife's access to the baby for cord clamping and the midwife's access to the woman's uterus to assess for the next contraction.

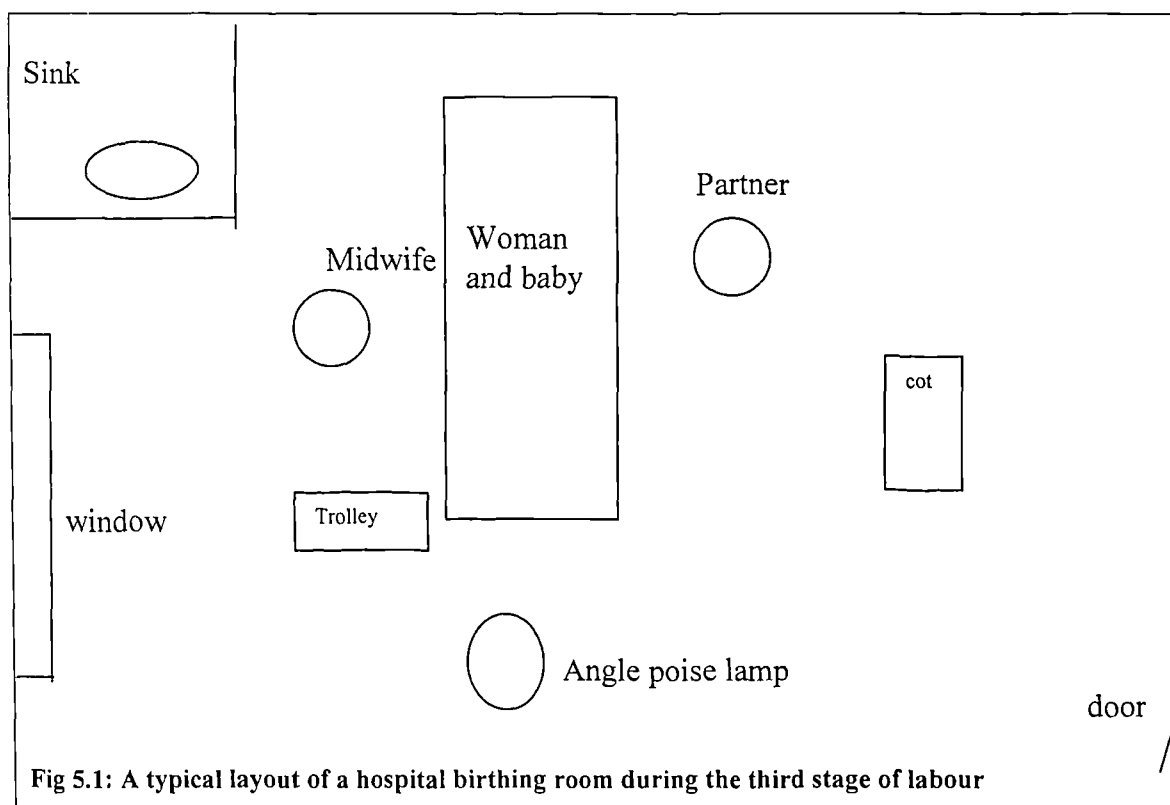


Fig 5.1: A typical layout of a hospital birthing room during the third stage of labour

The personal details of interviewed midwives were tabulated for ease of reference (see appendix nineteen). As data from four interviews were lost due to tape failure, details reflected data from forty seven midwives. Analysis of personal details revealed variation in the sample of midwives included in the study. The majority of midwives interviewed were female, in keeping with the dominance of female midwives in the UK overall. 35 midwives were married and 31 midwives had children. 33 midwives had been qualified up to fifteen years and fourteen had fifteen or more year's experience. Three midwives had careers spanning 30 years or more. Whilst the majority of midwives were white, a number of other ethnic groups were represented. A number of midwifery grades were represented (from E grade to manager scale 7). An E grade midwife had little managerial responsibility and normally practiced in a supported hospital environment; a grade associated with midwives in the early years of their career. Manager grade scale 7 was associated with midwife positions with significant managerial responsibility such as those midwives leading hospital/community teams at trust A. 32 midwives were hospital based, though community, integrated and case holding midwives were also represented. At least two midwives from every team were interviewed, apart from two small rural community teams a distance from the two main trust hospitals, when one and no midwives were represented respectively. 31 midwives trained locally and 36 trained after qualifying as a nurse. The majority of midwives achieved certificated midwifery qualifications rather than diploma or degree qualifications; diploma and degree courses had only become available in the early nineties.

The variation in participants reflected the use of theoretical sampling to explore both common and unusual elements in the data. For example during analysis of early interviews a link was made between practice environment and third stage practice. To test the hypothesis that midwives practiced according to the cultural norms of their place of employment, midwives who worked in a variety of different areas and offered a variety of different models of care were targeted.

5.3 Aspects to third stage practice

Two main categories of practice for third stage care were identified by midwives. Active management was the term most commonly used to describe a package of care involving the administration of an uterotonic drug. Physiological management was the term most commonly used to describe management without uterotonics (though these were often made ready just in case they were needed).

"We were taught about physiological and active management of 3rd stage. Physiological being you let the body's natural action take over the delivery of the 3rd stage. Where as with active management you're taking control over some of the actions that actually happen. Active management is the one with drugs."

Interview 26:29-33

Ten midwives did not describe physiological management at all and several more identified limited experience of this form of management.

Despite the naming of two categories of practice, midwives described multiple ways of managing the third stage of labour. The complexity of third stage care was revealed by the identification of 22 aspects or parts to care (see table 5.2).

Table 5.2: Aspects of third stage practice.

1. Name of management
2. Women's positions for birth
3. Uterotonic drug type
4. Timing of drug administration
5. Consent at time of drug administration
6. Babies positions during the third stage of labour
7. Cutting the umbilical cord
8. Breast feeding
9. General baby care
10. General care of women
11. Women's positions during birth of placenta
12. Assessment of bleeding
13. Waiting
14. Symptoms of placental separation and descent
15. Observed signs of placental separation and descent
16. Checking of the uterus
17. Guarding
18. Handling the cord during placental delivery
19. Maternal effort
20. Placental delivery
21. Delivery of the membranes
22. Delay management

In each aspect to third stage care midwives further subdivided their practice into ‘options for care’, which reflected the multiple ways midwives managed each aspect of third stage practice. For comparative and analytical purposes ‘aspects to care’ were used to tabulate the descriptions of third stage practice (see appendix twenty) and were also used to frame discussion of third stage practice variation in this chapter.

Descriptions of practice within each aspect to third stage care were presented and supported by reference to quotations from midwife interviews, data from computer generated third stage practice outcomes and quotations from midwifery textbooks. To ensure anonymity all midwife quotations were referenced by the number given to the interview transcript and by line number of the transcript as it appeared in the Atlas Ti programme. For example interview 1:23-25 refers to interview one, lines 23 to 25.

5.3.1 Name of management

While most midwives referred to active management and physiological management in their practice, a number of different words were used to describe both categories of practice (see table 5.3) and some midwives identified more than one word for the same management category. For example interviewee 37 talked about active and controlled management, and interviewee 40 talked about non active and physiological.

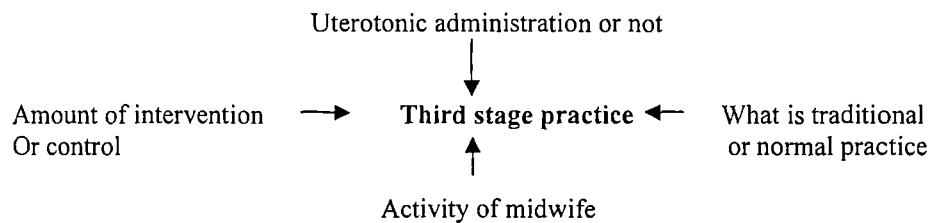
Table 5.3: Words used to describe the two main categories of practice for the third stage of labour by number of midwives using the word.

Active management		Physiological management	
41	Active management*	37	Physiological management*
1	Managed 3rd stage	1	Expectant management
1	Giving drug	1	No drugs
1	Traditional management	4	Passive management
2	Using or with syntometrine	2	Natural management
1	Partially managed 3rd stage	1	Non active management
1	Treatment with syntometrine	1	No syntometrine
1	It's not physiological, it's the other one	3	No name identified as did not
1	Controlled management		
1	Normal management		

*most commonly used term for each approach

Four factors were identified which influenced the categorising of third stage practice. (see fig 5.2)

Fig 5.2: Factors influencing descriptors used to categorise third stage practice



Varying levels of midwife activity were described in both active and physiological categories, though the term intervention was often associated with active management with natural being linked to a physiological approach.

"One is like being able to give drugs so you are very much in control of everything and the other side of it is awaiting various events to happen and let nature takes its course."
Interview 34:31-40

Midwives' perceptions were that uterotonics and midwife activity during the third stage interfered with normal physiology but also controlled a potentially dangerous part of childbirth. The use of such terms as managed third stage, controlled management and treatment with syntometrine reflected this. Expectant and passive terms used in physiological management, reflected the non interventionist principles of this approach.

Midwives often referred to what was routine or traditional practice linking such terms to active management as the most common form of care offered to women. Active management was perceived by some midwives as unit policy, hospital oriented practice, and the preferred management approach of obstetricians. Some midwives felt they had no choice but to use and recommend it for these reasons; particularly true of midwives working in hospital B. It was also perceived by many midwives that active management was quicker, and therefore there was pressure to use it on busy delivery

suites to clear rooms quickly. Environmental factors influencing third stage management decisions among midwives were therefore highlighted.

"I would discuss with her the fact that we do have this injection which is traditionally being given after the birth of the child to speed up the third stage."

Interview 5:228-230

"...I'm working within the hospital and I've got the hospital policies and protocols to follow and it is active management. "

Interview 22:218-220

"...I believe that doctors want women to have active third stages".

Interview 28:385

A common theme when identifying categories of third stage practice was the mixing of interventionist and non interventionist practices together. Whilst active management was labelled with doing adjectives such as active, giving, using, treating and controlling, physiological management was associated with passive, physiological and no. However descriptions of practice did not always reflect such clear boundaries and mixed approaches were also categorised with labels such as partially managed care. Examples of such mixing included the giving of syntometrine combined with the use of maternal effort, and using cord traction without first administering an uterotonic.

"I don't do a completely passive third stage in as much as once the placenta has separated I would still go through my routine for maternal delivery of the third stage and if it wasn't coming that way I would go for controlled cord traction".

Interview 20:312-316

Such mixing of doing and not doing was described by several midwives (see interviewees 9, 20, 24, in appendix twenty) and highlighted variation in meaning of terminology used to describe third stage management approaches. Further confusion over terminology was reflected in the use of terms such as modified Brandt Andrews, Brandt Andrews, maternal effort, fundal pressure, controlled cord traction and true controlled cord traction. These terms were not included in the list of management names in table 5.2 as they referred to aspects of third stage practice, rather than the total package of care. Brandt-Andrews and Modified Brandt-Andrews referred to waiting for

signs of placental separation prior to cord traction. Controlled cord traction or true controlled cord traction referred to the practice of not waiting for such signs, but applying traction as soon as the uterus was contracted. Maternal effort and fundal pressure referred to how the placenta was delivered. However all these terms were sometimes used and recorded in computerised records as management approaches, reflecting confusion and identifying the difficulty in defining third stage practice into two distinct groups (See table 5.4). With such confusion over terminology, it was difficult to identify what management approach midwives used as labels did not clearly reflect the approach taken.

"I suppose you'd call it a modified Brandt Andrews... give the syntometrine, wait for signs of separation then apply controlled cord traction to encourage the placenta to be delivered."
Interview 2:267-275

Table 5.4: Method of third stage management in normal birth at hospital A for years 1998 and 1999, documented by midwives on the computer system.		
Name of management	Number 1998	Number 1999
Controlled cord traction	2343	1955
Don't know	9	11
Manual removal of placenta (MRP) with epidural/general anaesthetic/no general anaesthetic/spinal	84	69
Maternal effort	284	317
Modified Brandt-Andrews Manoeuvre	848	1024
Physiological third stage	248	186
Other	1	-
Other and assisted by gravity	1	-
Other and by itself	-	1
Other and Controlled cord traction (CCT) and Maternal effort	1	2
Other and CCT attempted – cord snapped. Delivered by maternal effort	-	1
Other and combined with maternal position	-	1
Other and delivered spontaneously	6	4
Other and Edinburgh	1	-
Other and fell out	1	-
Other and fundal pressure and CCT	1	-
Other and maternal effort and fundal pressure	-	1
Other and part removed, then MRP in theatre	1	-
Other and partly delivered by CCT but needing MRP under epidural	1	-
Other and prepared for MRP then CCT	-	1
Other and see comment	-	1
Other and syntocinon infusion, fundal pressure	1	-
Other and under spinal anaesthesia for retained products.	1	-
Other and with membranes and baby	-	1
TOTAL	3832	3574

Reviewing the names midwives used for third stage practice revealed a lack of clarity and consensus over terms used to describe third stage management. The terms used did not clearly reflect two types of practice with blurred boundaries apparent between approaches. Descriptors were closely linked to levels of intervention and control together with what was deemed traditional practice.

5.3.2 Women's positions for birth

Midwives described women using a variety of different positions for birth in active and physiological management (see table 5.5).

Table 5.5: Women's birth positions in active and physiological management	
Active management	Physiological management
Semi recumbent = 28 On side = 3 Left lateral = 9 Upright = 5 on bed = 2 All fours = 15 In birthing pool = 1 Hands and knees = 1 semi supine = 1 kneeling = 10 standing = 3 on back = 2 squatting = 3 Most common position It varies = 31 One/two positions common = 16 Semi recumbent/sitting up = 16	Semi recumbent-17 Various -9 Upright -7 Standing - 4 Kneeling - 12 All 4s - 14 Squat -5 Chair -1 Woman's choice - 2 LL - 3 Sitting - 1 Leaning over bed - 1 No data 1 + 10 who do not do at all Most common position Semi recumbent - 12 Upright -7 Knees - 3 Standing -1 All 4s - 3 No common type identified - 11

Also birth position was not necessarily the position a woman stayed in for delivery of the placenta and membranes. In active management, third stage positions divided into two categories, position at onset of the third stage and position adopted for delivery of the placenta and membranes. In physiological management, an additional category was identified; the position women moved into during the third stage while awaiting placental separation and descent (for comfort), before moving again for placental delivery.

Several midwives talked about variable birth positions in terms of meeting the individual needs of women.

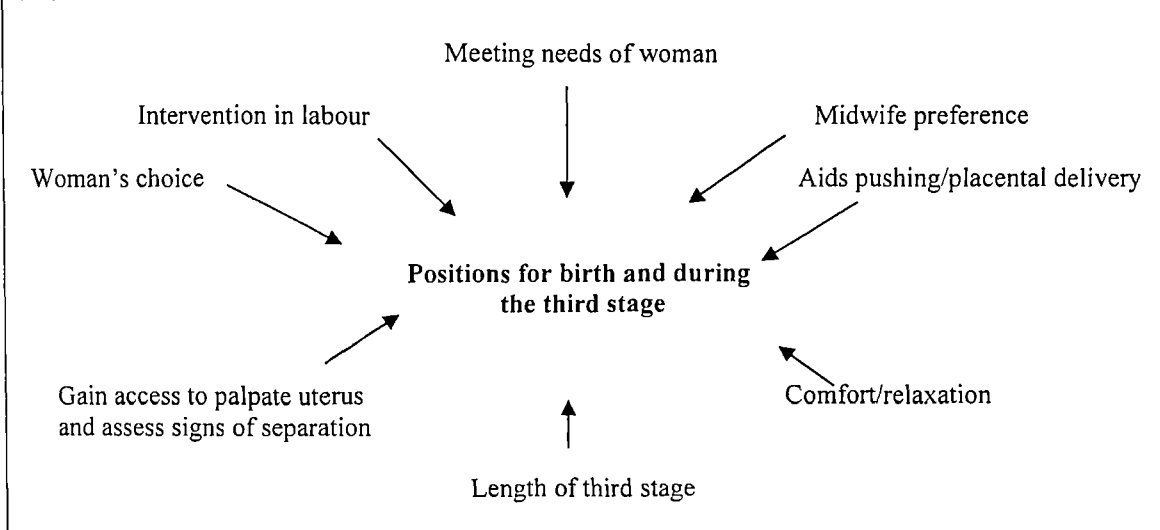
"I personally feel that it's important for women to be comfortable and to be in a position that enables them to give birth easily. So women that I look after tend to be in a variety of positions."

Interview: 42:133-135

However common birth positions for active and physiological third stage management were mentioned. In active management, semi recumbent birth positions were more common, with upright postures more closely associated with physiological management.

Midwives rationalised a woman's birth position by reference to intervention in labour reducing a woman's mobility, the midwife or woman's preference, and certain positions aiding pushing or comfort (see fig 5.3).

Fig 5.3: Factors influencing a woman's position at the birth of her baby and during the third stage of labour.



"If I am in on delivery suite they have had an epidural... They tend to be sitting down."

Interview 41:215-220

"I like delivering on all fours, and if the lady's happy to try a different position, then the one I would suggest is all fours."

Interview 10: 142-145

"The other reason that I like all fours is because if they are not pushing very well it often helps."

Interview 35:145-151

In active and physiological management descriptions, after the baby was born, there was a tendency for women to sit or get on to the bed if they were not in this position already. In active management this was to allow the midwife access to the abdomen and to assess signs of separation prior to placental delivery. In physiological management it was seen as a time for a woman to relax a little bit and feed her baby before the placenta was delivered. This was also linked by midwives to the length of the third stage in physiological management.

"If she was squatting and I could put my hand on her abdomen that's fine. If she was kneeling against something and I really couldn't do that then I would encourage her to turn around".

Interview 29:341-343

"For the passive I tend to make the lady more comfortable... because obviously she may be in that position for a while."

Interview 34:253-255

Women's preference to sit or lie was also mentioned.

"Most of them have wanted to turn over...because by that time they want to hold their baby and they are not in a position to do it otherwise."

Interview 43:239-243

In active management women who chose to sit or lie then tended to stay in that position for delivery of the placenta. In physiological management more commonly women either spontaneously adopted a more upright posture or were directed to do so.

Reviewing the positions women adopted during the third stage of labour revealed that a variety of positions were used by women. Factors influencing what position a woman adopted were multi-factorial and included midwives individualising

care to the needs of the situation, and directing a woman to adopt a particular position to facilitate the midwife's management of the third stage of labour.

5.3.3 Type of uterotonic drug

An uterotonic drug was routinely given in active management of the third stage of labour, but not normally in physiological management. Pharmaceutical products mentioned were syntometrine 1 ampoule, ergometrine (no dose mentioned) and syntocinon as a bolus or as an infusion. Routes of administration included intramuscular injection (IM), intravenous injection (IV) and intravenous infusion (IVI). The drug most commonly used for active management in low risk women across the health authority was syntometrine 1 ampoule IM (see tables 5.6 and 5.7).

Table 5.6: Uterotonic drug types for third stage management in vaginal birth		
Drug	No. of midwives mentioning	Use
Syntometrine 1 ampoule (Synocinon 5IU and ergometrine 0.5mg) IM	47	Routine active management of the third stage of labour.
Syntocinon 10IU IM	25	Active management of the third stage of labour for women with raised blood pressure.
Syntocinon 5 IU IM	1	Active management of the third stage of labour for women with raised blood pressure. Possible use in routine active management.
Ergometrine no dose mentioned but available in practice areas in doses of 0.5mg IM/IV	10	Treating women with history of postpartum haemorrhage and grand multiparity
Syntocinon 10IU in 100ml normal saline over 4 hours by infusion	2	Grand multiparity

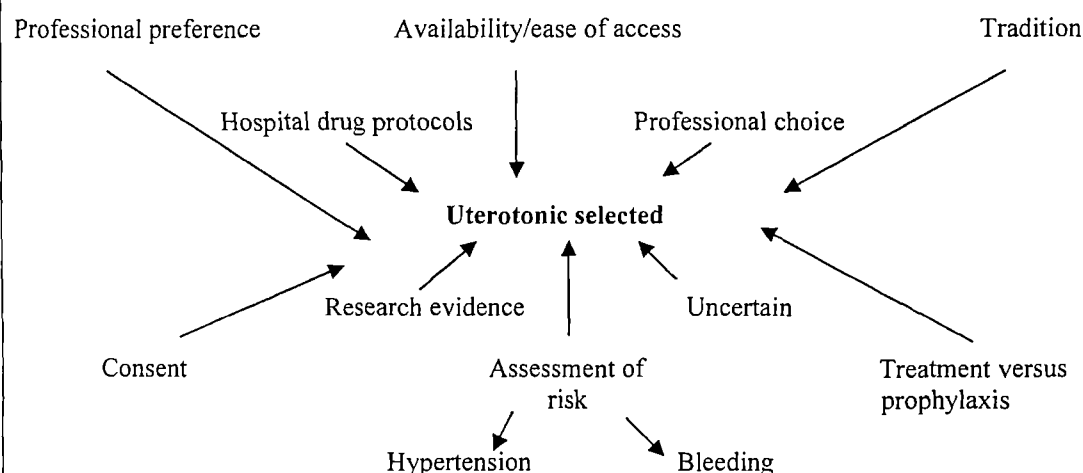
Table 5.7: Women given Syntometrine during normal birth at hospital A 1998-2000			
Drug	1998	1999	2000
Syntometrine 1ml IM	3009 (78%)	2852 (80%)	2814 (78%)
Total births	3836	3576	3625

Such a policy was debated by two midwives who did discuss syntocinon as an alternative, though this was not routinely used at either trust. A bolus dose of syntocinon (usual dose 10IU) was reserved for women with hypertension as midwives

said that drugs containing ergometrine were contraindicated due to the effect of ergometrine on blood pressure. Ergometrine was selectively used as prophylaxis for women at risk of postpartum haemorrhage and for treating excessive bleeding. It was commonly described as being given to grand multiparous women (women who had given birth four times or more). Some midwives pointed to their dislike of ergometrine due to its side effects, which included nausea, vomiting and uterine cramps. It was never routinely used for women at low risk but was considered a second choice after syntometrine if a woman was bleeding heavily. One trust had a policy of using an infusion of syntocinon 10IU in 100ml normal saline over four hours following childbirth as prevention and treatment of postpartum haemorrhage in grand multiparous women.

A number of factors influencing the choice of drug type for active management arose during discussions (See fig 5.4).

Fig 5.4: Factors influencing choice of uterotonic drug



The explanation for the routine use of syntometrine centred on its accessibility (being ready in the rooms), and its routine and traditional use. Midwives indicated that syntometrine was routine practice and unit policy where they worked. Drug standing orders allowed midwives to write up and give the drug without direction whereas other uterotonic agents needed to be prescribed by medical staff on an individual case basis.

"I've only seen syntometrine here...That's always been in the rooms ready."

Interview 8:430-432

"Well, the hospital policy says syntometrine..."

Interview 12:630

"With raised blood pressure...they are supposed to have syntocinon, but that has to be prescribed so you need to have time to get that prescribed."

Interview 43:137-140

The use of drugs other than syntometrine, were regarded as necessary only in those women who deviated from the normal and/or were at increased risk of bleeding. Such therapy was not seen as routine and required individual assessment of the woman. Ergometrine particularly was viewed as an extreme therapy.

"...we went through a phase of giving ergometrine, which was a bit drastic."

Interview 45:295-297

One midwife talked about allergic reactions to syntometrine and offered the opinion that this, together with the effect on blood pressure, should lead midwives to question the routine use of syntometrine in clinical care.

"It isn't always as clear cut as syntometrine or not syntometrine. There are people who either you wouldn't give syntometrine to because of their own allergies to it or because of something like high blood pressure."

Interview 29:451-454

Conversely other midwives expressed a preference for administering syntometrine and persuaded women accordingly. Medical staff preference for syntometrine administration was also highlighted.

Q: "Do you always give syntometrine?"

A: "Yes. If the mother's agreed. If they haven't then I tend to talk them in to it because I feel it's safer."

Interview 25:144-146

The issue of a woman choosing the uterotonic drug she wanted was not discussed by any midwife interviewed. The focus of choice was on the decision to have an uterotonic drug rather than its type. Type of drug was the decision of midwives or doctors.

Midwives in this study gave a clear rationale for the administration of uterotonic drugs other than syntometrine. However there was limited explanation of why syntometrine was the drug of choice in the majority of situations. Reasons that were given centred on the routine, historical use of syntometrine in practice environments. Only a few midwives questioned such an approach by discussing comparative drug studies, but still their practice was environmentally driven; choice of uterotonic was discouraged by the requirement to discuss and plan with doctors giving any drug other than syntometrine on an individual case basis.

Midwives did not describe changes in third stage practice when alternative uterotonic drugs were used. For example, the following midwife highlighted no difference in care when syntometrine or syntocinon was used in her practice and there was no mention of the different actions of different drugs, though ergometrine was seen as most effective at handling PPH.

Q: "Is there any difference in how you manage the rest of the third stage of labour if you give a different oxytocic drug?"

A: "Not me, no."

Q: "And it works in the same way as syntometrine?"

A: "Well, I haven't noticed any difference, I guess I haven't looked for any difference."

Interview 9:158-181

The administration of an uterotonic drug was not routinely part of physiological management. However midwives talked about having it ready for use if excessive bleeding occurred, if the uterus failed to contract and if there was delay in placental delivery in excess of 30 minutes.

"But I would have syntometrine at the ready in case there was any bleeding... if the placenta hadn't delivered within half an hour I'd ask the woman's permission to give her syntometrine"

Interview 19:296-300

Having syntometrine ready in physiological management was viewed either as a prop (to support physiological management if needed) or as a confidence booster to facilitate trying out what was not routine practice (It could always be given later if needed). Such opinions reflected midwives faith in the administration of uterotonics, despite the potential delay in their administration.

Reviewing the type of uterotonic drug midwives used for third stage practice revealed syntometrine use dominated as the drug of choice in active management, though other uterotonics were used for women deviating from the normal. Physiological management was not normally associated with uterotonic administration, though syntometrine was often made ready just in case. Factors influencing the choice of drug included availability, tradition and midwife preference.

5.3.4 Timing of drug administration

In active management, the timing of syntometrine administration varied. According to the midwives interviewed, this could occur at crowning of the baby's head, with the birth of the baby's anterior shoulder or following delivery of the baby. In many instances drug administration varied according to the situation. For example if there was another member of staff present (a midwife or student), administration was normally at delivery of the anterior shoulder. Some midwives expressed this as the ideal, but referred to difficulties in achieving this when caring for women without assistance. Drug administration was therefore delayed for pragmatic reasons; until the midwife was free to give it.

"I was taught to give the syntometrine with the anterior shoulder but I don't. And I don't know a midwife that does... delivering the baby and giving the syntometrine at the same time is a bit impossible."

Interview 35:263-267

The majority of midwives chose to give syntometrine quickly (within the first minute of the baby's birth), though some talked of administration delays of up to 5 minutes. (see table 5.8).

"I mean occasionally if it's been a very quick delivery I haven't drawn the syntometrine up. So then I have to. And I'm never really in any hurry to give the syntometrine... I haven't really noticed that it makes any difference."

Interview 33:126-138

Table 5.8: Timing of administration of uterotonic drug (normally syntometrine) for active management of the third stage of labour.

Timing of uterotonic drug administration	Number of midwives
Timing varied	8
At crowning of the baby's head	2
With the birth of the baby's anterior shoulder	14
After birth and before umbilical cord clamping	36
After birth and after cord clamping	10
Given within 1 minute or less of the baby's birth	20
Given within 1-3 minutes of the baby's birth	2
Given within 3-5 minutes of the baby's birth	5

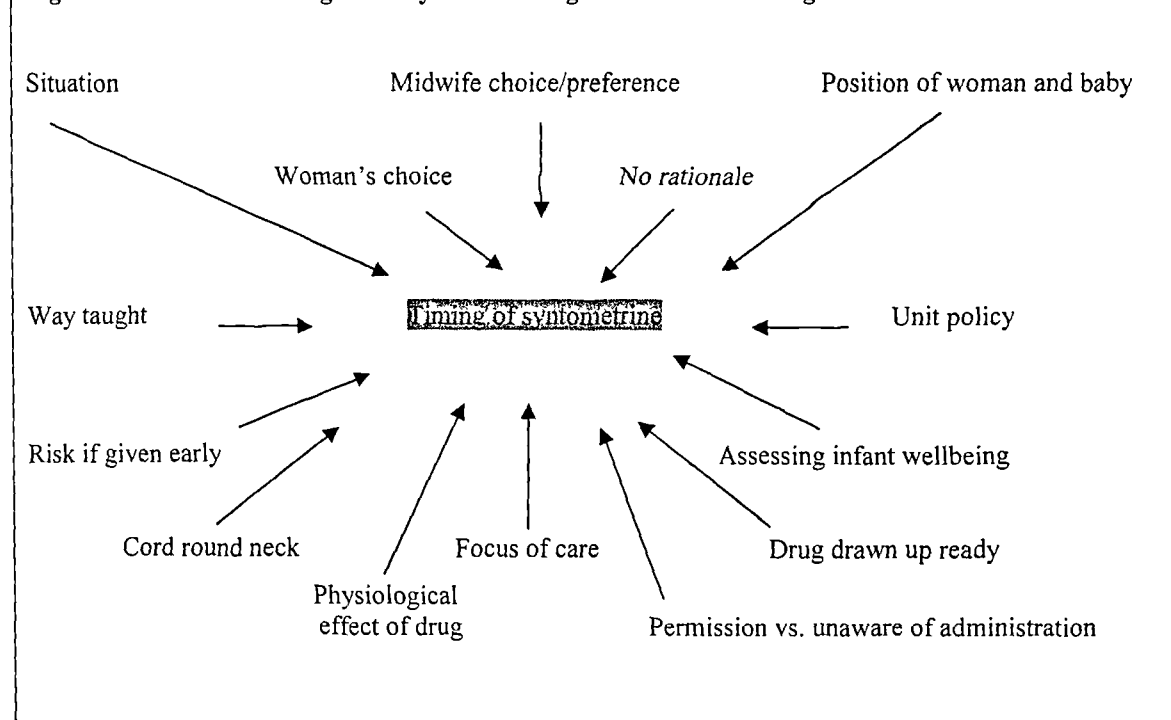
The most common scenario was for the drug to be given quickly after the baby's birth and before cord clamping (4 out of every 5 midwives interviewed).

A variety of factors appeared to influence timing of drug administration (see fig 5.5).

"It depends if the baby needs resuscitation, I would deal with that first unless I could see out of the corner of my eye the mother was starting to bleed in which case I would just quickly get the Syntometrine in and get back to the baby."

Interview 7:170-175

Fig 5.5: Factors influencing when syntometrine given in active management



The importance of getting baby to mother was stressed as being more important than when syntometrine was given in relation to cord clamping.

"If the cord is so long that you can manoeuvre the baby over the tum then I would probably give the syntometrine first and then cut the cord. But if the cord is stopping the baby getting up to (mum) or I am worried that I'm pulling on it, then I'll cut the cord first."

Interview 33:116-119

Administering syntometrine before or after cord clamping was not seen as relevant by some midwives, whilst others identified the importance of its administration simultaneously with cord clamping, though the order of each was not necessarily important. Some midwives talked about waiting for pulsation of the cord to stop before drug administration. Others talked about the importance of cutting the cord first so that the infant was not exposed to either the drug or a bolus of blood from the placenta as a result of the non physiological contraction of the uterus. Some midwives felt there was no risk to leaving the cord intact after syntometrine was given.

"I'm always concerned about giving drugs to the woman, and the child actually receiving this. So that motivates me to... divide the cord with the Syntometrine...fairly soon after you've given the Syntometrine."

Interview 5:467-472

"...the point I'm making is that I don't give the oxytocic before I clamp the cord...I always clamp the cord first and that's related to some vague idea of placental shunt due to the oxytocic"

Interview 12:617-620

Some midwives were concerned that early drug administration, particularly during the second stage could potentially affect the unborn child, particularly if there was a second undiagnosed twin.

"I don't like giving it (syntometrine) with the anterior shoulder because you never know quite what to expect. If you get a shoulder dystocia, if you get an undiagnosed second twin you've then got time against you. So I like to see the baby safely out before I'll give the syntometrine."

Interview 42:155-159

In some situations a midwife or woman's preference seemed to lead her action in relation to syntometrine administration. Some midwives did not see the need to rush in and give the drug and wanted the birth to take priority rather than rush and panic the woman during the third stage.

"I don't tend to have a big rush and a panic about getting the syntometrine in and getting the placenta out."

Interview 4:360-362

Some women preferred the umbilical cord to remain intact. Midwives therefore had no choice but to give the syntometrine first. Some midwives deliberately gave the drug immediately at birth as women were less aware of its administration. Conversely other midwives were more concerned about obtaining permission for syntometrine to be given and delayed administration to discuss this with the woman.

"On my own, I give the syntometrine first."

Q: "Before or after you cut the cord?"

A: "Quite often it's after because as soon as they have the baby it just follows."

Interview 17:126-133

Several midwives were uncertain about the order in which they clamped the cord and administered syntometrine. Also they perceived time moved more slowly during childbirth which affected their ability to accurately identify time lapse between events.

"The cord is clamped and cut and then the oxytocic drug, usually syntometrine, sometimes syntocinon, is given intramuscularly. Within two minutes of the baby being born I would say... I don't think it ever takes me longer than that. In fact I know its probably even less than that because its amazing how much you can do in a couple of minutes."

Interview 4:396-405

However the importance of noting the time of syntometrine administration was made by some midwives who used it to determine when further third stage intervention should occur.

"I always check the time I give my syntometrine, wait for 3 minutes."

Interview 35:191-192

A number of midwives highlighted that their practice was directly related to the way they had been taught how to manage the third stage. Others just highlighted it was the way they practiced and could not give a rationale for their actions. Only two midwives referred to unit policy guiding their practice.

Reviewing syntometrine administration during the third stage revealed variation in the timing of drug administration and variation in when syntometrine was administered in relation to cord clamping. Explanations for practice variation differed among midwives with midwife beliefs about childbirth and third stage management emerging as dominant influencing factors.

5.3.5 Consent at time of drug administration

Consent at time of giving syntometrine arose as an issue by the very nature of its absence in discussion. The majority of midwives only mentioned this after prompting. Consent tended to be acquired during labour, but not at the time of injection. An impression was given that administering syntometrine was part of the process of birth with active management, and given with little reference to the woman while she concentrated on her baby. Only two midwives spontaneously mentioned seeking consent. The majority, when asked what they would say, said they would tell a woman the injection was coming, but not necessarily ask consent for its administration

"So make that moment to give them the syntometrine and they hardly know that they've got it. And they often ask 'did I get the injection?'"

Interview 17:132-134

This reflected the lack of control women had over aspects of third stage care; the midwife taking a dominant role in determining timing of drug administration with little reference to a woman's consent for its administration.

5.3.6 Babies positions during the third stage of labour.

Midwives talked about placing the baby in a variety of positions at birth. In addition a baby's position could be altered during the third stage, particularly when active management was used, facilitated by cord cutting prior to placental delivery. Positions mentioned in active management were placing the baby straight into the birthing woman's arms, on to the woman's abdomen or on to the bed or floor between the woman's legs.

"It's either on the mums tummy or just on the green cloth between her legs."

Interview 22:97-98

When midwives expressed a preference for a particular position, placing the baby directly onto the woman's abdomen was the most common choice. A small minority of midwives identified always laying the baby on the bed first.

Q: "The position of the baby when the cord is cut?"

A: "With the mum usually on the tummy (right). If at all possible I do like the babies to be skin to skin."

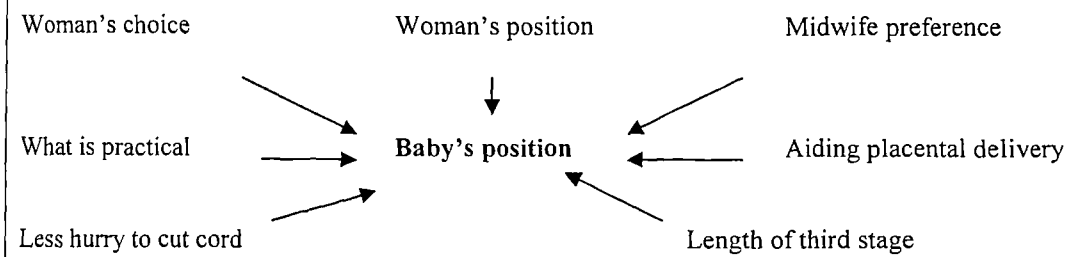
Interview 5:473-475

"I've not always plonked the baby on the mum's tum straight away unless she asks specifically. I think sometimes they need a little bit of a breather and then have the baby when they are ready. ...This is a semi-recumbent. I think alternative positions are never all going completely alike...If they are upright then the baby would then either go onto the bed or into the mother's arms. Or if there's a short cord then it would be lower than the mum...Then if they are on all fours then the baby might be passed through...between the mum's legs."

Interview 3:151-188

Midwives identified a number of factors influencing their choice over where to lay the baby (see fig 5.6). Midwives most often talked about women being offered a choice over where their baby was laid at birth with discussion normally taking place in labour. The majority of women chose to have the baby delivered onto their abdomen. However some women, from ethnic minority groups particularly, preferred their baby to be dried and wrapped before being handled and therefore chose the bed. Alternatively at birth, the midwife placed the baby on the bed in front of the woman to give her the choice of when to pick her baby up.

Fig 5.6: Factors influencing baby's position during the third stage



"Usually I deliver on to the tummy and then I clamp and cut the cord. A lot of Asian women prefer the cord to be clamped and cut first and so the baby would be in the bed."

Interview 24:110-116

The position a woman gave birth in had a significant effect on where the baby was placed. A woman delivering in bed in a semi recumbent position meant it was easier for the baby to be placed on the woman's abdomen. Midwives highlighted that it was not always easy if an alternative position in bed was used. They then talked about separating mother and baby and giving the baby directly to dad or the birth partner to allow women to turn over. Several midwives talked about the precarious nature of women being on their hands and knees on a bed several feet off the floor and also highlighted that some women chose to have their baby handed to a partner so they could concentrate on completing delivery of the placenta.

"Usually wrap the baby up especially if mum's on hands and knees, they are often a bit precarious in that position. So I usually wrap the baby up and give it to dad."

Interview 27:229-231

"Sometimes they feel that they want to pass the baby to the partner so that they can get the last bit dealt with."

Interview 22:149-151

Whilst women were actively encouraged to decide where their baby was placed at birth, midwives did express a preference for the baby to be placed on the woman's abdomen, for warmth and to encourage skin to skin contact.

"Just dry it a little and then put it on mum's chest or tummy, unless she said she didn't want to, but I prefer to put it there to keep it warm so it tends to go there."

Interview 7:147-150

A variety of other practical reasons also influenced where the baby was placed during the third stage. Factors such as normality, length of the cord and assessing fetal wellbeing were mentioned.

"Baby is placed on mum if everything is nice and normal."

Interview 41:223-223

In physiological third stage management, when discussing the baby's position, midwives again highlighted the variation that could occur as a result of a woman's birth position, personal preference of midwife or woman and practical issues. However there was a greater focus on upright positions for women, which directly influenced where the baby was placed.

"Give the baby straight to mum whatever position she's in...it's a juggling (act) to get them through the legs or whatever."

Interview 2:379-382

"Depends what position they're in to be honest. Again when they're standing, that's a little bit hard as well (chuckle) depending on how long the cord is and whether you're near the bed or things like that...often if the woman's standing she hasn't got the energy to actually hold the baby so you are perhaps holding the baby underneath..."

Interview 4:217-228

Cord clamping was often delayed in physiological management. There was less hurry to access the woman's abdomen, which gave time for interaction with the baby.

"She may be on the floor, kneeling on the bed which is a common choice, or actually on the bed leaning on a beanbag. So in this case, I usually post the baby through and you lay the baby before her. If she's on the bed, it's beautiful if (the baby) lays on the bed in front of her because there is real eye to eye contact."

Interview 5:290-293

The placing of a baby in his or her mother's arms was the most commonly discussed position in physiological management, with an additional position, of baby

being placed at the breast. This was directly attributed to assisting in the birth of the placenta.

"Well there is a theory that if you put the baby to the breast you move the placenta by moving the baby don't you."
Interview 31:94-96

The third stage of labour in physiological management tended to be reported as taking longer and more upright positions for birthing the placenta were reported in physiological management descriptions. This may account for the references made to an infant being moved off the bed at some point during the third stage for placental delivery.

Reviewing positioning of the baby during the third stage of labour revealed variation in where a baby was placed in both active and expectant management approaches. In addition a variety of reasons were given for this variation including practical issues and, midwife or woman preference.

5.3.7 Cutting the umbilical cord.

The umbilical cord could be cut during delivery of the baby, immediately after the birth, delayed till later in the third stage or after the third stage was complete.

Some midwives liked to wait before cutting the cord, while others saw the need for speed.

"I don't usually wait until the cord has stopped pulsating. But it isn't the first thing that I attempt to do. If the baby comes out, its crying well, its colour is good, you know mum is sort of holding it and dads come in, then that's fine. Then I wouldn't immediately say I've got to do this - hold on."
Interview 20:231-236

"You clamp and cut the cord quickly, with the baby separated quickly."
Interview 31:266-267

This was reflected in variable timing of cord cutting, from at birth up to 15 minutes later (see table 5.9). The majority of midwives chose to cut the cord within five minutes.

Table 5.9: Timing of cutting of the umbilical cord in active management				
1 minute or less	2-3 minutes	3-5 minutes	After 5 minutes	Stopped pulsating
14	13	11	2	8

In relation to syntometrine administration, the cord could be cut before the injection, after, or sometimes it varied. If the cord was tightly around the neck, then it was usually cut before.

"It varies on the situation but most of the time the cutting of the cord comes first and the syntometrine comes after all within the 1st minute of the delivery."

Interview 26:171-173

"I make sure that the baby is OK, give it to the mother, check again that the baby is still breathing, pick up the Syntometrine, give it, put the syringe down, pick up the cord clamp and scissors and do the baby's cord...this is assuming of course that I haven't previously had to cut it because the cord was round the baby's neck and I couldn't free it."

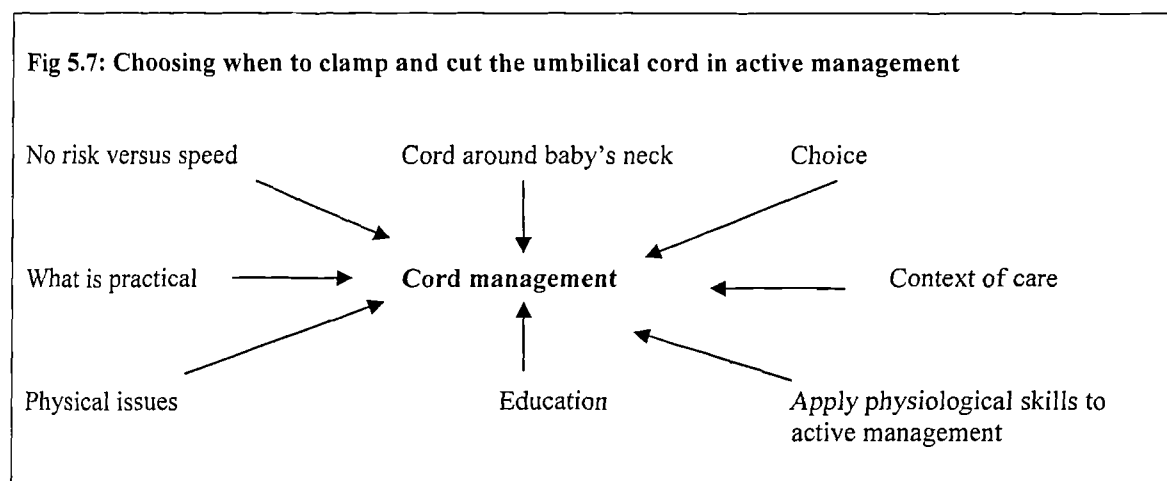
Interview 7:192-209

When the cord was cut either two clamps or one clamp and a cord clamp were used and the cord severed between them. The midwife applied the clamps and most commonly severed the cord as well, though a woman or her partner could be invited to do this. A clamp was normally left on the maternal cut end of the cord, though this could be released to collect cord bloods if a woman was rhesus negative or to facilitate placental delivery by blood drainage. How the cord was clamped and cut was directly related to what midwives had been taught during training.

"During my training in Glasgow the practice there was that if a woman was rhesus negative, you bled the cord while the placenta was in situ... In to one of the little blue bowls in the delivery pack and then I would draw up the blood from that and put it in the bottles. I would think of delivering the placenta after that."

Interview 16:121-131

A variety of reasons for speed or delay in cord clamping in active management were mentioned by midwives (see fig 5.7).



Choice of when to cut the cord was something that midwives often discussed with women, though not always. Reasons for delay in cord clamping centred around a woman's choice (when she was ready for the cord to be cut), a midwife's choice, where it was felt to be nicer for the woman to delay cord clamping for her to concentrate on welcoming her baby for the first time, and when waiting till cord pulsation stopped was seen by the midwife as advantageous.

"A lot of Asian women prefer the cord to be clamped and cut first..."

Interview 24:111-112

"It used to be immediately, the cutting of the cord but that's now no longer."

Q: "Where's that come from?"

A: "From doing physiological 3rd stages. From women asking for me to wait until the cord stops pulsating before clamping and cutting the cord."

Interview 27:286-291

"I would say often I wait until it stops pulsating. I don't cut it straight away."

Interview 33:122-124

Other reasons for delaying cord clamping included, aiding placental separation and to maintain oxygenation of the baby during adaptation to extra uterine life. Such an

approach was said to be as a result of applying physiological management principles to active management.

"I would wait for the cord to stop pulsing, then clamp and cut the cord. I know what you are thinking, because you are thinking normally to wait until the cord's stopped pulsing is more part of doing a physiological... Some people would say that if it's proper active management as soon as the baby is delivered you cut and clamp the cord. Well I think whilst the cord is still pulsing and the baby is still getting oxygen why cut the cord to deprive the baby of the oxygen that's still coming through... before its really starting to breathe on its own."

Interview 19:121-132

Conversely midwives who clamped and cut the cord quickly felt the need to do this so they could give the syntometrine, to avoid the drug affecting the baby and to prevent it from causing a shunt of placental blood into the baby, which could lead to jaundice.

"I'm always concerned about giving drugs to the woman and the child actually receiving this (right) so that motivates me I think a little bit more to actually divide the cord with the Syntometrine (right)."

Interview 5:453-472

"I think that once you give the syntometrine the baby is going to get a gush of blood that it doesn't really need. An overload... Its not going to be a natural physiological trickle of blood, it's going to be too much. Cause when the placenta clamps down the blood gushes down the cord and the baby gets it. I believe that it can cause more jaundice. That's just overload."

Interview 28:225-232

The needs of the baby were quoted for both early clamping and delayed cord clamping in active management.

"If there is a problem with the baby, then I would get that cord clamped and then sort the mum out."

Interview 9:189-193

"If the baby is flat and I am on my own then I look at the baby first. I will not cut the cord straight away... because at least there is a connection until I somehow manage to get some sort of help. The baby is getting something through the cord."

Interview 17:152-160

Delayed cord clamping was also associated with students taking longer to do this at delivery, mother involvement in cord clamping, and the woman's position at birth.

"If I'm delivering with a new student midwife then she'd catch the baby and then I would give the syntometrine, so the syntometrine would then be given before the cord, because they(students)tend to take longer to clamp and cut..."

Interview 3:142-147

"Normally I ask the partner if they want to cut the cord or the lady herself if they want to cut the cord..."

Interview 10:111-112

Context also played a part. If help was available from another midwife or student, cord clamping tended to occur earlier.

"When you work on your own there's no one to give it (syntometrine). So I usually clamp the cord, then give it quickly, then cut the cord or the partner cuts the cord."

Q: "If there was someone in the room would it be different?"

A: "Yes. Cause I'd probably have chance to clamp and they could give it as I was clamping and cutting the cord."

Interview 28:203-208

Physical reasons such as a short cord, and the cord around the neck also influenced early cord clamping, to assist in the baby's birth and to get mother and baby together as quickly as possible.

"If the cord is only very short and the mother wants to hold the baby and she is still in that position then I would say let me just clamp and cut the cord...But if the cord was long enough then I would pass the baby and let mum look at the baby"

Interview 10:199-215

"If there was cord around the baby's neck at the delivery of the head then obviously you would cut and clamp the cord, yeah, but if there was no cord present and the baby delivered then my practise is not to rush to clamp the cord, because I don't see any particular need at that point in time."

Interview 14:210-215

In physiological management situations methods of clamping and cutting the cord were the same as for active management. The focus of attention when discussing cord cutting and physiological management was time; when the cord was cut in relation

to cord pulsation and the need to wait to cut the cord so that women and their partners could welcome their babies uninterrupted

Physiological management was associated with non interventionist practice, and waiting for the cord to stop pulsating was seen as an integral part of physiological management by the majority of midwives interviewed. One midwife chose not to cut the cord at all until the placenta was delivered. However variation was still seen as some midwives talked about clamping and cutting the cord immediately. Times stated for cord cutting ranged from less than one minute after birth up to 30 minutes.

Q: "When would you cut the cord?"
A: "As before within 20 or 30 seconds."
Q: "You wouldn't wait for it to stop pulsating?"
A: "No."

Interview 20:339-342

"Normally after about thirty minutes, I then clamp the baby's cord by applying the plastic cord clamp to the baby."

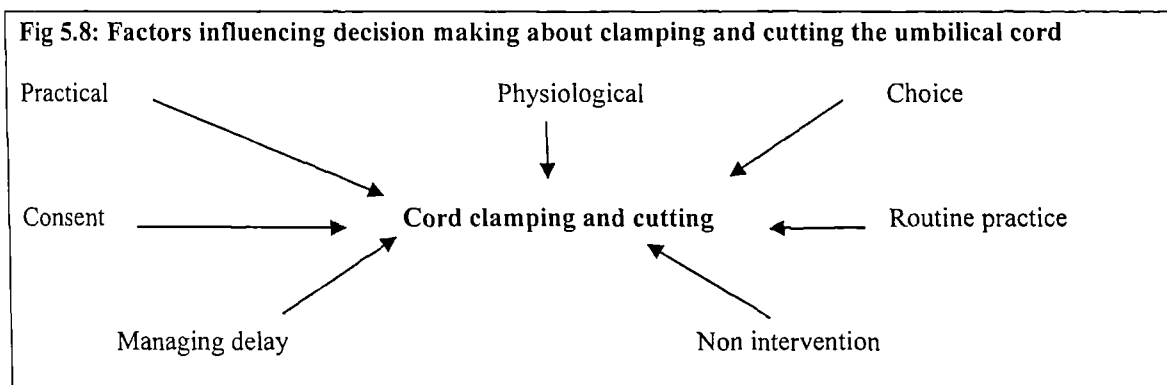
Interview 2:396-417

If cord clamping was seen as necessary, some midwives then chose to release the clamp from the maternal end of the placenta while the placenta was still in the uterus.

"Leave the maternal side free...it's to aid the placenta to separate."

Interview 39:352-355

Again a number of reasons were given for cord care in physiological management (see fig 5.8)



Practical reasons for cutting the cord included when cord pulsation was going strong after a significant period, to allow mum or dad to hold the baby or to allow mum to breast feed.

"I tend to wait for the cord to stop pulsating though having said that I have once cut it before it stopped pulsating because at 35 minutes it was still going strong."

Interview 4:232-235

"If the cord has stopped pulsing and the placenta is still in (right), but signs of separation have not really occurred, we often separate the cord at that time so the dad can perhaps hold the baby."

Interview 5:60:332-3335

Practical reasons for delaying cord cutting included waiting until the woman was comfortable and allowing time for interaction with the baby.

"Sometimes I just get carried away with breast feeding and then the placenta is out before I have a chance to cut and clamp the cord. I prefer to leave it intact. (laugh) but sometimes the cord is quite short and they can't get the baby on the breast so I lay them upwards and then cut the cord when its stopped pulsating."

Interview 28: 119-124

Other reasons included no need to cut, not touching the cord as it will go into spasm, early cutting increasing the risk of post partum haemorrhage or placental retention, and a belief that the cord pulses for a reason and therefore it is natural to leave it intact to do its job.

"I would probably wait a bit longer to cut the cord with a physiological 3rd stage because there doesn't seem any particular reason to cut it."

Interview 33:270-274

"...it (the cord) can go into spasm as soon as you have delivered if you go handling it and touching it."

Interview 26:320-321

"So I think the cord pulsates for a reason...I wouldn't necessarily cut the cord at all until the placenta had been born."

Interview 8:216-220

Conversely when pulsation stopped, the cord could be cut as it was

"...no longer servicing the baby"
Interview 8:235.

Midwives referred to the cord getting thinner and weaker looking when this was the case.

"You can feel it starting to go a lot weaker and the cord starts to go quite thin."
Interview 4:238-240

The practice of releasing the clamp from the maternal end of the cord was said to aid placental separation, particularly when there was delay during the third stage as blood escaped reducing the bulk of the placenta and causing it to shrink.

"If the placenta seems to be delaying I'd then release the clamp...because there's a back flow and by releasing, that sometimes tends to help the separation."
Interview 17:309-314

Choice was a key aspect of physiological management generally and cord cutting was an aspect of care that was specifically discussed with women; when it was to be done and how. Midwives stressed the importance of first obtaining consent before clamping and cutting the cord in this situation.

"Then when it's stopped pulsating we will let them know this cord has stopped pulsating... are you happy for me to cut the cord now? And then we would do that..."
Interview 45:377-380

Whilst the majority of midwives gave a clear rationale for their practice in cord clamping/cutting, in some midwives this was not the case. Some midwives could not say why they either cut immediately or delayed, whilst others referred to delay as routine practice in physiological management situations.

A: *"Then I would actually tend to clamp the cord (straight away), I've got to be truthful."*

Q: "For what reason?"

A: "God knows, I can't remember why, bad practice... that's what I've always done."

Interview 8:25-27

"Might feel the cord to see if it's pulsating. Cause you are not supposed to clamp and cut the cord until its stopped pulsating. But having said that I read something the other day that said you shouldn't actually cut and clamp the cord until the placenta is delivered. So that made me think again."

Interview 35:291-300

Reviewing cord cutting in third stage practice revealed variation in when and how the cord was cut. While a variety of reasons for speed or delay were given by midwives, choice was particularly relevant when discussing cord cutting with evidence of benefit and contextual features also playing a part in decision making.

5.3.8 Breastfeeding

In active management, breastfeeding during the third stage of labour was associated with delay rather than being routine practice. Only three interviewed midwives routinely encouraged breastfeeding during active management and no breastfeeding occurred in the observation group. The majority of midwives did not mention breast feeding at all and those that did linked it with mum or baby actively being interested, or a woman having requested early infant feeding on her care plan.

"The placenta's not coming and you've got to your 20 minute stage when you are supposed to inform the doctors. But before then I would first ask the mother if she wanted to breast feed and if she did, put the baby to the breast."

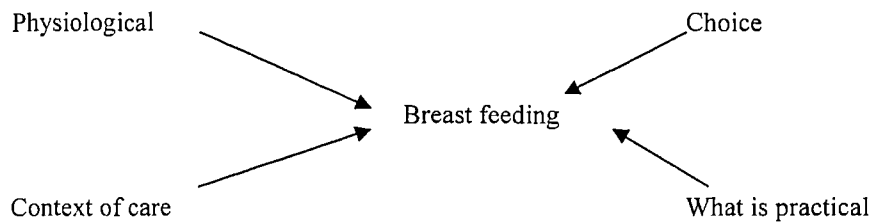
Interview 6:388-392

"...it depends if she is ready for it, and if the baby is showing signs of interest in it too. Also what her stated wishes were on the care plan (right). Sometimes they want the baby to go straight to the breast."

Interview 7:275-282

In physiological management breastfeeding was more common (21 midwives mentioned this) and it was seen as an integral part of the physiological management process. Midwives rationalised this practice for a number of reasons (see fig 5.9).

Fig 5.9: Factors influencing breast feeding during the third stage of labour



Midwives and women wanted to use the physiological release of oxytocin during breastfeeding to aid placental separation. In addition midwives identified that women were more focussed on wanting to breast feed, as part of the physiological process of birth.

"I usually ask mum if they would like to breast feed and say that would help the womb to contract quicker. Therefore it will reduce their bleeding."

Interview 24:224-226

"Then I think its really up to the couple because what I tend to find is some women are very keen to initiate breast feeding very quickly in the hope that the surge of hormones will help the separation of the placenta."

Interview 45:382-385

One midwife highlighted the practical difficulty of getting mother and baby together for breast feeding when the cord was not separated early, as is common in physiological management. Another midwife deliberately chose not to encourage early feeding, so that the woman could recover from the birth.

"A lot of mums want to put the baby straight to the breast as well which if you have got a short cord you can't do that."

Interview 26:326-328

"I rarely put the baby straight to the breast. I know there's a theory that you are supposed to, to make the oxytocin release, but I have this theory that I don't give the baby to the mum until the mum is ready to receive it."

Interview 31:101-104

Another midwife highlighted that it was easier to breast feed in physiological management as the delay in placental delivery allowed babies more time to find the breast themselves. Also early feeding helped its establishment.

"If she wants to breast feed she can. I would encourage her...For the baby's sake and for establishing breast feeding at that point. I wouldn't be encouraging her to breast feed purely to establish a contraction."

Interview - 29:55 185-193

"...hopefully I would try and get baby on the breast if that is what mother wants. Often they (babies) will find the breast themselves by rooting around, wriggling around. And licking and tasting as they do."

Interview 38:264-267

Reviewing breast feeding in third stage practice revealed its routine use in physiological management; in active management it was mentioned rarely and only in relation to being used in situations where there was delay. Breast feeding was used in third stage practice for pragmatic, physiological and contextual reasons.

5.3.9 General baby care.

During active management of the third stage of labour, general baby care involved drying and wrapping the baby, assessing infant wellbeing, stimulating the baby if needed and generally 'making a fuss' of the baby. Giving the child to his or her parents was a priority with skin to skin contact sometimes mentioned. The baby's cord stump could be neatened if there was time, and identity labels applied. If the infant required active resuscitation, care was altered accordingly. In addition different midwives focussed on speed or delay depending on their priority, whether this was quickly moving on to delivery of the placenta or welcoming the baby at a special time.

"Give the baby a quick wrap, a quick dry, clamp the cord"

Interview 38:119-120

"I make a fuss of the baby, make sure that the baby is dried, and had its towel changed and keep its temperature up. And just make a fuss. I think again it's a very powerful experience. That we just need a few minutes before they even hear anything. I don't rush unless, of course, there's problems."

Interview 31:292-296

In physiological management midwives did mention general baby care, but the focus overall was on less intervention. There was more emphasis on skin to skin contact and the importance of welcoming the baby and it being a time for the midwife to withdraw; a time for the family.

"It's just a time when the baby is here and we are peeking at what the baby is and checking that the baby is OK. And welcoming the baby. So it's a time for the family, the woman and her partner."

Interview 45:367-370

The midwife assessment of the infant was still important, but the emphasis was not to be intrusive, and facilitate mother and baby interaction. A reflection of this was the way in which one midwife chose to do the baby examination in front of the parents during the third stage which also highlighted the differences in the length of the third stage in physiological management compared to active.

Reviewing general baby care during the third stage of labour revealed differences in the level of care offered at this time dependent on the infant's need and the value midwives placed on the need for speed or welcoming the baby at a special time.

5.3.10 General care of women

During an active third stage, different midwives had different priorities. Some midwives cleaned up and got ready for delivery of the placenta, while others withdrew and did very little. In those active midwives, getting a receiver ready, changing gloves, getting things clean and tidy, getting rid of sharps and getting mum comfortable were important together with checking that there was no vaginal bleeding.

"Obviously I need to check mum and make sure that there's not post partum haemorrhage really... I make sure she's clean and tidy".

Interview 22:139-142

Those less active midwives focussed on not rushing in, allowing skin to skin contact and chatting to parents.

"Still being at the bedside. Checking the baby is OK. Chatting to the parents. I don't rush into immediately delivering the placenta."

Interview 45:208-210

In physiological management, midwives talked very little about actively doing any general care with the woman during the third stage, apart from ensuring she did not get cold. Midwives gave a general impression that the third stage was a time of waiting and embracing and welcoming the baby.

Reviewing general care during the third stage of labour revealed differences in the level of care offered at this time dependent on the priority midwives had for either getting things ready for delivery of the placenta or valuing the importance of mother and infant interaction.

5.3.11 Women's positions during birth of the placenta

During discussion of a woman's position for placental delivery in active management, a number of themes emerged relating to a) the position a woman was in or adopted for placental delivery, who made the decision to adopt this position, and c) the rationale given for the choice of position.

Midwives referred to a number of positions for placental delivery (see table 5.10). Whilst these varied, the vast majority of midwives (41 out of 47) identified one common delivery position which they asked women to adopt. Sometimes women made the decision themselves, either choosing to change or remain in their birth position.

"Usually I get them round onto their back if they're having an active management. And most of them want to turn around anyway so that they can cuddle their baby..."

Interview 35:188-191

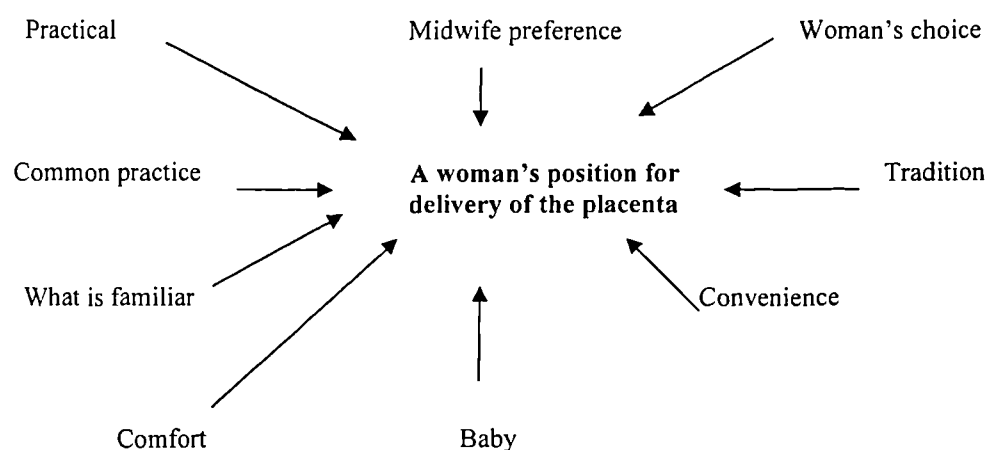
"If they're tired after pushing they might change their position so I would just adapt myself to whatever position they adopted then to deliver the placenta."

Interview 11:277-280

Table 5.10: Positions for delivery of the placenta and membranes by third stage management	
Active management positions	Physiological management positions
Semi recumbent = 38 sitting = 8 gravity/upright = 2 On all fours = 3 Upright on bed = 1 squatting = 1 on to back = 1 Anything goes = 1	Upright - 14 Bedpan - 5 On all fours -3 on bed - 1 Sitting - 5 SR - 14 Lying - 2 Standing - 1 Squat - 6 Bucket - 2 Bowl - 1

The most common position adopted in active management was semi recumbent (half sitting, half lying). Midwives identified that this position dominated for a number of reasons (see fig 5.10) including practical reasons, midwife preference, woman's preference and what was perceived by the midwife to be common practice.

Fig 5.10: Factors influencing what position a woman adopts for delivery of the placenta in active management.



Semi recumbent was identified as being most familiar and the traditional placental delivery position.

"Even if the woman has delivered on all fours or whatever other position for the 2nd stage, I usually like her to sit or lay semi prone in the more traditional way for the placenta."

Interview 20:220-222

In addition, as active management was associated with abdominal palpation and cord traction, midwives felt such a position provided easier access for these manoeuvres. Many midwives preferred a semi recumbent position and actively encouraged women to adopt such a position.

"If I've delivered a lady in the left lateral quite often I would ask her to move round into a semi recumbent position...I just find it more comfortable for me as a midwife to deliver the placenta."

Interview 46:201-204

Midwives also suggested that women were more comfortable lying down and could hold and interact with their new babies more effectively, as the placenta was delivered.

"...usually get her into some sort of sitting position so she is able to concentrate on adoring her new baby without worrying about what's going on down between her legs, and me fiddling around..."

Interview 2:255-260

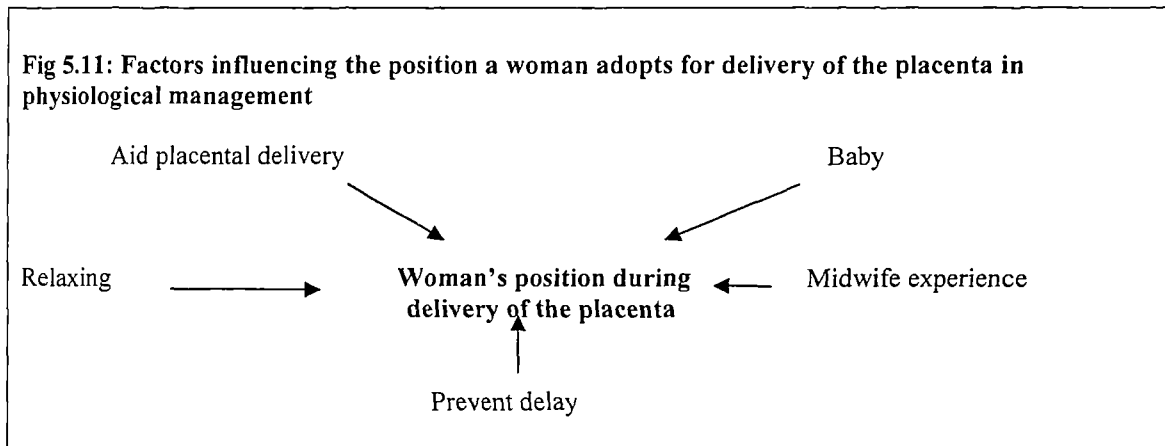
Women also chose their position for placental delivery, and sometimes automatically adopted a position that was comfortable.

"...on all fours, generally what happens is they sit back on their heels to hold the baby and then usually I find they want to lie down then or sit resting somewhere so they can hold the baby better."

Interview 33:160-164

When describing physiological management, midwives tended not to differentiate between positions used for active management and those used for physiological management. Of those who did describe differences, variation in a

woman's position for delivery of the placenta was evident, with a strong emphasis on upright positions for birthing the placenta more easily (see fig 5.11).



"if she's upright it will flop out very easily. If she is on her back it doesn't flop out so easily because again it's going uphill over the cervical curve isn't it. So sometimes it will just sit in the vagina and she will actually complain that there is something there."

Interview 5: 380-385

Upright postures were said to encourage feelings of pressure (to aid pushing), prevent delay, encourage the placenta to descend and facilitate delivery of the placenta, particularly when delayed. Bedpans and buckets were sometimes used to achieve the correct position

"Then I would ask the mother to stand up or squat on a bedpan or if she felt any pressure, any sensation of pressure in the vagina. See if she wants to deliver her placenta...Gravity helps."

Interview 16: 253-257

"If there seemed to be a bit of a delay with the delivery of the placenta I might get her in a different position, squatting or on all fours, but with her bottom lower than her shoulders. I would encourage her to actively push to try and separate the placenta."

Interview 19: 307-311

A significant proportion of midwives talked about a semi recumbent position for placental delivery in physiological management, which was in direct contrast with others who identified gravity as an important part of management. The rationale for this

related to the importance of a woman being able to hold and feed her baby and relax following the strenuous birthing process.

"I usually try to sit them down because it's comfortable to do that and they can breast feed as well while we are doing it."

Interview 28: 104-106

One midwife referred to her lack of experience in physiological management as a reason for encouraging women to adopt a semi recumbent pose; a position more commonly associated with active management.

"I'd like to say whatever position they would find comfortable to help the placenta to come out but I think because I don't have much experience of physiological 3rd stage then I may find it easier to lay them on the bed so I could look for signs of separation."

Interview 32: 241-245

Whilst women adopted a variety of positions for the third stage of labour, active management tended to be associated with a semi recumbent position, with physiological management associated with upright postures. Reasons for this tended to focus on the accessibility of the woman's abdomen and the use of gravity to aid placental descent.

5.3.12 Assessment of bleeding

In active management the importance of assessing women's vaginal blood loss during and following placental delivery was emphasised. Midwives talked about assessment in terms of observing vaginal bleeding externally, with some midwives combining this with abdominal palpation.

"I will feel the uterus when there is bleeding, or the first sign of bleeding to make sure the uterus is contracted."

Interview 15:329-331

Some midwives noted a heavier blood loss with syntocinon administration compared to syntometrine. Any excessive blood loss necessitated a change in management, as did the woman's obstetric history.

"I've (not) used syntocinon that often, but I do find that sometimes people do have a little bit of a heavier blood loss."

Interview 11:264-266

"I would be a bit more aware of postpartum haemorrhage (in para 4 women)... my hand would be more astutely on that fundus waiting to see if it was very boggy, very relaxed."

Interview 40:294-302

An estimate of total blood loss was made following third stage, though few midwives mentioned collecting and measuring loss.

Q: "So after the placenta's delivered do you collect the blood loss?"

A: "I do if I think it's brisk, but if its not and I've just got a normal 50-100ml, I don't, I estimate that."

Interview 40:312-316

In physiological management the importance of assessing for bleeding during the third stage was also emphasised with intervention (reverting to active management with the giving of syntometrine), linked to excessive loss. Breast feeding was also used if excessive bleeding occurred. Having syntometrine drawn up was one way of handling the potential danger of excessive bleeding in this situation; reflective of either an expectation that physiological management would fail to control bleeding or the need to plan for failure.

"...syntometrine will be drawn up just in case. You know as a precaution really. I'll explain to her that you know I won't need to use it unless I feel that I have to, if there was any bleeding."

Interview 38:269-272

Q: "Would you manage the third stage of labour in any other way?"

A: "Only if I have to go from physiological to active."

Q: "And what would be the reason for doing that?"

A: "Bleeding or extreme delay and the doctors are insisting on it".

Interview 15:418-421

Midwives noted that blood loss was normally heavier in physiological management; this was reflected in midwives making more comments on the risk of bleeding when discussing physiological management and stressing the importance of looking for it.

"They generally bleed more after a physiological 3rd stage, so I am aware that this woman is losing not a huge amount of blood obviously I would do something about that, but generally there is quite a big patch of blood on the bed."

Interview 28:113-111

Assessing bleeding was linked by some midwives to observation only, rather than observation and abdominal palpation, though some midwives used both strategies, (particularly if bleeding occurred).

"As long as the blood loss was within normal limits I would just hands off...just use my eyes to observe what was happening."

Interview 20:346-348

The influence of a midwife's values and beliefs in relation to how the third stage of labour should be managed also emerged here. The following midwife expressed her personal belief that physiological management was a much greater risk for women in terms of excess bleeding.

"Yes, I suppose it is the thought of right what are you going to do the day when she suddenly loses a thousand mls of blood and you've not given it (syntometrine)...and I feel so bad for myself but also for the woman that all of a sudden she has lost a thousand mls of blood just for the sake of not giving an oxytocic...and I wonder, 'have I done you any favours?'. "

Interview 23:198-209

Reviewing assessment of blood loss during the third stage of labour revealed the importance midwives placed on assessing bleeding, with variation evidence in the means by which bleeding was assessed. Values and beliefs influenced decision making at this time.

5.3.13 Waiting

In active management, following syntometrine administration and cord clamping, midwives referred to a period of waiting before continuing with their care. The waiting period varied from between 1 and 10 minutes. Some midwives talked about not waiting but this was less common.

"...I don't pull on it straight away, I don't pull on it until I'm thinking that maybe there are some signs of separation occurring...but I don't necessarily stand and watch and wait for those...I usually leave it for a while anyway...probably 10 minutes."

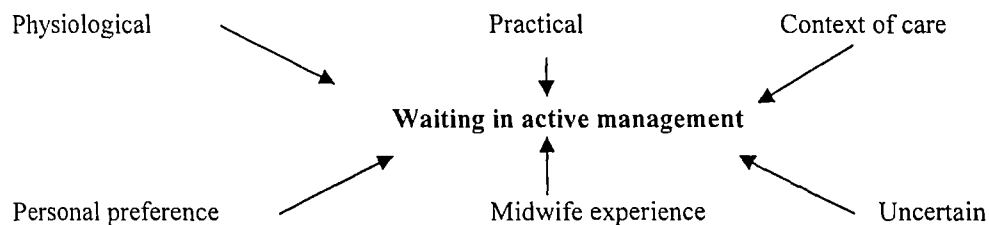
Interview 9:250-262

"...probably by the time I've got the woman moved onto the bed and got her comfortable I'd say that I would probably would do it (cord traction) straight away after that so you're probably talking about a minute or so."

Interview 11:328-333

The reasons for waiting and the length of time midwives waited for varied (see fig 5.12). Sometimes waiting for a discrete period of time could not be explained.

Fig 5.12: Factors influencing the use of waiting in active management



A period of midwife inactivity in active management was most commonly associated with waiting for physiological signs. Midwives waited for the syntometrine to bring about a uterine contraction and for evidence of placental separation and descent.

"Just wait for a little while. I mean the syntometrine doesn't actually start working for 2 to 3 minutes so you can't do very much anyway."

Interview 26:175-177

Some midwives waited only for a uterine contraction, others looked for signs of separation, and some used a combination of both.

"I wait for seeing that the fundus is well contracted."

Interview 44:217

"No hurry really. We just wait to see signs of separation usually."

Interview 38:153-154

"Wait for the cord to lengthen, signs of bleeding. I would then check the uterus is well contracted."

Interview 21:323-324

However some midwives said that signs did not always occur and then uterine contraction alone or used in combination with a discrete time period was used.

"If I don't see it (signs of separation), and it's probably been more than a minute and a half since I've given the syntometrine and I can feel that the uterus is well contracted, I'll go ahead and do the controlled cord traction anyway."

Interview 7:216-219

There were a number of practical reasons why waiting occurred in active management. These included being busy doing other things with mother and baby, waiting for cord pulsation to stop and waiting for the woman herself to experience pain indicating further uterine contraction.

"I just don't rush the 3rd stage. So it can take anything from five minutes to fifteen to twenty minutes. It depends what I am doing. And so I never ever rush it."

Interview 30:154-156

The context of care also influenced waiting in that if a placenta was delayed in separating or there was resistance to cord traction, a period of inactivity would be used before trying to deliver the placenta again.

"Usually about 5 minutes. But it can be sort of 6,7 depending on attachment of those membranes. But I will just wait and wait"

Interview 40:235-236

A number of personal reasons were also given to rationalise waiting. These included the idea that being less hurried improved results, interfering too much caused a retained placenta, and the need 'not to rush it'. Conversely not interfering quickly enough was associated with retained placenta.

"A less hurried approach probably gives you better results at the end of the day."

Interview 14:525-527

"I think you can interfere too much and that's probably when you get your retained placentas".

Interview 22:166-169

"Then I watch and wait and I don't wait very long. - I expect it to be out within 10, well 5 minutes because the lower segment would retain you know."

Interview 28:236-238

Midwife experience was associated with a slower third stage in active management.

Q: "Can I just ask is the way that you practice third stage management exactly the same as when you trained?"

A: "No. It's more delayed. I am slower. I am not so jab jab jab, get on with it."

Q: "So where's that come from?"

A: Confidence entirely. Experience."

Interview 40:263-267

Physiological management descriptions focussed more on the waiting aspect of third stage practice compared to active management. So much so the code was labelled 'doing nothing' rather than waiting.

"I just sit back and don't intrude... And the whole time just keeping an eye on the baby, just listening for the baby, just watching the baby's colour, and again watching that the woman's not in danger of losing blood that she doesn't need to lose. Basically just waiting, just sitting there. Waiting for the adoration to die down."

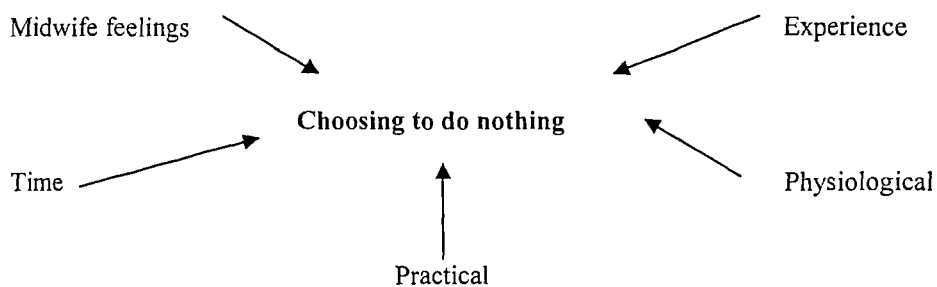
Interview 2:384-394

There was a clear emphasis on non intervention in this management approach, with a focus very much on the woman being in control of birthing her own placenta (see fig 5.13). It was not so much about waiting for signs so that the midwife could proceed with care (as in active management), though some midwives still had this focus.

"I am waiting for the same things to happen again. The mother saying she has got a contraction or there'll be signs with some bleeding."

Interview 47:318-320

Fig 5.13: Factors influencing waiting during the third stage in physiological management



The period of waiting in physiological management was significantly longer than in active management; from five minutes up to thirty minutes, with midwife inactivity being a key part of this period.

"Otherwise I tend to leave the lady in a comfortable position. But a lot of the time with passive, I'm sat in a chair. (Then what), It's a matter of waiting. I've had quite a few that have taken a while."

Interview 34:267-270

The rationale given for why midwives waited and were inactive during this time, was that this was a normal physiological event. The midwife was there to watch and wait for the placenta to appear. In addition midwives preferred to wait, to allow time for mother-infant interaction before interfering in any way, and tended only to interfere if the situation warranted it.

"I usually then wait at least 20 minutes and do nothing at all so long as there is no excessive bleeding."

Interview 31:148-149

As time passed in physiological management, midwives were more tempted to begin intervention, though the risks of fundal fiddling in this situation were also highlighted.

A: "As long as the blood loss was within normal limits, I would just hands off. Just use my eyes to observe what was happening... Probably up to half an hour. I might be tempted after ten to fifteen minutes just to, you know, gently feel the uterus."

Interview 20:346-351

"Just wait. Just leave them alone. I'm... I'm very much I like to sit on my hands. I don't like to fiddle. And I hate to watch people fiddling."

Interview 41:124-126

In addition to physiological reasons for doing nothing, practical issues such as waiting for the cord to stop pulsating, waiting for the woman to identify she could feel something, and waiting for the woman to experience pressure or pain were also described.

"Usually wait for the cord to stop pulsating."

Interview 13:331-336

Q: "Are you telling me once the cord is clamped and cut, you don't do anything else after that?"

A: "Absolutely nothing. Observe the blood loss and wait."

Q: "Then she just tells you what's happening?"

A: "We usually say, 'can you feel anything yet?'. One woman said 'ooh I've got another contraction' and we say 'oh it's probably the placenta' and it just came away."

Interview 27:347-353

The longer period of doing nothing was attributed to not giving syntometrine. The whole process was seen as the body working on its own to expel the placenta requiring the midwife to do nothing. However midwives did talk about the difficulty in remaining inactive after a long period of time.

"My understanding of physiological 3rd stage is that you don't do anything. You just let the body do it on its own. So I try to do as little as possible. But after about half an hour my nerve starts to go and I feel I ought to do something ..."

Interview 33:351-355

Experience also played a part, with midwives learning from experience the need for patience.

"I obviously still put my hand on the mother's fundus. I am very patient because I believe it takes slightly longer. It can take up to 15-20 minutes. And really I have actually learnt from patience."

Interview 24:235-238

Finally a midwife's feelings also influenced her practice. The midwife below highlighted her concern with waiting and the importance of careful observation.

"You've just got to keep watching to see if anything does happen or the mother says anything. Cos obviously you don't want massive bleeding taking place."

Interview 47:296-298

The majority of midwives identified that waiting was a significant part of their practice in third stage management, though the period of waiting was highly variable. Reasons for practice included learning from experience, applying understanding of physiology to practice together with pragmatic and contextual factors. In the majority of midwives waiting was linked to three aspects, which require further exploration. These are: waiting for the woman to have symptoms of something happening and 'verbalising' these; the midwife 'observing' signs of something happening and; 'confirming' that these symptoms and signs reflect placental separation and descent.

5.3.14 Symptoms of placental separation and descent

The use of symptoms in assessing progress during the third stage of labour was a part of practice among midwives in both physiological and active management approaches. However these symptoms were more commonly mentioned in physiological management situations. In active management situations it was apparent that maternal symptoms were not a major part of care, though symptoms such as the woman experiencing pain or discomfort when the uterus contracted and feelings of pressure as the placenta descended into the vagina were sometimes noted.

"Then sometimes the woman will say 'ooh, I feel a bit uncomfortable'."

Interview 45:214-215

"She might say she's getting a contraction or pain."

Interview 47:211

Sometimes women spontaneously mentioned these symptoms and at other times midwives actively asked women whether they were experiencing any feelings before proceeding with cord traction.

"I usually ask her to say when she has a pain in her tummy or a contraction. Even if they don't tell me they will often go 'ooh'. You notice that something's happened."

Interview 18:133-136

Experiencing these symptoms however was not essential as most midwives relied on detecting a uterine contraction with a hand on the abdomen and also highlighted such feelings were unreliable, particularly in women who had epidural anaesthesia.

"I think if the woman said to me that she couldn't feel a thing, she couldn't feel anything there, I think possibly I would go to feel the uterus just to check."

Interview 26:213-215

In physiological management, symptoms in women played a key part in the third stage management. There was a focus on the woman being in control of birthing her placenta and any activity was led by her feelings, which could include pain and or pressure symptoms. It was also mentioned that some women got no feelings at all. Pain was described as abdominal pain, strong afterpains (especially in multiparous women), feeling uncomfortable, an ooh feeling, registering awareness of another uterine contraction, tummy ache and cramping pain. Pressure sensations included an urge to push, feeling that the placenta has descended, a fullness in the bottom (similar to an urge to empty the bowels), and vaginal heaviness. When women were upright midwives suggested these pressure symptoms were more pronounced.

"In my experience most women say 'oh. I want to push'."

Interview 35:317

Some midwives described less specific symptoms: women feeling funny, having a trickling down sensation, or just feeling something.

Some midwives talked about informing women about the symptoms they were likely to have during the third stage, others chose not to discuss these but to wait for a woman's reactions and then explain what was happening and to encourage women to be led by them. These usually occurred ten to fifteen minutes after the birth of the baby and were used to either guide or support the woman to push to deliver her placenta.

"What I wait for is for her to tell me something and usually within 10 to 15 minutes she will consciously register a uterine contraction...Her face will prop up a little bit and she'll say 'ooh'...I don't tell her to feel this, she'll tell me. I say what can you feel? 'Tummy ache' is the usual comment...Sometimes she will actually register the placenta in her vagina and say something is there."

Interview 5:315-327

Sometimes midwives used these symptoms as a sign of progress and encouraged women to adopt an upright position in preparation for the placenta to be delivered.

Symptoms of placental separation and descent experienced by women were used by some midwives during the third stage of labour and not by others. In addition when these symptoms were used in care, there was variation in whether women were asked to tell their midwife when they occurred. Some midwives preferred to wait for women to spontaneously mention these symptoms. Reasons for use and non use of maternal symptoms were underpinned by the value midwives placed on them in the context of third stage management.

5.3.15 Observed signs of placental separation and descent

Waiting for signs of separation of the placenta before continuing care played a part in both active and physiological management approaches during the third stage.

These signs divided into those signs a midwife witnessed (bleeding, cord lengthening and visual abdominal changes) and those signs a midwife felt by abdominal palpation.

There was significant variation among midwives when they discussed signs of separation of the placenta in active management. There was variation in descriptions of what the term meant, how signs were detected, whether signs were waited for or not before proceeding with care and the rationale for waiting or not waiting for them to occur.

Midwives defined signs of placental separation in a number of ways. The most common description included lengthening of the cord and a trickle of blood per vagina. Some midwives also included abdominal changes while others referred to these changes separately.

"...wait for signs of separation, things like lengthening of the cord, or a trickle of blood."

Interview 2:272-273

A: "Wait for signs of separation...cord lengthening, blood and contraction of the uterus".

Interview 12:646-648

Abdominal changes could be determined either by visual inspection of the uterus and/or abdominal palpation.

Q: "The signs of separation you are looking for?"

A: "Lengthening of the cord, gushing, a contraction and the way the tummy rears up."

Interview 9:272-275

Some midwives assumed that the researcher knew what signs of separation were and did not offer a definition unless prompted to do so.

A: "Out of the corner of my eye, I would be watching if there were signs of separation. I wouldn't actually do anything."

Q: "What do you mean by signs of separation?"

A: "If the cord lengthened, or if there was a gush of blood. I would be looking out for that."

Interview 33:144-149

Most commonly midwives observed for a gush or trickle of vaginal bleeding that then stopped.

*"It is a gush and then it stops (sign of separation).
Interview 9:270*

They also described observation of the cord, which could lengthen either significantly or a little; normally detected by the distance of the clamp on the cord from the woman's vulva.

*"I've got lengthening of the cord because I've got my clamp so
you can notice if it's lengthened.
Interview 22:171-172*

Observing the woman's abdomen was also described. A uterine contraction led to hardening, rising and narrowing of the fundus. Separation of the placenta was observed as a bulging in the lower abdomen, resembling a full bladder. Some midwives also linked observation of signs of separation with a woman's symptoms as well as waiting for a discrete period of time to pass (as described previously). This was a dominant characteristic among many midwives interviewed who used timing as well as other observed and detected signs of separation.

*A: "Wait for signs of separation which usually when you give
Syntometrine or an oxytocic of some kind will occur after about
5 minutes. A little bleed. Again I don't find that women notice
this, they frequently don't tell me that this is happening. It's
signs that I notice."
Interview 5:507-511*

In active management situations midwives described either waiting for signs of separation, noting them but not waiting for them or not waiting for them at all.

*"I usually observe for signs of separation of the placenta
Interview 37:128*

*A: "When I first qualified I used to look for signs of
separation but probably not quite so much now."
Interview 10:349-350*

*"More often than not I miss them anyway cos I'm usually talking
or doing something with the baby."
Interview 30:147-149*

The majority of midwives in this study referred to using signs of separation as a marker which indicated that they could proceed with cord traction and actively observed the woman to determine when they occurred.

"I look for lengthening of the cord and a gush of blood. If I see that, I start to do controlled cord traction."

Interview 7:214-216

Some midwives suggested cord lengthening did not always occur and therefore they relied more heavily on the sign of vaginal bleeding. Other midwives highlighted cord lengthening could be used alone if a vaginal blood loss was not evident.

"Even with active management I still wait for a couple of signs of separation, just waiting for visible blood loss that you can see and possible lengthening of the cord. Sometimes that doesn't always happen but I go more with the bit of blood loss that the women gets..."

Interview 26:184-192

"I was always taught that you always have a separation bleed but I don't think you always do cos often that bleed's behind the placenta and doesn't come out until you pull the placenta out...but yes, you do see a definite lengthening of the cord."

Interview 4:427-434

However it was pointed out that vaginal bleeding could be a sign of a vaginal laceration rather than separation of the placenta.

"You don't always get a trickle. I would expect the fundus to be hard and to rise. That would be the main sign. But it doesn't bother me if I don't see a trickle because it might not happen. And if you've got an episiotomy or a laceration that's bleeding, it may mask that anyway."

Interview 42:200-205

If no signs occurred at all, the most important indicator for further action was waiting for the uterus to contract, though the passage of a discrete period of time was also mentioned.

Q: "Can I just ask do signs of separation always happen?"

A: "No."

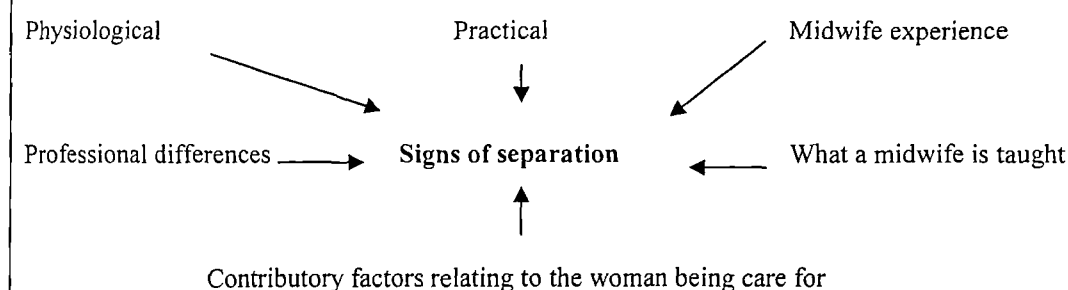
Q: "Then at what point do you...?"

A: "When the uterus is contracted."

Interview 29:377-381

A number of reasons for waiting or not waiting for signs of separation in active management were given by midwives (see fig 5.14).

Fig 5.14: Factors influencing the use of waiting for signs of placental separation in active management



The majority of midwives talked about the importance of waiting for the placenta to separate first before proceeding with cord traction and the possibility of the placenta remaining adherent if waiting was not used.

"Otherwise if you apply controlled cord traction you won't deliver the placenta anyway if it's still adherent."
Interview 19:181-184

Midwives also talked about not wanting to wrench the placenta from the uterus, and knowing the placenta had started to shear off the uterine wall prevented this.

"I wait to see if there's any signs of cord lengthening and the bleeding... So that I hopefully know that the placenta's started to shear off the uterine wall."
Interview 34: 195-201

Other midwives talked about how their experience had led them to believe that waiting for signs of separation facilitated easier placental delivery, while others pointed to this being either the way they were taught as students or following 'textbook practice'.

Q: "So what made you choose to be a little bit more waiting?"
A: "Just experience and with the people I've worked with really I think. I've learnt from there and found it was reasonably successful."
Interview 38: 219-221

Q: "And what's your rationale for waiting for signs of separation..."

A: "...Because I was taught to."

Interview 15: 412-417

Rationales given for not waiting for signs of separation included the practical difficulty in assessing whether they have occurred in some women due to their build and abdominal muscle tone. Also that these signs did not always occur and that they were sometimes missed anyway

Q: "What about signs of separation?"

A: "I don't necessarily wait for them...cos you don't always see them."

Interview 35:195-200

Some midwives did highlight that they used to look for these signs but that they had stopped looking as experience had taught them they did not always occur. Several midwives talked about the professional differences between obstetricians and midwives in relation to waiting for signs of separation. Midwives tended to wait, while doctors tended to proceed with cord traction without waiting.

I mean the doctors just deliver the cord straight away don't they, which I don't like. Because I've been brought up on the three key things (signs of separation.)"

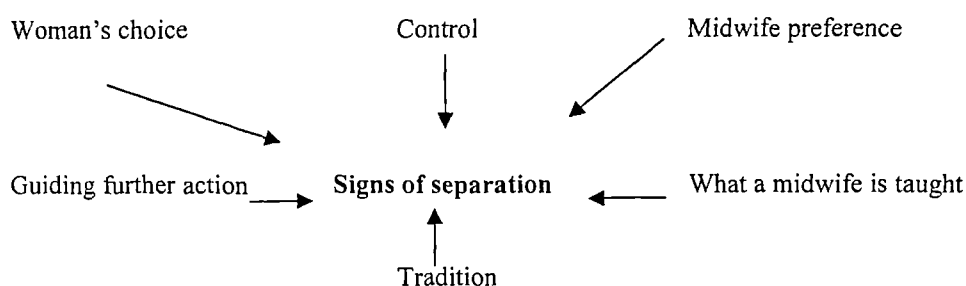
Interview 31:313-315

In active management, signs of placental separation were seen by the majority of midwives as an essential element of care. Midwives perceived that further actions were dependent on the signs of separation and descent that they detected. In comparison midwives describing physiological management did not focus so specifically on signs of separation detected by themselves. There was also a clearer differentiation in physiological management descriptions between symptoms of separation and descent experienced by the woman, signs of separation observed by the midwife and midwife confirmation of separation and descent by performing abdominal palpation. Midwives practising physiological management relied more on what the woman was feeling and what she spontaneously wanted to do in terms of urge to bear down, pain at next contraction and pressure symptoms of a descended placenta. Though reference was made to the definitive nature of abdominal changes as being the only absolute indication

that separation had occurred, some midwives deliberately avoided such intervention, perceiving abdominal palpation as potentially harmful and an intervention in a normal process.

As with active management, midwives described a variety of actions in relation to signs of separation. Midwives either waited for signs to occur before proceeding, noted when they occurred but did not rely on them, or did not look for them at all. The rationale given for these practices also varied (see fig 5.15).

Fig 5.15: Factors influencing the use of waiting for signs of placental separation in physiological management



Some midwives stressed the importance of waiting for signs as a mechanism for guiding further action and controlling placental birth

"I might feel the uterus to make sure it's contracted. So if I suspected the cord was lengthening, I saw a trickle, I could check the uterus, check that the cord had stopped pulsating and then have a go at letting her push".

Interview 31:151-155

The tradition of being taught to wait for signs during midwifery education was also stressed.

"And often as the placenta is separating spontaneously you see it, a trickle of blood, you'd notice that the cord appeared to be moving a little bit. All the signs that traditionally I was taught to look for in a 3rd stage of labour."

Interview 29:221-224

Not waiting for signs of separation in physiological management was directly attributed to midwife's preference. Such signs were perceived to be misleading with their detection potentially leading to intervention in a process, which focused on the woman herself guiding placental delivery.

Q: "Can I ask if you would wait or notice any signs of separation?"

A: "Not really. I find them to be a bit misleading actually. I'd rather go with the woman... with a physiological I'd say I like to be completely hands off and I don't want to get her pushing unnecessarily or make her uncomfortable if its not there

Interview 41:167-174

For the majority of midwives observing signs of placental separation and descent during the third stage of labour was routinely used. However there was variation in what observations were used and whether midwives actively waited for observed signs before proceeding with care. Reasons for practice centred around what midwives had been taught as students, what midwives had learnt from experience and midwives reference to physiology.

5.3.16 Checking of the uterus

Whilst checking the uterus was sometimes seen as part of the process of detecting signs of placental separation, for other midwives this was seen as a separate aspect of third stage management. This highlighted the difficulty in looking at discrete areas of third stage care as there was blurring of the boundaries between them.

Checking the uterus was seen as an important aspect of care to consider in both active and physiological situations. Some midwives saw this as an essential component of care and one which should always occur before further management of placental delivery, particularly with active management.

Q: "So at what point do you put your hand on the abdomen?"

A: "Before I start controlled cord traction. I just palpate the uterus to make sure the fundus is firm."

Interview 18:144-146

Other midwives pointed to the interventionist nature of actively checking the uterus abdominally and the risk of such ‘fiddling’ leading to bleeding complications. This attitude was normally dominant in physiological management, though not exclusively so.

"Because I think that if you are going to have a physiological 3rd stage you have to be physiological. The minute you start to interfere, doing anything, touching the cord, touching the uterus, you are influencing what's happening to that mum. You may encourage the uterus to contract before it was ready to contract. To partially contract, to delay separation, all sorts of scenarios.

Interview 29:295-301

When midwives talked about checking the uterus during the third stage, they identified when this occurred, how abdominal palpation was performed, what they were looking for during examination and why checking the uterus was important. When midwives talked about not checking the uterus they highlighted the importance of non interventionist practice and the use of other parameters on which to base practice, such as visual signs and a woman's symptoms. Such approaches were described in both active and physiological management situations, with checking the uterus less often used in physiological management.

Checking the uterus during the third stage normally involved the midwife placing a hand on the woman's abdomen at the umbilicus to palpate the fundus. Midwives described two ways in which they did this; continuous and intermittent palpation.

"I generally rest my hand there (on the fundus) and feel it and wait for it."

Interview 8:497-500

"Having found that it's well contracted I take my hand off. I've got this vague notion...that feeling is a bad idea and I've picked that up from midwives who taught me when I was a student so I don't fiddle..."

Interview 12:651-661

Some midwives chose to place their hand on the abdomen as soon as possible (usually within a minute), while others delayed doing this for several minutes.

"I tend to put my hand lightly on the uterus, just to feel for a contraction...probably by the time I've got the woman moved onto the bed and got her comfortable I'd say that I would probably do it straight away after that so you're probably talking about a minute or so."

Interview 11:325-333

"Then at about five minutes, ten minutes, feel the uterus to see if it's well contracted, sometimes to see whether it's separated or not."

Interview 3:217-220

Sometimes midwives did not use a time frame to guide their practice but relied on other indicators such as maternal symptoms and midwife observed signs of separation and descent.

"If she then has got the pain I would supervise, because then I'll feel the uterus."

Interview 15:177-178

The pressure applied to the abdomen varied among descriptions, with some midwives using terms such as a gentle hand, a resting hand a hand that doesn't fiddle or guarding of the fundus.

"Then a gentle hand on the abdomen..."

Interview 5:511-512

"...and I would just put my hand on the fundus, not to press it or anything. Just to observe whether it was contracted."

Interview 20:141-143

"I do tend to guard the fundus if I can so I can feel it rise..."

Interview 25:141-143

Another types of abdominal assessment to assess placental separation was also used and involved the midwife placing a hand on the woman's abdomen just above the symphysis pubis and applying pressure down and back towards the woman's head while observing for the cord receding back up the vagina (as noted by movement of the forceps on the cord). If the cord receded separation was unlikely, if it didn't, the placenta was separated. Such an assessment was made either in combination with other signs or instead of abdominal palpation.

"Usually if I have got a very tender patient, she doesn't want you to touch her, I tend to put a little bit of pressure to support the pubic bone, press down there a little bit just with

a finger and I look at the cord. If it doesn't recede back in I know that it is separated, without putting pressure on the mum that she doesn't want."

Interview 17:188-193

Abdominal palpation was used by midwives to confirm that the uterus was contracted and that the placenta had separated and descended into the lower part of the uterus. Assessing a contraction included the detection of a hard firm uterus, which had risen slightly above the umbilicus.

"I'm looking for a nice cricket ball feel to the top of the fundus rather than wide."

Interview 9:299-300

Evidence of separation and descent was described as the uterus being slightly narrower, elongated vertically, and ballotable (the upper uterus appearing as a mobile mass above the placenta filling the lower uterine segment).

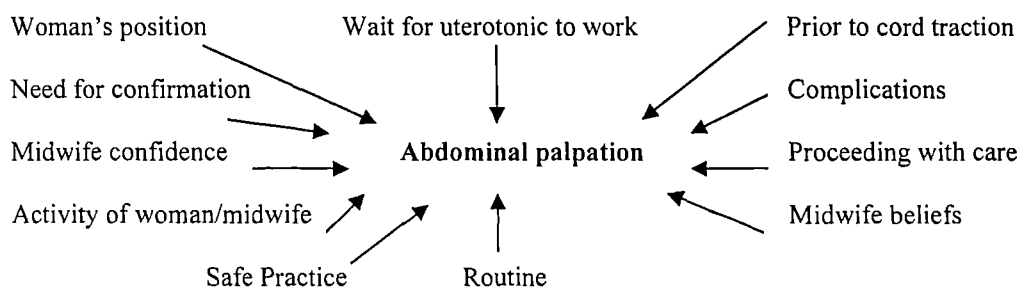
"You usually find that the fundus of the uterus becomes narrow and rises in the abdomen and that can quite often be demonstrated and becomes ballotable, slightly. So ballotable uterus, which means that if you take the fundus of the uterus gently in between your thumb and your first finger and you move it gently from side to side it becomes very mobile where it's broad and more immobile when the placenta has not separated, it's still attached to the fundus."

Interview 14:308-315

Some midwives did highlight that it is not always possible to tell whether a placenta is separated or not, but that it is always possible to confirm a contraction.

Midwives provided a variety of reasons for checking and not checking abdominal changes in third stage care (see fig 5.16).

Fig 5.16: Factors influencing the use of abdominal palpation in third stage care



Midwives who believed in checking the abdomen did so to confirm that the uterus was contracted and that the placenta had separated and descended. For many it was the most important indicator for proceeding with care, and was regarded as more reliable than maternal symptoms and visual signs. Midwives used checking to confirm a uterine contraction before going on to deliver the placenta.

"And then I'll very gently feel the uterus. If it feels well contracted then I'll attempt to deliver the placenta."
Interview 35:193-194

This was particularly emphasised in active management situations. The majority of midwives felt cord traction should not be applied until the uterus was contracted and there were detectable signs of separation; the rationale being that cord traction without a contracted uterus was unsafe practice, which could lead to excessive bleeding and uterine inversion. Also midwives waited for the syntometrine to work. One midwife did refer to the routine pattern of care in active management which included palpating the uterus; it being completed without any real thought.

A: you just sort of carry on from one thing to another don't you. You don't actually think for so many minutes."
Interview 10:313-315

Midwives who did not routinely use abdominal palpation associated it with fiddling, and identified this as dangerous, favouring a 'hands off' approach. This was particularly stressed by midwives describing physiological management, though it was also mentioned by some midwives when talking about an active approach.

"I will not meddle with the fundus."
Interview 44:223

Midwives associated fiddling with causing the uterus to partially contract, which was associated with delay in placental delivery and excessive bleeding. Fiddling was not clearly defined by midwives, though such an approach was often referred to. It reflected a heavy handed abdominal palpation approach which was usually intermittent. Rather

than a midwife waiting for the uterus to rise up under her hand, the midwife's hand was used to knead the uterus.

"... and there's all this you know the palpation and fiddling with it a bit. I am really anti that."

Interview 41:288-289

Midwives not in favour of abdominal palpation occasionally used it in certain circumstances such as when vaginal blood loss seemed large and there was cause for concern.

"If there's a lot of blood loss then you have to palpate the uterus to see if it's boggy or well contracted."

Interview 31:115-117

Some midwives did favour assessing the abdomen but described being unable to do so if the woman had taken up a position where access to the abdomen was restricted.

"I don't do that (check the uterus) when she is in any other position because you can't get to the uterus."

Interview 26:284-287

In physiological management midwives described women being active in bringing about placental delivery, therefore rationalised that there was no need to check the uterus was contracted and the placenta separated because no intervention was required. The woman herself noticed these things occurring and responded to them. Some midwives when discussing physiological management felt very strongly that when syntometrine was withheld interfering by palpating the abdomen was dangerous and a sign of bad practice.

Q: "Do you touch the abdomen at all?"

A: "Not if I've not given syntometrine... you don't twiddle with anything - it's hands off. You keep hands off. You are a really bad midwife if you touch her."

Interview 23:172-178

However less confident midwives felt they sometimes still wanted to check to reassure themselves that the uterus was contracted before the woman began to push.

"When she said she thought she felt it coming, I think I just felt it do you know what I mean, just to make sure it was well contracted."

Interview 30:198-200

Reviewing the use of checking of the uterus in third stage care revealed that not all midwives checked the uterus and not all midwives checked the uterus in the same way. The key influencing factor was the value midwives placed on the importance of checking the uterus before continuing with care. While some midwives regarded this as essential others referred to the procedure as an intervention requiring justification.

5.3.17 Guarding

Placental expulsion was managed either by the woman through her own efforts or by the midwife's actions which included guarding of the uterus and/or controlled cord traction. In descriptions of both active and physiological management, midwives described situations where none, all or a combination of these three could be used to bring about delivery of the placenta. In this way delivery of the placenta was divided into types according to the activity levels of the woman giving birth and the midwife supporting her (see table 5.11).

Table 5.11: Types of placenta delivery by activity of mother and midwife			
Who is active?	Maternal effort	Guarding	Cord traction
Woman only	Yes	No	No
Woman and midwife	Yes	Yes	Yes
Woman and midwife	Yes	No	Yes
Woman and midwife	yes	yes	No
Midwife only	No	Yes	Yes
Midwife only	No	No	Yes
Midwife only	No	Yes	No
No one (Woman's body)	No	No	No

The term guarding was used to describe the placing of a midwife's left hand on the woman's abdomen above the symphysis pubis with or without the hand applying pressure during third stage care. Descriptions of guarding were provided by the majority of midwives interviewed, though not always used. It followed assessment of separation

and descent of the placenta and was used either as counter pressure to cord traction or as a means to provide women with something to push against when maternal effort was used to deliver the placenta. Reference was made to supporting, protecting and bridging the uterus while delivering the placenta.

"Sometimes its necessary to put a hand on the uterus to give her something to push against... if I put any pressure at all it is in resistance to her pushing. There's no way I would push down on her stomach. And that usually is sufficient to deliver."

Interview 20:148-165

"That hand is ...just firmly holding above the symphysis pubis supporting, guarding the uterus...To prevent a prolapsed uterus"

Interview 32: 144-149

Guarding was used in both active and physiological management situations. Its use dominated active management descriptions; in physiological management it was rarely mentioned. When it was discussed, midwives tended to favour not using it though there were occasional references to its use, either alone or in combination with cord traction. See table 5.12.

Table 5.12: Descriptions of guarding for active and physiological management		
Type of practice	Numbers of midwives describing practice in physiological management	Number of midwives describing practice in active management
Guarding	6	40
Not guarding	4	5
Guarding not mentioned	26	2
TOTAL	36 (11 midwives did not discuss physiological management at all)	47

Not guarding was described in both active and physiological management situations, though again more commonly associated with a physiological approach. Several midwives mentioned the variable use of guarding in their practice.

"I did have a home confinement a while ago where I didn't actually do that. The woman felt so uncomfortable that she said "oh don't touch my tummy". So I didn't."

Interview 37:180-182

"...this debate about guarding the uterus, it depends if I remember really."

Interview 2:305-306

Descriptions of guarding differed among midwives. Some midwives described placing the flat of their hand on the abdomen just above the symphysis pubis and pressing up and back, though down and back was also mentioned.

"You just put your hand sort of across the base of where the uterus is and exert an upward pressure, with the flat of your hand."

Interview 33:236-238

Some midwives described using the first finger and thumb of their left hand to brace or hold back the lower part of the uterus above the symphysis pubis.

"I would gently put my left hand with my thumb and first finger sort of apart and just gently support the lower segment and just gently pull (on the cord)."

Interview 45:226-231

The amount of pressure applied to the abdomen differed. Some midwives described applying pressure and holding back the uterus, while others talked about their hand just being there. Some midwives talked about the link between abdominal pressure and maternal effort, with hand resistance increasing with maternal endeavour. Some midwives directly referred to gentle light pressure mentioning terms such as holding, resting and not pushing hard. In active management guarding was mostly described in combination with cord traction, with guarding pressure equivalent to pressure applied to the cord.

"...my hand is just above the woman's symphysis pubis and I'm sort of pressing very gently with an open hand down slightly and sort of up towards the woman..."

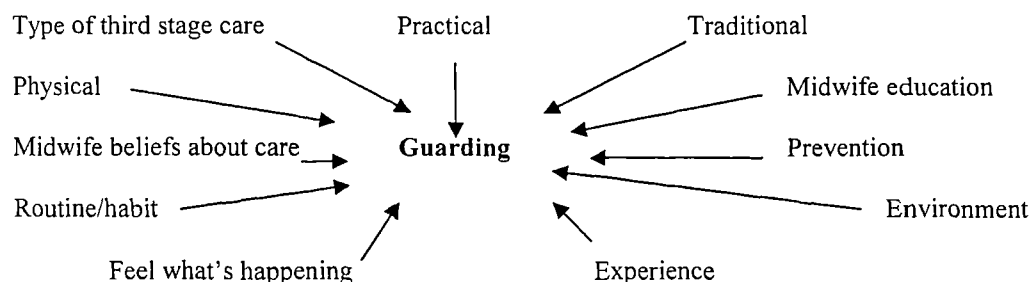
Interview 2:321-323

"I just literally rest it there, I don't really put any pressure on...and as soon as I see the placenta then I move my hand."

Interview 10:393-397

The reasons midwives gave for guarding the uterus varied, (see fig 5.17).

Fig 5.17: Factors influencing the use of guarding in third stage care



The reason that dominated was to prevent the uterus from being inverted (pulled or pushed through the vagina and ending up like an inside out umbrella). By bracing the lower abdomen the uterus was held up and prevented from descending during cord traction.

"Guarding means that if I am tugging at the cord and there is no support there then the uterus can prolapse."

Interview 44:243-244

However even among midwives who performed this procedure, there was doubt whether a hand placed in this way could prevent uterine inversion.

"That's the way I was taught and that's where my hands tend to go. They automatically go there, but I'm not guarding. In my tiny brain I think if I'm pulling that hard that I'm going to pull a uterus out of this mother then perhaps I shouldn't be practising as a midwife. I wasn't really sure as a student probably if I was honest, what I was guarding then. And I'm still not. I can't see how it works as such, but I put my hand there anyway because everybody does."

Interview 23:109-113

The reason then given for this practice was tradition/habit. It was the way midwives were taught to manage the third stage. They were expected to do it by other colleagues, everybody did it and it was considered bad practice by some if omitted. If cord traction was being used, guarding was viewed as an essential part of care. Midwives also rationalised the use of guarding as a means of raising awareness of placental descent, which could be felt beneath the hand placed on the abdomen in this way.

Some midwives could not give a reason for guarding but mentioned they had always done this, it didn't do any harm, it was somewhere to place their hand and it tended to work. One midwife felt the placenta did not slither out so easily if the uterus was not guarded.

"Sometimes I make a bridge to effectively guard the uterus even though I don't believe you have to do that. It just gives me something to hold on to...but I don't always. Sometimes I just pull it (the placenta) out."

Interview 28:245-251

Not all midwives guarded the uterus in active and physiological management. In active management several midwives described not guarding, but did acknowledge its dominance among most midwives in practice.

A: "...don't really do anything with my left hand. When I first trained I used to guard the uterus by holding my hand down. But now my hand might be placed on her abdomen lower down but not any pressure or actually to do anything really."

Q: "So why have you changed?"

A: "I just think it's just through practice with other people and talking that it doesn't actually do anything."

Interview 18:163-172

In physiological management the practice of guarding with cord traction, guarding without cord traction and no guarding was described. Midwives not guarding rationalised that if no cord traction was used there was no need for counter pressure on the abdomen as the woman achieved placental delivery herself.

Q: "And you wouldn't guard?"

A: "No, but I wouldn't be pulling."

Interview 3:376-378

The most common reason for not guarding in both active and physiological management descriptions was a belief that it did not prevent inversion and that this was supported by research.

"I was a bit doubtful about whether to do it (guarding) to start with and I found that the students tend to say 'oh we are told we don't have to guard the uterus' or there's a question, 'do you think you should guard the uterus?' So in the end I looked it up. I looked up research and I can't actually remember the exact research but it seemed to suggest that it didn't really make any difference at all."

Interview 33:240-251

In addition some midwives described guarding as unnecessary, as the placenta delivered without it. Some midwives mentioned a move away from using guarding in practice as a result of clinical experience, seeing students do nothing, talking to other midwives and not being able to see how guarding was effective.

"You are going to ask if I'm guarding the uterus. No...because I think that research has proved that you are not doing anything...I was taught to guard the uterus in my training to prevent it from being pulled out, inverted. I really believe that you are not going to do that by putting gentle cord traction on...If its going to do it, its gonna do it whether your hand is there or not."

Interview 29:405-412

Reviewing the use of guarding in third stage practice revealed differences in the way guarding was conducted and levels of its use among midwives, though the practice tended to dominate in care situations. A variety of reasons were given by midwives in support of the use of guarding or not guarding, with tradition and education playing a key role in support of its use.

5.3.18 Handling the cord during placental delivery

Midwives described cord traction or controlled cord traction (CCT) as a manoeuvre to assist delivery of the placenta where the midwife placed a hand on the cord at the woman's vagina and applied traction to it in order to pull the placenta down from the uterus through the vagina and out. Normally performed in combination with guarding of the uterus, midwives also associated the practice with waiting for signs of placental separation and descent; this package of care being referred to as modified Brandt Andrews. In contrast true controlled cord traction was defined as traction applied immediately after the first uterine contraction during the third stage with no waiting for signs of placental separation. Both types of practice were described, though the majority of midwives waited for signs of separation. The practice of not waiting was commonly associated with obstetric care.

"As soon as I feel that it's contracted then I apply downward traction to the cord, which is what people would call controlled cord traction."

Interview 4:419-421

Cord traction was associated with active management of the third stage, with the majority of midwives describing its routine use. Only occasional reference was made to not using it. In physiological management descriptions midwives were divided in their use of this practice; some favoured pulling on the cord in the same way as they did for active management, some never touched the cord (the most commonly used strategy) and some described a modified cord handling/traction particularly when the placenta reached the vagina. Such an approach was described as gentler and less interventionist; applied only in situations to support maternal effort when the placenta was known to be in the vagina.

Q: "Would you put any traction at all on the cord?"

A: "No, I think not. That's probably the difference, no intervention."

Interview 18:264-265

"I might, as a gentle support, hold the cord. Certainly not traction like I would with an active or a managed 3rd stage... Just to sort of guide it to make sure its coming you know."

Interview 37:247-251

"The same as controlled cord traction. The action itself is active management without the intramuscular injection."

Interview 24:2560-261

When talking about how cord traction was performed, midwives varied in their descriptions in relation to how they held the cord, the direction in which traction was applied, how the cord was pulled (intermittent or constant), and the strength of traction. Not only did midwives differ from one another in their practice, but midwives described variation in their own practice according to the situation. For example whether the cord was thick or thin often played a part in decision making.

"Depends. Quite often I use my hands and I will wrap the cord around my finger and pull, but if it was a short cord or sometimes if they are thin cords (right) I use different ways. If I wasn't happy by using my fingers then I would probably be using the clamp in that way."

Interview 6:253-256

The majority of midwives favoured holding the cord close to the vagina for better leverage for traction application. This was achieved either by wrapping the cord around the fingers until the midwife had a grasp close to the vagina or positioning a metal clamp on the cord close to the vulva. The midwife then used this clamp to apply traction.

*A: "If it's a long cord then I will leave that and go near to the vulva. I don't give it a tug, not from a distance."
Interview 44:250-252*

*A: "I usually put a clamp on, a forcep on. I put my two fingers in the middle and I do downward traction."
Interview 28:267-268*

The direction in which traction was first applied was usually described as down into the bed suggesting the woman was in a semi recumbent position for the third stage with only occasional reference made to other directional pulling, associated with alternative positions such as all fours. As the placenta descended the majority of midwives referred to applying traction in a direction which followed the curve of cares of the pelvis. This involved lifting the cord up through one hundred and eighty degrees.

*"... applying pressure in the direction that the baby would be born, along the direction of the birth canal. So pulling downwards slightly and then as the placenta started to emerge taking it up, through the curve of cares."
Interview 29:385-392*

Traction applied to the cord was described by some midwives as continuous/constant and by others as intermittent.

*"Consistent downward traction if it feels like its moving."
Interview 23:123*

*"Invariably it's not constant because you can't do it for long enough so you end up having to relax and then take it again."
Interview 8 555-557*

The strength of pulling was also described in different ways. Some midwives favoured gentle traction while others used firm traction.

A: "The other hand is holding the cord and doing gentle traction downwards."

Interview 18:173

"Well its usually continuous. I think its just intuition whether I am getting some resistance or not. But it is quite firm - the traction."

Interview 16:192-193

Midwives also talked about feeling how the cord felt when they applied traction and how this influenced their further action. Resistance or give in the cord was often used as a marker whether to stop pulling and wait a little longer or whether to continue. Some midwives also referred to a clicking cord.

"If there's any suspicion of a clicking cord then I don't pull...I think that you've got 3 clicks. Cos I think it's the three vessels that click. I think that's what it is. If I feel one I'll stop pulling at that point and just wait a minute. And then I'll probably get mum, a little bit more maternal effort and things and just wait till I know its coming and then pull but very gently."

Interview 4:520-532

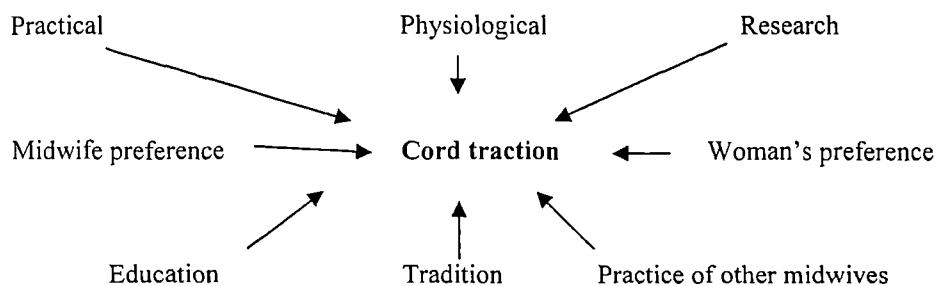
Some midwives found it difficult to articulate what they were feeling when handling the cord as it was such an established part of their practice.

"I think it's very difficult to describe how hard you pull...But I think you can tell if it's stuck and you can feel it actually start (moving)..."

Interview 33:181-184

Midwives did not offer a rationale for why they performed cord traction, but offered a variety of reasons for why they performed cord traction in the way that they did (see fig 5.18).

Fig 5.18: Factors influencing the way in which cord traction was applied.



They described using visual and tactile skills to assess how hard to pull on the cord, when to and when not to pull on the cord and what instruments to use. For example one midwife favoured using her hand to apply traction when the cord was thin as she got an enhanced sense of whether the cord was starting to break. Some midwives justified using a cord clamp to pull on the cord while others rationalised why wrapping the cord around their fingers was superior. Other midwives demonstrated flexibility in cord traction and decided what to use according to the grip they could achieve in individual circumstances.

"For a while I tried wrapping the cord round my fingers, and, I can't do it like that cause it slips all over the place. So I usually pick up another and clamp the cord further up closer to the woman and use it like a lever..."

Interview 2:293-297

"I twist it in my fingers. That way I can feel if it starts to give. I find if I use instruments, sometimes it's tearing and you are not getting a sensation that it's tearing in your fingers. If I feel it start to tear, I stop."

Interview 7:252-256

Applying traction close to the vulva was rationalised as making it easier for guiding the placenta out and improving traction leverage. In some circumstances midwives could not give a reason for their practice and suggested tradition played a part. One midwife always held the cord rather than used a clamp for this reason.

There was some debate among midwives whether constant or intermittent pressure on the cord was most appropriate. Physiological and research based reasons which supported constant traction were given, while others supported the use of intermittent traction for more pragmatic reasons.

"I put pressure on the cord, gentle pressure which I keep on and I don't let it off... Roach, probably out of date now, it was so long ago, suggests that if you do take the pressure off you increase the risks of bleeding."

Interview 12:704-708

"Intermittent pulling down on the cord. Why intermittent? Because if I was pulling and nothing was happening, I would leave it."

Interview 29:397-398

Direction of pulling was supported predominantly through reference to the length of the cord, the shape of the pelvis and in aiding placental delivery

"It should be in the same angle as you've delivered the baby following the curve of cares...if you just pull it in a direction straight out then you are not going to bring or deliver the placenta through the birth canal in the right manner and you won't facilitate an easy completion of the third stage and you get more leverage...in a downward direction."

Interview 14:381-419

Midwives did highlight the influence education and observation of the practice of others had on their own management of cord traction.

"I think mainly I would wrap the cord around my fingers. I think it's because that's the way I was taught probably."

Interview 19:202-205

"I use a clamp because that's what I see these young girls doing. That's what you are taught to do these days."

Interview 25:232-236

In addition midwives expressed strong preferences for particular strategies in cord traction according to how they felt. For example some midwives felt they were not in control when their fingers were wrapped around the cord, while others did not like clamps as there was a danger of pulling too hard and causing the cord to break. Some midwives felt handling the cord with their fingers provided additional information on progress of placental descent. A snapped cord was viewed as problematic by many midwives as it prevented further traction with the associated risk of retained placenta.

"I cannot wrap the cord around my finger. I don't feel in control...so I have my artery forceps for the tension. If there's no tension there I generally give a gentle tug downwards."

Interview 34:216-220

"And then I will wind the cord around my fingers because I don't like clamps on because I think you can pull too tight with a clamp."

Interview 36:84-87

In those midwives who described not using cord traction a number of reasons were given for this. The woman's preference played a part, as did the midwife's belief

that in physiological management situations or when maternal effort was used in active management, there was no need to interfere in a woman controlled process, the placenta delivering without intervention.

"I would much rather it be a very nice maternal effort if I've not used the drug."

Interview 20:315-316

Modified cord traction was described predominantly in physiological management situations. Midwives described *keeping the cord taut rather than applying* traction and rationalised such practice as helping women have more of a feeling to bear down. Other reasons included a women's position during the third stage preventing the placenta leaving the vagina, a women being unable to push the placenta out, a women wanting things over and done with quickly and delay in placental delivery.

Q: "So if the placenta was in the vagina and it hadn't plopped out on to the bed?"

A: "Then I'd pull it. If it was in the vagina you would see it there."

Interview 23:169-171

"If I was sure that the placenta was separated but the mother was not pushing this placenta out, I would very carefully and gently do the controlled cord traction."

Interview 20:393-497

"I suppose if it was a while and nothing was happening, I might be tempted to have a little tug and see what happens..."

Interview 35:367-370

Midwives also referred to habit when using cord traction in physiological management situations.

Q: "But you'd hold the cord?"

A: "I would. More of a habit I think."

Interview 15: 387-389

Reviewing cord traction in third stage management revealed differences in the use of cord traction among midwives and if used, how cord traction was applied. Contextual features dominated whether cord traction was used and how it was applied.

5.3.19 Maternal effort

Maternal effort was described by midwives as the woman being involved in birthing her own placenta by bearing down. Maternal effort was used either alone or in combination with the midwife guarding the uterus and/or applying traction to the cord. Midwives described situations where women actively sought to use maternal effort, or were encouraged to by their midwife. Its use was strongly associated with physiological management, though it was also mentioned in active management situations (when it was used either alone or in combination with midwife activity, particularly when there was delay).

In physiological management, maternal effort was generally viewed as part of the package of care. Midwives regarded this as more natural and hands off generally. Maternal effort was described as bearing down, coughing, pushing, and vomiting.

"And normally the placenta comes out with maternal effort either coughing, a little bit of a push or standing up sometimes does it or just a shift in position. The lady I have just helped to deliver there vomited her placenta out."

Interview 2:427-431

The strength of pushing was described as less than that for the birth of the baby, with anxiety expressed by some midwives over encouraging women to push too hard for fear of complications.

"I usually say, 'well I think you can push a little bit but don't push as hard as when you were pushing the baby out.'"

Interview 33:300-302

Maternal effort in physiological management was strongly associated with changes in a woman's position; women being encouraged to stand, squat or sit on a bucket or bedpan.

"I mean usually if the woman's standing up it's not a big deal, because the placenta just plops out."

Interview 12:540-542

"Then I would ask the mother to stand up or squat on a bedpan or if she felt any pressure, any sensation of pressure in the vagina. See if she wants to deliver her placenta...Gravity helps."

Interview 16:253-258

Using maternal effort did not normally involve cord traction or manual handling of the placenta. One midwife referred to this as true passive management; care being completely hands off. However some midwives did describe situations where cord guiding was used with maternal effort, or where cord or placental handling occurred when the placenta was at the vulva and almost delivered. In addition midwives sometimes gave the cord a tug so that the woman could feel the placenta in the vagina and instigate pushing.

"If she's got no feeling that she wants to push I'll check that the uterus is well contracted and maybe do some gentle cord traction. Usually that is enough for the placenta to come by itself, with the mother participating."

Interview 21:159-162

"I've had one where it was visible just at the introitus and she just hadn't got the energy to do it. So I just put a finger in and lifted it up as she pushed. And then the weight of it brought it out. But I didn't pull it."

Interview 4:323-326

Directing maternal effort differed among midwives. Some midwives chose to explain to women what was going to happen and directed their efforts. Other midwives described non directed maternal effort where women were encouraged to follow their own instincts.

"You've got to instruct her that she is going to deliver the placenta herself and what to do, to push when she feels she's had a contraction the same as when she was delivering the baby."

Interview 18:245-247

"Just encouraging her to be led by the signs that her body's giving her really. Cos most women actually feel it as it moves down as it comes through the cervix."

Interview 4:300-302

Reasons given for using maternal effort were it was more natural, a woman knows when the placenta is there and can be led by her body as to what to do next, gravity aids descent and expulsion and physiological management is about being hands off and not interfering in the natural processes.

"I think it's a part of my whole different approach to birth in recent years that I very much want to stop interfering with what is a natural process and allowing the woman to do what she can do and if she can push a baby out, she can certainly push a placenta out."

Interview 5:424-427

Reasons given for not using maternal effort or combining it with midwife activities included some women finding it difficult to push, woman wants a cup of tea and to be sutured and does not want to hang around, and lack of patience on the part of the midwife.

"...and some mums find it quite difficult to actually push the placenta out because there's nothing solid to actually push. So it isn't always easy for them. And sometimes if you just pull a little bit then they can feel it and then they can spontaneously push it out."

Interview 42:333-337

A: "When I am satisfied that it is separated I sometimes do lift out with the physiological as well..."

Q: "Why do you do that?"

A: "I think if I was honest probably lack of patience

Interview 13:371-381

The dominant form of placental delivery in active management involved guarding and cord traction. However some midwives did describe using maternal effort, either offering women choice of management or using maternal effort to manage delay or a friable cord.

"Then I'd tell her 'its time for the placenta to be delivered'. Now it's one of two ways we can do it. Either I can put a bit of pressure on and help the placenta out...Or if she wants to, she prefers to do it herself, she can just put in a couple of pushes as she did for the baby and it will come away. Quite often they say, I want to do it myself. So that's fine."

Interview 17:197-202

"I think mostly if the cord didn't feel very secure, if I could feel it giving that would be the most likely circumstances I would use it (maternal effort). Sometimes I've got the mum to help me if the placenta does seem to be sticking rather...If the cord is giving, I would stick to the maternal effort."

Interview 7:284-293

Midwives also referred to encouraging coughing to raise the intra abdominal pressure to assist in placental delivery. Some midwives also referred to women giving an involuntary push as the placenta bulged in the vagina.

"Occasionally I ask the mum to give a gentle cough rather than keep pulling. Because I generally find that then everything and the membranes and that will slip out."

Interview 34:228-230

When combining cord traction with maternal effort, the majority of midwives stressed that these were not performed at the same time; that either cord traction or maternal effort was used but not both.

"I might even encourage the mother to push, but I wouldn't actually do cord traction if the mother was pushing. I would just let her say have a couple of pushes and see what happens...if you were pulling at the same time it might be a bit uncomfortable or whatever..."

Interview 11:612-626

There was limited description of what maternal effort involved in active management; detailed description normally associated with physiological care. Reasons for using maternal effort in this context tended to focus on managing placental delay though some midwives also fundamentally believed that spontaneous placental delivery was appropriate in any third stage context.

"Well I always say to the mum, you've pushed the baby out, you may as well come finish the job and push the placenta out."

Interview 30:181-182

Reviewing maternal effort in the third stage of labour revealed the variable use and application of this aspect of practice in third stage care. A variety of reasons were given for using and not using maternal effort, which centred around beliefs about how the third stage of labour should be managed.

5.3.20 Placental delivery

Physiological management was predominantly associated with a non interventionist approach to placental expulsion, while active management was most commonly associated with midwives bringing about placental delivery by their actions. However inter and intra practice variation could be seen among midwives in both management situations. Occasional reference was made to spontaneous placental delivery not involving maternal effort, guarding or cord traction. This normally occurred when a woman was in an upright position.

In physiological management, spontaneous vaginal delivery of the placenta was normally encouraged. This involved the midwife holding a receiver or both her hands close to the vulva to cup or catch the placenta.

"Once I saw the placenta there at the vulva then I would be ready to cup it with my hands."

Interview 32:266-268

This was to prevent it from plopping out and getting everywhere dirty and preventing undue tension on the membranes.

"...hold a bowl underneath to collect it. Don't want it to splatter everywhere."

Interview 18:259-260

Other midwives valued having the receiver a little away from the vagina to allow the weight of the placenta to aid its delivery as well as the expulsion of the membranes. Occasionally the midwife talked about facilitating delivery by holding the placenta in both hands and using an up and down motion to release trailing membranes from the vagina before placing it in a bowl close by.

In active management situations, receiving the placenta normally involved the left (guarding) hand being brought down from the abdomen to cup the placenta as cord

traction was maintained in a direction following the curve of cares. The placenta was then delivered into this hand.

"...Yes, bringing it up and out by the cord until I let go. With my left hand, bring that underneath and let the placenta drop into it."

Interview 7:263-265

Whilst non interventionist delivery strategies were commonly associated with physiological management and hands on strategies associated with active management, there was significant overlap between the two groups, particularly in the use of intervention when the placenta reached the vulva in physiological management. Midwives often described helping the placenta out with a finger or using cord traction.

Midwives gave a number of reasons for different practice strategies for receiving the placenta. These included not interfering and letting gravity and nature takes its course (non interventionist approach) and using interventionist strategies to ensure the complete delivery of the placenta and to aid delivery when there was delay.

Q: "Would you touch the placenta at all?"

A: "No, not unless it was half out and didn't come out at all. Then it would only be a guiding movement."

Interview 38:291-293

"If the placenta wasn't coming and I knew it was separated then you come into the realms of possibly introducing a bit of active management in that you are perhaps guarding the uterus and giving a little tug on the cord. But I mean I am hoping that it will naturally deliver with maternal effort."

Interview 42:327-331

Reviewing delivery of the placenta revealed differences in the way this was managed with midwife activity levels associated with different approaches. Midwives rationalised their practice by reference to either the importance of complete delivery of the placenta or letting nature complete the birthing process.

5.3.21 Delivery of the membranes

Midwives described a number of ways of managing the membranes during the third stage.

"I do a variety of things, I can't say that there is one thing that I always do. Sometimes I twist them, sometimes I just gently lever them out and occasionally if I feel I need to I'll get some forceps on and just gently lift them."

Interview 9:347-356

Whilst no intervention with membranes was most often associated with physiological management, strategies to deal with the membranes related to whether they delivered spontaneously or not rather than the general management approach adopted.

"Often they just come with all of it anyway. But I think sometimes when they take a bit longer... then I'm very careful to pull them...and we don't want to leave any bit behind. So then I tend to get the end of them with the clamps, get one of the clamps again."

Interview 4:472-490

A common element in descriptions was the strategy of taking time. Membranes stuck in the cervix or vagina were seen as friable and needing teasing, easing and wiggling out in fine movements. Such movements included roping the membranes, clamping the membranes and using a finger to grasp and wiggle the membranes free.

"If they are not coming out... I usually use a pair of the forceps just to hold them and usually have a little sort of twiddle... cos it might be that they are just sitting inside. And if they are not then sometimes it's a case of getting women to have a cough. Because if they are being held on to at the top end it usually helps them to be released... just a case of teasing them out. And you just have to take your time really."

Interview 47:245-254

"If I thought as I was delivering this placenta that the membranes looked a little bit fragile, I would twist that placenta round to strengthen the membranes. So they are like a rope."

Interview 36:179-180

Asking the woman to cough or push was also used as was gravity, using the placenta as a weight to draw the membranes down.

Midwives talked about using a variety of strategies to deliver membranes according to the situation and did not always use the same strategy with all women. Other midwives expressed a preference for using a particular approach.

"I just like winding it round the forcep and then you don't miss anything then."

Interview 28:293-294

Midwives often talked about the practical nature of sensing when membranes were beginning to tear and the importance of avoiding this wherever possible.

"If you lift the membranes up you can sometimes feel that they're still attached and if they are I'd probably just hold onto them and very very gently pull. Sometimes just by wiggling if you know they are not attached and they just fall out."

Interview 2:344-348

Reference was made to difficulty in delivering membranes with a Matthew Duncan presentation (when the placenta slides out sideways rather than inverting like an umbrella); membranes were more likely to trail behind and get trapped in this situation.

"If you've got a Matthew's Duncan separation, I twist the placenta, invert it and then rope them (the membranes) to try and encourage full detachment of them. I can rope them with the placenta or if they are really tatty, I'll get my clamp and rope them with the clamp. Tweak them with the clamp and then twist the clamp. And again I've found that if you move your clamp down, just a little weight there and sway it to either side and up and down, it will detach from wherever its adhered to."

Interview 40:223-233

Finally midwives talked about how they learnt tips and ways of managing the membranes from other midwifery colleagues.

"I had an occasion where I actually worked at Birmingham for a while and I watched a couple of midwives there deliver the placenta and they actually wrapped the membranes, they sort of twirled it round...it just looked so much neater, and they seemed to catch more of the blood loss and I did have a practice at doing that for a while. But to be honest I never quite got the technique right and the blood used to just go on the bed anyway so I sort of just carried on doing what I did."

Interview 11:640-648

Whilst strategies for dealing with trailing membranes were similar in active and physiological management approaches, midwives talking about physiological management did identify that they appeared to deliver easier than in active management situations.

"They don't seem to be so ragged, they seem to come out quite neatly...Maybe you're not dragging them through the cervix, maybe the cervix is more receptive if the body has done it on its own rather than if you've pulled it through a cervix that's not ready..."

Interview 9:541-549

Reviewing delivery of the membranes in third stage practice revealed differences in the way midwives managed the membranes. This varied between midwives and in a midwife's practice, according to contextual features surrounding the birth.

5.3.22 Delay Management

In situations where midwives talked about delay in placental delivery, the use of fundal pressure was sometimes discussed. This was described as a way of pushing the placenta from the uterus using a piston like action. Such a practice was only used when delay occurred and even then some midwives talked about it but did not do it, feeling it was a painful and aggressive manoeuvre.

"Fundal pressure. After explaining, because it can be awfully uncomfortable, just have the fundus and put pressure on the fundus."

Interview 17:279-281

"I don't do expelling from above which some people do. I have seen it done. Some of the doctors do it too. And sometimes they get it. But I wouldn't do it. It's not routine. I think it's dangerous."

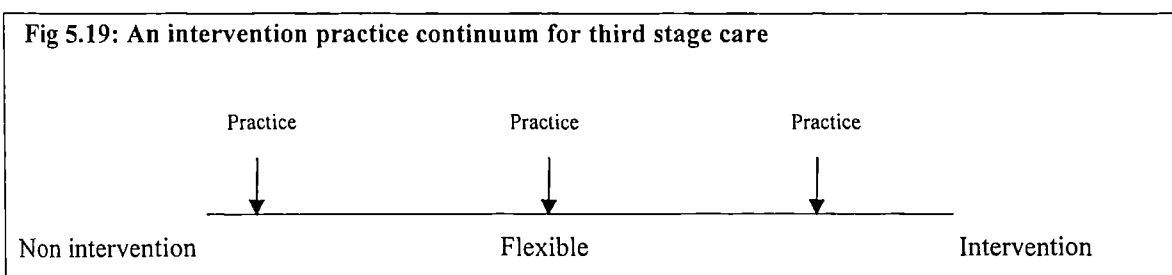
Interview 25:325-329

5.4 Models of third stage practice

What was revealed from midwives descriptions of third stage practice was the complexity of third stage care and widespread variation in third stage practice. Practice variation descriptions were supported by observation and computer generated information on third stage outcomes.

Whilst midwives identified two management categories, active and physiological management, there was significant variation in what these terms meant. Midwives described 22 aspects to third stage care and identified, on average, they had a choice of between two and five options for care in each aspect. The multiple choices available reveal multiple forms of third stage practice are used by midwives.

The key element identified by midwives when describing third stage care was the level of activity or intervention adopted to bring about delivery of the placenta and membranes. Models of care for third stage practice were therefore most clearly represented by reference to an interventionist – non interventionist practice continuum (see fig 5.19). Models of third stage practice were positioned along a third stage practice continuum using intervention as the key component differentiating between different models.



Midwives adopting a complete interventionist approach to third stage practice sit to the extreme right of the continuum and adopt an interventionist approach to all aspects of third stage care, which is dominated by the use of active management.

Midwives adopting a complete non interventionist approach to all aspects of third stage care sit at the extreme left of the continuum and adopt a non interventionist approach to all aspects of third stage care, which is dominated by physiological management.

All remaining midwives sit at varying points along the interventionist-non interventionist practice continuum according to the level of intervention and non intervention they adopt in their practice when managing the third stage.

Midwives practising at a mid point on this continuum were identified as flexible practitioners, who drew upon both interventionist and non interventionist strategies when managing care as appropriate.

The continuum also allows for representation of movement of practice models among midwives according to a number of influencing factors. The majority of midwives in this study demonstrated their third stage practice changed over time and became more or less interventionist as a result of a number of influences on their decision making. The continuum allows for a midwife's model for third stage care to move in either direction as they adopt more or less intervention in their management approach.

5.5 Conclusion

Multiple ways of managing the third stage of labour were described in this study, with the complexity of third stage practice clearly identified. Midwives played a pivotal role in deciding whether to intervene or not and factors that influenced decision making were complex and multi factorial. Having deconstructed and analysed the descriptive elements of the data, a theory of contingent decision making in third stage practice among midwives emerged which explained the key influences at work when midwives cared for women. This will be discussed in the next chapter.

Chapter Six: A theory of contingent decision making

6.1 Introduction

The previous chapter presented study midwives descriptions of the multiple ways the third stage of labour can be managed. The complexity of third stage practice was identified by reference to 22 aspects to third stage care, with midwives having a choice between two to five options for care for each aspect. Inter and intra practice variation among midwives was discussed with models of care represented by reference to an interventionist-non interventionist practice continuum.

Midwives gave numerous reasons for their practice, with additional reasons for practice being identified from how they described their practice and talked about care in general. A theory of contingent decision making in third stage practice emerged which provided an explanatory framework for third stage practice variation.

In this chapter the framework provided by the emergent theory has been used to discuss its categories and their properties. Threads of the theory are then drawn together with discussion of how substantive categories interrelate and merge to form the core socio- psychological process at work. The theory of contingent decision making then provides an explanation and understanding of practice variation in third stage care among study midwives and why changes to care occur over time. It also explains why an individual midwife's practice changes in certain situations, according to the needs of the individual being care for, changing midwife value and beliefs or environmental factors, whilst still providing an explanatory framework for those who maintain established practices.

6.2 Theory of contingent decision making in third stage care

Having deconstructed and analysed the descriptive elements of the data, a theory of contingent decision making in third stage practice among midwives emerged which explained the key influences at work when midwives cared for women (see fig 6.1). The theory evolved from the identification of one hundred and three descriptive and analytical codes derived from the interview and observational data. Codes then merged together into nine categories, from which three substantive categories and one core category was identified (see appendix twenty one). The core category was 'deciding/actioning care/making choices' and the three substantive categories were 'learning', 'interpreting' and 'contextualising'. These three substantive categories further subdivided into types of learning: formal, informal and experiential, contextual factors influencing care: the physical environment, the cultural environment the individuals being cared for and how these factors were interpreted by the individual midwife through aims of care and midwife philosophy.

In the substantive category 'learning', a model of learning for third stage care emerged based upon the reflexive nature of knowledge development which draws upon the oral and experiential traditions of midwifery practice. Whilst formal education and research drawn from research and reading played a part in midwifery care, it was the fundamental principle of learning in and from practice which was highlighted. Midwives made choices in third stage care based upon a body of knowledge predominantly drawn from their own practice and from those who practiced around them.

In the substantive category 'contextualising', a contextual model of practice emerged which highlighted the key contextual features a midwife was influenced by when deciding how to manage a woman's care during the third stage of labour. This included the physical and cultural environment in which care was given, and what actually practically happened to the woman during the midwife-woman interaction. Whilst the medicalised culture of midwifery, with intervention and risk focus was emphasized, there was evidence of a normality midwifery culture, particularly in situations where midwives practiced in supportive home based environments. Whilst

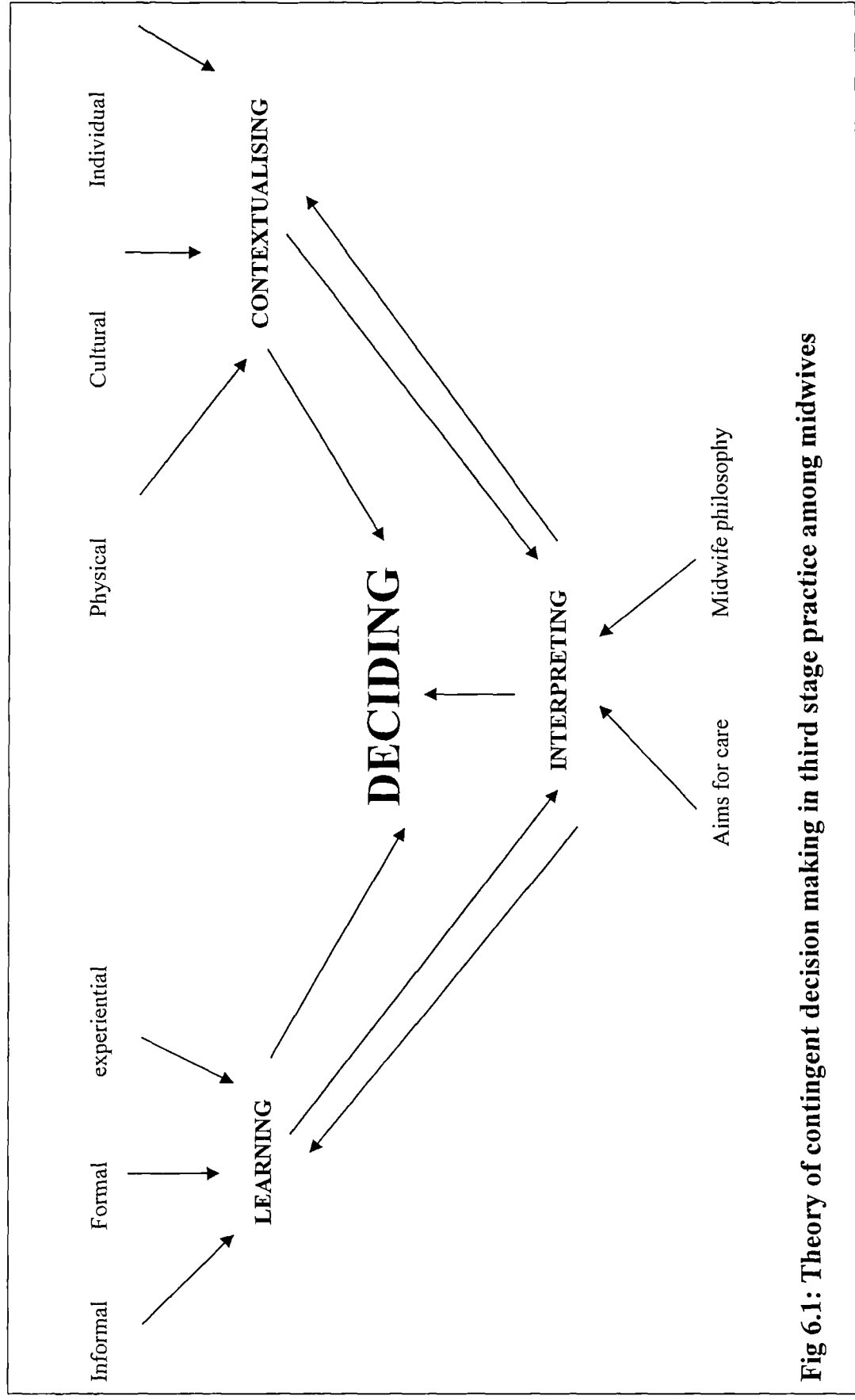


Fig 6.1: Theory of contingent decision making in third stage practice among midwives

these principles played a key role, the practical nature of the physical environment and what actually happened during the labour and birth to the woman also played a pivotal role.

In the substantive category ‘interpreting’, the key factor influencing how midwives decided what to do stemmed from their strongly held values and beliefs and the philosophical principles on which midwifery care was based. Not all midwives shared the same values and beliefs or midwifery philosophy. From the midwives interviewed three models of care were identified based upon beliefs about childbirth, beliefs about the role of the midwife and the woman and midwives’ aims for care. Whilst it was possible to identify the common models of midwifery practice in third stage care, there was a strong link between practice and experiences midwives had and the environments in which they worked. Whilst some midwives’ models of care remained static, others demonstrated change in relation to their experiences. In addition whilst three models of care were presented practice values and therefore models of care existed along an interventionist-non interventionist continuum with some midwives remaining in a discrete place along this continuum while others moved freely, altering their practice according to a variety of factors that influenced their fundamental values and beliefs.

A detailed discussion of each substantive category now follows.

6.3 Learning

The substantive category ‘learning’ reflected all learning experiences midwives were exposed to that informed their knowledge base for practice. Midwives drew upon this knowledge base when deciding how to manage the third stage of labour. The substantive category was further divided into three categories: formal learning, informal learning and experiential learning.

6.3.1 Formal learning

Formal learning was a category which identified the planned and structured learning experiences midwives were exposed to pre and post registration. Student experiences played a significant part in midwives decision making in third stage practice; post-registration education was less influential.

Formal learning was important in explaining practice variation in so far as midwives described variation in the formal learning they were exposed to which had an effect on the way they practiced and the decisions that they made. Variable practice was, in part, a product of midwives having a personalized knowledge base created by exposure to a unique set of learning experiences.

The majority of midwives had no post registration formal learning opportunities in third stage practice. Occasional reference was made to its discussion at refresher courses/study days or during midwifery related academic courses but for the most part learning opportunities were accessed by qualified midwives conducting their own searching and reading of evidence or talking to more experienced colleagues.

"Not formal(education). Only refresher courses where we met in discussion groups, that was Blackpool."

Interview 5:753:754

"I think it was reading something actually in the British Journal of Midwifery that made me think, 'well why am I doing this' (guarding) "

Interview 18:310-312

In contrast midwives provided detailed descriptions of where, what, and how they were taught to manage the third stage of labour as students and the variable experiences they were exposed to.

Student teaching took place in both classroom and clinical practice settings. Classroom teaching focused predominantly on the physiology of the third stage, with the practical aspect of doing taught by midwives in clinical practice.

"We had theoretical and practical. Being taught in college about the anatomy and physiology and what actually happens in the third stage. And then going out in to the clinical area and actually being involved in deliveries and learning with your midwife."

Interview 26:24-27

The majority of midwives highlighted that during their training active management for the third stage of labour was the norm, with education in clinical situations dominated by this approach. Occasionally, midwives as students had experience of physiological management, usually seen within smaller midwifery led units or community home birth settings.

"I saw one physiological 3rd stage when I was a student and that was in a home delivery."

Interview 26:390-392

There were differences in what was taught in theory sessions and what was taught in practice. Midwives who qualified after 1988 highlighted how active and physiological management for the third stage were taught in class, while active management continued to dominate care.

"We did quite a lot in school which was very different to what we saw in practice"

Interview 8:14

"On the wards it was just routine to give it (syntometrine) and that's what happened. Within the school there was discussion."

Interview 27: 28-35

Some midwives received no theoretical or practical education in physiological management, some received theoretical sessions only and a small number (of the most recently qualified midwives) described theoretical and practical experience of physiological management as students. Over half of the midwives interviewed identified no clinical experience of physiological management as students.

"Totally active management. Nothing else. Both theory and practice..."

Interview 40:25-26

"I can always remember in school doing something about physiological 3rd stage. But it was brushed over very quickly and we had no practical education of physiological 3rd stage, everything was actively managed."

Interview 41:23-26

There was also variation in whether fundal pressure was taught to students; this was confined to those midwives who trained prior to 1980.

"So it was generally controlled cord traction but you could do/allow maternal effort or fundal pressure if it was necessary. But fundal pressure was very rare in practice."

Interview 17:28-29

As students, midwives were educated to be afraid of the third stage of labour, to respect it and to be aware of the potential risks involved, particularly of excessive bleeding.

*"...it was always stressed that the 3rd stage of labour was **the** most important stage...could prove to be the most dangerous and the one that you needed to take care of and handle properly."*

Interview 20:31-36

"...this is why I still do what I do now. They put the fear of God in you really."

Interview 30:23-27

Care focused on preventing problems, whilst warning students of the dangers of fundal fiddling. The focus was on the midwife being active during the third stage to ensure the woman's safety, and doing things the proper way.

"...gentle traction and absolutely no fiddling."

Interview 5:42

Taught activities included clock watching, observing signs of separation and descent, palpation of the uterus, cord traction and problem solving strategies when things went wrong.

"What I was taught was give syntometrine with the anterior shoulder. Wait for 3 minutes for the syntocinon to work, before you do anything...feel the uterus to see if it's well contracted, very very gently. Mustn't fundal fiddle. I remember that. And then hand on uterus and controlled cord traction... downward traction and then as you see the placenta bringing it up and then very very gently deliver it."

Interview 35:22-44

Midwives predominantly learnt how to manage the third stage as students by watching midwives in clinical practice and then doing either what they had seen or what they were directed to do.

"It was just a case of observing the midwife I was allocated to who taught me about signs of separation and that's always the way I have carried on basically, sort of observing the signs of separation before you do anything and staying well away."

Interview 6:42-50

It was only recently qualified midwives who mentioned using research based evidence drawn from books and journals; they talked about reading research during their training, utilising evidence in their essays and discussing evidence in theoretical sessions, but not in clinical practice.

Variation in the student practice experience was highlighted by reference to midwives having their own particular ways of managing the third stage of labour, which students had to learn. At the end of training students were then expected to decide for themselves how best to manage the third stage of labour, drawing upon the variable experiences they had witnessed and been directed to use.

"Everybody hadn't got the same idea about how you look after the third stage"

Interview 5:57

"I was taught both guarding the uterus and not guarding the uterus...Depending on which mentor you were with. I was taught different ways of traction on the cord with the hand or using a forceps..."

Interview 33:36-42

"Practically wise, the way we were taught was by whatever the midwife you were with used."

Interview 2:34-36

Midwives were also influenced as students by a number of environmental factors. They talked about the medicalisation of care and obstetric led unit policies influencing third stage management, particularly in the 1980s which midwives said was a time when active management was seen as routine, standard, traditional and dominant, with women being offered no choice.

"I was taught in the eighties when it was all syntometrine and obstetric policies...So the way I was taught and all that I learnt was to give syntometrine; active management.

Interview 31:22-25

"So there wasn't a situation of whether a woman had the choice of using syntometrine or not. The normal situation was that it was explained to the woman that, well, not that it was always explained to the woman, but syntometrine was given for the management of the third stage."

interview 1:101-106

When midwives talked about what influenced their current practice, over half referred to the way they had been taught or trained in third stage care as students.

"I think its just, as I've said it's an amalgamation of a lot of things that I've seen and been taught while I was a student."

Interview 26:396-397

Some midwives talked about their current practice being the same or similar to how they had been educated, while others highlighted how their practice had changed since qualifying as a result of experience. This was particularly true in physiological management; most midwives were not educated as students in this approach, and were socialised into using active management. However over half described how they would manage a physiological third stage and referred to experience in this strategy. Education for physiological management therefore was not derived from any type of planned learning experiences either during training or since qualifying.

6.3.2 Informal learning

Informal learning was a category which described the unplanned learning experiences midwives were exposed to following qualification. Informal learning played a significant part in a midwife's practice development and decision making in the third stage of labour. This type of learning was also important in explaining third stage practice variation as it was dependent on the colleagues a midwife was exposed to throughout her midwifery career and her access to them. Exposure to different informal learning

experiences created a unique knowledge base in individual midwives which then guided individuals to make different decision in third stage care from one another.

During interviews, midwives regularly stressed that they developed in clinical practice as a result of learning from midwifery colleagues, both in structured and opportunistic relationships.

"...discussing practice with other midwives and with the supervisors. Peer support really. Talking and witnessing other midwives practice."

Interview 31:372-374

Variation was seen in the amount of structured support midwives received in the early period following qualification with a significant number having little or no planned programme.

"Well I must admit I can't actually say I had a period of preceptorship once I qualified. It was a case of being thrown in at the deep end and you had to get on with it."

Interview 19:364-367

Those midwives who talked about structured preceptorship, where they were supported by a named individual, were those who had qualified recently. Such programmes varied in the quality and quantity of support received. Some midwives were treated as students and had to distance themselves from the relationship to develop, others were left to fend for themselves with little support. Staffing levels played a part in this as did the size of the department worked in and whether a new member of staff had trained at the institution they were working at. New members of staff felt particularly vulnerable.

"I don't think there was much support. I think people were there if I wanted to go to them but I never really felt that anyone ever came to me to find out how I was getting on, and was I coping. I found that if I had a problem I had to go and seek it out"

Interview 11:679-684

Midwives predominantly talked about the support structures available to them when working on delivery suite, both as newly qualified midwives and throughout their careers. Members of delivery suite core staff were mentioned frequently, as were individuals who

midwives felt they could turn to in moments of doubt or concern. More experienced midwives were highly valued in this role, but it was pointed out that some were more approachable than others. Having a team of midwives with varying levels of skill on a shift facilitated this process.

"I am a big believer in permanent core staff because obviously now I am going in and out I don't work constantly on delivery suite. While everything is nice and normal I don't need the support, but when things are going a bit more pear shaped, I know I can go out and say "what do you think about this" and "Do you think I should be doing such and such a thing"."

Interview 23:254-260

"I have always felt that midwives were reasonably supportive of each other. There was always the odd person that you wouldn't have touched with a barge."

Interview 14:821-823

Midwives talked about support being provided when they asked for it and also support being given routinely as in when hospital policy required two midwives to be present at each delivery. In addition reference was made to core delivery suite midwives appearing to intuitively know when their help and support was needed in certain circumstances.

"...they always know what's going on in the room, whether you have actually told them or not. They have a sixth sense, I've got to develop that now I think. And they are very ready to come in and to be there and assist with this problem, which is, I find very comforting."

Interview 40:331-335

Such informal structures appeared to rely on the individual being able to ask for help, the context of the situation in which they practiced, (having access to other midwives who viewed their practice and supported them), and the quality of the relationship between the individual midwife and the team they worked with. It was apparent midwives marginalised or less confident found it difficult to access these informal support structures and learning opportunities.

An example of the powerful influence of opportunistic colleague support was provided by the frequent references made by midwives to 'coffee room chat' where during breaks midwives talked over individual cases and offered each other 'tips for practice'.

"The only thing I think that's influenced the way I've developed management of the 3rd stage is the usual gossip within the coffee room."

Interview 2:549-551

"I think working in the team in the community you have support from your colleagues in talking through experiences, probably reflectively, going through things that were done. That's automatic with midwives really."

Interview 18:281-283

In addition midwives mentioned the value of watching other midwives practice, where new ways of working could be observed, good practice reinforced and poor practice highlighted.

"Observing others I have taken and adopted that method. Others I haven't liked and will not adopt."

Interview 24:335-336

This sharing of experience was highly valued and pointed to the oral tradition of knowledge transfer and development in midwifery which in part explained practice variation in third stage care; practice variation occurring as a result of midwives being exposed to different work colleagues and their practices. This was supported by midwives reference to the way their practice had changed since registration. Midwives described practices which had not been taught during their training and did not appear in recent editions of midwifery textbooks commonly used by students (Bennett and Brown 1999;Morrin 1997). For example milking the umbilical cord or removing the clamp to drain blood out of the placenta were skills taught and learnt by midwives in practice.

"If you get past about 7 minutes and there is still no signs of separation , in fact the cord looks quite bulbous and tight, then just one of the tricks of the trade that somebody else has told me, is to release the clamp and then you will have some blood loss, that will relieve the pressure and then it will actually aid with the separation."

Interview 6:261-265

"...lot of midwifery skills are only gained by observing and working with other senior people... that little thing about the

cough for delivering the membranes when they're a little bit stuck may seem quirky, but it is extremely effective and I have only got that from word of mouth and observation. I didn't learn that in a textbook."

Interview 14:834-842

6.3.2.1 The oral tradition of knowledge transfer in midwifery

To further clarify and substantiate the finding of an oral tradition for knowledge transfer in midwifery, a review of two midwifery textbooks published in multiple editions throughout the twentieth century took place. This was conducted to assess the extent to which current practice reflected traditional practices taught to midwives in the distant past and handed down from midwife to midwife in practice. Each text was analysed for similarities and differences to each other and to practice descriptions given by interviewed midwives (see appendix eighteen).

Comparing current practice with documented historical descriptions of third stage care supported the oral tradition of midwifery knowledge transfer; a process which involved midwifery knowledge and skill being verbally transferred from midwife generation to midwife generation over time. Elements of current practice were identified from descriptions provided in texts published at the beginning of the twentieth century. This included aspects of practice currently and not currently described in recently published midwifery textbooks. For example midwives described ways of managing the membranes if they failed to deliver spontaneously using similar language to that used in 1901.

"Another way of bringing away the membranes is to rotate the placenta round several times and so by twisting the membranes into a cord cause their detachment."

Jellett 1901:132

"If they are sticking in the vagina, I twist the placenta to wind them into a cord and then gently ease them up and down."

Interview 7:268-269

Other midwives provided descriptions of milking the cord, a common practice described in 1953.

"...some authorities recommend milking two inches of the cord in the direction of the umbilicus before applying the first ligature"

Myles 1953:314

"when they get a delayed third stage they use that process, milking down the cord."

Interview 1:621-622

Descriptions of signs of separation and descent also reflected historical descriptions from the early half of the twentieth century. For example in Myles (Myles 1967) reference was made to specific abdominal changes a midwife might notice when the placenta leaves the upper uterine segment using language similar to that used by interviewed midwives. In addition a technique to assess this was described in detail by study midwives and appears in earlier texts.

"...only two fingers should be used in testing mobility of the uterus, the middle finger of each hand or the middle finger and thumb of one hand."

Myles 1967:323

"...if you take the fundus of the uterus gently in between your thumb and your first finger and you move it gently from side to side it becomes very mobile where it's broad and more immobile when the placenta has not separated."

Interview 14:311-315

Checking whether the uterus had left the upper uterine segment was also described by interviewed midwives and correlated with historical accounts.

"If the body of the uterus is drawn gently upwards towards the umbilicus with the hands placed on the abdominal wall, and if the placenta is still in its cavity, the protruding cord will be drawn back to a slight extent in the vagina. On the other hand if the placenta has left the uterus the cord will not be drawn back, as the movements of the uterus will have no effect on it"

Jellett 1914:177

"Sometimes to see whether it's separated or not, sometimes you can tell whether the cord moves if you press just above the symphysis pubis. If you press, the cord shortens."

Interview 3:218-221

Whilst aspects of current practice could be seen to have their roots in historical practice descriptions, there was also evidence that historical practices had been altered slightly over time. This was labelled the 'Chinese Whispers Principle'. A popular childhood game called Chinese Whispers involves players whispering to each other the same sentence. The end point of the game is for the final player to reveal to everyone what has been whispered down the line. In the receiving of the information, the meaning gets changed from person to person the more players are involved and so what is revealed at the end of the game is often similar yet different from what was originally said, having been altered in the telling and interpretation process. This was evident in the use of some terms in current third stage practice descriptions. For example the term Modified Brandt Andrews was referred to by Myles in 1964 as the process involving bracing of the uterus whilst applying cord traction (Myles 1964). Midwives in this study defined the same term as waiting for signs of placental separation and descent before applying guarding and cord traction.

"Gentle cord traction is used; the left hand braces the contracted uterus upwards"

Myles 1964:337

"I do a modified Brandt Andrews...I watch for signs of separation before I do controlled cord traction."

Interview 28:241-244

Another example is the current use of fundal pressure to manage a retained separated placenta, which was a common means of managing third stage care in 1901 but for normal situations.

"As soon as we know by these signs that the uterus is empty, the placenta may be expressed by the Dublin method. To do this, grasp the fundus with one or both hands during a pain, and press downwards and backwards in the direction of the last piece of the sacrum"

Jellett 1901:131

"If the cord has broken or if I'm asked to go and help somebody who has had a snapped cord... Find the fundus and I just sort of tend to squeeze towards the feet."

Interview 17:289-293

Also the meaning of the term guarding has been altered over time. In the early nineteen fifties guarding was a term used to describe the manual control of the uterus during the third stage by the midwife placing a hand on the abdomen at the uterine fundus (Myles 1953). This was said to prevent or detect the uterus filling with blood. Midwives in this study used the term to refer to the bracing of the uterus during cord traction; a hand applied across the lower abdomen. Whilst elements of the original meaning remain – guarding referring to control of the uterus, the skill described has been altered; from a hand at the fundus to a hand above the symphysis pubis.

"Guarding the uterus. This term is used to describe the manual method of observing the uterus during the third stage of labour... the slightly cupped hand is laid lightly on the fundus..."

Myles 1953:325

A: "Guarding means that if I am tugging at the cord and there is no support there then the uterus can prolapse."

Q: "So you are placing your hand on the abdomen?"

A: "On the symphysis pubis and then pressing my hand upwards."

Interview 44:243-247

A further point emerged from analysis of historical accounts of third stage practice. It was possible to map the changes to third stage care against developments in medicine and medical technology, which occurred during the twentieth century. In 1901, third stage practice was heavily reliant on recognising and using the normal physiological processes to guide practice (Jellett 1901). Whilst Jellett still recommended intervention with fundal pressure, waiting for signs of separation and descent were stressed and physiological management acknowledged as an alternative. As a result of the development of uterotonic drugs and their use as a prophylactic measure, published descriptions of care began to focus on controlling rather than facilitating placental delivery. This was reflected in the de-emphasis on waiting for signs of placental separation and descent, development of cord traction and the focus on speed.

"The placenta should be extracted with the first uterine contraction after the birth of the baby...Waiting for separation and descent of the placenta has been traditional teaching for midwives but this cherished idea should be abandoned"

Myles 1971:326

It was also reflected in the loss of debate over practice options and the recommending of a specific package of care for the majority of women. By the early 1980s, active management with cord traction dominated (Myles 1981). In addition there was strong evidence of a move from caring and supporting the woman and her new child as a unit, to separation of mother and baby with their individual rather than collective needs identified. This was reflected in discussion of mother and baby needs in different chapters within each textbook, where they had previously been discussed together. It was also reflected in the discussion over when to cut the umbilical cord; the woman's need for speedy delivery of the placenta taking precedence over the needs of the infant to receive the extra volume of blood provided by delayed cord clamping.

"...it was a subject of great dispute, whether the cord should be tied the moment the child had cried, or whether the application of the ligatures should be deferred until the cord has ceased to pulsate...children in whose case late ligation of the cord has been adopted, are more vigorous ..."

Jellett 1901:124-125

"It has been stated that the infant obtains 40-60ml of extra blood from the placenta if the cord is not tied until pulsations cease, but the baby has to destroy the extra blood cells, that were necessary during fetal life, and this process of cell destruction may give rise to jaundice in the neonate."

Myles 1985:321

The medicalisation of childbirth in third stage practice was also mapped in the artwork used in editions of textbooks published during this time. Chapters discussing third stage care began to show highly medicalised childbirth scenarios; a picture of a gowned and masked midwife watching over a baby in a theatre like environment (Myles 1975:295), pictures of women in hospital beds surrounded by technology (Myles 1985:339). More recent editions of midwifery texts showed a shift in emphasis for third stage practice – a re-emergence of physiological management as an alternative (Bennett and Brown 1989), a re-evaluation of the separation of the needs of mother and child, and an increased focus on the importance of this period of childbirth

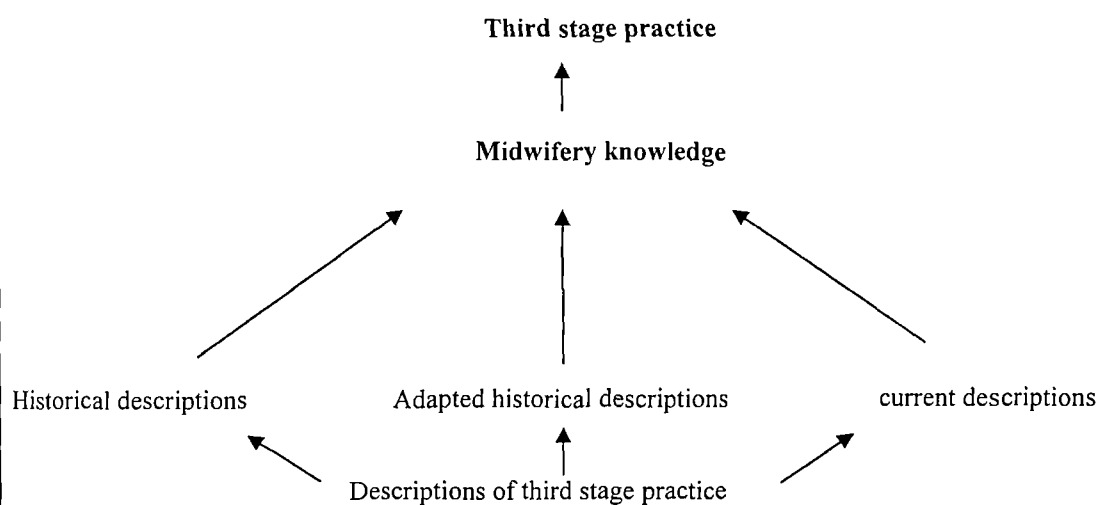
"This is a time when the activity and excitement accompanying the birth of the baby are replaced by the parents' quiet and wondrous contemplation of their offspring. The focus shifts from the mother's concentrated exertions to the miracle of the newborn. "

Bennett and Brown 1989:209

This may in part explain the re-emerging of historical practices in current care as midwives endeavor to reclaim physiological birth for women, using evidence of its beneficial effect on the baby (Bennett and Brown 1999). This was reflected in the description of alternative positions and utilising breast feeding during the third stage in interview descriptions and later editions of textbooks; both seen as mechanisms to facilitate normal physiological processes. It was also reflected in the re-emphasis on the use of maternal signs of placental separation during physiological management, and the debate over whether guarding was really a necessary intervention (Bennett and Brown 1993; Bennett and Brown 1999).

A model of the oral tradition of midwifery knowledge transfer in third stage care evolved from the comparison of midwives descriptions of care with historical accounts of third stage practice in midwifery textbooks (see fig 6.2). This model acknowledges the powerful influence of historical midwifery practice on current midwifery care, where aspects of practice from the past have been passed down from midwife to midwife through the telling of practice stories and the observation of others. Midwives integrated some elements of historical practice wholesale or adapted them to meet the needs of current care situations. Such a model of knowledge development was unique to each individual midwife based upon the practice stories they were told and how stories were integrated with other learning experiences from training and practice.

Fig 6.2: Oral tradition of midwifery knowledge transfer in third stage care



6.3.3 Experiential learning

Experiential learning was a category which identified midwives learning in and from practice. Midwives talked about their past experiences in caring for women during labour and birth and how they were pivotal in the development of their expertise and in shaping changes to third stage care over time. These experiences shaped their practice development in a fundamental way and highlighted the individual nature of learning from practice (it being dependent on the experiences exposed to). Whilst formal and informal learning formed the initial platform for care, it was practice experience itself that allowed ongoing development of practice expertise; a process of learning by doing. This type of learning was important in understanding third stage practice variation; midwives were exposed to different experiences and responded to those experiences by adapting their practice in a variety of different ways.

"I don't think you can actually develop any skills until you are actually doing it."

Interview 26:485-486

Learning from experience, the majority of midwives changed their practice in the third stage over time. Whilst some midwives identified dramatic changes, others changed less significantly. Only one midwife identified no change. Aspects of care that were changed were classified into minor and major changes; Minor change referring to changing an aspect or aspects of a package of care, major change referring to adopting a completely new approach. The most significant major change was in the use of physiological management as the majority of midwives had limited experience of this approach during their initial training.

"I had only one dealing with a physiological 3rd stage (during training) and I think when I first qualified that the thought of doing a 3rd stage really, I thought will I be able to cope with doing a 3rd stage you know? But as you do get further on after you've qualified and you do build your confidence up and you get involved in things, and you realise that you have got the capabilities to do them."

Interview 26:504-510

Midwives also identified minor changes to active management, particularly in relation to a more relaxed and delayed approach to care, adopting a more hands off style, and abandoning guarding.

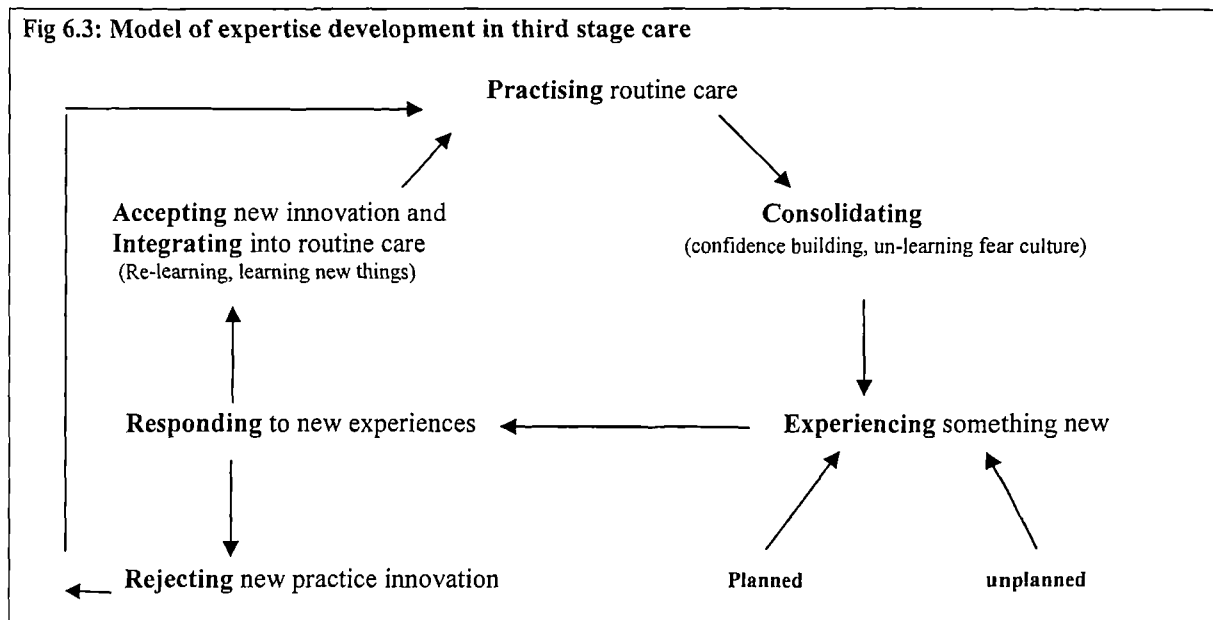
"I don't really do anything with my left hand. When I first trained I used to guard the uterus by holding my hand down. But now I mean my hand might be placed on her abdomen lower down but not any pressure or actually to do anything really."

Interview 18:163-167

In addition midwives talked about how through experience they had learnt how to manage when things went wrong during the third stage, generally leading to developing competence and confidence in personal abilities. Such changes included managing a friable and snapped cord, managing a retained placenta or membranes, managing postpartum haemorrhage and managing inversion of the uterus.

A learning from practice model was identified which mapped and explained the process of developing third stage care as a result of experiential learning (see fig 6.3).

Fig 6.3: Model of expertise development in third stage care



Experience allowed midwives to consolidate their skills in the routine care they were exposed to, to manage situations they had not been exposed to before and to handle

situations where complications arose. Midwives also learnt to develop their expertise in third stage care through a fundamental process of trial and error; experimenting with care packages and adapting practice to meet the needs of the situation exposed to and the individual needs of the woman being cared for.

Following registration midwives described a period of consolidation of existing skills; practising and re-practising what was routine made third stage care second nature. Anxiety and fear of the third stage diminished during this phase and midwives learned to trust their skills and to re-evaluate the risk and fear culture they have been exposed to during their training (a process of unlearning). This phase was linked most closely with longevity; the longer qualified, the more experienced midwives generally became.

"When you first qualified you're very aware of 'I must do this now', 'the baby's born I must give the syntometrine'. It's almost as if you are clock watching in a way. But I think the more deliveries you have and you get more experienced you feel a lot more relaxed and laid back about it, it's not so frightening and so daunting."

Interview 10: 494-500

It was generally agreed by most midwives that experience over time with repetition of routine care had a positive effect on expertise development. However not all midwives successfully negotiated this period of consolidation, nor was there a specific length of time identified for this process. Other factors were identified as impeding the learning from experience process including the context of care, how midwives interpreted their experiences and the feedback they were able to receive from colleagues.

Midwives also learnt when they were exposed to new experiences in third stage care, experiences in which they had little or no previous skill. These new experiences divided into planned and unplanned experiences. Midwives spontaneously offered descriptions of both through detailed story telling, which also provided the basis for reflection and evaluation of what had occurred. Stories were intertwined with discussion about third stage practice throughout interviews and tended to focus on unusual and complicated events. These stories were often used to validate the midwife's own belief systems about how the third stage of labour should be managed. Midwives also talked

about colleagues using the story telling genre to intimidate and control the practice of others.

"Oh yes I've heard that the day you see a woman trickling and fainting on the floor that's the day you'll give syntometrine for the rest of your career."

Interview 228:425-427

The trigger for planned new experiences came from a variety of sources; from midwives becoming more comfortable and confident with routine care and choosing to try out new and potentially better ways of working; from other midwives suggesting different ways of managing the third stage; or by women being cared for requesting a different approach. Occasionally midwives were confronted and challenged by their colleagues to change their practice.

"Once you qualify you start having ideas of your own and reading and again asking other colleagues and then you have your students bringing in new ideas and everything else"

Interview 34:62-65

The majority of new practice experiences were brought about by the midwives themselves actively choosing to change their practice a little or a lot to see what would happen. Occasionally they were able to witness the innovation themselves before trying it out, but more often this did not occur. This experimenting with third stage care was normally gradual and usually began with small alterations to practice such as handling the membranes differently, encouraging maternal effort or utilising a more upright position for placental delivery.

"I suppose it has just evolved (3rd stage practice)...I think it does change, very gently."

Interview 23:152-154

When dealing with completely new situations such as managing a physiological third stage or managing placental delivery at a water birth, experimentation of a complete package of care was attempted.

"The first experience I had was on night duty on the home from home. There was a woman in there I didn't know at all. She came in with a mega birth plan and an independent midwife from London who was just there to support her. She wasn't having this and

wasn't having that and nobody else would touch her with a barge pole. So I said I'll look after her. And I tried to appear so laid back so that this independent midwife wouldn't think that I was a bad midwife. And everything went so perfectly, with everybody outside saying oh you'll never get that placenta."

Interview 23:229-236

Midwives identified that if they had prior warning of the need to adopt a new approach (normally at a woman's request), a self directed learning strategy was used to gain an understanding of what was required. This included actively seeking out colleagues, reading literature and seeking learning opportunities to help plan for the experience.

"I'd talked to people about how they did it and then started experimenting".

Interview 21:480-482

Occasionally experimenting occurred by chance as a result of circumstances at the time of birth (an unplanned experience). For example midwives forgetting to give the syntometrine. However subtle changes were often occurring in a midwife's practice when this happened (such as delay in giving the syntometrine and taking more time during the third stage) that it appeared midwives were unconsciously choosing to forget the syntometrine to see what would happen?

"I think it (forgetting the syntometrine) made me think about it you know. It didn't make me feel so sort of scared not giving the syntometrine, but I wouldn't say that recently in the last sort of couple of years of my practice that I've felt this need to get the syntometrine in quickly anyway. I think I've probably, in my own mind, been experimenting a little bit by leaving it longer and longer."

Interview 11:562-568

Midwives often referred to this phase of experimentation as a period of trial and error suggesting there could be a positive or a negative outcome to the use of new practice strategies.

Q: "tell me then how you developed your expertise in managing the third stage of labour?"

A: "...it would have been trial and error."

Interview 12:835-837

"Well I suppose you try things out. You see something that you think is a nice way of managing something. So you have a go at it and some times it will work for you and sometimes it doesn't quite work with you at the helm."

Interview 42:389-392

"I tried out what I'd read (on physiological third stage). I did as little as possible. Really I was experimenting on this woman. And it worked."

Interview 23:241-242

In addition to being exposed to new experiences in a planned way, midwives talked at length about being exposed to new experiences that occurred spontaneously and were completely unplanned.

"I was called to a home birth in August to a lady that wasn't from my caseload... She delivered this little boy wonderfully in her bathroom standing up. Everything was quite normal and then...she had a huge PV bleed following delivery of the placenta and membranes...I felt physically sick because of the way, the speed of the way that she bled. Thankfully I was with a student who really kept her cool. We got her on to the floor, palpated a contraction...It was well contracted but she was still bleeding a lot. So I had to give her syntometrine and the bleeding finally stopped. When we stood her up to go to her bedroom she started bleeding again. She must have lost about 1200mls. I mean she was never compromised by this bleed. She remained well throughout and even despite having a PPH she said the whole experience had been wonderful. Which kept me going really. Because I thought that the whole experience was dreadful."

Interview 21:498-523

Such experiences were most commonly associated with complications of the third stage, such as a snapped cord, post partum haemorrhage and retained placenta, when midwives were required to manage the situation. Occasional reference was made to inversion of the uterus.

"She had to go to theatre for this cord that had snapped. It was very thin... it wouldn't come out. I tried emptying the bladder, squatting, coughing. I think even we even got the doctors in and they tried. But nothing."

Interview 22:301-305

When I was training there was an SHO who inverted a uterus pulling too hard. I was there and witnessed that. And that was extremely traumatic.

Interview 42:467-469

Some unplanned experiences were associated with practical necessity to change practice as a result of the circumstances a midwife found herself in, rather than a complicated scenario. For example the position a woman was in making it impossible to apply cord traction, a woman vomiting her placenta out, or a woman giving birth at home where circumstances did not allow for the management of third stage practice as routinely adopted in a hospital environment.

"It wasn't a very big baby, the woman was standing upright, she pushed, I just guided the baby out. She crouched down, I put the baby on the floor, dried baby off and picked baby up, and by the time we'd got through the logistics of the position, this placenta just sort of came out... And it was too late to give my(syntometrine)..."

Interview 11:532-549

As a result of experience, midwives responded by either identifying the need to change their practice, the need to abandon the development, or the need for further experiences to make a judgement.

"It's about experience, but a lot of it is trial and error. I've tried something and it's worked so I've kept it and that's gone in to my body of knowledge."

Interview 15:275-278

This reflective process was heavily influenced by colleagues, who if supportive could reinforce new skills or if critical, could deter further development.

"I think the first physiological 3rd stage I did was purely by accident and I came in for a lot of criticism over it... this girl delivered spontaneously...and I forgot to give syntometrine and the placenta came out beautifully, very quickly, within five minutes... And X (a core midwife)picked up on this and 24 hours later I was hauled over to labour ward. Why hadn't I given syntometrine? So I explained the situation... And she was ever so cross. 'Don't ever do that again; everybody must be managed actively'. And so I didn't do it again for a long time."

Interview 42:403-421

"I did have a home confinement a while ago where I didn't actually do that (guarding the uterus). The woman felt so uncomfortable that she said "oh don't touch my tummy". So I didn't. But I still did very similar with my other hand as in applying traction to the cord. And after the delivery my midwife

colleague said 'why didn't you guard the uterus?. So I felt like I'd done something wrong then that I hadn't rested my hand on the uterus. And I've always done it since.'

Interview 37:179-186

In addition midwives assessed how effective the new development had been in practice. For example one midwife chose to experiment with roping the membranes as she had observed other midwives doing. After trying this she identified the new way of working was not successful for her and she abandoned using it. If the development had been successful, the assessment may have been positive and the midwife may have integrated the new way of managing the membranes into her practice portfolio. This highlighted the importance of a midwife's perception of her experiences. This was influenced by evidence of a blame and guilt culture among midwives, particularly in complicated situations. Midwives had an emotional response to experiences of this sort which raised anxiety levels, created fear of future complicated experiences and affected a midwife's confidence in her ability to manage such situations. In addition a process of questioning established practices arose, together with a re-evaluation of routine care and whether this was appropriate.

*"You question, could I have done anything about that.
...Everything has gone wonderfully, alternative positions for delivery. And you get a retained placenta or a snapped cord. And you just feel so desperately guilty".*

Interview 45:621-626

Whether a new way of working was adopted depended on how the experience was perceived by the midwife; whether positively or negatively. This depended on whether it worked, whether the midwife felt comfortable using the new aspect of care, whether the new approach was supported by others and how the practice was viewed by the midwife herself. Positively evaluated new experiences reinforced changes to practice; new aspect of care being integrated into a midwife's practice portfolio. What worked in practice was continued. Conversely if the experiment was viewed as a mistake and/or not as effective as the old way of working, then the new development was abandoned. Such changes to third stage practice could be temporary or permanent depending on future experiences. For example a midwife managing a snapped cord by putting a woman on a bedpan might choose to continue to use this aspect of care. However if the new innovation was not

reinforced with further positive practice experiences, then the midwife would tend to abandon it for other approaches with a more favourable outcome.

"Also every time I see a natural 3rd stage with a good ending it reassures me, gives me confidence in it again."

Interview 31:392-394

Experiences, both positive and negative resulted in an emotional response in midwives, which altered their view of the third stage of labour and how it should be managed. For example a midwife described a negative outcome to her first experience of a physiological third stage (the woman bled heavily), which made her highly reluctant to adopt such an approach again. Her feelings about how the third stage should be managed were changed by the experience, with the result that she felt unable to offer a flexible approach to care in the future. If the outcome had been positive then confidence would have been enhanced and flexibility in care with further experimentation with physiological third stage possible. However it was not just about the experiences a midwife had. Practice was also influenced by midwives values and beliefs. There was an interface between the experiences a midwife had and her values and beliefs about how the third stage of labour should be managed, values influencing how experiences were perceived. Which occurs first (the values and beliefs of the midwife influencing practice or practice influencing a midwife's values and beliefs) is difficult to determine and requires further investigation.

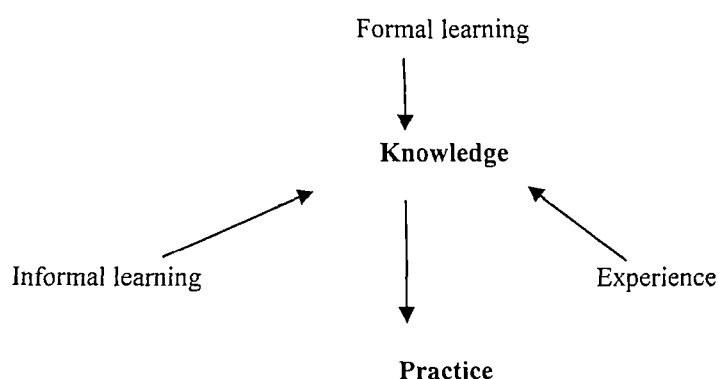
From practice, midwives learned 'tricks of the trade'. They learned from positive and negative experiences which resulted in individual and unique changes to practice. Such changes could be minor or major and normally followed a particular pattern of development; from consolidating practice to experimenting with practice to adapting and integrating new ways of working into what was routine care for the individual midwife. Some experiences had such a profound effect on midwives that their development in third stage practice was arrested as some experiences (such as complicated scenarios) affected confidence levels and created fear of similar experiences. However such responses tended to be short term and with further experience, midwives observed that that the developmental process continued. Midwives said that development continued throughout their careers, though there was some evidence that other factors other than experience itself

affected the learning from experience process. Not all midwives demonstrated the same development of third stage practice over time. Some midwives found it easier to be innovative and developmental, whilst others found it difficult to move significantly from what they had been taught as students. In addition not all midwives responded to situations with the same outcome. This was particularly true of complicated situations like a post partum haemorrhage. Some midwives when talking about such experiences used the story to support the premise that all women should have active intervention in third stage care, while other midwives used similar stories to challenge the routine use of active management, suggesting it leads to complications. Such different responses seemed not to be directly attributable to the experience exposed to alone, but be influenced by the midwife's interpretation of that experience.

6.3.4 Model of learning

A model of learning for third stage care was identified, based upon the reflexive nature of midwifery knowledge development. Whilst formal learning and research played a part in midwifery care, it was the principle of learning in and from practice which was fundamental. Midwives made choices in third stage care based upon a body of knowledge predominantly drawn from their own practice experiences and from those who practiced around them (see fig 6.4).

Fig 6.4: Model of learning for third stage care



6.4 Contextualising

The substantive category 'contextualising' reflected all situational and environmental features that influenced midwives decision making in third stage care. Midwives highlighted that the context of care played a significant role in their decision making for third stage practice. Whilst variation in learning experiences in part explained practice variation, contextual features provided an understanding of why midwives did not always practice in the way they had been taught or why their practice varied according to the situation. This was dependent on the specific physical, cultural and individual situation they were exposed to. This substantive category was further divided into three categories: physical environment, cultural environment and individual environment.

6.4.1 Physical Environment

Physical environment was a category which identified how the surroundings a midwife worked in influenced decision making for third stage practice. The physical environment influenced what midwifery care was given and the overall approach adopted. This included where a midwife worked, the location where births took place, the room a woman birthed in and the people present at that birth. The physical environment provided an explanation for practice variation in third stage care in that practice was seen to vary according to changes in the physical environment in which midwives worked.

Midwives working in hospital were more likely to adopt an interventionist approach to care. Midwives caring for women in the community favoured a more flexible approach with midwives working across hospital and community sites favouring a non interventionist or flexible perspective.

Q: "So physiological is the one that you do the most of?"

A: "Since I've worked on the community. Since I had the domino scheme job. When I worked in the hospital I nearly always did an active management...Protocols and the doctors and the speed with which things have to move."

Interview 31:76-81

Midwives from the midwifery led unit surprisingly did not favour a non interventionist model, citing the difficulties women were exposed to if transfer to the maternity unit some distance away was required. This led to the selective use of intervention for third stage care, with flexibility remaining an option for some (see table 6.1 and fig 6.5).

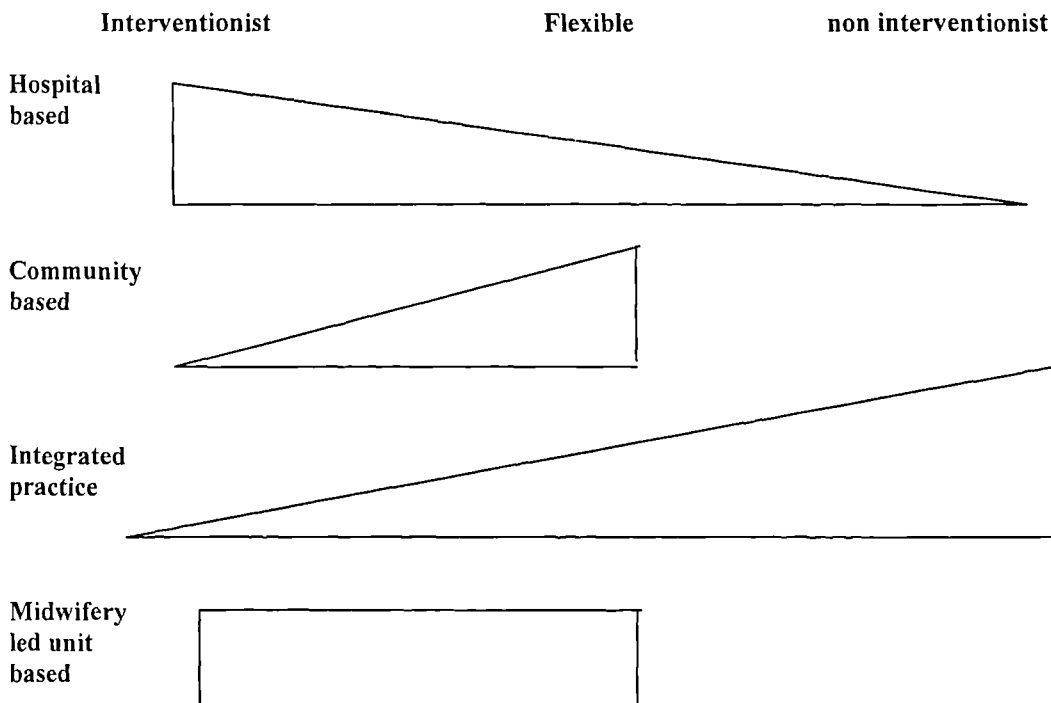
"I can never relax until the afterbirth has delivered...Because of the risk of bleeding. And I think also being 17 miles from the consultant unit, if you are here."

Interview 37:43-46

Table 6.1: Numbers of midwives expressing a preference for each model of care for third stage practice by midwife place of employment

Usual place of practice	Intervention	Flexible	Non intervention
Hospital	21	8	3
Community	2	5	5
Hospital + community	3	6	3
Mid led unit	2	-	-

Fig 6.5: Approaches to third stage practice according to midwives working environment



The place where birth took place also heavily influenced the approach for third stage practice (see tables 6.2).

Table 6.2: Number of midwives expressing a preference for each model of care for third stage practice by environments midwife assist women to give birth in.

Birth environment	Intervention	Flexible	Non intervention
Hospital	21	6	4
Community	2	2	-
Hospital + community	3	6	3

Care given in a hospital delivery suite environment where equipment was easily accessible, professional help was available and the physical environment supported intervention was associated with an interventionist model of care. In contrast care in a home birth environment or in a home from home room on the delivery suite was said to be less rushed and followed a less interventionist model.

"I think actually going into the home from home unit... I think I became far more aware then that the ladies had a choice and we weren't there just to say you're doing this that and the other."
Interview 6:433-436

"...mainly from the home births that I've been involved in. You see things happen so naturally that you think 'God why are we giving it' (syntometrine)."
Interview 15:493-495

Midwives were also influenced by the micro environment (the room a woman gave birth in, who was present and the equipment available) as well as the macro environment (how busy the delivery suite was).

"We try and have a receiver ready especially when someone is at home. We are trying very hard not to make a mess. So you've put inco sheets ready probably a receiver ready or the most suitable thing seems to be a bucket."
Interview 27:357-360

Both the accessibility and availability of oxytocics in the birthing room played a part in whether they were used. In hospital delivery suites they were stored in each delivery room ready for use, making their access easy and reinforcing the expectation that they would be routinely given. In a home birth environment a midwife brought the oxytocics with her to the delivery and they were made available only if required.

The presence of other people in the room at the time of birth also played a significant role in third stage care. An example of this was the timing of administration of syntometrine in active management. Midwives who assisted at births alone delayed giving the syntometrine until after the baby was born. If a midwife was accompanied by a second midwife or student, syntometrine was usually given with the anterior shoulder. In hospital A midwives often managed the third stage of labour without support from a second midwife. In contrast it was policy at Hospital B to have a second midwife witness the birth and stay to administer the syntometrine with the anterior shoulder. This also tended to occur in home births as it was policy for a second midwife to be present.

*"With home birth we always call a second midwife."
Interview 27:63-65*

Who midwives worked with in the environments in which births took place also influenced third stage management. Doctors particularly had a negative effect on the use of physiological management in hospital as did other midwives not in support of this approach. Where doctors were present at birth an interventionist third stage was often advocated.

"My first physiological management was a private patient and the consultant came in whilst I was doing it and I thought the poor man was going to have a heart attack because I had taken the cord clamp off and I had let the blood drain into the receiver from the placenta. He walked in and said, "oh there's a lot of blood there" and I said "oh I've emptied the placenta, she would like a natural third stage" and he said. 'No I'm not allowing it' and he said to the woman 'I'm not allowing this'. At that point the placenta actually started coming and I could see he was really distressed, so I said to him, 'The syntometrine is ready on the trolley'...So I put it into the lady's leg when I had a brief moment between you know watching the placenta coming down and getting it into the receiver;

managed to put the syringe down just before the placenta had flopped out...He followed me out of the room and he said, 'Don't you ever, ever let me catch you doing that again'."

Interview 7:631-653

Some midwives demonstrated caution when any other health professional was in the room and were aware of the potential for interference from both medical and midwifery colleagues on their practice. In contrast some midwives valued the support they received during this time.

"Once them doors are shut, I get very annoyed if anyone comes in to my room."

Interview 34:364-365

"I've changed so much since I've been on X. That's because the environment that I'm working within, not only the women but also the midwives. So it's a very supportive group."

Interview 21:426-429

A final factor in the physical environment was the type of experiences midwives were exposed to in the environments they worked in. Midwives working in hospital, especially as core midwives on delivery suite, identified that active management was routine. Midwives exposed to this environment had little or no experience of physiological care. In contrast midwives working across home and hospital boundaries were more likely to be exposed to both active and physiological management with a leaning towards a more non interventionist approach generally (see appendix 22). This was particularly true of one team that was leading the way in offering an integrated antenatal, intrapartum and postnatal service. Midwives in this team had significantly higher rates of physiological management than any other.

6.4.2 Cultural environment

Cultural environment was a category which referred to the patterns of behaviour and thinking midwives were exposed to in their working environment. Midwives identified that the environment in which they practiced influenced their decision making during the third

stage. This particularly related to the norms of behaviour expected in the working group to which they belonged, and the values and beliefs of the group that drove care provision.

"I have thought about physiological third stage but...the culture that I'm within and the midwives that I work with we haven't done many as a group of midwives."

Interview 11:512-515

"Two things I'm working within the hospital and I've got the hospital policies and protocols to follow and it is active management."

Interview 22:218-220

The cultural environment provided an explanation for practice variation in third stage care in that practice was seen to vary according to changes in the cultural environment midwives were exposed to.

Different groups of midwives expressed different value and belief systems in relation to childbirth, linked to environment for birth. For example a midwifery team offering an integrated service of antenatal, intrapartum and postnatal care across hospital and community environments, stressed the importance of childbirth as a normal life event requiring little or no intervention in low risk women. This was expressed in higher home birth rates, reduced rates of intervention and higher rates of physiological management for the third stage of labour.

"You tend to find that say the X scheme and the X midwives where they have a lot of contact with their women antenatally, more of them tend to come through wanting a physiological 3rd stage which is really interesting."

Interview 26:138-141

In contrast hospital teams stressed a more medicalised view of childbirth, with a fear and risk culture pervading. As a result intervention occurred more frequently and active management was valued and advocated for all women.

"The...hospital promises to actively manage the third stage of labour and if somebody doesn't want syntometrine it has to be documented..."

Interview 10:614-618

Individual midwives working in these different teams were expected to follow the team principles of care and were encouraged to do so by overt and covert means. For example in one integrated team, physiological management was talked about frequently and midwives less experienced in its use were encouraged to use it and supported to do so.

Q: "You think the team encourages innovation?"

A: "Definitely. We are very supportive as a group where as perhaps if you do something a little bit different you might not get quite the same support in another environment."

Interview 21:433-436

This team also audited their practice and encouraged individuals to assess their performance in comparison to other midwives within the team. This led one midwife to identify her lower than average physiological management rate, which influenced her ongoing third stage care.

Talking to peers and also because we audit our practice, I noticed that other midwives were doing far more physiological 3rd stages than I was, which made me think why?

Interview 21:474-476

In contrast other teams did not adopt such an analytical or supportive approach, favouring maintenance of established norms of care in that environment, notably active management. Such rituals were reinforced through the telling of horror stories of significant bleeding, and through the pressure brought to bear by the medicalised environment a midwife found herself practising in.

"Obviously we work in a big unit, you hear a lot about major primary PPH's and a lot of things that are obviously potential problems when you are dealing with 3rd stage."

Interview 26:516-518

This is reflected in the attitude expressed by doctors and some midwives to the use of physiological management, and by the culture of criticism of physiological management, which pervaded in the hospital environment.

"It puts me off when I don't get a placenta out with a physiological, I am frightened to go and discuss it with the doctor...because I believe that doctors want women to have active third stages."

Interview 28:382-385

"The trouble is that if you ask the core staff they say 'she's had a physiological 3rd stage? Well for God's sake give her some Syntometrine'. So you don't get any, well the support you get is to tell you to give syntometrine. It's very popular, particularly amongst the doctors. I've heard some very unpleasant things said by the doctors about the physiological 3rd stage."

Interview 33: 392-397

Some midwives, particularly core staff delivery suite midwives ridiculed the use of physiological management and deterred its use by setting time parameters for the third stage; the principle of 'getting people through and out' highlighted.

"I did do a delivery here one night actually... I found that I was being very much badgered by senior staff at the time...to basically not do what I wanted to do. So I basically crumbled under the pressure and did an active third stage by giving Syntometrine."

Interview 8:148-153

A: "Occasionally the room situation can be a bit of a pain, its going to be an hour or so and they are saying, 'oh how long is she going to be? She could be up and dressed by now'. And that can be in the back of your mind, but you try not to let it influence your care too much."

Interview 38:381-384

Midwives also talked about how their practice was checked by others and interfered with and how if they were moving outside the norms of that environment (by using physiological management), they kept a low profile to avoid confrontation. However other midwives found it easier to 'toe the party line'.

A: "I felt pressured by the core staff because you don't get things done and dusted quickly when someone has a physiological third stage... you don't show your face until your placenta hasn't delivered."

Interview 15: 525-531

"I find that things like doctors rounds and things like that interfere by coming round, it's like their presence is there,

you always feel you've got to justify what you are doing and why you are doing it. You're not an independent practitioner."

Interview 8: 677-680

"I moved from (hospital B) for loads of reasons, I mean one because I felt they at the time were very prescriptive and if you were gonna not go down that road you had to fight and I didn't have the emotional energy after three months to do that every shift and sometimes it was becoming every shift where the things that you were doing were being challenged."

Interview 12:88-94

Such control was reflected in the critical stance of doctors to physiological management and the use of core delivery suite midwives to check the practice of others. Individual midwives were encouraged to practice in a particular way, controlled by the use of criticism, challenge and sometimes ridicule.

Midwives interviewed did identify that the culture surrounding birth was subtly changing, particularly in hospital environments where women were being encouraged to make choices for labour and birth. For example with the advent of water birth more choice in third stage management was being offered.

"I think there's more openness about what people are doing. People are actually talking about what they do and people are actually, sort of owning up sometimes to doing physiological third stages. Where as I think before in the climate we were in, because the unit you know, promoted active management, you know you couldn't quite feel open enough to say sometimes well I don't always get the syntometrine in and the placenta does deliver without active management."

Interview 11:131-137

"But I can see its going to have to change a bit with the pool deliveries because I think it would be a real palaver if the woman wanted a managed 3rd stage. She would have to leave the water virtually immediately after delivery of the baby in order to give the syntometrine and manage the 3rd stage."

Interview 37:292-298

However custom and practice of active intervention still remained a controlling influence in these environments and was reinforced by the litigation conscious culture midwives worked within.

"Maybe to begin with, to be truthful I probably did a few more active deliveries because I was on my own and basically lacked confidence...That's only because of my own worrying about litigation..."

Interview 8:748-753

From interviews it was apparent that the issue of power and control of midwives played a part in their decision making. Midwives working autonomously and independently controlled their own working environment and had the power to make whatever decisions they felt were appropriate in given situations. In contrast midwives working in environments where they themselves were controlled, had decision making severely restricted. This normally happened in hospital situations, where midwives felt controlled by guidelines, custom and practice and the dominant medical culture.

"I am not as confident with physiological 3rd stage as I would like to be because of the initial criticism and because the practice that I've had has all been very much active management. But I know that physiological 3rd stage can work cos I've seen it work. And because I've read that it works. So I have to try and balance what I know to be right, what I think might be best for this client and hospital, and what the influences and the pressures are of working within a hospital unit where your practice is managed."

Interview 42:432-440

Midwives were specifically asked about unit policies or practice guidelines for third stage care; the majority stated that practice guidelines existed, but could not recall their content. Those that did stated active management was advocated, though acknowledged this was changing.

Q: "Is there such thing as an NHS Trust unit policy where you work on the third stage of labour?"

A: "I'm sure there is, there has recently been new guidelines produced actually and to my shame I haven't read them...so I need to have a look at them."

Interview 5:768-774

Q: "Is there a unit policy?"

A: "Yes. Well it's actually changing. But because this is an obstetric led unit we are supposed to give syntometrine for the 3rd stage."

Interview 28:437-438

There was evidence to suggest that the unit policy for third stage care was an unwritten one, where active management still remained the approach of choice.

"I think it's an unwritten policy. I think it's to just give syntometrine. I can't honestly say I've ever seen it. Its one of these things that's been said and done and you know everybody abides by it but it's a hidden rule."

Interview 34:384-387

This was substantiated by no practice guidelines on third stage care being available on either of the hospital delivery suites suggesting guidelines played a limited role in influencing third stage practice.

6.4.3 Individual environment

Individual environment was a category which referred to the individual situation midwives were exposed to in their working environment whilst caring for a particular mother and her baby. Midwives, when asked how they managed the third stage often used terms such as 'it varies' or 'it depends' linking practice variation to individual women. This involved tailoring practice to meet the needs of women giving birth in a specific environment. The individual environment provided an explanation for practice variation in third stage care in that practice was seen to vary according to the individual nature of care given to individual women and their babies within an individual context.

Pregnant women's choices played a role in midwives decision making during the third stage.

"I would look at people's birth plan and ask them what their preference is, particularly if I don't know them. I am very keen to try and find out what their needs are."

Interview 16:67-71

Women and their partners made choices with regard to the overall approach to third stage care; active or physiological management.

"So if the parents choice is for a physiological third stage, I am willing to try it. If they have no particular preference, I do tend to do an active third stage."

Interview 7:104-107

More specific care decisions included when the umbilical cord was cut and when the baby was placed after delivery.

"A lot depends on whether the partner wants to cut the cord at that point."

Interview 12:397-399

"It depends on what the lady likes. Some women don't want to hold the baby straight away, so I'll ask her 'do you want to hold?'. "

Interview 35:154-156

Midwives also based their decision making on the past medical and obstetric history of each woman they cared for; midwives being particularly interested in any history of hypertension, bleeding or anaemia. Any such history often swayed midwives to recommend a more interventionist approach.

Q: "How do you decide how to manage the third stage of labour?"

A: It depends first of all on the woman that you are delivering so it depends on the labour circumstances. If this is a mum that has had a very straightforward pregnancy, and if she wants physiological 3rd stage then you manage it that way... Or if she is a mum who comes into a high risk category... I would try and dissuade a mum from physiological 3rd stage."

Interview 42:361-373

Midwives also made decisions based around the current context in which care was being delivered to an individual mother and baby. Contextual features such as the woman's feelings during the third stage and what position she had chosen to adopt.

"It depends because sometimes they want to pass the baby to the partner so that they can get the last bit dealt with. But I don't make them. If they want to hold the baby I'm happy with that."

Interview 22:150-153

Waterbirth made active management less likely as it was not possible to administer syntometrine while the woman was in the water. In addition practical necessity meant that in some situations, midwives could not adopt strategies such as palpating the uterus as the abdomen was inaccessible. In addition aspects such as the speed at which the placenta delivered and the thickness of the membranes played a part in decision making.

"It depends... If the membranes are all intact, I can rope it easily and it makes it firmer. If it was trying to rip off, roping is not going to help, then I gently ease out with a clamp."

Interview 13:258-263

At birth, the condition of the baby influenced midwives actions. If the born baby was born in good condition, the midwife was free to manage the third stage. If the baby required active resuscitation, the midwife delayed managing the third stage as her priority became the health and wellbeing of the infant.

"It depends if the baby needs resuscitation, I would deal with that first unless I could see out of the corner of my eye the mother was starting to bleed. In which case I would just quickly get the Syntometrine in and get back to the baby."

Interview 7:172-175

Some aspects of care changed according to the reaction of women to the care they were receiving. An example of this was a midwife who adapted her practice to avoid abdominal palpation because the woman being cared for reacted negatively to having her abdomen touched.

"I did have a home confinement a while ago where I didn't actually do that (guarding the uterus). The woman felt so uncomfortable that she said "oh don't touch me tummy". So I didn't. But I still did very similar with my other hand as in applying traction to the cord."

Interview 37:179-183

The situational environment in which birth took place also influenced midwives decisions. This was particularly true when delivery suite was busy when there was urgency to exit delivery rooms quickly and when other midwives were less likely to be accessible.

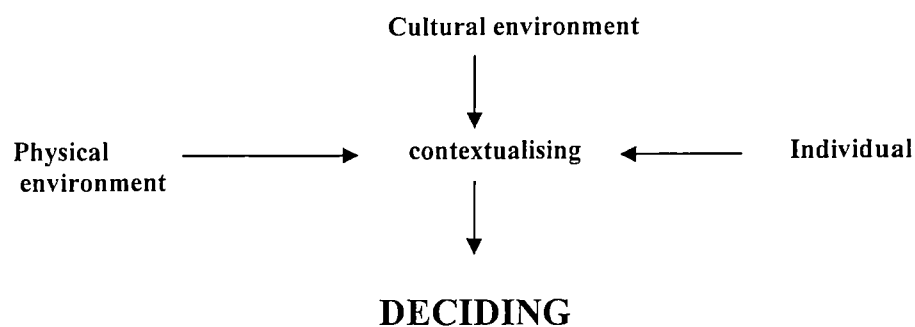
In addition certain delivery situations precluded the use of certain approaches to third stage care. For example active management was avoided at water births.

"...if the woman gives birth in the pool then if you give syntometrine they've got to come out of the water really sometimes. So you really don't want to. At that point who wants to have to stand up and get out of there. You know how heavy you feel when you get out of the bath."
Interview 4:830-836

6.4.4 Context of care model

A context of care model for third stage practice emerged from consideration of all the contextual features influencing practice, which highlighted how midwives adapted their practice to meet the needs of women within an individualistic framework (see fig 6.6).

Fig 6.6: Context of care model for third stage practice



Practice decisions were in part dependent on the physical environment for care, the cultural environment in which care was delivered and what happened to women during their interaction with midwives. Midwives pointed to the dominance of a medicalised interventionist culture in hospital environments which left them powerless to action non interventionist decisions without being criticised and challenged by a medically dominated establishment which adopted unwritten interventionist guidelines and policies. In contrast there was evidence of a normality midwifery culture, particularly in situations where midwives practiced in supportive community based environments, where midwives were empowered to make any decisions they felt were appropriate and were not confined by the

control of others. While cultural features played a key role, the practical nature of the physical environment and what actually happened to women during labour and birth were also important.

6.5 Interpreting

The substantive category 'interpreting' referred to how midwives filtered their experiences through a value and belief system when deciding how to manage the third stage of labour. Whilst learning and contextualizing directly influenced decision making independently and in conjunction with one another, such experiences were normally interpreted through a philosophical lens which determined what decisions were made. In addition strongly held beliefs could independently influence decision making without reference to learning or contextual features. Midwives highlighted that how experiences were interpreted played a significant role in their decision making for third stage practice. Whilst variation in learning experiences and contextual features in part explained practice variation, interpretation of experiences provided an understanding of why midwives did not always practice in the way expected of them and how similar learning experiences led to disparate decisions. This substantive category was further divided into two categories: aims of care and midwife's philosophy.

6.5.1 Aims for care in labour

Aims of care for labour, was a category which identified what midwives strived to achieve when caring for women during childbirth and the influence of these aspirations on third stage decision making. Aims of care for labour, in part, provided an explanation for practice variation in third stage care in that practice was seen to vary according to midwives goals and purposes for care. Different aims for care among midwives reflected different approaches to how the third stage of labour was managed. By reference to aims of care, how similar learning experiences and contextual features were viewed differently and acted on differently by different midwives was explained.

It became apparent when talking to midwives about their practice that midwives did not always share the same aims for care in labour. Aims for care divided into those which focussed on safety of mother and baby, those that focused on the importance of normality, those that focused on choice and control, those that focused on satisfaction and those that focused on caring in a particular way (for example information giving). Normally aims for care encompassed more than one of these aspects, but midwives tended to focus on one aspect as being most important.

"To provide care that enables a mum to have a safe delivery of her baby. That she is healthy at the end of it. That the baby is healthy. But that also enables her to have choice about what she wants."

Interview 29:549-552

"I feel that labour is quite a normal natural event and that wherever possible encourage it to be a positive situation. And then just where it's needed intervention."

Interview 32:323-325

"The principles of care? Well I think mainly to be safe, kind, competent. To know what you are doing, to give the women the information for them to be able to make a choice as to how their labour is managed, what sort of pain relief they have and to give them as much support as you can during labour. And inform them at every stage as to what's going on, how they are progressing, lots of encouragement."

Interview 19:447-453

Variable aims were most clearly demonstrated in discussions midwives had about choice. Choice was a commonly mentioned attribute of care, but though it was mentioned by the majority of midwives, it tended to be referred to in a broad rather than a specific way. This was not then substantiated in further discussions about practice. In other words midwives talked about choice but then did not always demonstrate practising it. This was most clearly demonstrated in midwives own descriptions of how women were given choice for third stage management. Some midwives identified how challenging giving choice could be and how often women were directed to choose a particular form of care.

"I'm not sure I believe in informed choices as an objective thing, because I think information goes through a body of a personality who has views and feelings and passions"

Interview 12:227-229

This was further supported by midwives descriptions of how they gave choice for third stage care which identified bias towards one type of approach, either for active management or for physiological management.

"I would possibly mention the fact that its quite common to give an injection to help speed up 3rd stage of labour and ask her if she had any views on that. And if she said she didn't mind I would possibly go on ahead and give that."

Interview 46:80-83

"I don't think women are aware of how ghastly syntometrine really is and what an aggressive effect it has on the body and I'd say 1 in 3 probably vomit after having syntometrine"

Interview 12:282-290

Some midwives acknowledged this directed choice and identified how it came about.

"I think it's probably because of the way we say about syntometrine... We say this. 'We offer the syntometrine, we give it just after the baby is born, and we give it to try and reduce the risk of excessive bleeding' and that 'it does tend to make the placenta come away quicker'. And I think that's it. You know...and they think 'well I don't want to be hanging about for an hour waiting for a placenta to come out'."

Interview 47:121-137

Of those interviewed, some midwives overtly directed women's choice towards active or physiological management allowing their personal belief systems to direct women to choose what they themselves favoured and were more comfortable with.

"What I normally say to them is that there is a danger of them haemorrhaging and with the help of the syntometrine it doesn't necessarily stop the haemorrhage but it will control it by the fact that they should deliver the placenta a little bit quicker, within the next 20 minutes. Where as if you had a physiological 3rd stage, it could take up to an hour. Even an hour and a half. And I'm not happy at doing that from my own personal experience."

Interview 36:338-344

Some midwives covertly directed choice in the way they framed the discussion of choice with women, directing women to choose by packaging the information to promote one approach over another.

"It's hard to give an unbiased opinion... I tell them about the syntometrine. That it is an invasive technique. It is an injection. That it can cause sort of quite a lot of discomfort"

with the contraction. That it can make them feel sick, and vomit following the syntometrine."

Interview 21:414-418

A few midwives recognised the dilemma surrounding informed choice and the difficulties of separating their own beliefs from the way in which they packaged information.

"Since I've been qualified I try and give women informed choice over management of the 3rd stage. You have to take it quite slowly you know because you can confuse them if you say something like "syntometrine will reduce the blood loss". Then they automatically ask for syntometrine. But if you discuss pros and cons of syntometrine initially and then go on to how you can handle the 3rd stage differently, with different methods. Often they will understand and be able to make more of a informed choice."

Interview 38:44-51

These midwives made a great effort to package information clearly and in a non biased way, while still acknowledging that some bias in the discussion would exist and this had the potential to influence women to choose what they as midwives wanted them to have. One midwife acknowledged that choice is about control and that while some midwives were able to offer choice, others were not.

"...you know there are a lot of good midwives around who give women informed choice...But I think there are also still sadly quite a few midwives who still do think that they are very much the controller. They have the control and they might give limited informed choice like you could try this or you could try that. But you know that's too much hassle, I'm not going to suggest that. We'll just get on with this. And I think it does happen."

Interview 45:677-68

Sometimes, this lack of choice for women was attributed to hospital policy, the environment in which care took place, and lack of experience of physiological management.

"I tell them that the hospital policy at the moment is that every lady has a drug to make the uterus contract to try and prevent excessive bleeding. Would you like me to give it to you or is there anything you would like to ask me?"

Interview 40:250-253

However, it was apparent from discussions that the most important indicator of choice related to a midwife's belief in whether choice was appropriate. As a result midwives fitted

into one of three discrete categories; those who offered choice while attempting to reduce bias from their own belief system, and those who offered either a directed choice or no choice underpinned by their beliefs. Those who did not support giving choice used women's lack of knowledge and understanding of the issues surrounding risk and the responsibility of the midwife to recommend a course of action.

"Women don't seem concerned about the 3rd stage. All they seem concerned about is delivering a baby and I don't think women understand the dangers of the 3rd stage."

Q: "So maybe it should be the midwives responsibility to recommend or to direct women's choice?"

A: "Yes. I think the midwife needs to be comfortable in doing what she is doing. And I myself feel more comfortable with a managed 3rd stage."

Interview 37: 286-291

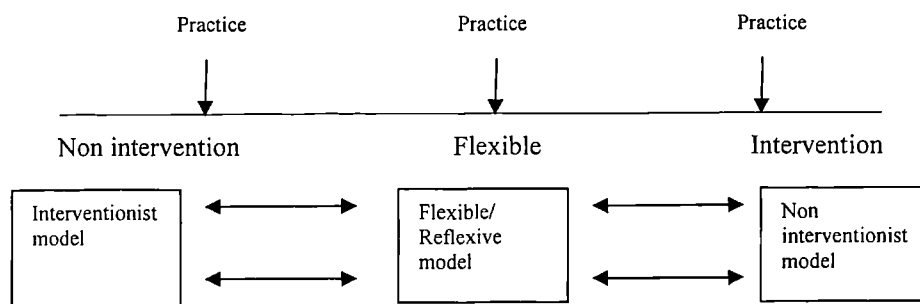
It is interesting to note that when choice was offered, it was the package of care that a woman was choosing and not its individual aspects. Choosing the details of care remained predominantly the remit of the midwife.

6.5.2 Midwifery philosophy

Midwifery philosophy was a category which identified the attitude, values and beliefs midwives expressed about childbirth generally and the third stage of labour in particular. Midwives throughout discussion and when caring for women demonstrated differing values and beliefs about childbirth and the third stage of labour. The category provided an explanation for practice variation in third stage care as practice varied according to the differing values and beliefs expressed by different midwives.

From the descriptions of care (see chapter five), it was revealed that models of third stage practice existed along an interventionist-non interventionist practice continuum. Practice could sit at any point along this continuum, with some midwives demonstrating movement in their practice model along the line over time whilst others remained static. Using intervention as the key concept in third stage practice, three discrete models of care were identified as existing among interviewed midwives (see fig 6.7).

Fig 6.7: Models of care for third stage practice among midwives compared to interventionist practice continuum.



Each model was framed by a personal philosophy of midwifery care which included attitude values and beliefs about third stage practice. The practice models were interventionist, flexible/reflexive and non interventionist (see table 6.3).

Table 6.3: Descriptions of models of midwifery care for third stage of practice

Interventionist	Flexible/Reflexive	Non interventionist
Rigid in approach	flexible in approach	Rigid in approach
Do things	Do things if required	Do as little as possible
Intervention	intervention as necessary	Non intervention
Minimising risk	Assessment of risk	Natural
Risk focus	risk/natural focus according to Situation	Natural focus / limited danger
Medical model	Medical/life event model	Life event model
Anxiety	Confident	Confident
Oxytocics valuable in all situations	Judicious use of oxytocics	Avoid oxytocics
Directed choice	Choice	Directed choice
Midwife dominant	Power sharing	Midwife dominant
Safety concerned	Safety considered in situation	Safety not concerned
Strong opinions	Flexible opinions	Strong opinions

Interventionist practice was dominated by intervention. Midwives using this model applied active management strategies to all care situations, including situations in which physiological management was chosen. In active management this involved:-

- early administration of a uterotonic
- early clamping and cutting of the cord,

- directing a woman to adopt a semi recumbent position,
- palpation of the uterus to detect the next uterine contraction,
- cord traction and guarding of the uterus to expedite delivery of the placenta and membranes quickly.
- Trailing membranes delivered by applying traction to them, usually with a clamp.

In physiological management this involved all of the above with the exception of administration of a uterotonic.

Midwives who adopted a non interventionist model adopted a hands off style of care, again in the majority of situations, even when active management was chosen by the woman and a uterotonic drug given. In physiological management this involved:

- No uterotonic drug being given.
- A woman not being asked or directed to change her position for the third stage, but left to decide for her self what was most comfortable.
- The cord left unclamped until after the placenta delivered
- No palpation of the uterus by the midwife at any time
- No touching of the cord to delivery the placenta, which was birthed by maternal effort and gravity alone.

In active management this involved all of the above with the addition of administration of a uterotonic drug.

"I try and have a lot of hands off really. I think you can interfere too much and that's probably when you get your retained placentas"

Interview 22:167-169

Flexible/reflexive midwives adopted varying models of midwifery care for the third stage; sometimes using an interventionist approach, sometimes using a non interventionist approach and sometimes using an approach which combined aspects of intervention and non intervention. In active management this could mean utilising maternal effort rather than cord traction to deliver the placenta or delaying cord clamping until pulsation ceased.

In physiological management this could mean early cord clamping to allow a mother to hold her baby or the use of cord traction to assist in delivering the placenta when maternal effort insufficient.

"I feel that labour is quite a normal natural event and that wherever possible encourage it to be a positive situation. And then just where it's needed intervention."

Interview 32:323-325

These three models of care reflected midwives' attitude, values and beliefs about how the third stage of labour should be managed based upon a number of key concepts, which guided practice (See table 6.4).

Table 6.4: Key concepts reflecting midwives' attitude, values and beliefs about how the third stage of labour should be managed.

- Midwife's ability to be flexible in practice
- Midwife activity levels during the third stage of labour
- Midwife's view of risk during the third stage of labour
- Midwife's view on medicalisation of childbirth with particular reference to the third stage
- Midwife's view of choice and control for third stage care
- Midwife's view on importance of safety during the third stage of labour
- Midwife's confidence level
- Midwife's attitude to oxytocic use
- Midwife's view on how the third stage of labour should be managed
- Midwife's feelings about the third stage of labour

The ability of a midwife to be flexible in third stage practice was often referred to either directly by midwives themselves or indirectly when discussing the care they offered. Flexibility was defined as the ability to alter or change third stage practice to meet the needs of the woman or situation.

Midwives' views on the concept of flexibility and their ability to be flexible in practice varied. Some midwives had such strongly held beliefs about how the third stage should be managed (interventionist or non interventionist) that they were unwilling or unable to change their practice. These midwives demonstrated little or no ability to alter or change their practice. Whilst these midwives lay at polar opposites in terms of values and beliefs they shared a common attribute; that of being rigid and inflexible.

"I think that some of the midwives are also too rigid."
Interview 15:621

The majority of midwives demonstrated some ability to alter and change their practice, though levels of flexibility were variable, some midwives being more flexible than others. Midwives demonstrating the most flexibility sat close to the practice continuum midpoint. An individual midwife's practice could be mapped along this continuum, with evidence to suggest that the majority of midwives had the capacity to move in terms of level of flexibility according to a variety of driving or restraining factors. For example a newly qualified midwife was generally rigid in her practice in third stage care and tended to lie at the interventionist end of the practice continuum. However as she began to develop confidence and began to experiment, flexibility in care was demonstrated. However a traumatic experience such as a severe post partum haemorrhage could force her practice back towards the more interventionist end of practice until she was either encouraged to move again or began to feel more confident in exploring practice options.

Midwife activity level during the third stage of labour was defined as how physically active the midwife was in bringing about delivery of the placenta and membranes. This included any touching of the woman giving birth as well as directing the woman to act in a given way (for example palpating the uterus, giving an oxytocic, touching or handling the cord, manipulating the placenta, telling a woman to push, asking a woman to alter her position).

Midwives demonstrated varying levels of activity in the third stage of labour. Again these were mapped along a continuum of practice with some midwives always demonstrating an interventionist/active or non interventionist approach/inactive approach,

with the majority demonstrating varying activity levels according to the situation. Again activity levels were seen to change as a result of learning in and from practice and the drivers from the context in which care took place.

Activity levels in an interventionist model included the woman being passive and the midwife taking charge of delivery of the placenta and membranes. The third stage was actively managed with an oxytocic drug, early clamping and cutting of the cord, palpation of the uterus, guarding and cord traction with manipulation of the membranes if necessary. Value was placed on the merits of intervention in bringing about completion of the third stage

"I can't understand why anyone would want to delay the third stage of labour (right) from a personal point of view. Once you've had that baby as far as I'm concerned, lets just finish it and get on with the baby... I can't see the point in sitting there when you're probably quite uncomfortable, not very clean, waiting for something that could have happened like half an hour ago."

Interview 10:674-688

Activity levels in a non interventionist model included the woman being active and the midwife stepping back during the third stage of labour. No drug was given, the uterus was not palpated, the umbilical cord was not clamped and cut and no manipulation of the cord or placenta occurred. The midwife explained to the woman what would happen and encouraged her to listen to her body in terms of what to do. The placenta was delivered by means of gravity and maternal effort. Value was placed on the merits of a hands off style of care in managing the third stage.

"I believe strongly in not touching the head, not feeling for the cord, not doing downward tractions, all those things."

Interview 12:7790-791

Activity levels in a flexible/reflexive model included varying levels of activity on the part of the midwife and woman, and there were multiple possibilities. For example when actively managing the third stage, a midwife chose not to adopt a complete interventionist approach. She gave an oxytocic, but then delayed clamping and cutting the cord, did not palpate the uterus and encouraged the woman to birth her own placenta

through maternal effort rather than applying cord traction. Conversely a midwife managing a physiological situation applied some interventionist principles to care such as cutting the cord, palpating the uterus and applying some cord traction. Value was placed on the judicious use of activity whilst still acknowledging women's ability to deliver the placenta themselves.

"...even though you are using syntometrine I don't think that you should totally ignore the woman's natural urge to push and all of these things because they can still be quite useful."

Interview 26:400-403

There was variability seen among midwives in relation to how they viewed risk in the third stage of labour. As previously discussed risk was often taught during initial training and midwives completed their education with the understanding that the third stage was the most dangerous part of labour. In the three models of care identified, midwives lying at polar opposites had opposing views on the concept of risk in the third stage.

The non interventionist midwife viewed the third stage as no different from the rest of labour; a normal physiological process and as long as a woman was fit and healthy there was limited risk involved.

"I know some people worry until the placenta is delivered but I don't find it particularly stressful and I think generally the longer I've been qualified, the more laid back about it you get...I don't have any worries about the third stage of labours it's just part of your care."

Interview 10:93-99

Often the view portrayed was that the medicalisation of childbirth had forced a medicalised view to dominate in third stage practice; this being that there was always risk and risk should be minimised through intervention. Midwives with this view of the third stage felt that the medicalisation of a normal life event for healthy pregnant women should be challenged.

The interventionist midwife adopted the medical view that birth was only normal in retrospect and demonstrated a belief that the third stage of labour was highly risky due to

the possibility of post partum haemorrhage. The midwife therefore was vigilant throughout the third stage and intervened as soon as possible to bring about speedy delivery of the placenta to reduce the risk involved. Such an approach reflected the belief that risk can and should be minimised by intervention, and that for all women this was an appropriate form of care.

"I suppose I'm frightened that they might start bleeding and that the uterus wouldn't be contracted and that the uterus might sort of come down."

Interview 33:328-331

The flexible/reflexive midwife had a less extreme view of risk in relation to the third stage. Whilst midwives recognised that the third stage of labour could be a risky time, there was also recognition that if the woman was fit and healthy, there was no need to presume risk. The third stage was viewed as normal unless there was an indication that something was going wrong. Midwives with this view believed women were designed to birth their placenta and had mechanisms in place to manage the situation. The concept of risk, whilst being acknowledged did not guide practice, it informed practice only if a complication occurred.

"I mean it is potentially still a dangerous time but every time I deliver a woman I don't panic when it comes to the 3rd stage. It's just something that happens when you are delivering a woman."

Interview 26:67-70

Medicalisation of childbirth was defined here as being the process by which childbirth was managed through a medical paradigm; a philosophy of care based upon the concept that birth was only normal in retrospect and that intervention in birth benefited the outcome for women and children (Teijlingen et al. 2000). Such a view values the use of technology to assess well being and manage care during childbirth.

Midwives had varying views on the medicalisation of childbirth. Interventionist midwives adopted the medical paradigm whole heartedly. They viewed the third stage as a time of great risk and believed that the process should be actively managed by the midwife

to minimise the risks involved. This included hospital birth and active management of the third stage of labour. Physiological management was viewed suspiciously; the ability of a woman to manage her own placental delivery was regarded as highly questionable and dangerous. Non interventionist midwives rejected the medical paradigm entirely. They challenged the need to intervene in a normal natural process, and valued a hands off rather than a hands on approach to third stage care. Midwives viewed intervention as dangerous rather than safe, causing rather than alleviating risk. Their *raison d'être* was to view birth as normal and to view intervention as unnecessary and dangerous in the majority of situations.

"I know we are always taught that it's the most dangerous part of the delivery but I actually feel that once the baby's out, that the placenta can be dealt with. It can obviously lead to emergencies. But at the end of the day it's just a normal process. It just happens. We've medicalised too much and I think because of all the interventions that go beforehand, that we tend to medicalise that part as well."

Interview 8:892-897

"I reckon the cord pulsates for a reason don't you, and I'm not arrogant enough to believe that medical science knows better than the evolutionary process or God himself. So I think the cord pulsates for a reason...I choose to believe that it is meant to happen this way so, therefore, I don't want to interfere with it."

Interview 12:407-421

Flexible/reflexive midwives were less extreme in their views on the medicalisation of childbirth and took a more considered approach. Whilst the concept that birth was a normal and natural event was embraced, it was recognised that childbirth could go wrong and that the judicious use of intervention was both appropriate and essential in certain circumstances. However they did challenge such an approach being rolled out to all women irrespective of risk and favoured a less interventionist approach for some women, whilst acknowledging the place for intervention in others.

"In an ideal world wouldn't it be lovely if everyone did things naturally. But you know I think in reality that doesn't happen. We get a huge number of deliveries. We are fairly medicalised."

Interview 45:638-642

Choice was defined as the act of choosing or selecting from a range of options. Control was defined as the power to direct, curb or check behaviour. The majority of

midwives identified offering women choice over whether to have an active or physiological management for the third stage of labour. However for the most part midwives also directed women to choose one care package over another; some were overt in this, whilst others were more subtle in their approach. Whilst offering choice on one hand they took it away with the other, failing to relinquish control by influencing women to choose what they valued and perceived to be best for the woman. Once the decision over which package of care was made, the detail of the package of care chosen was determined by the midwife; control over what happened stayed with the midwife herself.

Interventionist midwives did not offer any choice over how the third stage of labour was managed. They told women what would happen to them and sought their consent to what they regarded as routine practice; active management. Control of the third stage remained with the midwife throughout the third stage of labour.

"I would just tell her that I will give her an injection to help the afterbirth to come out."

Interview 25:179-180

Non interventionist midwives had a similar attitude toward choice as their interventionist colleagues. They also told women what would happen to them and sought their consent, but for a different type of care (physiological management). Control of the third stage remained with the midwife throughout the third stage of labour. It is interesting to note that midwives offering care packages lying at opposing philosophical poles shared similar approaches to choice and control.

"But I think there's one colleague who does it all the time (physiological management) and in a way I think she pushes it on people because it is her ethos really. This is how she manages patients."

Interview 18:326-328

In contrast flexible midwives tended to recognise the difficulty in offering women choice when midwifery values and beliefs influenced the way information was packaged. Midwives using this model actively endeavoured to offer women a real choice for the third stage of labour, whilst recognising that in some situations it was appropriate for a package of care to be recommended. However even in this group of midwives, control over the

minutiae of care remained with the midwife; women chose the package, not what was in it. This reflected the high level of control midwives exerted over the third stage of labour; it being regarded as a stage of labour requiring professional judgement. Women were generally regarded as lacking the knowledge to be able to make detailed decisions about care at this time.

"I'm prepared to let them be the leaders in the care they want, unless there is an emergency when I'm going to do anything I have to do and then argue about it afterwards, and I usually let the ladies know that that is how I want to manage it, and I've never had one disagree with that yet."

Interview 7:676-680

Safety was a concept many midwives referred to in discussions about the third stage of labour. Midwives talked about how they were trained to practice within parameters of safety and it was well recognised among midwives in the study that safety was a concept central to care; it being the midwife's responsibility to ensure women and their children were safe during the experience of childbirth.

"When you're a learner and just newly qualified there are certain parameters that you are told which is for safe practice. Which is fine, but with experience you can still work safely but you can actually extend that length of time just a little bit and still be working, in my mind still be working safely."

Interview 14:895-901

However the perception of safe practice in third stage care differed among midwives. Midwives using an interventionist model rationalised intervention as the safest option for women. The concept of safety was used to substantiate the belief that active management for the third stage of labour was the most appropriate form of care as it reduced the risk of bleeding in women and facilitated speedy delivery of the placenta at a dangerous time. Using safety as a lever, midwives then informed and persuaded women towards choosing such an approach for the third stage.

"You know that the woman should be informed what is the safest and what is the best way to manage her 3rd stage of labour for her. If she disagrees with that and refuses that, well then that's another situation but I don't think you'll get a lot of women refusing something that they know that's right for them. Well why would they want to?"

Interview 1:750-756

"I may persuade her, give a little gentle persuasion for an active management. Because I personally feel that it's a safer option."

Interview 19:351-353

Midwives using a non interventionist model of care also used safety to rationalise a completely different perspective; that of not intervening. In midwives using this approach it was regarded as safer not to intervene in what was a normal, natural process. Oxytocics raised blood pressure, caused sickness and potentially could lead to retained placenta. This was again then used as a lever in guiding women to choose physiological management.

"I have quite strong feelings really in that I really believe that if somebody's had a normal labour that they are well in themselves they have laboured spontaneously and within an acceptable time limit...that it would be perfectly safe to have a normal physiological 3rd stage of labour. That is not to have any interference with drugs at all."

Interview 29:60-67

Flexible midwives had a less dogmatic approach to the concept of safety, failing to associate it so closely with a specific course of action in third stage care. Midwives using this approach were open to using either active or physiological management approaches as relevant to the needs of an individual woman at any given time. They embraced the concept that both active and physiological management options were safe and midwives were responsible for using their professional judgement to assess which care package was appropriate and advise women accordingly. This group more than any other recognised the judicious use of oxytocics and intervention in certain situations and were less likely to use safety concerns as a lever to direct women's choice. In addition the use of an oxytocic as a prop facilitated the use of physiological management in midwives who were less confident in its use but were committed to offering women.

"As long as I can ensure the safety of the baby and the mother, then I am prepared to support them in what they want to do."

Interview 6: 521-522

The concept of safety was not just used to rationalize the overall approach chosen, but was also referred to by midwives when talking about aspects of third stage practice. For example midwives referred to safety in relation to the use of fundal pressure and checking

that the uterus was contracted. Again different perceptions of safe practice among midwives were highlighted. Interventionist midwives stressed the need to intervene in all aspects of third stage care to ensure safety of the woman; this involved early palpation of the uterus to ensure a woman was not bleeding internally, and speedy delivery of the placenta with cord traction. Non interventionist midwives stressed the need to intervene as little as possible during the third stage of labour to ensure safety. This involved no palpation of the uterus (which could cause partial separation of the placenta and bleeding), and the use of a hands off approach for delivery of the placenta (for the same reason). Flexible midwives tended to focus on what seemed safe in the given situation in which they were working. They were flexible over the use of abdominal palpation during the third stage of labour and in the use of cord traction in either active or physiological management approaches. They recognised that intervention was both beneficial and detrimental to safety in certain circumstances and needed to be discriminately used. For example when a friable cord was detected in active management, a midwife would encourage maternal effort rather than cord traction. In physiological management if a woman wanted to hold her baby soon after birth but the umbilical cord was too short, a midwife would clamp and cut the cord early. This pragmatic flexibility in practice allowed midwives to make safe decisions within an individually based framework.

Confidence levels were different among midwives using different models of care for third stage practice. Midwives using an interventionist approach generally lacked confidence in both their own skills and in believing in a woman's ability to deliver the placenta and membranes without intervention. Newly qualified midwives with limited experience in practice tended to utilise this model of care, though more experienced midwives also adopted such an approach. It was only as confidence levels rose that midwives demonstrated the ability to move their model of care away from an interventionist model towards a more flexible or non interventionist approach. Midwives using a flexible and non interventionist model of care demonstrated greater confidence in a woman's ability to deliver her placenta without intervention and confidence in their own skills in managing the third stage using a non interventionist approach. For midwives who used a flexible model of care, confidence allowed them the ability to adapt and adjust their

practice to meet the individual needs of women. Midwives adopting a non interventionist model of care utilized their confidence to embrace non intervention for all low risk women in a climate where intervention remained the norm. To do so required a high level of confidence in both a woman's ability to birth her placenta and a midwife's ability to support her doing so safely.

"I've managed it all ways now and I've managed a lot of complications with the third stage and I feel quite confident about it, I feel I could cope whatever happened. So if the parents choice is for a physiological third stage, I am willing to try it."

Interview 7:102-106

"...because of that last experience I am a bit wary."

Interview 35:547-549

A: I am always a little bit apprehensive cause it's the most worrying stage because of PPH or partial separation or whatever.

Interview 25:87-88

Attitude towards oxytocic use also differed among interviewed midwives. Interventionist midwives viewed oxytocic use as a routine aspect to third stage care and the safest form of care available. Midwives in this category were more comfortable with using oxytocics than not using them and advocated their use to women. Not using oxytocics was viewed as dangerous and midwives viewed not using them with anxiety and apprehension

"I've always felt that it (giving syntometrine) was the safest thing to do, we should be giving it."

Interview 18:413-414

Non interventionist midwives had opposing views about oxytocics. Drugs that made the uterus contract were viewed as an unnecessary intervention in third stage care in low risk women, leading to unwarranted complications such as hypertension and nausea. Their use was actively discouraged with midwives feeling less comfortable in their use. Non use of oxytocics was embraced by these midwives, who were more comfortable with this approach.

"I feel that I can trust in women's bodies to naturally give birth to the placenta. I do feel if we have not interfered in any process in labour then there's no reason why we need to interfere with the 3rd stage."

Interview 32:349-352

Flexible midwives viewed oxytocics as a necessary intervention in given circumstances. Midwives in this category tended to have no strong feelings about oxytocic use; feeling equally comfortable with their use or non use for the third stage of labour, and happy to base their use or non use upon the needs and wishes of the woman they were caring for as well as their professional judgement.

"I honestly don't have any thoughts one way or another in the sense of, obviously there are some ladies who are far more prior risk and obviously need to have it (syntometrine) but if ladies choose not to there is no problem. I don't have any real thoughts on whether they should or shouldn't have it, I think it is a combination of what they do want and whether there is a need for them to have it.

Interview 6:546-551

Midwives in this study had different feelings about the third stage of labour generally. Again these could be divided according to the model of care a midwife chose to use. Interventionist midwives expressed fear and anxiety when discussing the third stage of labour; it being viewed as a dangerous period of childbirth when the woman was at significant risk of bleeding to death. Midwives in this category felt it was a time when the midwife should be concerned for the woman and aware that at any moment something could go wrong. Midwives using this model felt responsible for a woman's wellbeing during this phase and regarded it as their responsibility to ensure that the third stage of labour was handled appropriately using intervention. There was a sense of relief when it was completed. Midwives in this group favoured active management as the approach of choice for third stage care feeling 'mother nature needed a hand' to ensure safety. Physiological management was viewed suspiciously as potentially dangerous.

"I am always a little bit apprehensive cause it's the most worrying stage because of PPH or partial separation or whatever."

Interview 25:87-88

"Big sigh of relief when it's all over. I always potentially think this is the most hazardous part of having a baby although I do think mother and father breathe a sigh of relief when the baby is delivered and crying. I can never relax until the afterbirth has delivered."

Interview 37:40-43

Non interventionist midwives felt that the third stage of labour was just another part of the birth process that a woman's body was designed to manage. Midwives in this group felt that no intervention was necessary in a normal natural process in which 'mother nature knows best'; a time in which the woman was to be left to focus on welcoming her new child rather than being interfered with. Rather than viewing their role as an active one, midwives felt their role was one of watchful waiting; being there to witness and monitor events. Non interventionist midwives felt active management was an unnecessary intervention, potentially dangerous and inappropriate for women experiencing normal birth. Physiological management was felt to be the most appropriate care package in all such situations.

"I think there's a lot of risk attached to syntometrine and I quite willingly tell the ladies that there is a risk regardless of my decision to give them active or physiological."

Interview 28: 177-179

"If everything has been normal with no problems I don't see why the end part of a woman's labour has to be managed. And I think it should be every woman's choice providing everything is fine and I don't see why we should have to speed up the end of it because the labour has been normal. I don't have any urgency to hurry up the whole process."

Interview 21:253-257

Midwives adopting a flexible model of care viewed the third stage of labour as potentially dangerous, but not necessarily so. Midwives in this group used words such as 'respect' for the third stage and 'mixed' feelings about the third stage generally. Whilst the third stage of labour could be dangerous, women's bodies were designed to manage this process successfully. Midwives felt it was their responsibility to assess risk and offer women choices of management to meet their individual needs. Ongoing care then involved monitoring and changing practice according to the situation. Midwives in this group expressed few strong feelings about the third stage of labour and embraced little preference for active and physiological management. Use of different approaches was relevant to the needs of the situation rather than the strongly held beliefs of the midwife.

*"I don't have any intense feeling about it (the third stage)".
Interview 15:61*

More specifically midwives had very different views on how the third stage of labour should be managed in low risk women. Midwives adopting an interventionist model viewed active management as the most appropriate form of care for all women. They viewed physiological management as positively dangerous and inappropriate. The view that intervention improved outcome was a fundamental aspect of a midwife's belief system using this model. Such a view led to women being informed that active management was routine and directed to choose it on safety grounds. A set pattern of care was then implemented which involved early oxytocic administration, early clamping and cutting of the cord, manual assessment of the uterus, and delivery of the placenta and membranes by cord traction.

*"If somebody said to me, 'what would you do?' I think I would probably advise women to have an active management of 3rd stage, having syntometrine and having controlled cord traction. Because I have seen women who have had a physiological 3rd stage of labour and ended up having a massive PPH and a retained placenta. And I don't think it's pleasant at all for the patient and it's certainly quite stressful for the midwife as well."
Interview 19:67-75*

Midwives adopting a non interventionist model viewed physiological management as the most appropriate form of care for all women. They viewed active management as an unnecessary, unwarranted intervention in a normal natural process. Non intervention was regarded as an essential part of third stage care, based upon believing in a woman's ability to birth her placenta naturally without intervention. The view that intervention improved outcome was rejected and a principle of hands off embraced. Such a view led to women being informed that their bodies were designed to deliver the placenta naturally and directed to choose this option. A set pattern of care was then implemented which involved no oxytocics being given, the cord being left unclamped until after placental delivery, no handling of the uterus during the third stage, and no manipulation of the cord to bring out placental delivery. The placenta was delivered by the woman's own efforts and the use of gravity.

"I think perhaps promote a natural physiological third stage, but my motivation for doing that is to try and encourage women to have confidence in their own birth process."

Interview 5:602-605

Midwives adopting a flexible model of care for the third stage had less rigid views on how the third stage of labour should be managed. Midwives in this group viewed both active and physiological management as appropriate forms of care in given situations and that how the third stage of labour should be managed in women at low risk, was for the woman to choose what she herself wanted whilst being supported by her midwife. Midwives in this group did not express positive or negative attitudes toward active or physiological management, though routine use of active management for all women was questioned. Midwives partly embraced the concept of intervention improving outcome but only in given situations and tempered by the belief that women were designed to deliver their placenta without intervention and could be safely supported to do so, again in certain situations. For this group of midwives how the third stage of labour should be managed was based upon an individualistic perspective; what a woman wanted and what was appropriate for her. No one form of care was valued above another and no form of care was regarded as safer or more dangerous. Such a view led to women being informed about the ways the third stage of labour could be managed and directed to choose what they wanted. No set pattern of care was adopted, midwives being flexible enough to adapt whatever pattern of care was chosen by the woman.

"I think the biggest thing I've had to learn as a midwife is really that the less I do, the better I am. But I don't have a knowledge base that I can apply to every woman. I can't filter every woman through a template of my knowledge because every woman will, by definition, respond slightly differently."

Interview 12:899-904

6.5.4 Models of care

Midwives in this study expressed a variety of values and beliefs in relation to the third stage of labour and how it should be managed. These feelings together with other influencing factors had an impact on how the third stage of labour was managed. Whilst

three models of care have been highlighted here, it is important to note that the majority of midwives did not fit neatly into one of the three approaches identified. Rather third stage practice was best represented along a continuum of practice, moving from highly interventionist practice at one end to highly non interventionist practice at the other. The majority of midwives moved along this continuum, at some times being more interventionist and at others less so according to a wide variety of influencing factors. This reflected changing feelings about the third stage of labour and beliefs about how it should be managed.

A: "I've got very mixed feelings at the moment and its really one of the reasons why I was keen to talk to you about it. It might spur me to do something because I always have done active management of the 3rd stage but recently... I am now questioning whether I should always being doing that, and thinking about doing it physiologically."

Interview 18: 41-56

The practice of a small group of midwives existed at the extremes of the practice continuum, with the majority lying between the two poles. However more midwives overall used a package of care based upon some form of intervention. (See table 6.5). This reflected the national picture, where interventionist models of care for third stage practice continue to dominate.

Table 6.5: Number of midwives by orientation to third stage practice

High interventionist	7
Interventionist	23
Flexible	10
Non interventionist	7
Highly non interventionist	3

Those midwives who sat at the extremes of third stage practice (being highly interventionist or highly non interventionist) tended to demonstrate similar yet contrasting attributes to one another. Similarities included feeling passionate about how the third stage of labour should be managed, wanting choice and control to rest with them, and being rigid

in terms of their practice. The type of practice however and the beliefs on which practice models were based, opposed one another; interventionist midwives believing passionately in intervention, non interventionist midwives believing passionately in non interference. Midwives demonstrating such a single minded approach played a significant role in swaying the practice of others, who demonstrated less extreme practices and views. Midwives with single minded and dogmatic views were capable of persuading others to change their practice either towards or away from their own way of working. These midwives played a key role in preventing practice from stagnating at a discrete point along the practice continuum and challenged others to critically review the way they worked and to embrace new ways of working.

In reviewing the categories aims for care and philosophy of care it was apparent that the attitudes, values and beliefs of midwives influenced their decision making in third stage practice. In addition practice variation could be linked to the philosophical lens a midwife viewed her experiences through and the aims of care she espoused. While exposure to variable learning experiences and contextual features provided some understanding of practice variation, how midwives interpreted experiences provided insight into why midwives did not always practice in the way expected of them and how similar learning experiences were interpreted differently and influenced decision making among midwives in diverse ways.

Conclusion

The factors influencing midwives decision making in third stage practice were highly complex and multi-factorial. At any given time midwives used situational triggers to make decisions about how to proceed as well as drawing upon their past learning experiences. Contextual and learning variables were brought together and interpreted by the midwife, who filtered them through a personal value and belief system. In any given situation a midwife was seen to move and adapt according to which influencing factor was dominant. For example even if a midwife had a strong belief about the normality of

childbirth, over time she could be coerced by the environment she worked in to adopt a more interventionist style of third stage care. Conversely a recent traumatic experience of complications of the third stage could overwhelm both a midwife's belief system as well as the situation she found herself in. In other words despite working in a holistic midwifery led culture she could choose to adopt a more interventionist style until her confidence in a woman's ability to deliver her placenta normally returned. In any given situation and at any time in a midwife's career, what influenced a midwife's third stage practice could be altered by any one of a number of influencing factors.

The theory of contingent decision making for third stage practice among midwives which emerged from this study provides an explanatory framework for third stage practice variation. In this study decision making for care was based on an evolving knowledge base, values and beliefs and a number of contextual features. The theory explains why practice variation in third stage care exists among midwives and why changes to care occur over time. It also explains why an individual midwife's practice changes in certain situations, according to the needs of the individual being care for, changing midwife value and beliefs or environmental factors, whilst still providing an explanatory framework for those who maintain established practices.

Chapter seven situates the theory of contingent decision making within the wider literature on decision making and practice variation, whilst also exploring the implications of the study findings; that there is significant practice variation in third stage care among midwives and this reflects how midwives decision making for third stage care is contingent on a number of influencing factors.

Chapter Seven: Discussion and conclusion

7.1 Introduction

In the previous chapter a theory of contingent decision making in third stage practice was proposed to explain and understand practice variation in third stage care among midwives. Midwives interviewed during this study revealed how third stage practice decisions were influenced by three key factors; the unique body of knowledge a midwife used when making decisions, the contextual features of the practice situation in which a midwife worked, and how a midwife filtered her decision making through a set of values and beliefs before choosing what to do. A midwife's practice at any given time was said to be dependent on these influencing factors which in themselves varied. The variation in knowledge, context and values and beliefs at any given time explained the practice variation seen in third stage care among participants.

This chapter will critically evaluate the methodology adopted for this study. This will be followed by discussion of study findings in relation to the wider literature on practice variation and decision making theory, with particular reference to the influence of knowledge, contextual features and values and beliefs on practice decisions. It will be proposed that the theory of decision making in third stage practice presented in this thesis informs and adds to the body of knowledge on decision making in clinical care, offering a unique insight into a highly complex process. Finally the implications of these findings for midwifery practice will be discussed.

7.2 A reflection on the conduct of the project

Conducting a large qualitative study has been a challenging and rewarding exercise. Taking the opportunity to look back at how the study was conducted provides me with the opportunity to reflect on how I could have done things differently and what

I would take forward into any future research endeavours. The challenges I faced related specifically to the adoption of a suitable methodology for the project and the conduct of the research on a part-time basis.

I spent a substantial amount of time struggling to fit this project around an established methodology. I reviewed a number of methodologies in depth and failed to find one which met the needs of the project and the way in which I wanted to conduct the study. It was only as I became aware that methodologies could be adapted to meet individual needs that confidence in my ability to create a way of researching emerged. Whilst the journey to this conclusion was arduous, it gave me an understanding of a number of methodologies from which to approach the qualitative project. While some authors will challenge my adoption of a pluralistic paradigm and a methodology based upon some and not all of the principles of grounded theory, I feel this journey has prepared me to defend my position. In any future research endeavours I will have the confidence at the outset to embrace adapting methodologies to fit a purpose rather than being restricted by established methodologies. In addition this journey reinforced the position I wanted to adopt, to investigate midwifery practice without restrictive boundaries on what I should and should not investigate. In other words to adopt an holistic stance when investigating care provision which embraced the physiological, social, psychological, spiritual and political as appropriate. As a midwife researcher I wanted to cross traditional academic boundaries in the investigation of my profession.

Reflecting on how I conducted the project, a number of critical points have emerged. In the beginning I attempted to do too much. As a novice researcher I had grand ideas about what I could achieve in my PhD thesis which included using multiple methods of data collection and inviting large numbers of midwives and women to participate in the study. This occurred as a result of trying to impress funding agencies working within a positivist framework. As the project developed I realised that large numbers did not necessarily make the grounded theory study more rigorous or valid. Also focussing on one method in depth enhanced the rigour of my work while still allowing me to use other data collection tools to inform and support the data collected.

As a result I felt confident in abandoning some data collection methods. In the future I will have the experience to look critically at what is realistic, achievable and relevant when planning a qualitative project, rather than being affected by outside influences.

More specifically I had difficulty gaining consent from hospital consultants for the project (this took a year). On reflection I could have adopted a more pro-active approach to seeking consent by making appointments to see individuals and explaining the project in person. In addition I did not anticipate that midwives would feel threatened by the project, regarding the study as a management tool to assess competency. Whilst I responded to this appropriately, I should have anticipated that some midwives might feel this way. In future research this will be taken into consideration at the planning stage.

During the data collection phase I became aware that there was a discrepancy in the method of consent I had adopted for women and midwives. While women were required to sign a consent form to participate in the study, midwives were not. Whilst I was satisfied that midwives gave their verbal consent, I felt written consent may have been more appropriate, particularly in the observation phase of the study when I was seen to be asking women for their written consent and not midwives caring for them. This appeared to privilege the woman's consent above that of the midwife, when both were present and being observed. In future projects, consideration will be given to the use of written consent for all participants and not just those receiving care.

Initially I did utilise the services of a secretary to type up interview transcripts. However this was less than ideal for a number of reasons. I found transcribing tapes myself assisted in the generation of theoretical concepts and maintained my closeness to the data. Also having a secretary unfamiliar with the language of midwives meant transcripts were often inaccurately transcribed and meant I had to review the tapes and retype transcripts to fill in the gaps. This experience led me to the conclusion that transcribing tapes myself, while time consuming, was time saving in the long term.

As theory began to emerge during the study, I began to informally seek feedback from midwives about the theory and its relevance to third stage practice. Whilst Glaser does not regard participant feedback as an essential element of the grounded theory study (Glaser 1999), I felt it added to the rigour of the study findings. However I had not planned a formal mechanism for this to occur, which I feel would have been beneficial.

As a part-time researcher working full time I found it challenging to maintain interest and progress in the study. Whilst ill health meant I had to take long periods away from the project, I quickly realised that there was a need to stay close to the study on a weekly basis or when I returned to the research after a period away, I had to spend additional time reviewing what had taken place, before being able to progress. In future projects I will be aware of the need to allocate time to research and to maintain close contact with the research and its progress on a regular rather than an intermittent basis.

7.3 Practice variation in the third stage of labour

In this study midwives described two ways of managing the third stage of labour: active management and physiological management. Dividing practice in this way has been established practice in the UK for a number of years and these management approaches are frequently referred to in midwifery textbooks and published papers (Harris 2004; Rogers, Wood et al. 1998). In this study these two management styles were broadly categorised according to midwife activity; how much intervention was used when assisting a woman to deliver her placenta and membranes. Active management was identified as an interventionist strategy and physiological management as non interventionist. Within these two styles of care there was significant inter and intra practice variation noted, particularly in relation to the amount of intervention midwives chose to use. Practice could not be categorised into two approaches; practice was more clearly represented by a continuum of practice model, which moved from highly interventionist care at one end to highly non interventionist

practice at the other. Inter practice variation (variation in practice between different midwives) was explained by acknowledging that management approaches sat at differing points along the intervention practice continuum. Intra practice variation (variation within an individual midwife's practice) was explained by acknowledging that for some midwives movement along the intervention practice continuum took place as a result of adapting care to individual circumstances. Therefore multiple forms of third stage management existed in practice.

Difficulty in defining what constituted an active and physiological third stage management was supported by the literature. Different management protocols for both active and physiological management were used in a number of studies, (Prendiville, Harding et al. 1988; Begley 1990; Thilaganathan, Cutner et al. 1993; Rogers, Wood et al. 1998) with reference also made to mixed approaches to third stage care (Gyte 1994). The literature supported the notion proposed here, that there is no consensus over what constitutes an active and a physiological management approach and that multiple management approaches exist.

That third stage practice variation can be linked to levels of intervention was indirectly referred to by Logue in 1990 when he was investigating PPH rates among midwives and obstetricians (Logue 1990). He polarised the third stage practice of clinicians by whether they were heavy handed or conservative and linked activity levels with rates of PPH. This study supported Logue's work; different models of third stage practice were identified based upon levels of intervention, though no direct reference was made to the quality of that intervention.

Practice variation in third stage management has been referred to by several authors (Prendiville and Elbourne 1989; Logue 1990), though the concept has never been previously investigated. Discussion in the literature has focussed on physiological management variation which was referred to by Gyte (1994) as piecemeal practice; an approach suggested to have arisen from the dominance of active management in UK care and a lack of skill and expertise in physiological management among midwives

(Gyte 1994). Gyte (1994) suggested that a significant number of midwives used such an approach in the active versus physiological management study undertaken in Bristol in the 1980s (Prendiville, Harding et al. 1988); she used this information to critique their findings.

In this study, midwives supported the notion that active management dominates third stage practice and made reference to lack of expertise among midwives in physiological management. Inter practice variation in physiological management was also supported. However this study also identified intra practice variation in physiological management and midwives referred to a multiplicity of factors influencing their care when adopting such an approach.

More recently inter and intra country variation in active management was identified. Festin et al (2003) completed an observational study of vaginal deliveries at fifteen different sites world wide and noted only one site consistently offered all three components of active management. There was significant variation seen in the use of an oxytocic agent and in the practice of controlled cord traction during the third stage. Variation in early cord clamping was less variable with 79.4% of births in the study utilising this intervention. The authors attributed variation to the lack of access to research based evidence; a reflection of the view that active management was superior as a form of care due to its association with reduced blood loss. Midwives in this study described inter practice variation in active management in a similar way to Festin et al, but intra practice variation was also noted. In addition rather than adopting a simplistic explanation for practice variation, as Festin et al did, this study proposed a more complex multi-factorial model to explain this phenomena. Whilst access to knowledge may in part explain practice variation between sites studied, this study suggested that decision making in third stage management was much more complex and involved a broader range of influencing factors.

Inter and intra practice variation in third stage care has not previously been investigated; no published studies on this subject have been located. However aspects of

third stage management have been investigated. Mercer et al (2000) explored umbilical cord clamping variation among American Nurse-Midwives. Inter practice variation was noted with midwives adopting an early, intermediate, late or after cord pulsation ceased approach to cord clamping. Differing practices among midwives were attributed to differing beliefs and models of care for the third stage of labour; a concept supported in this study.

7.4 Practice variation in midwifery

While there has been no exploration of midwifery practice variation in third stage care, practice variation in midwifery practice has been investigated and reported in the literature. Barwise (1998) identified variation in episiotomy rates among midwives and units and went on to explore various decision making theories influencing midwifery practice in this area. In a further study Williams et al (1998) investigated intervention rates in low risk primigravid women and found significant geographical variation in the use of electronic fetal monitoring, numbers of vaginal examinations per labour, rate of induction of labour, epidural use and rate of episiotomy. The proposed reasons for such variation were linked to the availability of anaesthetists, individual preference and reporting error. Webb and Culhane (2002a) also reported substantial variation in hospital episiotomy rates among physicians in the USA, and associated higher rates with other high rates of intervention generally. They concluded that the wide range in episiotomy rates could be attributed to local policies, procedures, preferences and practice styles of individual physicians and hospitals.

This thesis, whilst investigating midwifery rather than medical practices supported the influence of context and personal value and belief systems on practice decisions. However this project also provided a more detailed understanding of the mechanism by which contextual features and value and belief systems influenced practice decisions, as well as highlighting the relevance of learning in and from practice.

Kaczorowski et al (1998) also explored variation in rates of common procedures such as Cardiotocography (CTG) use, Intravenous hydration in labour (IVI) and episiotomy among Canadian hospitals and found significant geographical variation as well as variation according to the size of the institution delivering care. Small units were associated with less intervention and larger units with more. Despite this finding, the authors did not focus on exploring why smaller units had differing practices, but stressed the importance of getting research based evidence into practice in units where they perceived this was not happening (in smaller units).

Variation in third stage practice in this study was associated with the place of confinement, with midwives steeped in hospital birth traditions favouring interventionist practice. Explanations for this related to reduced autonomy, control by others and the dominance of medical models of care in such environments.

Pattinson and Theron (1989) found significant inter observer variability among midwives using symphysis-pubis measurements to assess intra uterine growth retardation. Whilst no reason for the variation was proposed, the importance of individualised care was identified to address potential error in detection of growth retarded fetuses.

Many studies exploring practice variation focus, not on understanding why variation occurs, but on attempting to control it by instituting standardising procedures. Variation is not seen as a reflection of meeting the individual needs of women, but as an indicator of substandard practice which requires addressing. In this study this was not the intention. The intention was to highlight the unique and complex decision making processes that midwife used when deciding how to manage the third stage of labour rather than to highlight those midwives in whom decision making was suspect or substandard.

Hemminki and Gissler (1994) reported on practice variation in hospitals in Finland highlighting variation in rates of seven non operative interventions (including

electronic fetal monitoring, epidural, oxytocics and pain relief methods) and four operative interventions (amniotomy, episiotomy, instrumental delivery and caesarean section). Again reasons for such variation were attributed to resource allocation, reporting error, professional attitudes towards intervention and the cascade effect of one intervention then leading on to the necessary use of another. This is referred to by Robbie Davis-Floyd (2001) as 'the one two punch'. No mention is made of the value system underpinning such attitudes towards intervention. Arnott et al (2000) investigated variation in oxytocin practice regimes in Scotland but also did not offer up any discussion of why such variation existed.

Sommer et al (2000) provided insight into the variation in use of intravenous hydration (IVI) in normal labour in a birth centre setting in the USA, by talking to certified nurse midwives (CNMs) and registered nurses (RNs) about factors influencing their decision making. The results identified how CNMs and RNs balanced a number of factors before deciding to use IVI in labour, these included patient preference, research based knowledge and clinical judgements. The study also highlighted how the two professional groups expressed different attitudes towards IVI use based around perceived roles in care of women; CNMs focussing on client preferences whilst RNs were more concerned about potential emergency situations arising. In this thesis there was no intention to explore third stage practice variation among different professional groups. However this was highlighted by midwives themselves when talking about the attitude of doctors towards third stage management and how the influence of doctors directed their decision making towards intervention.

Many authors have referred to the ideological differences in the practice of midwives and doctors (Wildschut, ten Hoope-Bender et al. 1999), suggesting the medical model associated with medical care lies at an opposing pole to the midwifery/social/normal life event model of care (Callaghan 1993; Lane 2002; Walsh and Newburn 2002). However these papers did not address the differences found between those in the same professional group who appear not to follow the dominant model of care attributed to their profession. This was addressed in the work of Robbie

Davis-Floyd and St. John (1998), who investigated models of care among physicians in the USA. Their work suggested that despite the dominance of the techno medical model of care among physicians, some experienced a paradigm shift towards either a humanistic or holistic perspective (Davis-Floyd and St. John 1998). Davis-Floyd went on to describe how these three paradigms of health care influenced contemporary childbirth (Davis-Floyd 2001), offering the opinion that,

“...practitioners who combine elements of all three paradigms have a unique opportunity to create the most effective obstetrical system ever known”

Davis-Floyd 2001: S5

Similarities and differences can be seen when comparing Davis-Floyd and St John's (1998) work with the results of this study. Both suggested the practice models of individual practitioners sit along a continuum of practice. Both pointed to movement along the continuum and both reflected polarities moving from the highly technological (to compensate for the inherent defects of the body) towards celebrating the body's ability to birth without intervention. In contrast, Davis-Floyd offered a philosophical framework for practice overall, whereas this study focused on belief systems influencing only one aspect of practice; the third stage of labour. While these belief systems could be applied to other aspects of care, the intention was to describe values and beliefs influencing a small part of the care package midwives provided to women during childbirth. In addition Davis-Floyd and St John (1998) took as their dominant theme attitudes towards technologies and alternative modalities provided by complementary therapies. This was not the case with this study, which used beliefs about intervention to frame the three models of practice. Third stage intervention defined as any behaviour on the part of the midwife which was used to bring about delivery of the placenta.

Callaghan (2000) explored factors affecting the practice of midwives, and proposed the most important factor influencing them was where they sat on the values and beliefs continuum relating to childbirth. The medical model of childbirth was situated at one end of the continuum with the normal life event model at the other. Hospital based midwives were equally divided in their practice orientation, half being

strong believers in the medical model and half being normality focussed. The majority of hospital based midwives who contributed to this study practised within the medical paradigm and this was attributed to spatial and temporal features characteristic of the environment they worked in. Home based midwives in Callaghan's study were orientated towards a normal life event model, but were also sometimes influenced by the medical model, which dominated their relationship with hospitals. The association of hospital birth to the medical model and home birth to a normal life event model was not entirely supported in this study. Whilst hospital based midwives tended to embrace an interventionist model of care, it was only midwives who moved between hospital and community settings who were immersed in a non interventionist culture. Community midwives and midwives in the midwifery led unit used either a flexible/reflexive approach or an interventionist perspective. Several study midwives regarded the judicious use of intervention as necessary to prevent women requiring transfer to hospital following childbirth based upon the belief that a little intervention initially was better than a lot of intervention overall.

O'Connell et al (2003) investigated the obstetric intervention rates of 222 UK maternity units and found variation in rates of induction of labour, epidural use and rates of assisted deliveries. They proposed that units with an interventionist philosophy determined the intervention rates for all procedures investigated; a premise supported in this study by midwives reference to pressure exerted by hospital staff to conform to the dominant interventionist culture. However this project went further in exploring not just contextual features influencing practice variation but also evidence for practice as well as the philosophical beliefs of the midwives themselves. Contextual influences such as culture provided only part of the answer as to what influenced a midwife's decision making. Wiegers et al (2000) noted variation in home birth rates between different midwifery practices in the Netherlands and identified distance from home to hospital, midwife-consultant relationships and midwife/practice characteristics as significant factors in this. Midwife/practice characteristics which favoured home birth and were critical of non medical reasons for hospital birth were associated with higher

home birth rates. Referral for hospital birth was also reduced if midwives and obstetricians had a good working relationship.

Pragmatic reasons for practice variation were proposed by Webb and Culhane (2002b), who identified time of day variation in episiotomy, instrumental delivery and augmentation of labour rates. This was attributed to increased pressures on hospital staff to speed transfer of women out of delivery suite at busy times. Such contextual factors cannot be ignored in any decision making situation, a premise supported in this study, when midwives talked of pressures from hospital staff to get things over and done with.

Significant variation in attitude among midwives to technology in practice has also been reported. Sinclair (2001) found strongly opposing positions on CTG use among midwives, though the majority were largely in favour of the use of this technology. Younger midwives were more likely to have the view that CTGs led to problems. No reason for such variation in attitude was given.

In this study technology was not discussed in any detail by midwives. However similarities can be seen with Sinclair's work. Midwives who strongly favoured the use of intervention in this study and midwives who strongly favoured the use of technology in Sinclair's investigation shared similar value systems framed around trust and dependence on medicalised childbirth.

The wider literature supported the findings of this project, which highlighted significant variation in midwives' management of the third stage of labour. However this study stands alone in providing an explanation for practice variation in third stage care, as this concept has not previously been investigated. Studies which investigated practice variation in other aspects of midwifery care focused on the identification of one causative factor. Again this study stands alone in providing a multi-factorial rather than a uni-factorial explanatory model for practice variation. The theory which emerged from this investigation provided an explanation for why there was inter and intra practice variation among the midwives studied and highlighted the complex and individual

nature of midwifery decision making at this time. When making decisions, midwives in this study, were influenced by their prior learning experiences, by the context in which care decisions were being made and by their own values and beliefs about childbirth and the third stage of labour. It was the interplay between these three categories which influenced how a midwife came to make the decisions that she did and why different decisions were made at different times. This reflected a unique third stage practice paradigm for each midwife at a specific time in her career, which changed to a greater or lesser extent as a result of learning, context and belief systems. How such a theory fits within the wider decision theory literature will now be explored.

7.5 Decision theory

"Clinical judgement is not and never can be Euclidean geometry"
White and Stancombe 2003:4

How health professional make decisions in clinical care is an area of increasing research interest (Dowie and Elstein 1988) (White and Stancombe 2003). It is suggested that this is as a result of an expansion of the possible range of therapies available, increasing interest in clinical training, and rising client expectations of health care practitioners which has subsequently led to there being greater accountability for decisions individual health professionals make (Dowie and Elstein 1988; Thompson and Dowding 2002). Interest in decision theory focuses on answering two questions; how clinicians make decisions (the processes involved) and how well they make them (outcomes). The key element was to understand and improve decisions making.

Decision theories have been categorised into normative, descriptive and prescriptive groups (Thompson and Dowding 2002), though theories can often be attributed to more than one grouping (Elstein and Bordage 1988). Normative decision theorists assume individuals are rational and logical in their decision making. They focus on making decisions in an 'ideal world' and often concentrate on the outcome of the decision making process. An example of this is Social Judgement Theory, which

uses statistical multiple regression techniques to model how information cues relate to the patient's condition and the judgement of the individual (Dowding 2002).

Prescriptive theorists are also outcome driven; interested in improving on the decision making of clinicians by examining how decisions are made and trying to aid that decision making process in order to improve it. An example of a prescriptive theory is Decision Analysis, where decision trees are used to guide practitioners to make the right decision (Dowding 2002). In contrast descriptive decision theorists are interested in the real world of decision making and how individuals arrive at decisions or judgements (the process by which decisions are made). Descriptive decision theorists choose to concentrate on either what input and output makes up a clinical decision (clinical judgement analysis) or the processes by which a decision is made within the brain (process tracing).

The theory of contingent decision making for third stage care is process focussed. Practice variation is directly attributable to the way in which midwives weigh the factors that influence the decision making process according to the circumstances they find themselves in. The theory is not prescriptive, nor is the aim to standardise decision making to an idealised format, therefore it is more in keeping with a descriptive theory.

Decision making has become more and more complex as a result of expansion of professional knowledge leading to significant variation in outcomes from the decision making process. Some would suggest that as this complexity increases, the human brain is unable to cope with the quantity of evidence necessary to make a good decision (Dowie and Elstein 1988). As a result a growing number of techniques to improve clinical judgement have been proposed. Some are based on the need to embrace the uncertainties of clinical decision making by systematically researching them using probability theory to come up with the best decision (Eddy 1988). Other authors have adopted a less critical stance and suggest that tools to aid decision making be based upon providing health professionals with a process by which they can reflect in and on their actions (Schön 1988). Hamm (1988) points to the dichotomy in existence

between decision theorists; those who focus on the intuitive art of decision making and those who view it as an analytical science. He refers to the work of Hammond who identified intuitive judgement and scientific experiment as the poles of a continuum of modes of inquiry (or practice). Hammond also described six modes of practice positioned at different points along this continuum. Practitioners were said to adopt a particular mode according to the structural characteristics of the task and resources available within the context of the situation. Less structured tasks lent themselves to the use of more intuitive modes of practice whereas more structured situations favoured a scientific mode of practice. In the context of this research project, a decision theory which supports different modes of practice is confirmed, though in the continuum of practice proposed here only three rather than six models of care are described. Similarities can also be seen in the work of Dreyfus and Dreyfus (1986) who identified two practice modes based around the level of experience of the health professional. Their suggestion was that novice practitioners used a more analytical approach to decision making and it was only as individuals developed in expertise that they moved from this approach to a more intuitive stance. The assumption was that intuitive thinking was superior and reflected the highly valued expert opinion.

Whilst the midwives interviewed within this study were educated for varying lengths of times, and expertise in third stage management was associated with confidence, there was no evidence to suggest that experts made better decisions. In fact there was a deliberate attempt not to explore this aspect of practice, with the decision making processes of all midwives valued and not accorded more or less status according to years of experience. The focus was to describe the processes by which midwives made decisions as a whole, rather than comparing and contrasting different groups for the efficacy of their decision making processes.

Many decision theorists have attempted to reproduce the decisions of clinicians using clinical judgement analysis and process tracing (Cooksey 1996; Offredy 2002) with the intention of reproducing intuitive judgements to make them available to less experienced practitioners. However such work has been dogged by difficulties in

predicting the weighting individual practitioners give to aspects of the decision making process (Offredy 2002). Such difficulties were supported in this study, as midwives demonstrated that weighting given to different factors influencing the decision making process changed in different circumstances. For example a midwife with strongly held values and beliefs about normality for the third stage of labour would find it easier to put her beliefs into practice in a supportive environment, and less so in environments with an interventionist perspective.

Eddy and Clanton (1988) suggested that all practitioners followed a similar process when making a decision which involved the generating of hypotheses which guided further information collection before such hypotheses were then tested to allow a decision to be made. They suggested that experts were more efficient and more accurate when following this decision making process than their less experienced colleagues.

This study did not focus on mapping the process of decision making, but focussed more specifically on the factors influencing the decision made (input/output). In addition no quality of decision making judgement was made based on experience, though the process of expertise development in third stage practice was explored. At no point in this study was consideration given to quantifying the quality of judgements made in third stage practice. In reality this was not possible due to the lack of substantive evidence that a particular management approach in third stage care was superior (Harris 2001).

The concept of bounded or limited rationality (Newell and Simon 1972) in decision making was not supported in this study. Such an approach proposes that human beings are cognitively unable to cope with the amount of processing required to make a good decision (Newell and Simon 1972). Midwives in this study demonstrated that they utilised a wide range of information when deciding how to manage third stage care, processing this through a contextual and value based lens. Midwives demonstrated careful thought when making these judgements and did not demonstrate any cognitive limitations.

Decision theorists have focussed on attempting to map the decision making processes of health professionals (Cioffi 2002). They have also attempted to provide tools to improve the decision making processes of individuals by either applying an expert model or creating decision trees (Dowding 2002) . This was in an attempt to reduce variation and standardise/technicalise the human decision making experience. This study did not map the complete decision making process of third stage care into its sequential steps. What emerged from discussions with midwives focused on the influencing factors that underpinned midwives decision making, rather than the detailed process itself. In addition there was no intention to improve decision making by utilising decision analysis. Whilst some decision making processes may be mapped in this way, this study suggested that such an approach was not appropriate in third stage management. This was attributed to the complex nature of decision making in the third stage of labour and the potential that practitioners were not always aware of all the influencing factors they were drawing upon when making a decision, making it impossible to map the decision making process accurately. In addition, the individual nature of midwifery decision making *in the third stage reflected the individual focus* midwives adopted when caring for their clients. A basic tenet of midwifery practice is placing the woman at the centre of care and individualising a woman's care to meet her needs (RCM 2001; Department of Health 2004; Secretary of State for Health 2004). Such a belief system was not fully supported in this study, as reflected in the differing value and belief systems midwives exhibited. However it was reflected in the value that midwives placed on their right to individualise their decision making, whether it was to meet their employers, their own or their client's needs. Such an approach allowed midwives to practice in a way they felt most comfortable, and in a way that was most appropriate for the woman being cared for. In clinical guidelines on management of eclampsia, the Royal College of Obstetricians and Gynaecologists (1999) recommended that the drug an obstetrician was most familiar with should be used to treat hypertension in pregnancy as there was no evidence to suggest any difference between different therapies. Whilst the evidence for third stage management remains equivocal, midwives could follow the same principle of adopting the approach they are

most familiar with. Such a principle could, however, be challenged on the grounds that this takes away a woman's right to choose what happens to her in labour, and limits her choices to what the midwife is willing to offer. The counter argument is that women currently do not get offered choice for third stage care and therefore adopting such an approach would make little difference to women's experiences.

In this study the decision making theory which emerged did not focus on the processes by which decisions were made by midwives. Nor did the study attempt to place a quality judgement on the decisions of midwives. What emerged was a contingent theory of decision making, a theory that explained practice variation by reference to the cognitive, philosophical and professional context. As a result inter and intra practice variation was explained, not in an attempt to map the process or standardise such decision making, but to understand the influencing factors underpinning decision making. The theory is more in keeping with the work of Schön (1988) who proposes that the more aware we are of the factors influencing our decisions, the more able we are to evaluate whether the factors we have used to choose what to do are legitimate. This is left, not to others, but to the individual concerned. Reflecting on the cognitive, philosophical and contextual features of third stage practice decision making will enable midwives to best evaluate their own decision making, to develop and improve on the care they offer to women.

Many decision theorists have referred to the bias that individuals bring to the decision making process and point to the need for a more systematic approach to decision making to address this (Thompson and Dowding 2002). It was suggested by Thompson and Dowding (2002) that uncertainty was reduced by developing evidence based clinical questions to ensure decision failing did not occur. Reducing error in decision making to standardise practice decisions has dominated among decision theorists. In this study no such stance was taken. There was no assumption that midwives were making wrong clinical judgements, merely making judgements which led to varying outcomes, i.e. changes in practice. Unlike the majority of decision theorists who looked towards addressing problems in decision making, the theory of

decision making proposed here focused on demonstrating the complexity of decision making among midwives at this time and to provide midwives with an individualised quality framework from which to reflect upon their decision making processes.

Many decision theorists have focused on one influencing factor in decision making; sources of knowledge, values and beliefs or contextual issues. In contrast the theory proposed here highlights a wide range of factors that influence decision making and that decision making is contingent not on beliefs, or knowledge or *context*, *but on* all three. To explore this further, a review of the decision making literature relevant to each of these three influences on decision making was undertaken.

7.6 Influences on decision making

7.6.1 Learning (Midwifery knowledge)

"If clinicians rely on a range of different knowledge and warrants in their judgement making, we need to recognise these and explore them as topics in their own right."

White and Stancombe 2003:22

One of the three substantive categories informing contingent decision making theory was learning (midwifery knowledge for practice). Individual midwives, in their decision making in the third stage of labour, drew upon a knowledge base created from their formal, informal and experiential learning experiences; a unique knowledge base developed through exposure to a range of learning opportunities. In addition, whilst formal learning played a part in practice decision making, it was the oral and experiential nature of knowledge development among midwives which was highlighted, with midwives predominantly developing their expertise in third stage care from learning in and from practice.

Many decision theorists have focused on the types of knowledge underpinning clinical judgements (Siddiqui 1994; White and Stancombe 2003). Due to the extensive nature of the literature on these subjects, it was not possible to complete a thorough analysis. However commonly recurring themes are discussed in relation to the findings of this study.

When exploring reasoning for clinical decision making, authors often referred to different types of knowledge for practice, and discussions were often framed around the science versus art debate. In midwifery Lane (2002) referred to the traditional midwifery model of knowledge based on experiential, intuitive and practical skills (the art of midwifery) and compared this to the rational, scientific knowledge of the doctor. White and Stancomb (2003) referred to hypothetico deductive reasoning based upon similar realist principles and juxtapose this with intuitive reasoning or the tacit dimension (taken for granted knowledge that is difficult to articulate). Davis-Floyd and Davis (1996) referred to ratiocinative thinking or reasoning with the counter approach being referred to as intuitive. Lane (2002) went on to articulate the objective nature of medical knowledge and the productivist approach to midwifery knowledge, which she suggested was

“constructed through our interactions with each other.”
Lane 2002:27

Such dichotomies helped to reinforce the concept that midwives use either one or other of these types of reasoning when making decisions. However it was apparent in this study that theoretical or declarative knowledge (knowing that) was used alongside procedural knowledge (knowing how) to inform decision making; a point supported by Cioffi (1998). Midwives did not ignore the formal learning they were exposed to but incorporated it with their practice based learning. Eraut et al proposed a model of professional learning which highlighted the development of a professional body of knowledge for practice based upon the premise that clinical expertise was derived from both experience and formal education (Eraut 1994; Eraut, Alderton et al. 1998), a concept supported in this study. In addition Sookhoo and Biott (2002) said that

knowledge based upon implicit theory reflected pragmatism and experience and was used in idiosyncratic ways. Such idiosyncrasies were expressed in this study, with midwives drawing upon knowledge from practice in unique ways to inform their decision making. For example one midwife used the experience of a post partum haemorrhage to support a non interventionist approach to third stage care when it might be expected that she would advocate intervention in such a situation.

Multiple sources for midwifery knowledge have been identified in the literature. Wickham (2001) highlighted evidence, reflection, history and intuition as just some of the many sources of knowledge midwives draw upon in their practice. Hunter (1999) highlighted how the experiences of midwives in the past had potential relevance for current practice and referred to the oral tradition of knowledge transfer as a legitimate model for research. Evidence of an oral tradition of knowledge transfer was substantiated in this study; midwives demonstrated how practical wisdom was passed down from midwife to midwife through talking and interacting with their professional colleagues

Lamond et al 1996 (1996) investigated decision making in acute medical and surgical wards and identified that four types of information were used in decision making; verbal information, information gained from observation, prior knowledge and written material. This study supported these findings in that a variety of sources of knowledge were used in practice decision making for third stage care, with talking and observing the practice of others playing a key role. Luker and Kenrick (1992) suggested 35 factors influenced community nurses' decision making with practice based knowledge, the context in which care was delivered and discussions with colleagues playing a large part in the decision making process. This study also supported the work of Luker and Kenrick (1992) in that contextual and knowledge based factors influenced decision making. However Luker and Kenrick (1992) did not explore values and beliefs influencing processing of information and affecting decisions, which was a key component of this study. Flemming and Fenton (2002) explored the concept of

evidence based practice to inform decision making and proposed that evidence based decisions were made up of four components; clinical experience, research evidence, patient preference and available resources. Again this study supported such a premise whilst acknowledging that these influences did not always carry the same weighting as each other. While midwives in this study pointed to what women wanted, often in third stage management it was other learning, contextual and value based factors which played the more significant part when deciding what to do.

In an exploration of how nurses used clinical information, Offredy (2002) identified practice based knowledge, context and discussions with colleagues played a large part in the decision making process. She suggested that nurses placed greater weight on visual and subjective cues than textual and objective data. Midwives in this study demonstrated a similar preference for what they saw and heard in practice. Though reference was made to written evidence, this tended to be utilised only when there was uncertainty over what to do in practice.

With the polarisation of types of knowledge for practice, arises the debate over which form of knowledge is superior. The ranking of evidence for practice is well established in the UK with scientific objective knowledge dominating (Stewart 2001; Lane 2002; Freshwater and Rolfe 2004) and often referred to as authoritative (Stewart 2001). Other authors challenge such dominance and critique the concept that there is one legitimate way of knowing (Davis-Floyd and Davis 1996), pointing to alternative sources as being equally valid. However, whilst the scientific objective knowledge domain dominates, little legitimacy is given to the more subjective dimension, where relativist principles underpin the creation of intuitive ways of knowing (White and Stancombe 2003). In this study, it was apparent that midwives utilised a broad range of types of knowledge, with particular emphasis placed on the practice based knowledge of what works. Unlike the dominant technical rational knowledge warrant, midwives in this study chose to use a more integrative approach, sourcing knowledge for practice in both the technical rational and the intuitive domains of practice. However practical

wisdom handed down from midwife to midwife dominated. As midwife practitioners, it was this source of knowledge, which was used on a daily basis to inform and guide practice. Such a finding has been supported by other authors who point to practical experience having more weight than written accounts or formal theory (White and Stancombe 2003).

Whilst study midwives demonstrated using different sources of knowledge, the value placed on those sources of knowledge did differ. Midwives expressed strong emotions about the third stage and demonstrated how these emotions filtered information drawn from the situation and prior learning experiences to make decisions. Damasio (1999) referred to emotion and rationality being linked in decision making, with reference made to the re-embodied clinician who used rational empirical knowledge together with emotion to frame decision making. In this study the concept of the embodied clinician was demonstrated as midwives linked their learning with the contextual and value based features in which their learning was interpreted. In this way the concept of value free evidence for practice was challenged; a concept supported by others (Price 1995; Stewart 2001; Coombs and Ersser 2004; Freshwater 2004b)

In current practice in the UK, there is a drive to standardise the care health professionals give in a variety of contexts. The government agenda through agencies such as the National Institute for Health and Clinical Excellence, is to produce practice guidelines which guide the practice of individuals and frame their decision making on evidence based practice. Evidence based practice in this context privileges the technical rational forms of knowledge which underpin care, as reflected in the positioning of randomised controlled trials at the top of evidence classification tables (Royal College of Obstetricians and Gynaecologists 2000). Such guidelines also assume that there is a right way to practice, when often in clinical situations, the practitioner chooses to adapt and amend their practice to meet the needs of the individual situation. This was apparent in this study where midwives, when asked how they managed the third stage of labour, used the term, 'it depends'. Contextual decision making pervaded third stage

management and clinical guidelines, perceived as standards or protocols have the potential to confine and limit the individualising of care.

An interesting finding in this study was that the majority of midwives interviewed identified that there was probably a guideline for the third stage of labour somewhere, but they did not know what it said. During this study, practice guidelines were in fact developed for both active and physiological management. Utilising scientific evidence as the basis, the development group mapped out a guideline for physiological management which included placing the baby at the level of the introitus until the cord had been clamped and cut. The rationale for this was evidence from a study that found free flow of blood to and from the baby via the umbilical cord occurred after birth (Lapido 1972). If such a guideline had been approved (this aspect was in fact challenged), the practice of midwives would have been severely restricted. Midwives would not have been able to place the baby on the woman's abdomen to keep the baby warm and to encourage mother-infant interaction. Nor would midwives have been able to place the baby close to the woman's breast, which promotes breast feeding success and also initiates the release of naturally produced oxytocin which aids placental delivery. In addition the midwife would not have been able to encourage the mother to pick up her baby to move to a more comfortable position if she had chosen to birth upright. Nor would she have been able to encourage the woman to move to an upright position for placental delivery, until after the cord had been clamped and cut. From this study, all these practices were drawn upon by midwives when managing the third stage of labour; practice knowledge drawn from experience and also supported by more traditional forms of evidence.

What was apparent when exploring knowledge for practice was the dominance of certain types of knowledge over others in the forming of guidelines. If guidelines continue to be developed in this way, then the intuitive reflexive nature of third stage practice may be severely limited. Several authors supported this notion by identifying

how the artistry of midwifery knowledge was being marginalized by the authoritative status of the techno-medical model (Kelly 1997; Sookhoo and Biott 2002). Sookhoo and Biott (2002) identified that midwifery had many indeterminate areas of practice which had evolved through practice and could not easily be translated into rules or recipes. Such a tenet was supported in this study; nuances of practice were developed over a period of a midwife's career. Conversely midwives early in their careers may gain a sense of security from unambiguous guidelines and conventions, but they also over simplify the knowledge held by a community of practice (Sookhoo and Biott 2002). Therefore it is imperative when formulating practice guidelines that a range of knowledge are used and that the experience midwives acquire as a result of practice experience is acknowledged (Sookhoo 2002). Also to recognise that practice guidelines are what they say they are, guides to practice rather than rods to beat midwives who dare to practice in alternative ways.

Evidence based practice has been highlighted as an effective way of improving clinical care. It focuses on what works. However there are limitations to adopting such a narrow perspective to decision making. It oversimplifies the process of decision making and sometimes does not translate into some areas of practice. Also it assumes that there is an accepted body of knowledge to drive clinical care in all situations. In this context the evidence regarding management of the third stage is not clearly delineated. Whilst active management remains dominant, the evidence supporting such practice is equivocal. Therefore relying on such evidence in clinical care is neither appropriate nor rational.

The concept that clinical guidelines can reduce inappropriate variation in care in clinical practice is supported by Rycroft-Malone (2002). However in the context of this study such a premise was challenged as practice was seen as a fluid experiential process which changed to meet the individual nature of care situations.

The concept of knowledge as an off the shelf commodity was challenged in this study as it has been by others (White and Stancombe 2003). The unique way in which individuals were exposed to sources of knowledge pointed to knowledge for practice as a highly individual commodity. Study midwives utilised a unique body of knowledge which framed the clinical care they offered to women. However a critical point is that such uniqueness does not necessarily mean knowledge sourced in this way is of a good quality or that decisions made on this knowledge will be good decisions.

Rather than adopting an off the shelf approach to knowledge through restrictive practice guidelines, a more appropriate response may be to provide a mechanism by which midwives critically reflect on their knowledge for practice, amending and developing as needed. In this study midwives demonstrated such skill, developing and enhancing their management for the third stage of labour through learning in and from practice itself. The quality processes were embedded in the individual reflective cycle midwives used to inform and guide their practice. Schön (1988) refers to this process as reflection-in-action; a means by which practitioners create practice knowledge as a result of experiences in clinical care.

“Medicine has been willing to accept and to argue publicly that many aspects of decision making will always evade protocols and guidelines and that some judgements rely on individual expertise, ‘humaneness’ or patient choice”

White and Stancombe 2003:145

Advocates of evidence based practice often take a strong position against other ways of knowing, arguing there are no better ways of knowing than those derived from scientific experiment (Sackett, Rosenberg et al. 1996). White and Stancomb (2003) challenged this dogmatic stance and offered a rationale in support of embracing both traditional and alternative sources of knowledge (those drawn from history, social interaction, emotion and moral judgement). In support of this approach, study midwives highlighted how they drew upon a wide range of information when making decisions and offered a clear rationale for the management of care adopted, based upon a range of

knowledge and warrants. Midwives did not throw out evidence based practice in favour of other sources of knowledge, but integrated all sources of knowledge together to evaluate and plan their activities within a social and philosophical context. Hall suggested that at the sharp end of practice we are

"obliged to be realists, constructivists and constitutive' all at once."
Hall 1997:240

White and Stancomb (2003) suggested that this more relative stance on clinical judgement was more realistic than the naive realism promoted by evidence based practice. Midwives in this study demonstrated such relativity in their decision making, drawing upon a variety of sources of knowledge to inform their practice. So,

"...subjectivity becomes a positive force and the act of judgement-making a form of artistry, a magnificent free hand flourish created using the medium of formal knowledge but not reducible to it."
White and Stancombe 2003:24

Midwives in this study clearly demonstrated how expertise in third stage management developed over time to a lesser or greater extent. A model of expertise development was formulated which reflected consolidation, experimentation, responsiveness, integration and routinisation of practice. The process by which midwives moved through cycles of expertise development was similar to those outlined by the seminal work of Benner (Benner 1984). Third stage practice developed in response to working and interacting with others in clinical situations. This led to many midwives being able to exercise discretion in their practice; choosing between a range of options, rather than sticking rigidly to established practice from training. Sookhoo and Biott (2002) also referred to the concept of exercising discretion and how it increased with experience.

The concept that midwifery is a discursive practice was also supported here as midwives demonstrated they sought opportunities to discuss practice developments in the third stage of labour with others. Such discussions, if perceived as relevant were

then integrated into practice through trial and error. In this way midwives constructed their own practice according to the interactions they had with other midwives and personal experiences of care. Lane (2002) referred to how midwives constructed their own practice according to age, experience and practice setting and suggested the less experienced required development. Whilst age was not a factor in this study, experience and practice setting played a significant part in expertise development. The developmental needs of less experienced midwives were also identified, with development influenced by the cultural environment and individuals within the workplace. Midwives were either encouraged to try new ways of working, or restricted in their practice by the cultural environment in which they worked. Sookhoo and Biott (2002) also referred to workplace culture and how working environments which valued holistic assessment and midwifery judgement facilitated the exercising of discretion in practice.

It has been suggested here and elsewhere that midwives do not have a static discrete body of knowledge (Lane 2002). Midwives in this study used a range of knowledge and warrants when making practice decisions; drawn from formal, informal and experiential learning opportunities. It is also apparent that whilst formal learning opportunities played a part in decision making, it was informal and experiential learning which were most highly valued and incorporated into midwives decision making processes. Learning in and from practice underpinned the expertise development of midwives in third stage management to such an extent that environments in which midwives were restricted from learning from one another and their experiences, impacted upon their expertise development. This highlighted how considering knowledge and warrants as the only influencing factor on decision making was inappropriate. The importance of context of care was also highly significant.

7.6.2 Context

In this study, the context in which midwives made decisions about how to manage the third stage of labour was a significant influencing factor. Midwives third stage practice decision making was influenced by the physical environment for birth, the cultural environment for birth and the individual situation in which midwives offered care to women. Midwives were influenced by environmental factors, individuals and the cultural context of care situations. In addition, decision making was situational, being driven in different directions by tailoring care to the individual woman and child being cared for as well as the birth environment at any particular moment in time.

Bucknall (2003) highlighted a major gap in the literature on the influence of the clinical environment on decision making. In his study exploring the clinical landscape of critical care nursing, he highlighted how contextual features such as patient situation, availability of resources and interpersonal relationships affected decisions. In this study insight into the role of context in clinical practice decision was also highlighted, it being identified as one of the key influences on decision making.

There is growing recognition that focussing on information processing in decision making is reductionist and provides a limited understanding of what influences decision making. Consideration of the other factors influencing decision making is needed to consider how best clinicians can evaluate the decisions that they make. Whilst Bucknall (2003) highlighted the need to consider contextual features in decision making, this thesis goes even further in highlighting the interface between knowledge systems, contextual features and values and beliefs and their collective influence on decision making in third stage practice. Bucknall (2003) does however make one very important point in that reducing variability in decision making has not occurred despite a shift towards evidence based practice. Perhaps this is a reflection of the consideration of only one of the influencing factors in decision making. Consideration of the multiple

factors influencing clinical decisions may be more likely to have an effect on practitioner's behaviour.

Birth environment is an important influencing factor when making decisions in third stage practice. Study midwives caring for women in differing birth environments practiced in different ways during the third stage of labour; hospital based midwives were more likely to practice an interventionist approach and midwives assisting women to give birth across hospital and community boundaries were more likely to favour a non interventionist approach. Birth environment affecting decision making was also highlighted in a study which explored perineal outcomes in a home birth setting (Aikins Murphy 1998). A significantly higher intact perineal rate was found in this study compared to others and the authors suggested certain factors associated with home birth attended by certified nurse-midwives (CNMs) reduced trauma. However what these factors might be was not discussed. Sookhoo and Biott (2002) also referred to clinical judgments being influenced by labour ward policies, available resources, clients and midwife experiences. Particular emphasis was placed on the influence women and co-workers had on how practice knowledge developed. Midwives in this study demonstrated similar features; midwives framed their practice decisions around the woman being cared for, and the influence of colleagues.

Contextual factors influencing care were also investigated by Webb and Culhane (2002b) who observed time of day variation in rates of obstetric intervention in vaginal delivery in a hospital environment. Rates of intervention during the day were found to be between 10 and 86% higher compared to those at night. The authors suggested such variation could be explained by the need to transfer women out of delivery suite quickly at busy times. Whilst midwives in this study did not mention time of day as an influencing factor in third stage care, reference was made to the need to get things over and done with at busy times with the implication that intervention assisted in this endeavour. Other authors have also associated frequency of obstetric procedures in

vaginal delivery with women being cared for and care givers independent of clinical need for intervention (Reid, Carroll et al. 1989; Roberts, Tracy et al. 2000).

Midwives in this study identified key cultural features which affected their third stage practice. This related to the norms of behaviour and the values and beliefs of the group that drove care provision. Different groups of midwives expressed different value and belief systems and individuals within groups were controlled to behave like the group they belonged to by overt and covert means, particularly in hospital environments where midwifery practice was under greater control by core delivery suite staff and doctors. In such environments cultural norms favoured an interventionist perspective which was reinforced through power and control of midwifery practice. Midwives in this context lacked autonomy in decision making and were dominated by others.

Medical hegemony in decision making is not a new concept and has been referred to by several authors (Siddiqui 1996; Freshwater 2000b; Walsh and Newburn 2002; Coombs and Ersser 2004) and is clearly presented here. It is suggested such dominance often prevents practitioners from implementing their value and belief systems in practice (Siddiqui 1996). Siddiqui wrote a paper exploring midwifery values and identified variation in beliefs and commitment to advocacy and autonomy among midwives (Siddiqui 1996). She also highlighted how getting midwives to identify and reflect on their own values and beliefs might influence their interaction with other health professionals at work.

A link has been made between a medicosocial climate and intervention rates with practice norms, social influences and payment for services linked to such rates (Cosmi and Klimik 1993). Cosmi and Klimik (1993) called for practitioners to re-evaluate their attitudes towards intervention to ensure rates of intervention do not continue to rise. In Mercer et al's (2000) work on cord clamping the pressure of the hospital setting influenced practice more than personal value and belief systems.

Dover and Gauge (1995) also investigated the attitude of midwives towards fetal monitoring. Whilst identifying the importance of attitude to midwife behaviour, they

also highlighted that attitude did not always affect practice due to other factors such as organisational structure and policies. In addition midwife attitude was found to polarise around place of employment. More interventionist fetal monitoring practices were associated with working in a regional unit. The authors concluded that place of work affected the attitudes and professional behaviour of midwives (Dover and Gauge 1995). In addition whilst associating attitude with behaviour, they also found a discrepancy between expressed values and behaviour and attributed this to environmental factors.

In studying third stage practice, some midwives expressed attitude-behaviour differences and cited their working environment and the pressure brought to bear on them to conform to the norms of the community they worked within; particularly in medically dominated hospital environments. Axten (2000) suggests that midwife's judgement is peer guided; midwives look for confirmation and approval of their clinical judgements. This was supported here; midwives who worked in certain cultural environments sought approval from their peers and were required to conform to the cultural norms of the institution they worked in.

7.6.3 Attitude, values and beliefs:

Values and beliefs played a significant part in the decision making processes of midwives in this study. Midwives expressed different aims for care with aims directly linked to what midwives viewed as most important in the delivery of care. Midwives also demonstrated differing values and beliefs regarding third stage management, with care packages existing along an interventionist-non interventionist practice continuum. Such models of care reflected differing philosophies of care for third stage management. From discussions with midwives it was possible to identify three midwife philosophies for third stage practice; interventionist, non interventionist and flexible/reflexive. These three philosophies reflected midwives attitudes, values and beliefs in relation to flexibility, activity, risk, medicalisation of childbirth, choice and control, safety, confidence, oxytocics and feelings/views on the third stage of labour. Such differing

philosophies in part explained the practice variation in third stage management seen among midwives in this study; values and beliefs then framing the practice of midwives. Such values and beliefs may then be seen to confine midwives' practice; individuals only able to see what their theoretical lens (or personal philosophy) allows them to see (White and Stancombe 2003). This is in part supported by this study but not completely. If a midwife adopts wholeheartedly a belief that women bleed during the third stage and that intervention in third stage management will reduce bleeding, she will view all experiences through this lens and justify her active management style against this narrow view. Conversely if a midwife believes that bleeding during the third stage is caused by intervention, her care will also be subsequently confined by her value and belief system (or theoretical lens). However there are midwives who do not adopt such a blinkered view. Reflexive midwives demonstrated that they were open to other ways of looking at the third stage of labour in certain situations and sought a theoretical lens to fit the context of the situation they found themselves in. Not all midwives were confined by a strict theoretical code of practice, some were reflexive enough to embrace other theoretical explanations for third stage practice in certain situations. Such flexibility pointed to a holistic interpretive model of care which failed to be dogmatised by a particular viewpoint.

Within the wider literature, there is also evidence of different models of midwifery care for practice being used. Lane (2002) explored the concept of intervention in childbirth among 22 Australian midwives and identified three models of care for the profession; medical (obstetric-assistant) model, midwifery (professional, independent) model and the hybrid model. In keeping with the study findings presented here, Lane found the majority of midwives used a hybrid model for practice drawing upon features of both the medical and midwifery models which lay at opposing ends of the practice model continuum. Lane (2002) suggested these midwives had contradictory views about the body, believing on the one hand that childbirth was a natural process that could be impeded by the social context of birth whilst being able to switch seamlessly to the medical model if the body failed for physiological reasons. In the

models of midwifery practice for the third stage of labour described here, a less critical stance was taken when describing those midwives who used competing discourses as in the flexible/reflexive model of care. Midwives using this model utilised a variety of knowledge and warrants for their practice, demonstrating the ability to draw upon relevant discourses for specific situations, adapting and modelling their care on the needs of the particular situation and the women they cared for. Midwifery values and beliefs were not used to confine practice to a particular model for all, but informed practice as appropriate, changing according to the contextual features of a given situation.

Other authors supported the premise that midwives and other health professionals had differing values and beliefs from one another and that these influenced their practice (Wildschut, ten Hoope-Bender et al. 1999). There was a wealth of evidence that pointed to the divergent belief systems held by doctors and midwives; doctors said to follow a medical model and midwives said to follow a midwifery or holistic based model (Rooks 1999). It was suggested these models were based upon beliefs that philosophically led to the professions taking contradictory stances over what was important when caring for pregnant and childbearing women. It was suggested that this causes conflict between professionals as the focus of professional care is different (Siddiqui 1996; Walsh and Newburn 2002).

Such different belief systems could reflect the client group that is being cared for. Obstetricians apply a medical model of care to pregnant and childbearing women as their practice is based upon caring for women who deviate from the normal. Conversely midwives being the primary carers for women at low risk would be expected to have an alternative focus. Rooks suggested that midwifery and medical models of care were based on particular perspectives with resultant approaches being complementary to one another (Rooks 1999). In addition she suggested the two approaches were not mutually exclusive and that there was wide variation, (a point supported by this study). A practice continuum was proposed with the medical model of care at one end and the midwifery model at the other. Rooks suggested that if practices were plotted on a frequency curve,

that the curve would be bimodal. Most practices would fall towards the middle of the continuum incorporating elements from both perspectives. There would be few pure expressions of each model and two distinct peaks, each reflecting the practices of the midwifery and medical models respectively. Third stage care in this study was also mapped along a practice continuum based upon intervention. However three rather than two models were suggested with few expressions of the two extremes of practice and only one frequency peak at the midpoint, identified by the reflexive practice model.

Wildschut et al (1999) investigated practice variation in antenatal care in The Netherlands and highlighted that midwives and obstetricians had differing perspectives; obstetricians focused on medical problems while midwives adopted a psychosocial approach. Conflict was said to arise when such models of care did not focus on meeting the needs of women. Conversely other authors challenged the concept that models of care could be divided along professional boundaries. For example Davis-Floyd and St John (1998) highlighted that not all obstetricians necessarily adopt a medical model to care. She proposed three models of care among obstetricians and suggested that some obstetricians moved from one to the other as they embraced a more holistic perspective to care provision. Callaghan (2000) completed a study which explored factors that influenced the clinical practice of a group of midwives in Australia who were either self employed or employed in hospitals. She proposed that belief systems influence practice and identified two models of care among midwives: the medical model and the normal life event model. Whilst the models of care proposed here focused on intervention as the key component, results were in keeping with the work of Callaghan. The two belief systems sitting at polar opposites reflected similar values as those expressed within the medical model (interventionist perspective) and normal life event model (non interventionist). However the models proposed here go one step further in providing a third model of care which sits at a midpoint between the divergent models at the polar extremes. In addition it was acknowledged that midwives did not always sit neatly within prescribed categories of practice and that models of care expressed along a continuum more clearly reflected multiple models of practice available.

Models of care are based upon a set of values and beliefs that guide practice. If different models of care for practice are identified, then the assumption must be that different values and beliefs are held by practitioners. Differing beliefs among doctors and midwives have been identified in the literature with evidence of belief systems between professional groups sometimes converging and sometimes diverging. However what evidence is there to suggest that there are varying values and beliefs underpinning midwifery practice? This study supported such a premise by identifying varying beliefs about childbirth and the third stage of labour among interviewed midwives. Such a stance was also supported by others. Stamp and Kruzins (2001) found varying views on the benefits of perineal massage among midwives but did not offer an explanation as to what influenced them. Dover and Gauge (1995) explored midwifery attitudes towards electronic fetal monitoring (EFM) and also found attitudes changed according to the risk status of the woman being cared for. However midwife preference did not always match practice with organisational structure inhibitors resulting in environmental constraints which accounted for this discrepancy. Multiple factors influenced the decision to use EFM; confidence playing a key role. In addition midwives who preferred to use EFM were more likely to believe it was safer and more reliable than intermittent auscultation, whilst the opposite was true for midwives who preferred not to use it. Other factors influencing practice included where midwives worked (regional units where high risk women cared for more likely to prefer CTG, written policy influencing care etc).

There was also evidence within the literature that beliefs influenced practice. Mercer et al (2000) highlighted how beliefs about umbilical cord clamping among nurse-midwives in the USA influenced their practice. Those midwives who adopted a late clamping strategy were highlighted as having strongly held beliefs about physiological birth processes. However it was also noted that beliefs were not always sufficient to follow through in certain situations, suggesting other influencing factors such as institutional policies. In contrast a Dublin study (O'Connell, Gurney et al. 1993) highlighted how a particular philosophy of care governed the rate of obstetric interventions. O'Connell et al (2003) proposed that obstetric units with a philosophy

toward intervention had higher intervention rates for all procedures compared to those that did not stressing the relevance of institutional values and beliefs in care provision.

From this study and the work of others, it is proposed that values and beliefs and underpinning philosophies of care influence midwifery practice. In this study midwives demonstrated differing values and beliefs from one another and such values and beliefs did impact on midwives decision making in the third stage of labour. However differing values and beliefs alone were insufficient in explaining the practice variation seen among those studied. Decision making was also influenced by the other contextualising features, such as the context of care and the midwifery knowledge midwives drew upon when making decisions. This thesis proposes an explanation for practice variation in the third stage of labour which integrates values and beliefs within a contextual framework. Whilst midwives expressed values and beliefs about the third stage of labour, these were not always the driving force in their decision making. Other factors such as learning experiences and context also played a part. Decision making in the third stage of labour can then be seen to be a complex interplay between learning, contextualising and interpreting features. Practice variation in the third stage of labour can be explained by the uniqueness evident within each of these substantive influencing factors reflecting a population of midwives who base their decision making for third stage care on a fluid knowledge, contextual and interpretive base. Whilst some authors recognised the importance of evidence and values being integrated into one framework when considering decision making, (Hunink, Glasziou et al. 2001) this study proposed that consideration be given to the contextual features of decision making as well. There was little evidence in the wider literature that such an inclusive perspective on decision making had been adopted previously. It is only by considering all the influencing factors in decision making that a detailed understanding of practice variation can be fully understood. In this study, practice variation in third stage care was explained by the use of such an inclusive framework of knowledge, philosophy and context.

Some authors have rejected the simplified notion of decision making and have called for an understanding of clinical judgement that recognises its 'humaneness'

(Downie and Macnaughton 2000); that decision making is a fundamentally human activity tied to history and the social world. As a result it is suggested that consideration in medical training be given to the teaching of history, humanities and philosophy. Such a suggestion was supported by this study in that the importance of values and beliefs on decision making was highlighted together with the influence of historical practices on current care. Educating midwives about these aspects may assist in raising awareness of factors influencing midwifery decision making.

This study offers some insight into the multiple factors that influence decision making, both on a knowing, contextualising and interpreting basis. This study is more in keeping with welcoming and embracing the concept of decision making as a humanistic holistic process where uncertainty is embraced and acknowledged.

7.7 Implications for practice

This thesis highlights practice variation in third stage care among midwives and explains this practice variation with a theory of contingent decision making. This theory identifies three key influencing factors on midwives decision making; learning, the context of care and the philosophical context of practice decisions. Decision making is contingent on these three factors; midwives choosing how to manage the third stage of labour influenced by these factors. The unique nature of influencing factors at any given time explains the variation in practice seen. The evolutionary nature of midwifery knowledge for practice among individuals is highlighted as is the way in which environmental features influence care. Care decisions are also then informed by a midwife's individual philosophy and her position on the interventionist-non interventionist practice continuum at any given time. Practice, as a result, can be seen to be fluid and constantly changing as a result of these influencing factors, which express how knowledge context and values and beliefs can change over time as a result of experiences. As a result midwives need to consider a number of issues in relation to their practice.

In relation to knowledge for practice, greater consideration needs to be given to how midwives develop knowledge for practice and the importance placed on informal and experiential learning opportunities. To facilitate such learning, midwives need the support of each other and opportunities to discuss care and care decisions to learn from them. In addition the development of more formal learning opportunities in third stage practice could enhance the development of a critical, analytical body of theory for third stage care. Devising working environments to facilitate discussion of formal, informal and experiential learning for third stage care could build upon evidence for practice leading to expertise development. Recognising the unique way in which expertise in third stage practice emerges may facilitate situations in which midwives can support each other in this learning process, so that practice does not stagnate and become routine. Midwives could also consider how to develop working environments which recognise the value of learning in and from practice as well as the more established evidence for practice from techno-medicine. As a result guidelines could be developed which embrace multiple sources of knowledge rather than privileging that which has emerged from the techno-medical domain. Also that midwives see guidelines for what they are: a guide to practice which may be of particular relevance to the novice practitioner developing expertise. As midwives become more skilled, they need to be confident that when they deviate from such guidelines to meet individual needs, they will not be penalised. The current climate surrounding guidelines for practice does not embrace such an approach, favouring the control of practitioner's decision making through them. More and more such guidelines are being used in courts of law as being reflective of good practice (Hurwitz 2004).

In relation to values and beliefs, encouraging midwives to reflect upon their value and belief systems and how they influence their decision making can facilitate a critical evaluative practice model, where midwives are aware of the influence of their own philosophy on the care they offer. Such reflection may aid in re-evaluating the appropriateness of dogmatic viewpoints which lead to third stage practice environments in which women are controlled and disempowered by the values and beliefs of the

health professionals who care for them. Specifically reflecting on personal values and beliefs may help midwives to implement a strategy to address the limited or directed choices they offer to women at this time.

This thesis clearly identifies the important role played by midwives with extreme views who challenge established practices and encourage midwives to look at new and different ways of working. Whilst such midwives reflect rigid and dogmatic viewpoints, they do have an important role to play in encouraging the majority of midwives to think critically about their practice and to adapt if appropriate. Such midwives prevent midwifery practice from standing still.

In relation to contextual features of decision making in third stage care, this work raises awareness among midwives of the powerful influence physical and cultural environments have on the practice of midwives during the third stage of labour. Whilst recognising the individual nature of care for an individual woman, it is important that midwives also recognise the contextual constraints placed on their practice, particularly in environments where the medical model dominates. Once recognised, midwives can work toward changing cultural norms, which tend to encourage an interventionist model for third stage practice in low risk women. The value of environments which facilitate autonomy among midwives is clearly demonstrated as a means to achieve this. In addition practice managers may reflect on the cultural environment in which midwives practice and acknowledge the constraints placed upon midwives by such environments. This could facilitate a rethink on the strategy of developing larger and larger maternity units dominated by a medical culture, where midwifery autonomy is diminished and choices available to women for third stage care are reduced. More attention needs to be placed on the cultural and physical environments in which midwives practice to address these issues.

A further issue raised by this thesis is the importance midwives place on individualising their care to the needs of the individual woman being cared for. Whilst other contextual features may prevent this from occurring in certain situations, the majority of midwives in this study clearly demonstrated that practice should be

dependent on the individual woman they are caring for during childbirth. Attempting to standardise practice is therefore not an aim of those involved in this project. Such findings challenge the drive currently prevalent in the National Health Service to standardise practice. These results support the woman centred approach that midwives strive to achieve in a non supportive health service culture.

This study offers insight into why practice variation in midwifery management of the third stage of labour exists. An explanatory framework is provided which highlights how practice decisions at this time are contextual to the learning midwives are exposed to, the values and beliefs midwives have and the context in which care is delivered. By raising awareness of all the factors involved in decision making at this time may assist midwives to reflect upon their decision making and amend and adapt it according to this individualised evaluative process. Schön's (1991) model on reflection-in-action provides a potential framework for such a process, whereby midwives can look holistically at all influencing factors on decision making for third stage care and learn from such a reflective process.

7.8 Conclusion

This work set out to investigate midwifery practice during the third stage of labour and to explore the concept of practice variation. The project aims were a) to identify and explain the variety of ways midwives manage the third stage of labour, b) to see if it was possible to identify midwifery characteristics associated with different third stage management practices, c) to identify models of midwifery care during the third stage and d) to identify and explain the development of midwifery expertise in managing the third stage of labour.

Utilising an interpretivist research paradigm based upon the principles of grounded theory, information was collected and analysed from a variety of sources and

the following conclusions emerged. Study midwives chose how the third stage of labour should be managed. Midwives identified two types of third stage management: active and physiological. Descriptions of these two types of practice varied among midwives and within an individual midwife's practice. The complexity of third stage practice was demonstrated by the identification of 22 aspects to third stage care, with midwives having at least two and up to five choices of management for each aspect. This highlighted the potential for millions, if not billions of ways of managing the third stage of labour. Third stage practice was categorised according to the level of intervention of the midwife, with practice models being shown to exist along a continuum of practice from highly interventionist to highly non interventionist. Small numbers of midwives practised at each end of the continuum, with the majority practising somewhere between the two extremes. The midwives who contributed to this study also demonstrated movement along this continuum as a result of being influenced by a number of factors. Three models of midwifery care in the third stage of labour were identified; the interventionist approach, the non interventionist approach and the reflexive perspective. An explanation for practice variation is identified; the theory of contingent decision making for third stage care. This theory identifies how practice decisions in third stage care are influenced by three key factors; the unique body of knowledge a midwife draws upon when making decisions, the contextual features of the practice situation a midwife is exposed to, and how a midwife filters her decision making through a set of values and beliefs before choosing what to do.

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