

Decision making in pregnancy and childbirth:

Hopes, expectations and realities

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## Abstract

### Introduction:

Pregnant women increasingly expect to be involved in decisions about their care in collaboration with their clinicians. This involves a of sharing information, knowledge, experience and values, by both the woman and the clinician in order to make decisions together. Shared decision making is especially pertinent in the management of pain in labour where there are many options available, with varying degrees of evidence and acceptability. Pregnancy and childbirth is a context in which the appropriateness of shared decision making has been yet to be thoroughly investigated.

### Objectives

The key objectives of this research are as follows:-

- To carry out a systematic literature review covering women's experience of labour and of pain relief in labour:-
- To ascertain the views and expectations of various groups of women and professionals using qualitative methodology in order to develop appropriate decision support:-
- To develop the most appropriate decision support for choice of pain relief in labour in order to assist women in the decision making process.

### Methods

A qualitative approach was used to gain an in-depth perspective of the experience of women and professionals. Semi-structured interviews were conducted with women at various stages of their pregnancy and during their post natal period, whilst focus groups were undertaken with obstetricians, anaesthetists, delivery suite and

community midwives. Data were transcribed verbatim and analysed using the principles of the constant comparison method. My analysis was informed by my relativist approach to my work, understanding that there are multiple realities which need to be examined to gain a full understanding of shared decision making in this context. The themes that emerged were used to identify the issues that were important to the two groups.

### **Results:**

The three key result areas were identified were:-

#### 1. Discordance between expectations and realities

Discordance was identified between what women expected in areas such as how painful and how long labour would be, as well as in what support would be provided for example. There was also discordance between what the professionals said they told women and the information women wanted:-

#### 2. Information

Despite the information provision professionals still felt that women were generally unprepared for labour. This ill preparation pointed to information that did not answer questions women were asking, was presented at times when women were not receptive and in a format that was not appropriate:-

#### 3. Values

At no point in pregnancy were women routinely asked what was important to them regarding their labour in relation to pain relief. Understanding a

woman's values would allow a midwife to offer options of pain relief and support that were congruent with these values, thus helping the woman achieve the birth she hoped for.

### **Discussion**

The information needs of both women and professional's needs to be recognised to ensure that woman have access to sufficient detail to enable them to engage in decision making. The information should be delivered in a format and at a time which is acceptable to the women and which translates into knowledge. During the antenatal preparation of women it is important for midwives to support women in clarifying what is important them – their values. Clarification of a woman's values will enable the healthcare professionals to discuss options that fit with women's values and ensure they receive the support they desire during labour.

I propose that during pregnancy we need to ensure women are fully informed about their options, the risks and benefits and are clear of their values, but do make a decision antenatally – merely express a preference. This model of antenatal preparation would ensure that a woman was making decisions during labour in reaction to the level of pain she was experiencing based on her knowledge and how these choices related to her values.

Women also need to be made aware antenatally that during labour there are elements of unpredictability and events may rapidly become of a more urgent clinical nature. At times of an emerging urgent clinical situation midwives and clinical staff are in a

better position to recommend a course of action rather than deliberate options with the woman.

### **Conclusion**

To support women and healthcare professionals in engaging in shared decision making the following recommendations needs to be considered.

The maternity service needs to refine its information provision including the risks and benefits of each option. Provision needs to be made for those women who require enough information to allow them to make informed decision as well as those who require a greater depth of information.

Support needs to be developed for midwives and women to allow them to develop new skills to allow engagement in shared decision making. Developing skills for shared decision making early in pregnancy will equip women to make the many decisions they face during pregnancy and once their baby is born.

A critical examination of antenatal education provision needs to undertaken to ensure information is being provided at a time and in a format that is both appropriate and accessible to a wide range of women. Responsibility for preparation needs to be made explicit and suitable resources of information accessed and shared.

Finally there needs to be a review of the current birth plan, to assess it's suitability as a tool for assessment of knowledge, clarification of values and communication to support shared decision making.

In conclusion the most appropriate way of supporting women is to ensure that, at the beginning of pregnancy, midwives start to prepare women to make decisions by giving them the skills necessary to be involved in shared decision making. This preparation needs to be underpinned by appropriate information delivered in an accessible manner and informed by what is important to the woman.



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## 1 Introduction

This is a health service research study, conducted using qualitative methods, on decision making regarding pain relief in labour. Chapter 1 gives an overview of the fields of decision making and pain relief in labour, helping to locate this study in the wider body of literature. The two central concepts of decision making and pain relief in labour are revisited throughout the thesis to examine the relationship of the data to each of the areas and the impact of this research. This first chapter concludes with a section examining the background to this particular study, how the subject came to light and the necessity for further research.

### 1.1 The role of the patient in decision making

The first concept is that of decision making, the literature on which is rapidly expanding. There is a spectrum of decision making found in clinical practice from paternalism at one extreme, through shared decision making, to informed decision making by the patient at the other extreme, which has been identified by many working in this field (Charles et al., 1999a; 1999b; Dudley, 2001). Charles et al (1999a; 1999b) in their work detail the different models of shared decision making. In the paternalistic approach to decision making the information exchange is one way—from doctor to patient—the professional determining what information is given to the patient and what treatment is the best option. In informed decision making, the flow of information is largely the same as that in the paternalistic model—from professional to patient. The clinician is still the primary source of the relevant

information on the risks and benefits of the different treatment options, but the difference is that this then enables the patient to make an informed choice. In informed decision making, beyond this information transfer the clinician has no further role in this approach (Charles et al., 1999a). The defining nature of shared decision making is its interactive approach, both parties sharing their information, acknowledging that, whereas clinicians possess clinical expertise, patients are experts regarding their own medical condition (Department of Health, 2001), sharing their personal details and values. This sharing enables an evaluation of the options and a jointly agreed, shared, decision (Edwards and Elwyn, 2001b; Edwards and Elwyn, 2009). The distinction between paternalistic and shared decision-making relationships between clinician and patient has been further clarified by Roter and Hall (1992); cited in (Edwards and Elwyn, 2009). Roter and Hall identified a range of decision-making approaches—from default, where none has control, to paternalism, with dominant doctors and, finally, a consumerist model that is associated with the reverse of paternalism, focusing on consumer rights and doctor’s obligations. Finally, Roter and Hall (1992) identified a model that they termed mutuality, which is characterised by a sharing of decision making; they saw this as the favoured approach. There are many definitions of shared decision making, but the definition that is generally accepted, and the one on which the discussions in this thesis are based, is that provided by Charles et al (1997: 681): “Shared decision making is the involvement of both patient and doctor, a sharing of information by both parties taking steps to build a consensus about preferred treatment and reaching an agreement about which treatment to implement”—the sharing of information on options and values being fundamental to achieving full participation in the process.

Over recent years there has been an increasing move towards a form of clinical decision making that engages the patient (Bekker et al., 1999). Charles et al. (1997) saw this push for shared decision making as instigated by a variety of factors, including the consumer rights movement, the management of long-term chronic conditions in the community, as well as informed consent, which implies in itself a minimum amount of shared decision making. This surge of interest and urgency to involve patients in shared decision making has led to an assumption by some that, if shared decision making works in one clinical area, it will work in others. It is this assumption that has led me to explore this area of clinical care in more detail.

There is evidence that points to other reasons for this surge in shared decision making. Wennberg and Gittlesohn (1982) believe that it has been led in part by an identification of unexplained variations in practice. Those authors, prompted by variations in rates of hysterectomies, looked at 193 small areas in six States in New England and compared surgical rates across similar geographical areas. They found that some communities were receiving more treatment than others, although there was little difference in the population to warrant this variation and they argued that this was more to do with differences in styles of medical practice. The procedures where rates varied the most were the ones where there was no clear best option in terms of the medical evidence available. In light of this discovery of variation in practice, Wennberg and Gittlesohn (1982) advocated promotion of more informed medical consumers. Such informed patients would understand the risks and benefits of the different treatment options and make their own preferences known to their clinicians. By making the decisions, these patients would help to eliminate unnecessary healthcare. According to a recent article by Mulley (2009), unwarranted variation

(such as that identified in New England) can be reduced if more time is invested in supporting clinicians and patients in their decision-making process, including the implementation of measures of quality and outcomes. This proposal, highlighting the role of an informed patient, had been outlined earlier by Barry et al. (1995), who examined men who were suffering from benign prostatic hyperplasia. Barry et al. also suggested that decisions should be based on patient values and preferences, as well as on possible outcomes of different treatment options. Those authors understood that patients wanted to be given a great deal of information about their condition, and that enhanced patient participation might (as Mulley (2009) and Wennberg and Gittlesohn (1982), had previously suggested) reduce unwarranted variation in practice and improve medical decisions. The authors did have one reservation, in that they thought that patients who were bothered by mild symptoms might demand costly and unwarranted treatment, but this concern was shown to be unfounded in their study. A further study of decision making (Hingorani and Vallance, 1999) demonstrated how presentation to the patient of individualised health benefits, which could result from changes in their lifestyle via a variety of actions, allows the patient to participate in deciding which intervention is preferred to achieve the health gains. All three of these studies have shown how presenting patients with information on the clinical evidence and the likely effects of alternative options could allow patients to be better informed about treatment options and to make better-informed decisions. In fact, many decisions often have to be made in the face of some uncertainty and ambiguity regarding the outcomes of treatment, and sharing this responsibility can mean that the patient is involved in the decision (Mulley, 1989).

As well as presenting patients with accessible information on the risks and benefits of treatments in order for them to assess which treatment option they would prefer, an essential element of shared decision making is that of clarification of values, sometimes also referred to as values elicitation (Edwards and Elwyn, 2009). This involves finding out what is important to the patient and how this might affect or drive their decisions. It is often difficult for a patient to articulate which factors are important in helping them to make a decision. Discussion is needed between patient and clinician to clarify values and to support patients' involvement in the decision-making process; this can be helped by the use of decision aids, which are discussed below.

There is an important distinction which needs to be made between information provision and patient decision aids. Information leaflets give details, risks and benefits on the particular condition or treatment option being considered. Whereas, decision aids are interventions designed to help prepare patients to participate in making specific choices, and to deliberate choices among options, by providing them with information about the options and outcomes that are relevant to their health status, help patients clarify and communicate the personal value they associate with different features of the options (Elwyn et al., 2006; O'Connor et al., 2006).

According to the Cochrane review (O'Connor et al., 2006), effective decision aids have three essential components: first, they provide evidence-based information on the risks and benefits of treatments or interventions; secondly, they help patients to recognise the importance and the sensitive nature of their decisions; finally, by providing structured steps for the discussion, they help patients to clarify and communicate their values, i.e. what is important to them. One of the primary

objectives of this communication between patient and doctor is to facilitate dialogue and for patients to make choices between possible treatment plans. In an ideal world, the patient would come to the consultation with sufficient knowledge about the available options, and clarity about their own personal values, along with the ability and desire to engage in decision making; in turn, the doctor would support the patient in this process. However, as this is seldom the case in reality (Barnato et al., 2007), such communication needs to be supported, decision aids being one effective method of achieving this.

A report issued by the Department of Health in 2003, “Patient and public involvement in the new NHS” (2003), called for increased patient participation. The aim of the report was to improve services outcomes and reduce inequalities. However, despite the national importance of such engagement, as Callaghan and Wistow (2006) have pointed out, the actual level of engagement in such national initiatives to increase participation in health care is low.

Because of this relatively low engagement of patients, interventions such as shared decision making have been backed by the Department of Health in an effort to inform patients about health care options and to involve them in decisions (Elwyn and Edwards, 2001). The focus on patient-centred care and the involvement of users in service development has continued to challenge the traditional paternalistic approach to decision making in health care, with emphasis now on informed patients and shared decision making. A wide variety of decision aids have been developed to support better-informed decisions, ranging from patient leaflets, to interactive CDs and



computerised decision-support tools (Edwards et al., 2000). There is also a developing field of work on risk communication and perception, examining how best to convey information in such a way that patients understand the risks and benefits they face (Edwards and Elwyn, 2001a; Robinson and Thomson, 2001) . What is currently less evident is research that considers the context in which decisions are made—the setting, the people involved, the organisational structures and the expertise; these are particularly relevant with regard to an emotive event such as childbirth. Childbirth (in particular, decisions about pain relief in labour) is one such clinical area where there is scant evidence about the best way to engage women in the decision-making process.

## 1.2 Decision making regarding pain relief in labour

To put this study into context, this section focuses on the precise nature of pain in labour, on some of the debates that surround it, and on decision making directly associated with the relief of that pain.

Pain in the early stages of labour is a result of uterine contractions and may be felt in the abdomen, back and pelvis (Camann and Alexander, 2006); these contractions increase in intensity and frequency as labour progresses. The pain experienced in labour is subjective, with all women experiencing pain of varying duration and intensity (Yearby, 2000).

Historically, various methods of reducing or eliminating labour pain have been introduced, with varying degrees of success. Details of the history of pain relief in labour and of the methods available are given in chapter 3. It is important to emphasise that the pharmacological relief of labour pain is a relatively modern intervention, with ether and chloroform first being used in 1847. Subsequently, several other options have been introduced, some with more evidence of effectiveness—and some of which are more acceptable to women—than others.

The fact that methods of pain relief are readily available does not mean that they are acceptable to all women or professionals working in this field. In fact, there is an ongoing debate around pain relief, often referred to by Leap (1998; 2001; 2000; Leap and Newburn, 2010) and others as the “pain paradigm”. On one side of the argument there are supporters of the approach that pain is something that can, and should, be worked through naturally to achieve a fulfilling birth, allowing the body to take control and release its own natural painkillers, endorphins (Evans, 2006). Others oppose this debate, arguing that, if options are available to ease pain, they should be used and seen as a benefit of modern living; women should not feel guilty or ‘a failure’ for making best use of them.

Not all women may be aware of the options available for pain relief, nor may all of these options be available on all delivery suites in the UK. Units that are midwifery led may be restricted to options such as Transcutaneous Electrical Nerve Stimulation (TENS), water births and opiates, if they do not have anaesthetic cover. Those hospitals with consultant-led units may have access to all of the different options,

including the epidural, but this access may be restricted if anaesthetic cover is not available 24 hours a day.

As identified in section 1.1, the drive in the NHS is to involve more patients in making decisions about their healthcare. However, these choices need to be set in the context of which service is involved, the location where the service is being accessed, the cost, the implications of the choices, and the co-morbidities or risk factors of the individual patient. It would be wrong and misleading to imply that pregnant women have unbounded choices, with no regard for cost, for example, or for the infrastructure needed to support the provision of a particular choice (Schott, 2001).

The involvement of women in decisions about labour was the focus of a report entitled 'Changing Childbirth' (Department of Health, 1993), which emphasised the development of women-centred care. This was followed by 'The NHS Plan', which was also clear that patients were to be at the centre of reforms and that choice could be exercised only by properly informed patients (Department of Health, 2000). One of the key recommendations of the National Institute for Health and Clinical Excellence (NICE) has been that pregnant women should be offered evidence-based information and support to enable them to make informed decisions regarding their care (National Institute for Health and Clinical Excellence, 2003). Another NICE recommendation has been that information should include details of where women will be seen and of who will undertake their care. NICE went even further, noting that addressing women's choices "should be recognised as being integral to the decision making process" (National Institute for Health and Clinical Excellence, 2003:4); however, no

instruction or guidance was given as to how these choices ought to be addressed or included in routine practice.

Following such guidance from the Department of Health and NICE, it is now widely accepted that women should be given information and be involved in decision making during pregnancy (Watkins and Weeks, 2009). What is not clear is what information they should be given, and what format and level of detail would most benefit women and help them to engage in this decision-making process (Watkins and Weeks, 2009). The Midwives Information and Resource Service (MIDIRS) aims to be the central source of information relating to childbirth and to disseminate this information to midwives both nationally and internationally, thereby assisting them to improve maternity care (MIDIRS, 2010). However, the MIDIRS leaflets are very much information leaflets, as opposed to aids to support decision making.

The relationship between the provision of information and the quality of subsequent choice and decision making in significant life events, such as childbirth, remains uncertain. It is unclear whether, in fact, pregnant women are indeed “expert patients” (a term often used when referring to a patient with a long-term chronic condition) in terms of how well informed they are and how empowered they are to be fully engaged (Department of Health, 2001). There is some evidence to suggest that participating actively in the decision-making process, as recommended by organisations such as NICE, is an important issue in childbirth satisfaction (Hodnett, 2002). However, factors affecting satisfaction in childbirth may not be the same as those that contribute to effective decision making: perceived effective decisions in childbirth could include

those with a minimum degree of decisional conflict felt after making the decision (O'Connor, 1995); a positive outcome (minimal pain felt, healthy newborn); or satisfaction with the actual decision-making process.

The recent clinical guidelines on antenatal care state that women should be offered evidenced-based information in order to make informed decisions, and that women's choices should be recognised as an integral part of the decision-making process (National Institute for Clinical Excellence, 2003). Pregnant women are given a great deal of information on aspects of pain relief in labour, provided by a range of sources, at different intervals and of variable quality (O'Cathain et al., 2002). This information is currently provided in different ways and its effectiveness is largely untested. The timing of the provision of the information, its content and the medium by which it should be provided, all remain a matter for debate and investigation. There are many examples of decision aids to support shared decision making that have limited availability to women making decisions about pain relief before or during labour. It is important to reiterate that information leaflets themselves do not support the decision process, but merely provide the information. Decision aids help to clarify the decision that has to be made and the options available, including the risks and benefits as well as patient values. Given this scarcity of decision-support tools, such effective ways of helping health professionals to support pregnant women in making informed decisions was identified by NICE as an area ripe for research (National Institute for Health and Clinical Excellence, 2007).

The birth plan was seen by some as a form of a decision aid originally designed as a way of assisting women in decision making, helping women to focus on their own power and to control what happens to them (Fahy, 2002). The birth plan was intended to clarify women's decisions, to help them to communicate these to caregivers and thus (it was hoped) avoid unwanted escalating interventions (Lothian, 2006). Lothian (2006) maintains that a birth plan was never intended to be a list of requests but, rather, a tool for communication, to provide an ongoing dialogue and a structure within which to make choices. This concept of a tool that aids dialogue, to enable the patient and healthcare professional to reach a joint or shared decision, is the premise on which decision aids for shared decision making were set, but this intended role for birth plans seems to have been neglected in recent practice.

The premise for the body of research reported here was to work with local health professionals and pregnant women in order to identify how decision making is currently viewed as regards pain relief in labour and how this process could be supported, given the background identified. This could then help to improve decision support in this clinical setting.

### 1.3 Background to the study

This study resulted from my interest in decision making, especially in those clinical areas that have yet to include shared decision making in everyday clinical practice. It seemed, at one point, to be assumed that, because shared decision making was successful in some clinical areas, it would work in all areas. After extensive reading

and discussion, it seemed to me that an important area to investigate was one in which information was given, a decision was made and the action occurred at different points in time. This idea of decision making being an ongoing process that evolves over multiple encounters (Entwistle, 2000), a range of people and a distributed time frame, has been termed by Rapley (2008) ‘distributed decision making’—a way of understanding the distributed nature of decision making that must be examined if we are to understand the processes at work in the context of pregnancy and labour.

Regarding its distributed nature, information about pain relief is provided to a woman in advance of the actual decision— in fact, throughout pregnancy. A discussion is held between the woman and her community midwife at approximately 36 weeks of pregnancy about the choices she would like to make for pain relief. These choices are sometimes recorded in the maternity records and referred to by some as a birth plan. These choices are not acted upon until a woman goes into labour 2–6 weeks later, when she is usually supported by a different delivery-suite midwife. This process of distributed decision making gives rise to many questions, not least what happens in the period between the decision being made and the event. If a decision is being made in the context of a chronic illness, the patient has some experience of the problem and of living with that condition. In pregnancy we are asking women to make decisions on the relief of a pain that has never been experienced by primiparous woman, one which multiparous women find difficult to remember, and one that professionals find hard to describe. There is also no accurate way of predicting how painful each individual labour will be, how long it will last or what complications might arise, all of which are important factors which affect what choices are made about pain relief. There are many similarities between decisions in labour and other clinical decisions; however,

the urgency of decisions in labour is where this differs. Although information is given and discussions take place with pregnant women well in advance of labour, and options are considered and planned for, the actual decisions are made throughout labour and often as a matter of urgency when labour actually begins, responding to the events of labour. Despite acknowledging that we cannot answer some questions posed by women in order to make a decision (e.g. how long will labour last; how painful will it be?), women are still being asked to make a decision and to formulate a birth plan, at between 36 and 38 weeks of pregnancy.

Given that women need to be informed and wish to make decisions as part of their preparation for labour (McCrea and Wright, 1999; McCrea et al., 2000a), and midwives will continue to have discussions with women about their choices as part of antenatal care, my intention was to examine ways of supporting both women and the professionals that assist them in this decision-making process. I set out initially to develop a decision support tool for women, to prepare them for decisions about pain relief in labour. What actually occurred is discussed in subsequent chapters, and led to a detailed examination of decisions in labour, from which I hope to identify the most appropriate future means of supporting women and midwives in decisions about pain in labour.

The original research objectives of this study were as follows:-

- To carry out a systematic literature review covering women's experiences of labour and of pain relief in labour;



- To ascertain the views and expectations of various groups of women and professionals using qualitative methodology in order to develop appropriate decision-making support;
- To develop the most appropriate decision support for choice of pain relief in labour in order to assist in women's decision-making process.

The structure of my thesis is informed by the experiences of the women and professionals involved in this study. The aim of this, my first chapter, is to set out the context in which this work was undertaken, identifying the key literature in the fields of both decision making and pain relief in labour. Concepts such as shared decision making, decision aids, values elicitation and quality of decisions made have been introduced in this chapter. Chapter 2 details a systematic literature review that was undertaken in order to provide some background to this study. The literature review looked at work that had focused on the expectations and experiences of women regarding pain relief in labour. This detailed review of the literature not only informed the questions that I would later ask the women and professionals, but also allowed me to place my work in the broader field of recent research. Chapter 3 provides a general historical narrative on pain relief in labour, as well as essential background information on each of the methods of pain relief commonly used in obstetric units in the UK. The aim of this chapter (3) is to provide background information as well as an insight into the evidence that is available to women and professionals to enable them to make decisions. In chapter 4 there are details of the methods, methodological approaches, ethical and theoretical issues and of the analysis that was utilized. Chapter 4 also discusses the key theoretical and methodological approaches, giving an insight into how the research was conducted and how the analysis was approached.

Chapters 5, 6 and 7 detail the results from the interviews with the pregnant women in the study. Chapter 5 focuses on the results pertaining to the antenatal period and the issues that were important to women throughout this time. Chapter 6 concentrates on those aspects during delivery that were important to women, while chapter 7 focuses on the postnatal period. Chapter 8 outlines the results obtained from focus groups conducted with professionals who work with women during pregnancy and labour. The Discussion chapter (9) outlines my reflections on undertaking this piece of work and identifies my main findings and the implications that these have for the fields of decision making and pain relief in labour; the practical implications of the results are also outlined. Finally, the conclusion chapter (10) draws together some of the findings described in the Results, and reiterates the main arguments made throughout the thesis, as well as possible ways forward for this research area.

## 2 Expectations and experiences of pain relief in labour: a systematic narrative review of the literature.

This chapter gives details of a literature review that was undertaken as a result of a gap identified when the literature on pain relief in labour was initially explored. During the research for the background to the study, it was apparent that there was discordance between women's expectations of pain and methods of pain relief in labour and their experience. There also appeared to be a similar mismatch between women's expectations and their involvement in decision making. As a result, I conducted a systematic review of the literature to address the following questions (Lally et al., 2008): what are women's expectations about pain, its relief during labour and their involvement in the decision-making process; are women's expectations met by their experiences; The results of this literature review are discussed in terms of their impact on the field of shared decision making generally, and specifically in relation to decisions about pain relief in labour.

### 2.1 Background to the systematic review

As well as identifying why it is important to conduct this review, I must also outline what is meant by 'expectations' and locate this work within research from the expectations field. According to Leung et al. (2009), expectations are an individual's assessment of the most likely outcomes. These expectations are derived from multiple sources, including severity of their symptoms, how vulnerable they feel, previous experience and knowledge (Kravitz et al., 1996). Thompson and Sunol (1994) developed this notion further, stating that there are actually four different types of expectations: the first type is 'ideal', referring to the desired or preferred outcomes;

the second is 'predicted', which relates to what is actually expected; the third type is 'normative', which is what should happen; the final type is 'uninformed'. It is important to recognise that understanding health expectations may become increasingly important in attempts to make decision making relevant to individual patients (Janzen et al., 2006), with efforts to match patients' decisions to their expectations. A hope is sometimes referred to as 'an ideal expectation, a person's assessment of the most desirable outcome' (Leung et al., 2009), although this is not accepted by all (Janzen et al., 2006). Hopes and expectations feature highly in decision making generally, and in decisions about labour in particular. Health professionals need to maintain a balance between encouraging reasonable hope and creating unrealistic expectations (Leung et al., 2009).

Throughout pregnancy, women create expectations of how painful labour will be. Childbirth is viewed as one of the most painful events that a woman is likely to experience. The multidimensional aspect and intensity of labour pain far exceeds the pain in chronic disease conditions (Niven, 1992; Niven and Gijssbers, 1984). It is, therefore, not surprising that many pregnant women have concerns about the pain they will encounter and the methods of pain relief that will be available during labour. A woman's lack of appropriate knowledge about the risks and benefits of the various methods of pain relief is thought to heighten her anxiety (Abdullah, 2002; Raynes-Greenow et al., 2007), which is a factor that decision support seeks to address.

As discussed in the background chapter, women are increasingly expected, and themselves expect, to participate in decisions about their healthcare, including those

involved in pregnancy and childbirth (Bekker et al., 1999; Elwyn and Edwards, 2001; Say and Thomson, 2003). There are many decisions in which women may be involved during pregnancy—decisions regarding tests for fetal abnormalities, decisions regarding options for place of delivery, and decisions regarding the options available for pain relief in labour. The choices available and utilisation of various pain relief options vary both within and between countries (Health Care Commission, 2008; National Health Service, 2009). Wennberg and Gittlesohn (1982) argued that the uncertainty of the evidence for pain-relief options accounts for this unexplained variation and that involvement of patients would enable them to make better-informed decisions by being presented with both the clinical evidence and the likely effects of alternative interventions. These recommendations on involving patients in the decision-making process may be appropriate to prepare women during pregnancy but may not be viable for women once labour has begun.

As discussed previously, one method of elaborating upon the options, the risks and benefits, and providing support in the decision-making process, is that of decision aids. A Cochrane systematic review of studies evaluating the use of decision aids concluded that they can improve knowledge, reduce decisional conflict and engage patients more actively in decision making, but have little effect on satisfaction and a variable effect on the actual decisions made (O'Connor et al., 2006). Although a great deal of information is made available to women throughout their pregnancy, and there are several published Cochrane reviews on the effectiveness of specific obstetric interventions (Hodnett et al., 2003; Hughes et al., 2003; Smith et al., 2001), there is limited availability of decision aids to assist women when making decisions about pain relief in labour (MIDIRS, 2005a; Roberts et al., 2004). Recent guidelines on

routine antenatal care in the UK identified the need to implement effective ways of helping health professionals to support pregnant women in making informed decisions during labour (Department of Health, 2007; National Institute for Health and Clinical Excellence, 2003). This also asserts that healthcare professionals should consider how their own values and beliefs inform their attitude of how women ‘ought’ to cope with pain in labour and that professionals should ensure that their care supports the woman’s choice (National Institute for Health and Clinical Excellence, 2007).

This relationship of support between healthcare professionals and the patient has been identified in a systematic review that sought to summarise what is known about satisfaction with childbirth, with particular attention to the roles of pain and pain relief, and this has provided some insight into women’s expectations and experience of pregnancy (Hodnett, 2002). In a review of 35 reports of 29 studies, Hodnett has identified four key factors that influence satisfaction—namely personal expectations, the amount of support from caregivers, the quality of the caregiver–patient relationship, and involvement in decision making; for example, the author reported that an increase in involvement in decision making led to a greater degree of satisfaction. Those four factors appear to be so important that, when women evaluate their childbirth experiences, they override the influences of age, socioeconomic status, ethnicity, childbirth preparation, the physical birth environment, pain, immobility, medical interventions, and continuity of care (Hodnett, 2002).

This systematic review was undertaken in order to address some of the gaps in knowledge identified in the recent guidelines, and those identified in my own search

for information regarding expectations and experience in particular. The following sections detail the methods used to conduct the review and the subsequent analysis of the included papers.

## 2.2 Systematic Review Method

Combinations of key words used in this literature search included childbirth, labour (labor), pain, pain relief, obstetric analgesia, experience and expectations. Studies of both pharmacological and non-pharmacological methods of pain relief were considered. The following literature databases were searched using those key words: Medical Literature Analysis and Retrieval System Online (MEDLINE, 1966–2007), Cumulative Index to Nursing and Allied Health Literature (CINAHL, 1982–2007), Bath Information and Database Service (BIDS, 1951–2007), Excerpta Medica Database Guide (EMBASE, 1980–2007), Midwives Information and Resource (MIDIRS), Sociological abstracts (1963–2007) and PsychINFO Medline (1906–2007). The Cochrane database of systematic reviews and grey literature was also searched. Publications were limited to English language only. Searches were also performed of the references of the key papers included in the review.

The search identified studies using both qualitative and quantitative methods; both were included in this review in order to provide a comprehensive integrative overview of the current evidence. Studies were included if they used recognised robust methods to investigate or describe women’s experiences and/or expectations about pain relief and the decision-making process. Studies were excluded if the focus was on a specific

type of pain relief (for example, effectiveness of the epidural), a measurement of pain (a scale), or another aspect of labour such as place of delivery. Discussion of specific methods of pain relief was excluded because this review was intended to capture women's expectations and experiences regarding pain in labour generally, rather than for a specific method of pain relief, and it was decided that inclusion of these papers would be too wide a remit for this review. Theoretical papers and personal accounts about childbirth were also excluded, as they did not fulfil the inclusion criteria for good-quality research design, with no robust methods identified and were often narratives of bad experiences. It should be noted that expectations, experiences and decision making in the quantitative papers were often secondary outcomes rather than the primary outcomes of the research; papers where this was the case were included as they were still able to provide important information relevant to the review question. All qualitative papers were assessed in terms of validity, methods used and analysis of the results, using the Critical Appraisal Skills Programme (CASP) appraisal tool for qualitative research (Public Health Resource Unit, 2006) (Figure 1). For quantitative papers, a framework for appraising a survey (Petticrew and Roberts, 2006) was appropriate for the needs of this review including an additional question on whether or not ethical issues had been taken into account (Figure 2).



**Figure 1 : Qualitative Assessment Tool**

1. Was the aim of the research question clear?
1. Is a qualitative methodology appropriate?
2. Detailed questions
3. Was the research design appropriate to address the aims of the research?
4. Was the recruitment strategy appropriate to the aims of the research?
5. Were the data collected in a way that addressed the research issue?
6. Is there evidence of reflexivity?
7. Have ethical issues been taken into account or have the ethical implications been appropriately considered?
8. Was the data analysis sufficiently rigorous?
9. Is there a clear statement of findings?
10. How valuable do we think the research is to this body of knowledge?

**Figure 2: Quantitative Assessment Tool**

1. What was the response rate?
2. What question is the study aiming to answer?
3. Was the survey specifically designed with this question in mind?
4. Does the survey measures used allow this question to be answered clearly?
5. Is the population surveyed clearly described?
6. How was the survey carried out?
7. Is the denominator reported?
8. Are the measures reported objective and reliable?
9. Are these the most appropriate measures for answering the study question?
10. If the study compares different subgroups from the survey, were the data obtained from these different groups by means of the same methods?
11. Is the survey method likely to have introduced significant bias?
12. Have ethical issues been taken into account?
13. Is the study large enough?
14. Is there adequate description of the data?
15. Is there evidence of multiple statistical testing, or large numbers of post hoc analyses?
16. Are the statistical analyses appropriate?
17. Is there evidence of any other bias?

The searches produced 346 papers; the abstracts of all papers identified were read in order to exclude those not meeting the inclusion criteria. However, the inclusion and exclusion criteria produced a collection of literature that was limited by the fact that

there are few empirical studies on non-pharmacological forms of pain relief. Those excluded at this stage focused on the following: a specific type of pain relief (82); a measure of pain (37); another aspect of labour (120); a professional or personal viewpoint (30); and others (8). In all, 277 papers were excluded; 69 full articles were retrieved and subsequently, if included, appraised in full. Of these, 32 papers (13 qualitative and 19 quantitative) met the inclusion criteria; 37 full text papers were excluded for the following reasons: their focus was on experience of specific methods of pain relief (4), measurement of pain (4), attitudes and descriptions of labour and pain (13), midwives' perceptions (4), assessment of interventions (5), general satisfaction (5) or antenatal education (2). Uncertainty about inclusion was resolved by discussion between two reviewers (Richard Thomson and Joanne Lally). Data were extracted from each paper using the appropriate appraisal tool (Figure 1 and Figure 2). These appraisal tools enabled a structured approach to assessment of the quality of individual papers. Issues regarding quality (such as timing of questions, or countries in which the study was undertaken), which may have an impact on interpretation, are discussed below.

Once all of the included studies had been appraised, four recurring key themes were identified: these were the level and type of pain, pain relief, involvement in decision making, and control. Within each theme the results were broken down into sections on expectations, experience and the discordance between expectation and experience, in order to best address the research question. Tables detailing the studies are included, along with a review of the quality of each paper according to the criteria set out in the methods (Appendix 1 and 2).

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## 2.4 The level and type of pain

The first key theme identified relates to pain itself—how painful the women expected birth to be, expectation of where the pain would be physically experienced and how this pain would manifest itself. The details of the studies focusing on these areas are outlined below.

### 2.4.1 Expectations of level and type of pain

The studies that were identified as exploring the expectations of pregnant women about the level and type of pain vary in their results. The key issues identified in this literature include positive and negative perceptions of pain; the concept that pain in labour differs from pain experienced in an illness; and variation in the anticipated level of pain.

First, I will highlight those studies exploring the positive and negative perceptions of pain. One large qualitative study in Australia described women's negative expectations of pain (Fenwick et al., 2005). This was a self-selected sample of 202 women who were either pregnant or had delivered in the last 12 months. However, the results for all women were presented together, so it is difficult to distinguish which expectations had been formed by women's own experience of a recent labour and which by others' prior experiences (Kravitz et al., 1996). The study highlighted two themes reflecting a negative outlook on childbirth: first, that some women are anxious, scared and frightened of the childbirth experience; secondly, that women expect it to be a medical event in which it is assumed there will be intervention. The authors argue that the women who were interviewed foresaw birth as a potentially

negative experience, and that this was shaped by their antenatal fear and concern about the anticipated severity of the pain they would experience (Fenwick et al., 2005). The authors concluded that it is essential that research continues to focus on developing strategies to assist women to confront and deal with these fears. Also, as a society we need to examine labour pain and pain relief carefully, to enable us to promote the belief that women can give birth successfully, coping with the pain experienced.

A second study, conducted in Jordan, also found that 92% (71/77) of the women in the study expected a negative first experience of childbirth—either frightening (66%), very long (63%), too difficult (66%) or painful (78%) (Oweis and Abushaikha, 2004). The findings that can be taken from this study and applied to the National Health Service (NHS) in the UK are limited, because of the cultural differences and differences in provision in maternity care between Jordanian and Western culture and medicine. However, the issue of negativity raised by these two studies should be considered when examining women's expectations.

In contrast to these negative expectations, a Swedish study describes women's positive expectations, which are linked to their perception of a positive outcome. They also found that, although women find pain hard to describe, they often do so in contradictory terms, "I think it's a happy pain, though it's hell!" (Lundgren and Dahlberg, 1998:107); the transition for the women in this study as they became mothers gave their pain a positive meaning (Lundgren and Dahlberg, 1998). However, this study was conducted postnatally in a birthing centre, the ethos of which was that

of natural birth and pain bringing women closer to their babies; it is likely that this ethos, along with the fact that the women were questioned postnatally (potentially at a time of euphoria relating to the success of the birth), influenced the positive expressions about pain. Waldenstrom et al. (1996b) surveyed 278 women in Sweden within 2 days of giving birth: they found that 28% of those women in the study assessed pain as a more positive aspect of labour than a negative one. This positive perspective on the pain experienced may suggest that the actual coping with pain is a rewarding, satisfying experience for some women, rather than suggesting that the satisfaction lies with the pain itself (Waldenstrom et al., 1996b). However, in opposition to this view, Salmon et al. (1990) found that women's ratings of the painfulness of labour were unrelated to feelings of achievement—in fact, a painful birth was just as likely to have a positive evaluation as a pain-free one.

The second key issue identified was that of the pain of labour differing from pain experienced in other circumstances such as a chronic illness, which was identified by two authors in particular. Those authors proposed that there is a risk that, as a society, we expect to treat pain in labour like an illness (Green et al., 1990; Lundgren and Dahlberg, 1998), i.e. a side effect that should be eradicated. However, Green and colleagues (1990) found that not all women agreed with their concept that labour pain differs from the pain of an illness; it tended to be mainly the better-educated in their study who highlighted this difference (Green et al., 1990). However, of the 825 women who were surveyed from six different hospitals, 61% overall saw labour pain as differing from other types of pain. The study by Lundgren and Dahlberg (1998) was conducted with women who gave birth at an alternative birth centre, so their views may not be representative of the population as a whole.

The final key issue regarding expectations is the level or severity of pain. Several studies reported that women often anticipate suffering extreme or unbearable pain during labour (Green, 1993; McCrea and Wright, 1999; Shapiro et al., 1998). McCrea and Wright (1999) conducted a study of 100 multiparous and primiparous women shortly after birth. They suggested that the women who had expected labour to be “quite painful”, on a five-point scale ranging from very painful to not at all painful, were worried about the painfulness of labour and were the ones who held realistic expectations of how painful labour would be (McCrea and Wright, 1999).

It is important to recognise the potential impact of these differences in expectations about pain. As Fenwick and colleagues (2005) identified, choices that are made throughout labour about pain relief are made on the basis of how women anticipate labour generally. For example, if a woman views labour as a medical condition with risks, she may be more likely to choose pharmacological pain relief to eradicate the pain. If however, she views labour as a normal and natural process, she may be more likely to employ natural methods of coping and pain relief. One study found that expectations about the level of anticipated pain influenced a primiparous woman’s perception or satisfaction with the birth experience—either negatively, by making them feel a failure as they were in greater pain than expected, or positively, by being pleasantly surprised that the “torments which were expected” never materialised (Halldorsdottir and Karlsdottir, 1996:52). It is difficult to envisage how we ensure that women’s expectations regarding the positive or negative aspects, the type, or the level of pain are closely matched with their experience.

### 2.4.2 Experience of level and type of pain

The studies that focused on actual experience of pain in labour identified a wide range of experiences: one study found no difference in expectation and experience of pain levels (Slade et al., 1993); however, in the majority of studies (Fridh and Gaston-Johansson, 1990; Gibbins and Thomson, 2001; Green, 1993; Halldorsdottir and Karlsdottir, 1996; Peach, 1991; Shapiro et al., 1998), women found that the pain experienced was worse than anticipated; only in one study did women report their pain to be less than expected (Gibbins and Thomson, 2001).

The six studies where the pain experienced was found to be worse than expected, in which women were questioned between two months and 20 years after birth, reported that this was especially true in the case of primiparous women (Fridh and Gaston-Johansson, 1990; Gibbins and Thomson, 2001; Green, 1993; Halldorsdottir and Karlsdottir, 1996; Peach, 1991; Shapiro et al., 1998). Care does need to be taken when interpreting these data, as recall may be altered by the time lag between labour and reported experience. One study reported women's pain experience to be better, although different, than they expected (Gibbins and Thomson, 2001). Those authors found that three of the eight women questioned described their labour as less painful, but the contractions as being more intense, than expected. Those three women also had the shortest duration of labour in the study (Gibbins and Thomson, 2001), which may have had a significant impact on their overall experience. However, the other five women in this small qualitative study found the pain to be worse than expected. The other unexpected qualities of pain reported in this study related to the location of

the pain rather than the severity, i.e. pain in women's backs rather than in their abdomen, or the pattern of pain coming in waves rather than being constant (Gibbins and Thomson, 2001). It is clear from these studies (Fridh and Gaston-Johansson, 1990; Gibbins and Thomson, 2001; Green, 1993; Halldorsdottir and Karlsdottir, 1996; Peach, 1991; Shapiro et al., 1998) that the experience of pain for many women differs from that which they anticipated. Following on from this, Waldenstrom et al (2004) conducted a large longitudinal cohort study of 2,451 women in Sweden and found that 9.5% of their sample expected labour to be the worst pain imaginable and were then more likely to go on to experience a more painful, negative experience, in contrast to women whose view antenatally was more optimistic. This implies that women's expectations shape their experiences (Waldenstrom et al., 2004), and gives even more weight to the argument that women's expectations should be matched with their experiences.

### 2.4.3 Discrepancy between expectation and experience of labour pain

Several of the included studies reported a discrepancy between expectation and reality (Fridh and Gaston-Johansson, 1990; Gibbins and Thomson, 2001; Green, 1993; Halldorsdottir and Karlsdottir, 1996; Peach, 1991; Shapiro et al., 1998; Waldenstrom et al., 2004), focusing particularly on the underestimation of the level of pain.

The fact that women underestimate the level of pain is supported by several authors including Waldenstrom et al.(1996a), who specifically identified the underestimation of the "intensity" of labour pain as the primary reason for the gap in reality. However, this was the only study where women were asked postnatally about their antenatal



expectations and their actual experience; it may be difficult, after birth, to accurately recall antenatal expectations. In a study by Shapiro and colleagues (1998), an antenatal questionnaire of 324 women found that 36% anticipated suffering extreme pain but, when questioned postnatally, 65% actually reported experiencing extreme pain before they received analgesia. In a further study, differences in expectations were highlighted between multiparous and primiparous women, with more primiparous women rating pain as worse than expected (Fridh and Gaston-Johansson, 1990). Green et al. (1990) also found that, for 190% (N=133/710) of women, pain was not as expected, and for a further 36% (N=252/710) it was as expected in some ways but not in others; the primary way in which it differed, as reported by 20% (N=143/710), was in being more painful (Green et al., 1990).

The studies included largely show that women underestimate the intensity of the pain that they will experience. If women are not able to have more accurate or realistic expectations about pain in labour, they will not be able to prepare themselves appropriately for labour or to make appropriate choices.

## 2.5 Pain relief

Several of the papers identified focused on the effect of various methods of pain relief and whether it was as anticipated.

### 2.5.1 Expectations of pain relief

Studies of women's expectations of pain relief found, unsurprisingly, that many women wanted to access effective pain relief. However, a wide range of preferences was identified, ranging from women wanting no drugs at all during labour to those requesting enough drugs necessary to make labour either a manageable or a pain-free experience.

The issue of wanting effective pain relief was identified in a quantitative study of 890 women in Finland, where women were questioned on pain and pain relief. The study found that pregnant women are generally well informed, with 93% of primiparous and 89% of multiparous women in the study having attended antenatal education. The study also identified that 88% of the women had planned to request pharmacological pain relief, expected to have effective pain relief and were disappointed if their wishes were not fulfilled. The authors argue that women should be prepared for the possibility that they may need to have some form of pain relief or they may feel disappointed if they have not considered this antenatally—if they need an epidural, for example, when they had not prepared for this possibility (Kangas-Saarela and Kangas-Kärki, 1994). However, in contrast, others have argued that, by introducing women to this “pain relief menu” of the options available, we are undermining women and that we should be encouraging women to work with pain (Leap and Anderson, 2004).

Several studies have examined the level of pain relief that women expect to achieve during labour (Beaton and Gupton, 1990; Gibbins and Thomson, 2001; Green, 1993; Rajan, 1993; Ranta et al., 1995). In a postal questionnaire survey, 67% of women wanted the minimum amount of drugs to keep the pain manageable, 22% said they would “put up with a lot of pain to have a drug free labour”, whereas only 9% wanted the most pain free labour drugs can give (Green, 1993:67). Rajan (1993) and Ranta et al. (1995) identified women within their study groups who, when questioned antenatally, expected to be able to go through labour without any pain relief. Rajan, in the secondary analysis of a large data set (10,702 women), found that 6% of the study population expected to be able to deliver without any pharmacological pain relief (Rajan, 1993). These results should be treated with caution, as there were a number of missing variables in the analysis, and difficulties were encountered in conducting the secondary analysis. Ranta et al. (1995), in their study of 1,091 women, identified 4% of primiparous and 14% of multiparous women who anticipated having no pain relief during labour. In contrast, Beaton and Gupton (1990), who interviewed 11 women in their third trimester, found that those women had developed detailed and realistic expectations of their childbirth experience by this point in their pregnancy. One of the hopes that they expressed was the desire to avoid analgesia if possible, whereas acknowledging that they would be willing to use drugs if necessary (Beaton and Gupton, 1990). However, in contrast, Gibbins and Thomson (2001) found that women in their study took a more pragmatic approach in making choices about pain relief; those authors stressed that, although those women were not sure what to expect from the pain during labour, they hoped that it would be manageable, with or without analgesia.

Women's knowledge of the methods of pain relief available will affect their expectations. Capogna et al. (1996) have shown that levels of awareness of pain relief methods vary across Europe: for example, only 47% of Italian and 64% of Portuguese women were aware of epidurals, compared with 94–100% of British, Belgium and Finnish participants. It could be argued that this is a reflection of the availability and choice of pain relief in these countries rather than of education (Capogna et al., 1996), although this is difficult to determine from the detail given.

### 2.5.2 Experience of pain relief

The expectations literature shows that a person's expectations can influence their interpretation of their symptoms or, in the case of childbirth, of their pain (Kravitz et al., 1996). The literature presented in this section focuses on experience of pain-relief methods and on, first, how expectations may or may not affect a woman's experience; secondly, on the number of women who actually had pain relief during labour; and, finally, on women's knowledge about, and satisfaction regarding, the experience of pain relief.

First, I wish to discuss the literature that highlights how women's expectations may have had an impact on their experience of pain relief. One particular study focuses on how women's expectations of pain relief align with their subsequent experience. The study by Fridh and Gaston-Johannson (1990) of 133 Swedish women found that there was no significant difference between the medication women expected to use when questioned antenatally and the actual medication they used during labour, identifying no discrepancy in this case between expectations and experience.

Secondly, the literature examining the women who actually had pain relief was reviewed by Machin and Scamell (1998) and Kangas-Saarela and Kangas-Karki (1994). An ethnographic study of 80 women compared the expectations of women who received antenatal education from the National Childbirth Trust and of another group of women who had not had any antenatal education. The majority of the women who attended the National Childbirth Trust expected a natural drug-free labour, in contrast to the women who received no antenatal education. In reality, there was no difference between the groups in the actual pharmacological drugs administered during labour (Machin and Scamell, 1998). This suggests that, although expectations of the two groups regarding what pain relief they would use was different, their actual experience, as gauged by their use of medication, was the same. The satisfaction felt by the different groups was similar, despite a large group of women having very different experiences to those they expected, the positive outcome seeming to override any feelings of dissatisfaction. Regardless of choice, it is important that women are satisfied with the pain relief experienced. A study in Finland found that the majority of women had a positive attitude postnatally to pharmacological pain relief, with 88% of the women having planned to request it (Kangas-Saarela and Kangas-Kärki, 1994). Several studies have identified the percentage of women who delivered in hospital, and who actually had some form of pharmacological pain relief during labour, as varying between 84% and 100% (Gibbins and Thomson, 2001; Green, 1993; Rajan, 1993; Ranta et al., 1995 ).

Finally, women's experience of, and satisfaction with, pharmacological pain relief varies. In one study, women felt that they had remained open minded and had made

the right decisions to use certain methods of pain relief at the right time (Gibbins and Thomson, 2001); these women chose not to make fixed decisions about pain management prior to labour, so that they were not disappointed when their (often unrealistic) expectations were not met. Another study identified 97% of the population as using some form of pain relief, with the 3% who had used no pain relief being those who had not intended to use pain relief when questioned antenatally and so had matched their expectations with their experience (Rajan, 1993).

### 2.5.3 Discrepancy between expectation and experience of pain relief

An expectation–reality discrepancy was identified in the pain-relief literature, where what women expected antenatally regarding pain relief was not what they received during labour, for a variety of reasons. An example of this gap was highlighted by Ranta et al. (1995), who found that 52% of women in the study, who had declared that they would not use pain relief, did actually use it, thus demonstrating the discordance between hopes, expectations and the actual experience of decisions or actions taken in labour. Although a discrepancy was identified between the expectation and the experience of pain relief, two studies made a distinction between women’s hopes of having a drug-free labour but their expectation that they might have to receive some form of pain relief (Kangas-Saarela and Kangas-Kärki, 1994), particularly if the labour was prolonged (Beaton and Gupton, 1990).

It may be that we cannot help women to form realistic expectations in this area, and that it may be more beneficial for women to clarify what their hopes are, while at the same time they are prepared for all eventualities so that, if necessary, choices can be

made during labour. In order to do this, we must be aware of the difference between hopes and expectations—hope, for some, being a non-specific sense of a favourable outcome, rather than something that will aid decisions (Leung et al., 2009).

## 2.6 Decision making

One of the questions that this systematic review aims to answer is: “What is women’s involvement in the decision-making process?” What was found was that women are as concerned about being involved in the whole process (McCrea and Wright, 1999; McCrea et al., 2000a), being in control (Callister, 1995) and being able to cope (Gibbins and Thomson, 2001), as they are about being directly involved in the decision-making process. Although being involved and being in control are within the realm of decision making, the studies identified in this review do not report the women themselves as referring explicitly to decision making.

One study described what influenced women in the choices they made, stating that it was public discourses (e.g. the media) rather than formal antenatal education that was most influential, with private discourses with friends and family being highly influential in helping women to form their own expectations (Fenwick et al., 2005). A further study that identified decision making was conducted by Lavender et al. (1999) of 519 women postnatally as part of a larger randomised controlled trial on interventions in labour. Of the women in the study, 108 (21%) wanted to participate in decision making, but the desired degree of involvement varied across the study. Of these 108 women, 89 (82%) commented on the importance of both themselves and their partners being involved in deciding various aspects of care. The authors

concluded that participation in decision making can occur only if effective communication between women and midwives is achieved.

Therefore, if women are to be involved in decision making, communication between women and their midwives and their care providers must be improved in order to promote the shared decision-making process.

### 2.6.1 Experience of involvement in decision making

The limited literature on the experience of involvement in decision making that was identified in this review concentrated on the types of women who wanted to be involved and how current antenatal education empowered women to become involved.

First, McCrea and colleagues (2000a), identified multiparous women as those who placed most emphasis on being fully informed, with primiparous women being more concerned with controlling emotions rather than trying to be involved in decision making. This finding was supported by the observational work during labour that was conducted as part of this study, which looked at women's behaviour as a way of assessing their control of pain management in labour. Green and Baston (2003) support this view, in that they also found that participation in decision making was more important for multiparous than for primiparous women. Van der Hulst and colleagues (2007) commented that, in their study, it was younger women who had more influence than older women on the decision-making process. A separate issue arose in the study by Green and Baston (2003) that was even more important to the women than decision making—that of being treated with respect and as an individual.



Antenatal education was also important, with two studies reporting that preparation helped women to cope both physically and psychologically with their labour and also that their knowledge of pain relief helped them to make informed choices (Carlton et al., 2005; Gibbins and Thomson, 2001). The latter authors found that all eight women in their small phenomenological study felt that gaining information about their options and the choices available enabled them to be more prepared and confident regarding any of their decisions; they were given a sense of power and control in a situation where they would not be sure what to expect. The knowledge of pain relief helped them make informed choices, to cope psychologically and to be able to make decisions and to be included in the decision-making process. However, Carlton et al. (2005) have questioned what factors influence a woman to change from choosing an 'unmedicated' to a 'medicated' birth. They have also queried whether some types of hospital-based education serve to advise women more about the "appropriate" ways of giving birth than educating them in all of the options available to them (Carlton et al., 2005).

Brown and Lumley (1998), who examined the use of birth plans as an aid to decision making and informed choice, found in a state-wide survey of 1,336 women in Victoria, Australia, that the main advantage was seen as allowing 21% of the women (56/270) to become acquainted with the options available before labour began. A salient quote from a woman included in that study was that, when confronted with decisions under stress, it was easier to be involved in the decision-making process when the options had been evaluated beforehand (Brown and Lumley, 1998).

### 2.6.2 Expectations of involvement in decision making

Although, as discussed earlier, involvement in decision making is an important aspect of modern healthcare, little research has been conducted into women's expectations regarding decision making in labour. Research that has been undertaken regarding pain relief has tended to focus on aspects other than decision making; as a result, no references have been identified on this theme of the systematic review.

### 2.6.3 Discrepancy between expectation and experience of involvement in decision making

None of the studies included in this review reported a gap between expectations and experiences of being involved in decision making. This is not to say that no such discrepancy exists, rather that no relevant research has been undertaken or published.

## 2.7 Control

The term 'control' is often used in studies by both the women and the researchers as a proxy for involvement in decision making. Green and Baston (2003) developed clear definitions for different types of control (internal and external), through a series of questionnaires sent out at various points during pregnancy to 1,029 women. Green and Baston define external control as what is done to you, often equated with involvement in decision making, and internal control relates to your own control over your body or behaviour. In the study by Green and Baston (2003) only 21% (N=234/1,112) of women felt in control of all three areas (staff, behaviour and contractions) and 20% (N=219/1,112) felt out of control of all three, whereas

antenatally 66% (N=711/1,074) had expected to be in control of staff, 37% (N=397/1,073) in control of behaviour and 54% (N=576/1,070) in control of their contractions. Control of staff was related to interpersonal variables: for example, being supported led to increased levels of control. Pain and methods of pain relief were the primary factors for feeling in control of behaviour: for example, low levels of pain were associated with increased feelings of control whereas the use of Entonox was associated with a twofold decrease in control. Finally, control of contractions was predicted primarily by the experience of pain and ability to assume the most comfortable positions (Green, 1993; Green and Baston, 2003). Green (1999) had previously questioned whether some women place greater weight on one form of control than another, whereas others feel the need to be in control both internally and externally to ensure a fulfilling labour.

### 2.7.1 Experience of control

Literature examining women's experience of control looked at specific issues, including control of the women's own behaviour, how pain was managed, what pain relief was administered and their level of involvement.

Control of one's behaviour and being in control of the pain was identified by one European study: Capogna et al. (1996) found that those women who anticipated being able to control pain during labour were, indeed, able to control their pain and go through more pain before they requested any analgesia. This argument on how pain was managed by remaining in control of the situation was supported by McCrea et al. (1999), who also reported significant relationships between satisfaction with pain

relief and feelings of being in control, as well as being actively involved in decision making governing pain medication. McCrea found that women regarded being in control of how their labour pain was managed more highly than being in control of the actual pain. McCrea et al. (1999) also argued that control goes beyond decision making about pain relief: it also involves the use by women of their own personal coping strategies to deal with the pain. Given the importance of this sense of control, preparation of women for labour is crucial to allow women to take control and should not be relegated to the last few weeks of pregnancy (McCrea and Wright, 1999)—as is the case with antenatal education in the UK, which starts anywhere between 28 and 36 weeks of pregnancy. Several of the studies by McCrea and colleagues point to the argument that women are more likely to be satisfied if they are involved in, and have some degree of control over, the decisions about management of their labour, than if the decisions are taken out of their hands (McCrea and Wright, 1999; McCrea et al., 2000b).

One American study identified that the level of control that a woman wishes to exert during labour may affect the choice of birth setting (Callister, 1995). In this study, women who chose a community delivery articulated a need for a sense of control, especially over the choice of birthplace or the ability to meaningfully influence decisions, whereas those women who chose a hospital delivery overseen by an obstetrician, emphasised the perceived safety of the medical model and focused on safe outcomes, rather than on the desire for control (Callister, 1995). As this was a study conducted in the USA, we must be aware of the culture of obstetrician-led hospital births which is dominant within that country's healthcare system. Machin and Scamell (1997), in a study conducted in the North East of England, also commented

that during birth, at a time which is seen by many as a time of crisis (especially when things may not be going according to plan), the women in their study were reassured by the 'high-tech' medical equipment, practices such as confinement to bed and aids such as pethidine offered by the medical staff (Machin and Scamell, 1997). The choice made by a woman regarding the level of control she wishes to maintain throughout labour not only affects her place of delivery but also sets out the pain relief options open to her as labour progresses. For example, most midwifery-led units in the NHS do not have an anaesthetist attached to them and therefore epidurals will not be available; thus a woman's decision to give birth in [a midwifery led unit](#)~~the UK~~ would limit the choice of analgesia available to her.

### 2.7.2 Discrepancy between expectation and experience of control

Davis-Floyd (1994) has identified where expectations about control have been poorly matched with experience. She argues that this discrepancy between expectations and experience is not always negative and is sometimes in a positive direction. In her study she found that even if the birth was not natural as planned, women were still pleased with the experience if they felt they had been in control of the decisions made (Davis-Floyd, 1994). Therefore if we take Davis-Floyd's findings into consideration, then the fact that women lack realistic expectations about control is not such a major issue as first thought, and we should be more concerned about ensuring women have the control they desire.

This evidence lends support to the argument that it is important to clarify, with each woman, what is the most important issue to her during labour: e.g. is it control; is it

minimal pain; is it adequate pain relief? Clarification of the woman's values, what is important to each woman, allows the midwife to support her fully throughout labour.

## 2.8 Discussion

This review has identified four major themes relevant to women's expectations about pain and its relief during labour and the involvement of these women in the associated decision-making process. These themes are the level and type of pain, pain relief, involvement in decision making, and control. This review has provided an insight into the area of expectations and experience of pain and its relief in labour, as well as identifying the discrepancy (or gap) between women's expectations and their experience, which potentially may make such women dissatisfied with their childbirth.

A limitation of this review is the relatively small number of studies available, resulting in the inclusion of papers in which expectations about pain in labour were a secondary focus. In some cases, because pain was not the primary focus of the research, detailed information was unavailable. Within this small number of studies the focus is on pharmacological forms of pain relief, and there is clearly a gap in the literature with regard to evidence relating directly to non-pharmacological methods. A further limitation is that, although initially it was stated that we would investigate experience and expectations about decision making in this area, the evidence in this area is weak, with decision making being at best a minor focus of a few studies.

The strength of this review is in providing an overview of the research in the field. It gives great insight into the form of women's expectations, the extent to which their expectations match their actual experience, and what decisions are made.

The results of the studies included in this review have many implications for both practice and policy. To consider first the implication of how realistic expectations can be formed by pregnant women, Gibbins [and Thomson](#) (2001) found that antenatal anxiety was associated with a less positive experience, ~~whilst~~ Green [and Baston](#) (2003) questions whether an intervention to raise the expectations of pregnant women may result in better experiences. If midwives were able to reduce the anxiety that women may feel throughout pregnancy, and could equip them to form realistic expectations, they might be able to help these women to achieve a more positive experience. However, antenatal education remains of major importance, with its potential to empower women with realistic expectations to make informed decisions. What is not clear is whose responsibility it is to provide or seek the information; when it is most appropriate to give this information, and to what format the women will be most receptive. A form of antenatal education needs to be delivered which gives expectant mothers a more realistic expectation of what is likely to happen in labour (Fridh and Gaston-Johansson, 1990). Without some form of education from health professionals or childbirth educators, women have to rely on media, family and friends for information, which may not assist them in forming realistic expectations. Although not all women attend antenatal classes, it is a key vehicle for education and one that we can endeavour to change to provide a balanced approach to childbirth. It was identified that childbirth training and information on pharmacological pain relief should be regarded as compatible and complementary to other coping mechanisms

such as breathing and relaxation. Even women who hope they will be able to cope without pharmacological intervention, according to Kangas-Saarela and Kangas-Kärki (1994) need to be prepared for the possibility of pain relief, otherwise they may feel disappointed. However, what is unclear from this body of literature is whose responsibility it is to ensure that women are fully prepared for labour. Are women who are expecting a drug-free labour being helped or hindered in forming realistic expectations about labour, as such expectations are often not being met (Green et al., 1990)? Antenatal preparation classes are seen as one way of providing pregnant women with information, but it seems this is not enough to prepare women for the experience of labour; additional information, based on current evidence of risks and benefits, and a form of decision support are needed to fulfil women's needs. Although all women are encouraged to attend antenatal classes because of their obvious benefits, not all studies show that such classes are advantageous. Waldenstrom found that those women who had more severe pain than others had more often attended prenatal classes (Waldenstrom et al., 1996b), and Kangas-Saarela and Kangas-Kärki (1994) found that, even though nine out of ten women in their study had attended antenatal class, they remained very apprehensive about labour. This may imply that anxiety or fear issues were not being addressed in the classes (Machin and Scamell, 1998) and possibly the form and content of these classes should be readdressed to ensure that women's needs are met in future.

This review was unable to determine when and how decisions are made regarding pain relief in labour. If we are to provide decision support for women, then further research is needed to gain an insight into the decision-making process during pregnancy and labour. Much of the research in this review has pointed to the fact that



the professionals involved in the care of pregnant women help to shape their expectations. However, further research is necessary to examine how best to support professionals to guide women to make decisions that are appropriate, realistic and satisfactory for them.

## 2.9 Conclusions

If women are well prepared during pregnancy, then they are more likely to have realistic expectations of the levels of pain in labour, less likely to feel a failure, and should have increased confidence, which in turn can lead to more a positive experience. Women may have idealistic views of what they would like to happen (Leung et al., 2009), but they need to be educated or informed to ensure that they are prepared for what might actually happen and to give them the tools to deal with this. Health professionals must also recognise that a woman's hopes may differ from her expectations, as such recognition may lead to less ambiguous discussions about options (Leung et al., 2009).

This review has identified a discrepancy between women's expectations and their actual experiences. There is a mismatch between how painful women expect labour to be, how long it will last, what pain relief they will need, how in control they will be and what the actual experience is like; all of these issues are discussed throughout the Results chapters. If we are to improve women's experience of labour, we must examine how their expectations can be more closely matched with their actual experience.

In conclusion, it may be that we need to focus on a distinction that was made by Fenwick et al. (2005), Beaton and Gupton (1990) and Gibbins and Thomson (2001), among others—that women should have hopes regarding their anticipation of an ideal labour, but should also have an understanding of what might happen in practice. By distinguishing between the two possible experiences, women could say what, in theory, they would like to happen, but would also be aware of the possibility that their labour might not proceed according to plan and, if this is the case, be fully prepared to make the necessary decisions during its actual course.

### 3 Pain-relief methods

This chapter provides a background to the current NHS methods of managing pain in labour, and is intended to give some context to the choices discussed by both women and professionals in this study about what they are expecting, have been offered or have experienced.

To enable some understanding of why some methods are widely used despite a lack of any evidence of their effectiveness, this chapter opens with a brief review of the historical background to pain-relief methods, followed by an account of the risks and benefits of, and the recommendations for, each method currently used in the NHS. It is not intended to cover every possible method of pain management in this chapter but, rather, to look in detail at those methods that are widely and currently available in the NHS and at those methods referred to directly by the participants in the Results chapters. To ensure that this background chapter contains all the relevant information, both peer-reviewed research articles and information from publicly available websites were investigated.

#### 3.1 History of pain relief

Obstetric anaesthesia began with James Young Simpson in Edinburgh, who administered the first anaesthetic for childbirth on 17<sup>th</sup> January 1847 in the form of ether (Caton, 2004) and later the same year with chloroform (Yearby, 2000). This introduction of pain relief was welcomed by women who had been requesting anaesthesia, but the male professionals at the time were not easily persuaded, as they

were opposed to it on the grounds of safety. At the request of Prince Albert, John Snow administered chloroform to Queen Victoria for the delivery of her seventh child in 1853, an action which aided its acceptability and use in childbirth (Toscano and Pancaro, 2003); for the next 100 years this was the sole anaesthetic agent used in obstetrics (Yearby, 2000). This was also the first time that the social values of women, who wanted pain relief, came into conflict with the (largely male) medical-science community, who wanted to wait for evidence of the safety of such pharmacological methods (Caton, 2004) before they were introduced into practice. Women, who trusted obstetricians, campaigned for twilight sleep. This induced a state where the patient retained a slight degree of consciousness (Kitzinger, 2006) through a combination of scopolamine hydrobromide (an alkaloid drug) and morphine sulphate (Yearby, 2000), and was introduced in 1914. However, after the adverse side effects of morphine had been recognised, scopolamine alone was used from the 1940s to the 1960s to induce this state, in which the memory of pain (although not the pain itself) was eliminated by alteration of the brain functions responsible for self-awareness and self-control (Caton, 1999). In 1927 the National Birthday Trust was created out of the nineteenth century feminist movement as a response to concerns over high mortality rates; it campaigned for a move away from general anaesthesia for childbirth. Subsequently, during the 1960s, obstetric anaesthesia once again became 'in vogue' with both physicians and the public; opiate analgesics (including pethidine, morphine and diamorphine) and epidural administration have been widely used in obstetric practice for pain in labour since that time.

In 1954 Grantly Dick-Read reminded the population that childbirth was a natural physiological process. Dick-Read believed if women were educated about childbirth,

their fears would diminish, the pain of contractions would reduce and labour would be less protracted. This view was appealing to the general public, in view of the increase in pharmacological methods of pain management and of medical intervention, which at that time had become commonplace. Dick-Read's natural childbirth, and the training for childbirth advocated by Lamaze, were promoted in the late 1960s; according to Davis-Floyd, these techniques laid the foundation of modern childbirth (Davis-Floyd, 1994; Kitzinger, 2006). The National Childbirth Trust (NCT) was set up in 1957 to promote the ideas of Grantly Dick-Read, initially incorporating the view that women did not know what was best for them; this philosophy was subsequently changed to one where a woman's right to make her own decisions is central to the NCT (Yearby, 2000).

In 1963 a mix of nitrous oxide and oxygen, more commonly referred to as Entonox or laughing gas (Mander, 1998), was re-introduced for use in labour in the UK and is now the inhaled agent most commonly used in childbirth. Following this, the TENS (Transcutaneous electrical nerve stimulation) machine was invented following the development of the gate-control theory of pain in 1967 (Melzack and Wall, 1967).

Following the Peel Report (1970) which made provision to enable all births to take place in hospital, there was a decline in home births and an increase in interventions such as caesarean sections and instrumental deliveries, together with a clear increase in the use of epidural anaesthesia for pain relief in labour (Yearby, 2000). The use of water to comfort or to heal is of long standing, but its use during childbirth is a more recent development (Mander, 1998) that has been widely publicised by some enthusiastic proponents (Odent, 1983). Since the early 1980s, immersion in water

during labour and birth has been increasingly promoted to enable women to relax, help them cope with pain and maximize their feelings of control and satisfaction (Balaskas, 1992b; Odent, 1983). Following both the Winterton (1992) and the Changing Childbirth (1993) reports, greater emphasis came to be placed on the development of woman-centred care, and services were redesigned to this end, with midwives seen as ideal facilitators (Benoit et al., 2005). Some observers at this time saw the increase in epidurals as counterproductive to this woman-centred movement, which, they considered, served only to render women immobile and controlled by the medical profession (Arney and Neill, 1982; Yearby, 2000). In the second decade of the twenty-first century, we are seeing an increase in midwifery-led units, with a call to increase home births. In addition, consultant-led units have made efforts to make labour and delivery more home like, including promotion of the use of birth pools (MacVicar et al., 1993). The following sections detail the specific pain relief options, highlighting the risks, benefits and methods of administration.

### 3.2 Pain-relief options

The aim of this section is to set out any evidence that supports the effectiveness and quantifies the side effects of commonly used methods of pain relief. This section also summarises the guidelines or recommendations used by hospitals and highlights those areas where evidence is lacking. This is intended to provide a background against which to appreciate the viewpoints expressed by women and professionals in the interviews undertaken for this study. Each sub-section includes the method of administration and presumed mechanism of action of the drug, as well as any evidence available regarding its effectiveness, the optimal time for its use in labour, its effect on labour, and any side effects affecting the mother or her infant.

To provide a context within which to assess information on non-pharmacological and pharmacological pain-relief methods, a recent review of practice in the UK found that 11% of women used water-based methods, 82% used gas and air, 32% received pethidine or a similar opiate, 6.5% of women reported using no pain relief and 30% had an epidural (Health Care Commission, 2008). Data are not available either for all combinations used or for those, if any, that were used in isolation.

### 3.3 Non-Pharmacological Pain Relief

The non-pharmacological options detailed in this section relate to those options available in the study hospital and those referred to by the women interviewed in this study.

#### 3.3.1 Water

Reference to water as a method of pain relief in labour usually implies immersion in water of a pregnant woman at any stage in labour, where the woman's abdomen is completely submerged, usually in a bath or a pool; this may also be termed a water birth. Labouring in water appeals to both pregnant women and their carers, particularly those striving for a woman-centred, intervention-free, 'normal' experience (Cluett and Burns, 2009: 6).

The recommendations from both the *Winterton Report* (1992) and the *Changing Childbirth Report* (1993) were that all women, in all UK maternity units, should be given the option of labouring in water. This has practical implications for space and

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for the provision of pools and of staff skilled in supporting a water birth. The Royal College of Midwives followed this advice by releasing a position statement that incorporated immersion in water (1994), indicating that this procedure is known for being able to reduce anxiety to promote the release of natural opiates (Milner, 1988), and, ultimately, to provide pain relief (Simkin, 1989).

Immersion in water at a comfortable temperature of 35–37°C, counteracts pain in labour (Kitzinger, 2006) and can reduce the dosage of pain-relief drugs (Cluett and Burns, 2009). The Cochrane Review edited by Cluett and Burns, which included 11 trials involving 3,146 women, also identified a significant reduction in epidural and other forms of anaesthesia and analgesics in women allocated to water births compared with controls in the identified studies (478/1254 versus 529/1245, CI. 0.70–0.98). The review did not identify any significant difference in assisted deliveries, caesarean sections, Apgar scores or neonatal outcomes between the groups. The review concluded by stating that the use of water in the first stage of labour reduced the need for epidural or spinal anaesthesia, with no evidence of adverse effects. If a woman chooses to labour in water, this may have ramifications for safety and the provision of effective continuous support, as a midwife must be in constant attendance once a woman is formally in water (Gilbert and Tookey, 1999). However, fetal monitoring cannot be conducted while the mother is in the water and this may limit the option of water birth for those women needing continuous monitoring of their baby. All women need to be made aware that they may have to come out of the water occasionally for monitoring purposes.



As there is limited robust evidence of benefit or harm, women and midwives continue to be subject to conflicting opinions on the usefulness and safety of water birth as a form of pain relief (MIDIRS, 2005b). One of the areas of continuing debate is the optimum time for a woman to use the birthing pool. When early and late immersion were compared in a study by Eriksson et al. (1997), significantly higher epidural rates were found in the ‘early’ group (42/100) than in the ‘late’ group (19/100), together with an increased incidence of augmentation of labour (57/100 versus 30/100).

Augmentation of labour being an intervention that is intended to increase the intensity of labour, commonly used if labour is failing to progress. This evidence has led to the recommendation that women should enter the birthing pool only once labour has been fully established. However, when women in my this study first contact the maternity assessment unit for advice on how to cope with the early stages of labour, they are often told to take simple analgesics and to have a warm bath—but it is not clear whether this is seen as ‘early immersion’ as per Eriksson’s study (Eriksson et al., 1997), or if his study is referring to a more formal immersion in a birthing pool—and, if the latter, what is the difference, is it temperature of the water or place of the water immersion.

Several areas have been highlighted by the Midwives’ Information Resource Service (MIDIRS), in relation to the scarcity of information regarding the risks or benefits of immersion in water. It is still not clear whether water use is associated with an increase in perinatal mortality or if the shape or size of the bath affects the outcome. It is also important to identify any women who should avoid water during labour and to ascertain whether there is an optimum cervical dilation at which women should enter the water and to what extent immersion affects the duration of labour.

The recent guidance on water immersion, issued by the National Institute for Health and Clinical Excellence (NICE), states that immersion in water during labour reduces pain and the subsequent use of regional analgesia, with no significant difference identified regarding adverse outcomes compared with those in women labouring without water (NICE,2007). The recommendations for practice made by NICE (2007) state that women should be given the opportunity to labour in water, that the temperature of the water should be monitored regularly and should not be above 37°C, and that the pool should be cleaned in accordance with a protocol agreed by the microbiology department.

### 3.3.2 Transcutaneous Electrical nerve stimulation (TENS)

Another non-pharmacological mode of pain relief is the transcutaneous electrical nerve stimulation (TENS) machine. This is a compact piece of equipment, including a handheld amplifier and electrode pads which are applied above and below the maternal waist on either side of the spine, when used to address pain in labour. During labour the intensity of the electrical stimuli delivered by the machine is set just below the woman's pain threshold; she is able to increase this intensity during contractions to compete with the pain (Mander, 1998).

The main action of TENS comprises closure of the 'gate' to the passage of pain (Melzack and Wall, 1967) by sending direct electrical stimulation to the nerves transcutaneously, its other action being stimulation of natural endorphin release, which serves to modulate the transmission of pain (Camann and Alexander, 2006; Kitzinger,

2006; Mander, 1998). TENS is non-invasive, relatively inexpensive, portable, and with few side effects. However, there are doubts about its effectiveness, with the limited evidence being fraught with methodological weakness, which is conflicting and difficult to evaluate, with a recent Cochrane Review stating that the mechanism by which a TENS machine relieves pain is not well understood (Dowswell et al., 2009). There is some indication of the optimal timing of use, apparently early in labour (Chamberlain et al., 1993), ideally before six centimetres dilation (Kitzinger, 2006). However, in contrast, Dowswell et al. (2009) stated that the use of TENS in early labour at home has yet to be properly evaluated. Several separate sources of information for both pregnant women and professional medical personnel state that TENS has little, if any, effect on reducing labour pain (Dowswell et al., 2009; MIDIRS, 2003c; National Institute for Health and Clinical Excellence, 2007). The NICE guidelines (2007) identified one systematic review including ten randomised controlled trials (RCTs) and found no difference in intensity of pain or pain relief between users of TENS and controls, no difference in need for additional analgesics and no reported side effects. The Cochrane Review (Dowswell et al., 2009) identified one review that included 19 studies involving 1,671 women; pain scores were similar in TENS and control groups. TENS did not seem to have any effect on the duration of labour, on the need for intervention or on the wellbeing of either mother or baby.

The MIDIRS leaflet on TENS explains the positive aspects of this technique, which include:

- offering immediate relief, especially in early labour
- increasing a woman's sense of control, as this pain relief is self-administered
- the fact that mobility is not hampered
- has no known side effects

Johnson (1997) also identified further positive aspects of TENS in a questionnaire study of 10,077 women who had recently used this technique. Johnson found that 71% of women who used TENS reported good or excellent pain relief and that 91% would use it again. However, 81% also reported using additional analgesics and it is therefore impossible to say what pain relief resulted directly from use of the TENS machine. Women might also have to use their personal finances to pay for the hire of a TENS machine, which might render this form of pain relief beyond the means of some.

Conclusions from these reviews and guidelines are confused, in that the Cochrane review recommends that women should have the use of TENS if they think it would be helpful (Dowswell et al., 2009) , whereas the NICE guidelines for intrapartum care conclude that TENS is not an effective analgesic in labour, with no high-level evidence on the analgesic effect in latent labour and therefore should not be offered to women in established labour (National Institute for Health and Clinical Excellence, 2007).

### 3.4 Pharmacological pain relief

Pharmacological pain relief is a term used to describe methods of pain relief that use drugs. There are often local variations regarding which drugs are available and which dosage is used. The pharmacological methods identified below are those commonly used in the study hospital.

### 3.4.1 Inhaled Nitrous Oxide

Nitrous oxide, which is commonly referred to by its brand name of Entonox, is a 50/50 mixture of nitrous oxide and oxygen, both flavourless and odourless (Camann and Alexander, 2006), that is inhaled through a mask or a mouthpiece and can be used during labour. Even though it has a sedative, amnesic effect but not an analgesic effect, it is still seen by women as the simplest and possibly the safest form of pharmacological pain relief. The gas has been mixed with oxygen for increased safety and can be used in cylinders during a home birth as well as in hospital (Yearby, 2000).

Entonox has rapid effectiveness after 20 seconds, the effect ending quickly when inhalation ceases. In order for a woman to gain the most benefit from Entonox she must remain in control of its administration and must master sustained, slow, regular breathing, as well as starting to inhale before a contraction begins, so that at the height of the contraction, the time of maximum pain, the Entonox has had time to produce its effect (Yearby, 2000).

Entonox is a low-cost intervention requiring limited supervision by a healthcare professional and allowing self-administration by the labouring woman, thereby allowing her to remain in control of her own pain relief (Mander, 1998). Entonox is widely used, with some women seeing it as “somehow ‘natural’ not really a drug at all” (Green, 1993: 69).

Whereas the Care Quality Commission (2010) reported that 81% of all women surveyed (25,000 respondents) used Entonox, Chamberlain et al. (1993) found that, although Entonox was available in 99% of maternity units, only 60% of their study population had used it. Despite this, it was the most frequently used form of analgesia, with the majority of women who used it rating it as useful or highly useful (Chamberlain et al., 1993).

Only one major double-blind crossover trial has been conducted to assess the effect of Entonox (Carstoniu et al., 1994). It has been used to try to identify evidence of effectiveness but is based on limited data. The trial found no significant difference in mean pain scores, assessed on a visual analogue scale, between nitrous oxide and compressed air. Pain did not differ over time. There was no evidence that Entonox predisposed women to side effects such as haemoglobin oxygen desaturation, which is reassuring safety information.

In the most recent guidelines published by NICE (2007), a systematic review was conducted, with eight observational studies and eight controlled studies investigating the effectiveness of Entonox. Seven of the studies reported significant analgesia with Entonox. Reports of nausea and vomiting ranged from 5 to 36% across the selected studies, but questions were raised regarding the quality of the controls used in these studies. No alteration in uterine contractions was recorded in the one study that examined this parameter. Outcome for the newborn is quantified by the Apgar score, which evaluates five aspects (appearance, pulse, grimace, activity, and respiration) of newborn behaviour and allocates a score out of 10. No significant difference in neonatal outcome (Apgar) was identified in the four studies that recorded this score.

The advantages set out clearly in the MIDRIS informed choice leaflets (2003b) indicate that there is often only a short lag time between requesting Entonox and obtaining it, as it is readily available in most delivery rooms and can increase a woman's sense of control, as it is self-administered. Entonox can be used throughout labour without affecting a woman's ability to push, with the effects rapidly reversed when discontinued and, as previously mentioned, does not require direct constant supervision. Despite these positive aspects there are side effects, in that it can reduce mobility because of the mechanics of its use; in addition, it can cause drowsiness and nausea and may affect the newborn babies in ways that are, as yet, not fully understood.

In the guidelines, the conclusion drawn from the evidence is that Entonox appears to relieve pain but can make users nauseous and light-headed; however, there is no evidence of an adverse effect on the baby. The NICE recommendations are that Entonox should be made available in all birth settings as it may reduce pain, but that women should be warned of the possibility of nausea.

#### 3.4.2 Opiates

When morphine was first used in labour in 1906 it was used to induce 'twilight sleep' (Aly, 2000), an 'induced sleep with lack of memory so that women were unable to recall the events of labour' (Yearby, 2000: 5). Subsequently, pethidine, which is metabolised to a morphine-type substance, was developed in Germany in 1939 and originally was used as a strong analgesic for wounded troops. There has been concern recently that its soporific effects have been confused with analgesic effects (Yearby,

2000). Having been included under the Dangerous Drugs Act since 1949, its subsequent use has been strictly regulated. It is important to highlight that pethidine did not undergo randomised controlled trials prior to its introduction into obstetric clinical practice in the UK (NICE, 2003). Currently, the three opioids that are most commonly used in the UK are diamorphine, pethidine and meptazinol (Mander, 1998). Pethidine is a synthetic substance that is shorter-acting than morphine. It acts on the nerve pathways descending from the brain and plays a role in the gate theory of pain at the spinal column level (Yearby, 2000). Its main effects are alteration of the perception of pain and the alteration of reaction to pain, rather than a reduction in the pain itself (Mander, 1998). One of the major concerns about opiates in general is their ability to cross the placenta rapidly and the potential they have for a direct respiratory depressant effect on the newborn (Camann and Alexander, 2006), especially when birth occurs within 2–5 hours of administration (Yearby, 2000). In modern clinical practice, opiates are usually administered intramuscularly or intravenously and, occasionally, as patient-controlled analgesia (PCA), in order to achieve their effect as rapidly as possible.

When Fairlie and Walker (1999) compared pethidine and diamorphine for use in pain relief in labour, they concluded that pethidine was of little value. The inadequacy of both pethidine and morphine as analgesic agents are well known and, together with their known placental transfer and long half-life (Aly, 2000), would suggest limitations to their use. However, data suggest that their use is second only to that of Entonox in the UK (Care Quality Commission, 2010; Chamberlain et al., 1993), it is unclear whether this high usage is due to persistent demand, habit of use by midwives or lack of any reasonable alternative. Olofsson and colleagues (1996) compared the



analgesic and sedative effects of intravenous pethidine and morphine and their effects on anxiety in a double-blinded randomised dose-response study in Stockholm. They concluded that the pain is not sensitive to systemically administered morphine or pethidine, which serve to cause sedation. They went further to say that it seemed unethical to continue to meet women's requests for pain relief by giving them sedation and that the use of such sedative drugs should be avoided in labour.

As side effects for opiates are well known, Mander (1998) has suggested that women should decide whether a side effect is acceptable or not. However, how a woman feels about a particular side effect during pregnancy may change according to the pain she experiences during her labour. The known side effects of opiates include respiratory depression of both mother and neonate, euphoria/dysphoria which can lead to confusion and inability to cope, as well as more common symptoms of nausea and vomiting requiring the routine co-administration of an anti-emetic. Hypotension and difficulties in breastfeeding are also experienced. However, although these drugs have generally been found to have a limited effect on controlling women's pain, there is usually only a short operational time lag between the request for and the receipt of the drug; it does not slow down established labour; it is straightforward to administer, and it can be prescribed by a midwife (MIDIRS, 2003b). Opiates are also generally fast acting, taking effect between 5 and 15 minutes after administration and persisting from 2 to 4 hours, depending on which derivative is used (Mander, 1998).

The evidence base for use of pethidine and diamorphine in labour is surprisingly scant, and few studies evaluate the adverse outcomes on the mother and baby. There is limited evidence that diamorphine provides more effective analgesia than other

opiates with slightly fewer side effects for women (NICE, 2007). Of those studies that have been completed, there are variations in drug dose, type and combination, making it difficult to compare their results. It is also important to note that studies comparing opiates with placebo in childbirth have never been, and will not now be, done; thus it is not possible to quantify any adverse effect of the opiate versus no drug.

Despite the known side effects and the lack of evidence of efficacy, the guidance from NICE states that pethidine and diamorphine should be made available to women. The caveat is that women should be informed that such drugs will provide only limited pain relief and may have significant side effects for mother and baby, and that late administration may interfere with the baby's ability to breast feed (MIDIRS, 2003b). Several authors continue to call for more research to be conducted on alternatives and on the long-term effects (Aly, 2000; Fairlie and Walker, 1999; Reynolds and Crowhurst, 1997) but funding and ethical difficulties make it unlikely that such studies will be performed.

### 3.4.3 Epidural Anaesthesia

Since the introduction of epidurals into obstetric practice there have been continued improvements in both safety and effectiveness and this is now one of the most popular pain-relief methods for women giving birth in hospital (Camann and Alexander, 2006). An epidural is an invasive technique that should be administered by an anaesthetist; once the equipment is in place, both the mother and the baby must be continually monitored, meaning that constant supervision by a midwife is required (Yearby, 2000).

An epidural requires the insertion of a slow-acting local anaesthetic introduced by a needle via a small plastic cannula into the lumbar epidural space. Epidural analgesia completely blocks the transmission of pain impulses. The chemical structure of the drug used prevents any significant amount (<20%) being transferred across the placenta (Mander, 1998). The particular agent used in an epidural varies between hospitals, but is likely to be a membrane-stabilising local anaesthetic such as bupivacaine, an opiate such as fentanyl, or a combination of the two. It may be administered as a single dose, as a continuous infusion, or by a pump controlled by the woman herself (Birth Choice UK, 2009). As insertion of an epidural is an invasive technical procedure, midwives and anaesthetists should explain its advantages and disadvantages to all women who request one, to ensure that the requirements for informed consent have been met. The MIDIRS (2003a) leaflet advocates explanation of the basic principles in straightforward, non-clinical language prior to the onset of labour, to ensure that women are enabled to make an informed choice once labour begins.

Department of Health reports show national epidural rates of 21% in 2005, increasing to 31% in 2007–8 (Department of Health, 2009b; 2005). Despite this wide-ranging and increasing use of epidurals, many concerns have been expressed about the adverse effects of epidural anaesthetic on the mother and infant (Anim-Somuah et al., 2005). One study conducted in Dublin (Bohra et al., 2003) assessed the effect of epidurals on mode of delivery in 1,000 primiparous women, as part of an examination of active management of labour. In their study population, Bohra et al. found that 72.2% of women had an epidural, 18.6% had no pain relief and 9.2% had other forms of pain relief. Assisted or instrumental vaginal delivery was significantly higher in

those who had an epidural (32%) than in those who did not (9%). There was no significant difference in caesarean section rates between those with and those without an epidural, which has been a controversial issue in obstetric anaesthesia for some time. The first study of active management of labour in Dublin was conducted in 1973 when the epidural rate was only 1.3%; the rate had risen to 72% by 2003, which reflects either the change in attitude to pain in labour or the increased acceptability of the epidural by the study population. Satisfaction with the pain relief offered by the epidural has also been demonstrated (Dickinson et al., 2003), with median pain scores dropping to 27 (in a range of 1–100) for those women in the study who had an epidural, compared with 75 for those receiving non-pharmacological support (continuous midwifery presence), with 95% of women who were allocated to the epidural group reporting analgesia as working as well as, or better than, expected.

Despite these studies showing satisfaction and increased pain relief received from an epidural, concerns remain about the side effects – the major ones being detailed below. The review conducted for the Cochrane collaboration identified an increased risk of instrumental delivery for women who have an epidural ([Relative Risk](#) 1.38, 95% [Confidence Interval](#) 1.24–1.53), derived from analysis of 17 trials including 6,162 women. Eleven studies including 3,580 women showed that women with an epidural had a significantly longer second stage of labour (Weighted Mean Difference of 15.55 minutes) (Anim-Somuah et al., 2005). The same review found no significant difference in caesarean section rates, maternal satisfaction, long-term backache, neonatal Apgar scores or length of first stage of labour but significant differences were found in several other areas (

**Table 1** (Table 1).

**Table 1: Epidural versus no Epidural in Labour -a Cochrane Review**

Side Effect	Evidence
Use of synthetic oxytocin (Syntocinon) to augment contractions	Women with epidural at significantly higher risk of use of oxytocin (11 trials, 4,551 women,)
C-section for fetal distress	42% increase in Relative Risk of section in epidural group (10 trials, 4,421 women)
Women's perception of pain relief	Epidural group reported less pain in 1 <sup>st</sup> and 2 <sup>nd</sup> stage of labour than did the control group (2 trials, 164 women)
Need for additional pain relief	Epidural group had significantly less need for additional pain relief – Relative Risk 0.05. (15 trials, 6,019 women)
Maternal fever	Epidural increases risk of maternal fever, Relative Risk 3.67. (3 trials, 1,912 women)

(Anim-Somuah et al., 2005)

Clearly, the epidural technique offers better labour-pain relief than no epidural. Most women in the control groups in the studies identified in the Cochrane review were randomised to receive opiates; some of the effects, therefore, may be attributable to opiates rather than to other non-epidural forms of pain relief or no pain relief at all (Anim-Somuah et al., 2005).

The major advantage of an epidural is that, once it has taken effect, a woman should be free from contraction pain without a change to her level of consciousness.

Although there has been much research on the adverse effects of an epidural, no research has been done to date on the impact of an epidural on midwifery practice and on how the epidural changes how a midwife can and does support a woman during

labour (MIDIRS, 2003a). Epidurals can be provided for women only in the setting of a medically-led delivery unit and are not available for use in midwifery-led units or for home deliveries.

The current NICE recommendations on intrapartum care suggest that women who request an epidural should not be denied it, with the understanding that blood pressure will be measured every 5 minutes for 15 minutes after insertion of the cannula, to monitor hypotension. If a woman is not pain free after 30 minutes, an anaesthetist should be re-called to review the situation; this has implications for staff resource. An epidural should be maintained until after the 3<sup>rd</sup> stage of labour is complete and a woman should be made aware of the advantages and disadvantages before having an epidural sited (National Institute for Health and Clinical Excellence, 2007).

### 3.5 Summary

This chapter has identified the wide variety of methods of pain relief that are available to women, and also the variety of evidence that underpins their use. This highlights the difficulties that exist for midwives and other healthcare professionals in trying to ensure that women approaching labour are aware of the risks and benefits of the different approaches and understand what choices they can make, without making such women feel that all methods are fraught with danger and that no suitable options are open to them. The difficulties for women lie in the conflicting evidence and advice that is available for each option. One such example of conflicting advice is that offered for TENS machines, which are promoted by some as being effective only in the early stages of labour, and are not recommended at all by others as they have no evidence of their effectiveness. A woman reading this information must decide what information she trusts and on which she can base her choices. This also poses

difficulties for shared decision making, in that an essential element of shared decision making is the provision of clear, evidence-based information on which to make a decision. If influential bodies such as NICE, RCM, RCOG and MIDIRs all produce differing guidelines, it is difficult to be clear and consistent about the evidence on which women should be basing their decisions.

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## 4 Methodology and methods

The aim of this chapter is to describe in detail both the methods and methodology of this study. Following a description of the type of research that was conducted, what is understood by the term qualitative research, its characteristics and the methods of data collection employed to study this area, there are details of the background to the study and the population involved, how participants were recruited and how the chosen data-collection methods were used. There is also a detailed explanation of the method of analysis and how the data are presented in the 'Results' chapters of this thesis.

### 4.1 Introduction

As stated at the start of this thesis, this is a health services research project that uses qualitative methods to investigate the study area. Health services research is concerned with the relationship between provision, effectiveness and efficient use of the health services and the needs of the population (Bowling, 1997). The key research objectives of this study clearly fit into this type of approach:

1. To carry out a systematic literature review covering women's experiences of labour and pain relief in labour;
2. To ascertain the views and expectations of various groups of women and professionals using qualitative methodology in order to develop appropriate decision support;
3. To develop the most appropriate decision support for choice of pain relief in labour in order to assist in women's decision-making process.



Before embarking on my research I had to make a decision as to the most appropriate approach to take to answer my research questions—either a qualitative, a quantitative or a mixed-method approach. At an early stage I ruled out the use of quantitative methods as I wanted to explore in detail the issues concerning pregnant women and decision making in pregnancy and labour, and to explore the perceptions of both the professionals and of the women concerned regarding the final decision making. Qualitative methods, unlike quantitative methods, would enable me to gain the in-depth, rich data needed to explore the issues in this area.

A common distinction between qualitative and quantitative research is that qualitative research characteristically is hypothesis generating and quantitative research is hypothesis testing. A useful comprehensive definition of qualitative research is offered below by Denzin and Lincoln:

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretative, material practices that makes the world visible. These practices turn the world into a series of representations including field notes, interviews, conversations, photographs, recordings and memos. At this level qualitative research involves interpretive, naturalistic approach to the world. This means qualitative research studies things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them (Denzin and Lincoln, 2000: 3).

Qualitative research starts from an understanding that there are various ways of making sense of the world (Britten et al., 1995), many of which can be explored during the research. One of the strengths of qualitative research is its flexibility, the researcher being able to respond to the data. The techniques used in qualitative research are useful when examining topics that are ill-defined or poorly explored (Britten et al., 1995). The examination of these areas using qualitative methods falls

into three broad groups—interviewing, focus groups and observation. Whichever method is used, the key elements of qualitative research include many of the following components. First, the aim is to provide an in-depth and interpreted understanding of the social world, using often small, purposively selected samples. Secondly, data are usually collected through close contact between the researcher and the participant. Thirdly, the data are detailed and information rich, and are analysed in a way that is open to emergent themes and concepts. Finally, the output of qualitative studies tends to focus on re-presenting the world of the research participant (Ritchie and Lewis, 2003). The analysis and results allow for the presentation of an explanation of the researcher's view of the world he or she has examined.

This study on decision making regarding pain relief in labour is a pertinent example of an area of research that seeks to explain a phenomenon as it exists in everyday life. One of the aims of this study was to ascertain the views and expectations of women in order to better support them in decision making in the future. Before any suggestions can be made regarding future changes in practice, we need a detailed understanding of women's expectations in pregnancy regarding pain and pain relief, and of the views and expectations of the professionals caring for them. This detailed examination of pregnancy, labour and delivery, from both the women's and the professionals' perspectives, would not be possible through quantitative methods, because a structured questionnaire approach, for example, would not allow the researcher the flexibility of pursuing any areas of importance to the women that may come to light during the interviews. This detailed examination and interpretation of pregnancy and childbirth in terms of the meanings that people bring to these physiological processes

will enable me to identify appropriate ways to support decision making in pregnancy and labour.

In qualitative research, the nature of the study and the approach to how data are collected and analysed are influenced by the philosophical stance and the ontological and epistemological position of the researcher, which affect the methodological approach adopted. It is important to set out the researcher's theoretical standpoint in order to understand how the data were approached and how conclusions were reached. Although this is an applied piece of health services research, theory helps to give a structure to the analysis. According to Thrift (1999), the application of theory to any data analysis is a practical means of approaching the data and cannot be avoided.

I should first explain my ontological position regarding this piece of research. Ontology focuses on what is the nature of reality, about how things really are and how things really work (Guba and Lincoln, 1994). The reality spectrum extends from realists to relativists. Realism at one extreme advocates a single unequivocal social reality or truth that is entirely independent of the researcher and the research process. At the other extreme is relativism (or anti-realists), whereby multiple perspectives of the world are created and constructed in the research process (Mays and Pope, 2000). For this research project I have adopted a relativist approach, in that multiple realities are available to the researcher, which were constructed by the participants through the research process, in either the focus groups or the interviews. It was not important that what was constructed was an accurate reflection of the 'truth'; rather, it was the participant's recollection of their reality (Potter, 2003), their recollection of how

things happened, what was said and how this affected them. Each participant constructed their own 'reality' of the events; it is these individual realities which need to be considered. An example was that several women perceived a barrier that prevented them from gaining access to an epidural when they requested it. These women felt that they had to convince the Maternity Assessment Unit (MAU) midwives that they were in 'enough' pain to be allowed access to the delivery suite and ultimately to the epidural. The midwives did not agree that any such barrier was in place. What is important to explore in this situation is the effect that this perceived barrier has on both the women and the professionals, and how these multiple realities impinge on the social phenomena being studied. To accept the idea that there are multiple versions of a given situation implies the necessity to attempt to obtain the multiple perspectives available in the study and to capture as much of the complexity of the situation in the research as possible (Richardson, 2003). Each one of the accounts in this study is viewed as the respondent's version of the truth, or version of events. It is not thought that any of the accounts will be false, but it is how that individual views the events taking place. A midwife and woman recalling the same birth may give very different accounts, as they are approaching it from different perspectives. It is important to acknowledge during the analysis that these are people's reflections and are not supported by any observational data at this stage.

Secondly, a researcher's epistemological standpoint questions what is the nature of knowledge and guides the methodological choice (Carter and Little, 2007). In this study, for example, to be completely aware of 'the' reality of pain in labour, given my epistemological stance, would be difficult because, as outlined earlier, in my opinion there are multiple realities within the setting. Through this research I will be able to

construct only a view of real-life pregnancy and labour. My adopted approach is one of interpretative epistemology, which strives to construct a version of the truth from examination of the data, rather than aiming to finding the absolute truth (Weed, 2008). The reason for this approach is that my adopted interpretivist viewpoint does not see reality as a fixed external situation; to view it as such would be to adopt a positivist standpoint (Bassett, 2004). Unlike positivist research, this approach of interpretative research is influenced by the researcher, who translates the other person's words and actions. Interpretation of these data implies a researcher's understanding of the events as retold by the participants (Corbin and Strauss, 2008). Further, Denzin and Strauss (2000) consider that this interpretation illuminates others' experiences, making them accessible to many. I acknowledge that, as a woman who was pregnant with her third child during my research fieldwork, my pregnancy will undoubtedly have had an impact on my interpretation of the data. The reflections on my impact on the study are discussed fully in chapter 9.

Finally the methodological question –how can I, as the enquirer, go about finding out what I believe can be known? According to Guba and Lincoln (1994), a researcher's ontological, epistemological or methodological stance can limit or constrain the options available. Given that, as discussed above, multiple versions of events or realities need to be gathered and my aim was to conduct interpretative research, a variety of methods, including interviews and focus groups, was seen to be the most appropriate way of accessing different narratives to understand and examine the complexity of the situation. Details of the interviews and focus groups are outlined in section 4.3.

The following section details how I went about setting up this study based on the background knowledge I had gained and my theoretical standpoint

## 4.2 Background to the study set-up

This section details how funding and ethical approval for the study were obtained, the role of the advisory groups, and the work involved in setting up the study. These details are provided in order to make the research process as transparent as possible.

This study was undertaken as part of a training fellowship awarded by the Medical Research Council (MRC). Additional funding was awarded from the Royal Victoria Infirmary (RVI) Trustees charity. This additional funding was used to enable additional researcher time and for secretarial support to enable the audio recording to be transcribed. The additional researcher time was used to conduct 12 of the interviews with 6 of the women as well as being a co-facilitator in one of the focus groups. The additional research enabled a wider cross-section of women to be interviewed than would have been possible if I had had to undertake all of the interviews in the time available.

For this study I identified a team of supervisors who would be able to offer support and insight into health services research, shared decision making, qualitative methodologies and pain in labour. My supervisory team initially consisted of Professor Richard Thomson, who has expertise in health services research and shared decision making; Dr Madeleine Murtagh, with expertise in qualitative research; and Dr Sheila Macphail, a consultant obstetrician. Owing to the illness of Dr Madeleine

Murtagh, in November 2008 Dr Catherine Exley agreed to replace her as a supervisor with an expertise in qualitative methods and health services research.

My topic guides were developed in the first year of my study, following my initial literature review in collaboration with the supervisory team and the project advisory group. It was then necessary, early in the second year, to obtain the relevant ethical approval from the Newcastle and North Tyneside Ethics Committee. Details were submitted of the research questions to be explored and the methods to be used, as well as of the topic guide and information that was to be given to each participant. Ethical approval was granted once minor corrections had been made to the information sheet (Appendix 3).

At the time when this proposal was being developed, an advisory group was set up to provide support and guidance throughout the project. This group comprised myself and my original supervisory team, a consultant anaesthetist, and representative midwives from both the community midwifery service and the delivery suite. The advisory group was set up to help develop questions to be included in the topic guide, to help negotiate access to the participants, and as a reference group that would check the validity of the results. The existence of this group ensured that, the views of a large group of stakeholders were able to inform all stages of the research (Rice and Ezzy, 1999): for example, the advisory group helped to suggest the best methods of selection and recruitment of participants, given the changes in the provision of antenatal services during the course of the study.

The inclusion of lay representatives in the advisory group posed initial difficulties. It had been hoped that the lay representative who was already a member of a feedback group on service delivery in the obstetrics directorate would be able to represent patients. However, because of other commitments she was unable to do so and was also unable to recommend a replacement. The midwives on the steering group approached several women who might be interested in joining the advisory group; unfortunately, all these women appeared to be more interested in relating their accounts of an often traumatic labour than in becoming involved in a long-term research project. The local branches of the National Childbirth Trust (NCT) were contacted as potentially representative of women, but they were heavily involved in other research projects and therefore unable to commit to our project. Ultimately, two members of the Institute of Health and Society (IHS), who had recently given birth at the hospital involved in the study, were invited in lieu of patient representatives to give their views on the study protocol, topic guide and early analysis of the results. Although not as intended, this proved to be beneficial as these women had not only an insight into research and the problems inherent in it but also were able to contribute their own recent experience of information provision and decision making in pregnancy and childbirth.

### 4.3 Methods of data collection

The choice of method in any study is largely informed by the research question and is inextricably linked to the theoretical perspective of the researcher – that researcher's way of seeing the world – as outlined previously. Health services research tends to focus on addressing specific practical problems or issues rather than on theoretical



considerations, and this often determines the methods employed (Pope and Mays, 2000). The strength of my chosen qualitative approach, according to Baum (1995), is that it allows the documentation and interpretation of the different ways in which people make sense of their experience of health.

Various types of questions can be addressed by qualitative methods. First, contextual questions (which identify what exists, the nature of experiences) allow the description of phenomena experienced by the study population – for example, how does racism manifest itself? Secondly, diagnostic questions are concerned with why phenomena occur, what decisions are made and the needs that arise – for example, what are the underlying reasons for racism? Thirdly, evaluative questions ask how well something works, which is a key question in much policy-related research – for example, what factors contribute to a successful health-promotion programme for ethnic minorities? Finally, strategic questions help to identify new theories, producing new ideas – for example, how can declining rural communities be re-started? Many qualitative research studies attempt to address several of these questions (Baum, 1995).

The research questions for this study are contextual, diagnostic and evaluative in their nature. First, the contextual question is aimed at identifying what already exists in the provision of information and education to pregnant women. This is done by asking such women what information they have received, and also by asking the midwives who care for them what information they have given; each group is also asked to appraise the utility of the information they have received from different sources. Secondly, the diagnostic element of the research considers what decisions are taken

during pregnancy and labour; why these decisions are taken, and the needs for information and support that arise out of this situation. Midwives are asked about their perspective on this decision-making process and the women are asked to convey their expectations of the decisions made. Finally, the evaluative element of the study seeks to address how well the decision-making process works in the context of the current delivery of care in labour, from the point of view of both the women and the midwives caring for them.

The methodologies for data collection that fit with my theoretical standpoint and are most likely to allow me to answer my research questions are interviews and focus groups. Interviews are widely used in qualitative research, in either a semi-structured or in-depth unstructured format. An advantage of semi-structured interviews is that they have a flexible structure of open questions, leaving the researcher free to diverge from these questions in order to explore ideas that arise through the course of the interview, thus providing an adaptable method of obtaining information (Robson, 1993). A disadvantage is that the success of the interview is largely dependent on the ability of the interviewer to keep the interview on course and to follow up any points raised by the interviewee. Interview skills are generally acquired through training and from experience. Patton (1980) maintains that, no matter which form the interview takes, good questions should be open-ended, neutral, sensitive and clear to the interviewee, in order to gain the most from them.

The second method chosen – focus groups – allows the participants' perspectives to be generated through open discussion. These group discussions enable the researcher

to discover a range of informants' views and whether there is a consensus (Britten et al., 1995). It is the role of the focus- group facilitator to 'facilitate the expression of ideas and experiences that may be left underdeveloped in an interview and to illuminate the participant's perspective through debate within the group' (Kitzinger, 1995: 300). The facilitator is able to use the group dynamics to create discussion about both the topic of interest and any new issues that arise. Most researchers, when organising focus groups, aim for a homogeneous group to capitalise on people's shared experiences – a group consisting of people of similar background and experience (or, as in this case, similar professionals) – that will allow the members of the group to highlight contentious or sensitive issues which might have remained unspoken in one-to- one interviews (Kitzinger, 1995). It is thought that focus groups are ideal for examining workplace cultures, with participants providing mutual support in expressing views that may be at odds to the views held by the public or, in this instance, by patients (Kitzinger, 1995). However, focus groups and interviews can only examine participants' knowledge of, and attitudes to, certain issues and cannot investigate actual types of behaviour or the prevalence of such views in the community (Rice and Ezzy, 1999). One negative aspect of focus groups is that an individual with a different opinion to the rest of the group may remain silent; it is in these circumstances that the role of the facilitator is pivotal in ensuring group participation. According to Kitzinger (1995), it is important when analysing focus group data to assess the impact of the group dynamics and to assess whether there is any evidence of the questioning of others' opinions, of deference to others, of censorship, or of participants changing their views throughout the course of the discussion as they hear other people's accounts.

After taking into account the advantages and disadvantages of these methods, the populations to be included in my study and my theoretical standpoint, it was necessary to determine the most appropriate method for each population. In my opinion, one-to-one semi-structured interviews with the women would allow them to talk freely about a highly personal and emotional event in their lives, whereas focus groups would enable discussion within professional groups to shed light on the issues to be developed. Subsequent consultation with the advisory group suggested that these professionals possibly would be unable to express their views until they had participated in some form of discussion, because they may not previously have formed an opinion regarding how prepared women might be to make decisions. For this reason I chose to use focus-group discussions with the groups of professionals. During the focus groups the following topic guide was used to ensure that key points were covered.

1. Introduction of researcher and recap the purpose of the study.
2. Acknowledge that the interview will be confidential
3. How are you involved in preparing women for labour?
4. What information do you give women?
5. At what stage in pregnancy do you give this information?
6. Do you ever recommend a certain form of pain relief?
7. In what circumstances would you recommend
8. Which pain relief do you most often recommend /favour and why?
9. How involved are women in actually choosing their own pain relief?
10. Do you think this appropriate?
11. What changes do you think if any should be made in how women are prepared for labour?
12. What additional information should be giving women?
13. At what stage of pregnancy?
14. In what format?

**Figure 3: Focus group topic guide**

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## 4.4 Study Population and Recruitment

As previously stated, this study involved research with two separate but related groups of people – pregnant women and the professionals who care for such women during pregnancy and labour. This section gives details of the study population and of their recruitment.

The study population consisted of women from a defined geographical area in a large city in the North East of England, who were at various stages of pregnancy and intended to give birth at the study hospital. The women were recruited from two midwifery bases within the city. The midwives at these bases were included in focus-group discussions, so had a detailed knowledge of the research being conducted. The first base was in a predominantly middle-class area of the city, with a population that was largely well educated and lived in safe, privately owned properties in an area that was well provided for in terms of services, shops, doctors and open green spaces. The second base was in one of the most deprived areas of the city, with high proportions of unemployment and council and housing association properties. The area is generally run down with limited access to shops and services.

### 4.4.1 Pregnant Women

**As specific areas that I wished to explore had emerged from the initial literature review, semi-review, semi-structured interviews (Pope and Mays, 2000) were considered to be the most appropriate method to use with pregnant women, because such interviews would not be too rigid to allow issues arising to be followed up. The questions listed in**

[Figure 4 : Outline Topic Guide for interviews](#) (Figure 4 : (Outline Topic Guide for interviews)) were used only as a guide during the interviews to ensure key areas were discussed; they were not necessarily answered sequentially in every interview, which allowed sufficient flexibility to each interview to enable discussion of any new issues that arose.

1. What methods of pain relief did you decide on before you went into labour?
2. What made you decide on these?
3. What were the most important factors which influenced your decision?
4. Which method/methods of pain relief did you actually use?
5. What made you decide on these?
6. What were the most important factors which influenced your decision?
7. Are you happy with your decision?
8. How will the experience of this labour and birth affect any future decisions?
9. What methods of pain relief would you chose for any subsequent deliveries?
10. Is there any information you needed that would have made it easier to make a decision?
11. What would your advice be for someone about to have a baby?

**Figure 4 : Outline Topic Guide for interviews**

I decided that the use of semi-structured interviews, conducted at several time points during the antenatal and postnatal period, would enable me to build a rapport with the women and to allow them the freedom to express themselves during the interview without fear of reprisals from other participants (which may occur in focus-group discussions). It would also allow me to follow, with these women, what they expected during pregnancy to what actually happened during labour. The aim of semi-

structured interviews is to discover the participant's own framework of meaning and it is up to the researchers to avoid, as far as possible, the imposition of their own structures or assumptions; the researcher must remain open to any concepts that may emerge (Britten, 1995). After previous experience of interviewing study participants, I considered that I had the skills necessary to conduct the interviews without imposing my own views.

The purpose of the interviews was to gain an understanding of the views of pregnant women on their expectations of pain and pain relief; to ascertain the source of their information; and to discover how useful, in their opinion, this information was to them in their decision-making process. The interviews also aimed to discover women's needs regarding information – including the timing, form and content of such information. Finally, the interviews would allow an understanding of how women made choices and what helped them in this process.

The plan was to interview individual primiparous and multiparous women at various stages in their pregnancy (Table 2: Interview Plan). However, throughout the course of the recruitment, pragmatic changes had to be made to the choice of those interviewed, as explained later in this section. Table details the sample of women from which I hoped to recruit, and at what point in pregnancy I hoped to interview them (Cresswell, 1998).

Stage of Pregnancy	Interview Category			
	Category 1 Early Pregnancy	Category 2 3 <sup>rd</sup> Trimester	Category 3 Postnatal	Category 4 Subsequent Pregnancy
Booking (13 weeks)	✓			
Mid/late pregnancy ( 34–36 weeks)		✓		✓
Birth				
Postnatal ( within 6 weeks)	✓	✓	✓	✓

(✓ -Indicates at what stage of pregnancy women from each category were to be interviewed.)

**Table 2: Interview Plan**

It was planned that four categories of 7–12 women in three phases of pregnancy and childbirth would be invited to take part in the study. The methods of selection and recruitment were designed to reflect the new service provision of antenatal care for low-risk pregnancies being delivered primarily in the community (Robson, 1993). Recruitment of the women was to take place during their routine antenatal visits, with their community midwife. During this appointment, issues such as general health and wellbeing were discussed, as well as concerns about labour and delivery. When a woman eligible for inclusion had been identified by a midwife, she discussed the research project and the possibility of participation during the routine antenatal appointment. If she was interested in taking part she was given an information leaflet (Appendix 3) and her contact details were passed to me. At this point I would follow up this initial contact with a telephone call to discuss the project in detail and to ascertain, after the discussion, if that woman would still be willing to take part in the study. If so, another patient information leaflet would be sent out, if necessary, and a date for an interview would be arranged. Consent for participation would be discussed and obtained before the interview began (Ritchie and Lewis, 2003).

The women in each category of the study were as follows:



**Category 1**, the 'early pregnancy' category, was identified as an important subset to target, as midwives in the advisory group reported experience of women who enquired about pain and pain relief in labour as soon as their pregnancy had been confirmed. However, when recruitment began for this group, only two women were recruited, both of whom had complications in early pregnancy. It was decided that these two women should be questioned to find out why they had decided to take part, and why, in their opinion, other women were refusing to take part. Anecdotal evidence had been offered by the midwives, at an early advisory group meeting, that, from the early stages of pregnancy, women wanted information about pain relief. The midwives felt that, because of this interest, women would be willing to talk to researchers about their feelings at this stage. However, in contrast to this anecdotal evidence, the women in this category were still focusing on the pregnancy continuing rather than miscarrying, and did not want to discuss any delivery issues at that time. The two women in question stated that they had chosen to take part in the study with a view to obtaining more information in relation to their own complications rather than expounding on their views and expectations. Although the onset of pregnancy is an important time at which to talk to women to explore their knowledge, it was felt inappropriate to continue to attempt to recruit women to this group. Time constraints on the recruitment of other groups, and the difficulties that I had encountered, implied that a new approach would be needed in order to identify and recruit. Such a new approach would have involved redesigning of the study and reapplication to the Ethics Committee, which was not considered to be achievable in the timeframe available. The two women who had come forward were asked if they would like to be involved in the study at a later stage; both agreed to do so, and subsequently were part of primiparous category 2.

**Category 2** consisted of primiparous women at the 32–36-weeks stage of pregnancy. These participants were recruited during their routine visit to their community midwife, which was held in their primary care practice at around 32 weeks of pregnancy. These women were all at low risk at the time of recruitment (i.e. they had no complications and were expected to go to full term with an anticipated normal singleton delivery at the hospital included in the study). Their participation in the study had been reviewed by either the midwives or Dr Macphail to ensure they met the inclusion criteria. This process eliminated those who were no longer considered to be 'normal' low-risk pregnancies. A letter was also sent to each recruited woman's GP to give that GP an opportunity to express any concerns about the woman's participation. The sample of women for this group was selected purposively (Pope and Mays, 2000; Ritchie and Lewis, 2003) from three age groups (<20 years – [2 primiparous women](#), 20–30 years – [8 primiparous and 7 multiparous women](#) and >30 years – [7 primiparous and 8 multiparous women](#)). Within each age group we tried to recruit women with a spread of educational achievement (left school at 16; 'A' levels; vocational qualification, and degree), the detail ~~of age groups~~ is outlined in [Table 3](#) and ~~qualifications~~ in [Table 4](#). These participants were interviewed individually about their experiences, expectations, decision-making preferences, sources of information and other resources for decision making, birth planning and pain-relief choices. All of these participants were subsequently re-interviewed within 6 weeks postnatally to enable comparison between their expectations and their actual experience of labour and pain management, and to ascertain what factors had influenced any changes in the decisions they had made.

Category	<20 years	20—30 years	>30 years
2 (Primiparous)	2	8	7
4 (Multiparous)		7	8

Table 3: Age of sample

Unknown	No Qualifications	Vocational / GCSE	A Level	Degree
7	5	6	7	7

Table 4: Academic Level of sample

**Category 3** was intended to be a group consisting of a separate set of women who were to be interviewed for the first time within 6 weeks postnatally. These women were to be identified and given patient information by a member of the research team on the postnatal ward and followed up if they wished to be part of the study.

However, after nearly six weeks of attempted recruitment, on a postnatal ward with up to 120 deliveries per week, no women were successfully recruited, despite daily visits to the postnatal ward. Midwives found it difficult to engage women who had no previous knowledge of the study to take part. Furthermore, the women during this postnatal phase were more concerned with adjusting to life with their new baby. In addition, many of the women were on the postnatal ward for only a matter of hours before being discharged home. After discussion with both the supervisory team and the advisory group, it was decided to cease recruitment for this group and to

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concentrate our efforts on ensuring that all the women that we interviewed antenatally were followed up postnatally.

**Category 4** consisted of women who were having their second or subsequent baby (they were multiparous) and were to be interviewed at 36 weeks of pregnancy and again at 6 weeks postnatally. The recruitment and selection criteria and the sample frame for this group were otherwise identical to those identified for the category two primiparous women; the ages of the sample of women are shown in [Table 3](#). This group of women were asked about the choices that they had made, how they came to make their decisions and how their decisions in this pregnancy were influenced by experiences in previous pregnancies. All of these women were also successfully followed up with an interview within six weeks postnatally.

All of the interviews were conducted at a location convenient for the women: all but one of the women asked to be interviewed at home; this one exception chose to come into the university. The interviews were recorded with a digital recorder, once informed consent for participation and recording had been obtained. The interviews lasted between 25 and 60 minutes. The interview recordings were then transcribed verbatim (Bryman and Burgess, 1994; Pope and Mays, 2000) by the project secretary. The accuracy of the transcripts was checked by listening to the recording while reading the transcripts and making any changes necessary (Bryman and Burgess, 1994).

Field Code Changed

#### 4.4.2 Professionals

The following section details how the professionals were recruited for inclusion in the focus group discussions for the study and how data was collected from this group. The different categories of professionals recruited for this study are detailed in the table below.

	Professional Category	Personnel Involved
Group 1 (FG1)	Community midwives Base 1	Midwives Parent educator Healthcare assistants
Group 2 (FG2)	Community midwives Base 2	Midwives Health visitor
Group 3 (FG3)	Delivery-suite midwives	Delivery-suite midwives
Group 4 (FG4)	Hospital clinicians	Anaesthetists Obstetricians

**Table 4.5: Participants in focus groups with professionals**

For focus groups 1 (FG1) and 2 (FG2), the community midwives were recruited from the same midwifery bases as the women. Once the midwifery bases had been identified, a link midwife in each was made known to me and became my contact point for organising the focus groups with the community midwives. After detailed discussions with the contact midwife, she relayed this information (verbally and with the aid of the professional information sheet) to all midwives within her base. These midwives were given participant information sheets (Appendix 4) with details about the purpose of the study and information about how the data would be anonymised, stored and referred to in any analysis and future publications. All midwives were then asked whether they would be happy to participate in a focus group, and all midwives who were working on the day of the arranged focus group agreed to do so. At the beginning of the focus group I went through the information sheet to ensure that all

the participants were happy and had been given the opportunity to raise any questions. The questions asked of the professionals differed from those put to the women (Figure 3) because they were designed to examine the professionals' views on pain as well as on the women themselves. At the beginning of the focus group, signed consent for participation was obtained from each midwife. Both focus groups took place over lunchtime at the clinic where the midwives were based. Financial constraints meant that I had to conduct these two focus groups unaided.

For the third focus group (FG3) – that with the delivery-suite midwives – the current delivery-suite manager (who was also a delivery-suite midwife) assisted with recruitment. The delivery-suite manager had identified a range of midwives, from those who had recently qualified to those who were more experienced, and from those with an interest in natural labour and birth and those who were happier with the medical model of intervention. I contacted all these midwives, explained the study to them, and gave them an information sheet and my own contact details in case they had any queries. The time arranged for the focus group was that which was most convenient for the majority of those midwives who had expressed an interest. Informed consent for the delivery-suite midwives was achieved in the same way as that for the community midwives. This focus group took place in a seminar room within the obstetric unit of the hospital in the study, with a co-facilitator in attendance.

The final focus group (FG4) involved clinical staff, including consultant anaesthetists and consultant obstetricians, together with specialist registrars and junior doctors from within the Department of Obstetrics. The clinicians involved were first approached by

Dr Macphail and then by me, ensuring that all interested clinical staff had been given an information sheet. To arrange the focus group and to obtain informed consent, the same process was followed as that for the delivery-suite staff. This focus group took place over lunchtime in a seminar room in fetal medicine within the hospital, with a co-facilitator in attendance.

In this study, the focus groups comprised similar professional groups, including one for midwives and one for obstetricians and anaesthetists. It was hoped that, by keeping the different professional groups separate, members of each group would feel able to talk freely without feeling intimidated by members of the other professional groups. The approach used to analyse all the data is set out in the 'Analysis' section.

The purpose of the focus groups was to gain an insight into the professionals' understanding and approach to labour, labour pain and the different forms of pain relief available during labour, as well as discerning their views on labour and the pain of labour. The results would then enable me to determine whether the views of the professionals were aligned with those of the women involved. I also sought to explore professionals' views on how women make decisions in labour and on how they assist women in this process. Although focus groups were seen as the most appropriate method of investigation for this group, they do have drawbacks, one of which was highlighted during focus group 2 (FG2): a health visitor was present but did not actively participate in the group; when this lack of participation was queried, she said that her opinions were the same as those of the midwives, and that she was there to

support them. Thus, although the focus groups had been well facilitated by me and a second researcher, they still had their drawbacks, which should be recognised.

Each of the focus groups took about an hour. All the discussions were recorded using a digital audio recorder; in addition, I took field notes of any contextual issues that might be important during analysis. The audio recordings were then transcribed verbatim and checked for accuracy and completeness in the same way that the women's interviews had been checked.

#### 4.5 Analysis

The raw data used in qualitative analysis are words spoken during an interview or focus group, or written down (Silverman, 1993), together with field notes (Seale et al., 2007). Bryman and Burgess (1994) claim that the design, data collection and analysis of these data are simultaneous and continuous processes, which interweave with other aspects of the research process, and that to separate out the analytical process is unrealistic. However, for clarity, I have tried to separate these phases, although recognising that, in practice, they occur simultaneously or iteratively.

All research must address such factors as study design, analysis, sampling, instrument design and (in particular) data analysis. It is crucial that data analysis and interpretation should be deliberate and thorough, avoiding the use of initial impressions rather than the detailed examination of the raw data (Sofaer, 2002). The



most common criticism of qualitative research, highlighted by Mays and Pope (1995), is that it refers to an assembly of anecdotes and personal impressions, subject to research bias, lacking both reproducibility and generalisability. To counter such criticisms, qualitative research must be both systematic and transparent in its design, data collection, analysis and interpretation, and in the communication of results. The strength of qualitative research is in its cyclical, iterative nature, especially with regard to the constant comparative method, whereby the analysis of each stage informs the data to be collected in the subsequent stages (which was the process followed in this study). The research is determined very much by what the participants are saying is important to them in their experience and not what is of importance to the researcher. I hope that the comprehensive description in this chapter of the methods used, together with the systematic way in which the data have been analysed and presented, it will ensure that the analysis will be both transparent and reproducible, increasing the scientific rigour of the results, and obviating any criticism of this study.

Qualitative data are generally unstructured, unwieldy and voluminous. The researcher, through analysis, has to provide some structure and coherence while retaining a close link with the context in which the data were collected (Ritchie and Spencer, 1994). One of the major goals of qualitative analysis is the generation of concepts, theories or hypotheses to be tested (Britten, 1995), which are formed by grouping together the categories that are applied to the data. Some of these concepts are grounded in the topics explored in the interviews; others emerge from the data. This work cannot be undertaken 'in a vacuum', as is suggested can be achieved if you use the grounded theory approach. The analysis of these data is an iterative but also a deductive

process, informed in part by the literature on shared decision making and pain relief in labour and in part by the fact that I was pregnant at the time of the fieldwork. As a large volume of data was produced, NVivo software was used to assist in the coding and management of the transcripts (Gibbs, 2002). The transcripts that comprised the formal data for analysis were coded by me and subsequently discussed at data sessions to develop a coding frame – initially with Dr Madeleine Murtagh and subsequently, in detail, with Dr Catherine Exley.

According to Rapley (2010), the practice of good data analysis can never be summed up by one label such as framework or grounded theory as there are commonalities across several different analytical approaches. My analysis was primarily informed by the constant comparative method (Corbin and Strauss, 2008; Glaser, 1965), with some reference to the framework approach (Pope et al., 2000; Ritchie and Spencer, 1994). My reason for not using a framework approach was that the data were unwieldy and I was more comfortable using a narrative approach of written summaries to approach the data systematically.

A description of the process of analysis used for this study and undertaken for data transcripts from both the interviews and the focus groups is detailed below.

1) Detailed reading and re-reading of transcripts

Like constant comparison and several other qualitative approaches (Rapley, 2010), the first stage of analysis is familiarisation with the data, where each of the transcripts is read and re-read in conjunction with the audio recording to gain knowledge of all of

the interviews and focus group material. Once this had been done, a summary was produced for each transcript, detailing the key points and issues that might be of interest for further investigation.

## 2) Identification of themes

The transcripts were read and summary documents were created to keep a record of the themes of interest and how they had arisen. This process was undertaken using a constant comparative approach to the data; this approach, whereby findings from the first interview were used to inform subsequent interviews (Bassett, 2004), was also used during the interviews themselves. This constant comparison of each incident of a particular theme of interest has the potential to bring out different aspects or different examples of the same phenomena (Corbin and Strauss, 2008). The themes covered such topics as enduring or experiencing labour, barriers encountered, progression through the drugs, attitudes to pain relief, and misinformation. Concepts or themes derived from the data represent the researcher's impressions/understanding of what is being described and of the issues expressed by the participants (Corbin and Strauss, 2008). Bulmer (1969) [and Corbin and Strauss \(2008\)](#) emphasised the importance of these concepts to research when he claimed that they are the categories for which data is sought and in which data are grouped, and which usually become the chief means for establishing relations between data and are the anchor points in the interpretation of the findings.

3) Coding of transcripts and categorisation of text

Coding is the process by which labels are given to extracts of data to give order to such data; this coding frame develops as the data analysis progresses (Bassett, 2004). Once the themes have been identified, it is important to go through each transcript systematically and to code all examples of each theme, while being open to the possibility that, during this process, new themes may emerge or existing themes may merge. This stage also includes a process of constant comparison, checking each new instance of a category or theme with the previous one, to ensure the appropriateness of the category and the relevance to the research. The development of themes or inductive categories allows researchers to link or ground these categories in the data from which they derive (Berg, 2004). Throughout the transcripts, one section of text might be identified by, or be relevant to, a number of different themes: for example, one quote might be coded for birth stories or for progression through drugs, as well as for attitude to pain relief.

4) Systematic analysis of each theme

This aspect of the analysis includes a detailed examination of the descriptions or examples of key issues within each theme, with identification of patterns and discrepancies within each category and across interviews. At this stage it was also important to look for cases known as 'negative', or examples of those that do not fit the pattern. These negative cases enable the researcher to offer an alternative explanation, which adds richness to the explanation and stresses that there are always exceptions to any point of view (Corbin and Strauss, 2008). Such an alternative explanation also demonstrates an intellectual integrity and lends considerable

credibility to the final set of findings (Patton, 1999). Even if negative cases are not found, the process of looking for them ensures the completeness of the coding and gives a further opportunity to identify nuances within each theme.

5) Development of hypotheses regarding the descriptions and patterns identified in the transcripts

Given the data presented and my knowledge of the fields of both pain in labour and decision making, I was able to develop hypotheses or theories that would offer some explanation to the patterns found in the data. These hypotheses provide a way of presenting the results that brings meaning to the research, allowing a presentation of the gaps in the findings, and suggests the next steps in examining this area further. The possible explanations and ways of representing the world of pain in labour and of decision making, form the basis of the following 'Results' chapters.

6) Challenging hypotheses by looking for conformity and variation and by identifying disconfirming cases

Category mapping and comparison, using a constant comparative approach, followed analysis of each group. Validity was assessed in accordance with Patton's four criteria of validity in qualitative research – namely verification, rival explanations, negative cases and triangulation (Patton, 1999). Triangulation of perspectives from the women and the professionals allowed me to examine the data from the perspective of various stakeholders with different views (Patton, 1999).

Once the analysis of all the data had been completed, the results were written up in a way that would develop my arguments and would later be discussed with reference to the themes of shared decision making and pain relief in labour. Salient quotes were identified to demonstrate the key issues in the 'Results' chapter. These quotes are included, together with discussion and reference to the literature, in the 'Results' chapters. Where different professional groups referred to the same issues, I have tried to identify an appropriate quote from each group. Deviant cases, where women or professionals have expressed an opinion that differs from that of the majority, were deliberately sought out; I have included these as alternative perspectives on the issue in question. In order to preserve the anonymity of the participants, all names have been changed and pseudonyms used throughout.

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## 5 Pregnancy

This chapter presents the analysis of data from interviews with pregnant women experiencing either first (primiparous) or subsequent (multiparous) births. Quotes from the women themselves are included throughout all four ‘Results’ chapters to illustrate interpretation. Where a case appears to contradict what the majority of participants are saying, a quote is also used to illustrate this opposing view.

Respondents are identified after quotes by their pseudonym, their age group, whether they were multiparous or primiparous, and whether the interview was conducted antenatally or postnatally: e.g. (Jane, >30, Primiparous, Antenatal).

This chapter begins by examining women’s views on the information they accessed and how this then informed their attitudes and expectations regarding their pain in labour. These results are then examined in terms of their relation to the two main themes of the thesis—those of shared decision making and of pain relief in labour.

### 5.1 Information

The women interviewed in this study were of various ages and from a range of social backgrounds, these women had diverse attitudes towards accessing information, towards engaging in decision making and towards birth itself. Women in this study received their antenatal education either from private sources such as the National Childbirth Trust (NCT)—which focuses on massages, breathing and relaxation as its approach to managing pain—or from the NHS. The following quotes give views on

the NCT and NHS classes and highlight the problem of ensuring that the type and level of information are right for everyone.

The NCT ante-classes, while you know they don't for a second tell you what, tell you what to do their, their thinking is very much the same as the thinking behind the yoga... you know don't just think you have to lie on your, lie on a bed on your back to give birth....you should try and be very active.

(Gail, >30, Primiparous, Antenatal)

Yeah, it was absolutely brilliant... And she said well anything you're imagining that we're all going to be sitting around rubbing each others backs and huffing and puffing, we're not, we're not doing that. We're sort of, I'm going to give you some information, give you lots of time to ask questions. And I thought that was so spot on what I wanted because that, that was exactly you know what I was thinking... Advice as to when you should call the maternity unit and you know when you should, when they'll probably advise you to go in, set the scene probably a bit more than in terms of the sort of the pain relief side.

(Angela, >30, Primiparous, Antenatal)

Gail, a woman pregnant with her first child, like many women in this study accessed several different sources of information (NCT, yoga), which she felt were complementary and would help her to be fully prepared. In contrast, Angela, who was also pregnant with her first child, attended only the NHS hospital antenatal class. Angela reported that the class she had attended was run by a midwife from the delivery unit and focused on the actual process of labour and what happens to a woman's body, the physiology of labour. Angela found this approach useful as she had "no close female relatives [she] could ask". Following the antenatal class, Angela said she now felt prepared in terms of who she should call (and when) at the onset of labour, and what would be likely to happen; however, she had to access any detailed information on pain relief herself, to supplement the class.



The major objective of any antenatal education is to enhance a woman's understanding and confidence as she approaches childbirth (Enkin et al., 2000). Gail and Angela attended very different antenatal classes, which offered different information about labour. Before attending these classes both women made a decision on which class or which approach was likely to be most useful or most accessible to them. Taking part in antenatal classes is seen as taking an active and deliberate choice to make birth manageable, regardless of which type of class is attended. It is important to emphasise that both women, when interviewed, were satisfied with their choice of antenatal preparation. Gail had identified how her NCT and yoga classes were complementary in their advice. Angela, on the other hand, was happy that she understood what would happen when she first went into labour, when she should go to hospital and what the advice might be from the midwives on the maternity assessment unit (MAU). Whereas Angela did not say whether she was given any information or advice on relaxation and techniques for coping with actual labour, Gail did not mention whether she was aware of when she should go to hospital or the role of the MAU, which could indicate either that this was not a topic that was covered during the NCT class or that this was not one of her concerns.

Despite the differences between these two classes, it seems that both were trying to prepare women in a structured way for labour. It is important to highlight that not all women choose to take part in any organised antenatal classes (Levesque-Lopman, 1983) it is thought that as little as one third of pregnant women participate (Declercq et al., 2002), the majority being white middle class (Pyron and Myers, 1996). In addition to the traditional sources of information from midwives and antenatal classes, women may also access television (Discovery Health, 2008), the internet (Mumsnet,

2008), magazines (Pregnancy and Birth, 2008) and the birth stories of others (BabyWorld, 2008; Mumsnet, 2008) to formulate their preferences and expectations for pain management. With women accessing a variety of information to prepare themselves for labour this means that women are prepared on different aspects of labour, which will therefore affect the extent to which they are able to engage in shared decision making. Women interviewed in this study considered either that they were given too much information or not enough. Kath, pregnant with her second child, was concerned by the level of detail she received, which she felt was excessive; in contrast, Linda thought that her NHS antenatal class lacked detail.

I think the risks, I mean I'm no medical person but perhaps the risks are quite minor and the benefits probably far outweigh the risks, but because they tell you, I mean they've got to tell you every, every risk haven't they? So they tell you even the minor little things that could and might go wrong and you just think oh no I couldn't possibly and then that puts you off when really it's... compared to what you're actually going through it's not, it's not a big deal. So, I..I understand they've got to tell you the truth and you need to be forewarned but perhaps its better not to know.

(Kath, >30, Multiparous, Antenatal)

They probably at the point where they're kind of talking about the pain relief options they probably start out about relaxation techniques and spend five minutes saying oh you know yes if you can help breathing and keep relaxed it will help as much as possible, and that was probably all they kind of spoke about it. They didn't actually do anything, actual practising sort of these techniques.

(Linda, 20-30, Primiparous, Antenatal)

Kath seems to suggest that being informed about all the risks, even the smallest, may have increased her anxiety rather than alleviating it. It is difficult to be certain whether this was too much information, the wrong type of information, the wrong emphasis or

just contained information Kath did not want to hear. In contrast, Linda was concerned that she did not have enough information, especially with regard to breathing and coping strategies. This supports the work of Lazarus (1997), who argued that not all women wish for the same level of knowledge regarding their options for birth or the same level of control, which should be taken into account when conducting antenatal education classes; however, in a group antenatal setting it is difficult to give each individual woman the level of information they wish for. Also although Kath did not want to be made aware of all of the risks, there needs to be discussion of which risks women need to be informed of if they are to make informed decisions.

Many of the women in the study who had attended the NHS antenatal class felt they had not been familiarised with enough information on the breathing and relaxation techniques. Although the women reported being told that there was some evidence to support the fact that relaxation and control of their breathing would help them manage their pain, they were not shown how to do it. Linda reported that she was told not to worry about breathing techniques, that her body would instinctively know what to do—which did nothing to help dispel her fears of labour. One of the main criticisms of the NHS antenatal education classes, identified by Nolan (1999) and that my data suggest may be still relevant today, is the poor teaching about coping skills for labour, including breathing and relaxation techniques.

As previously noted, pregnant women receive information about labour and childbirth through different media, and many women in this study used more than one source

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and sometimes commented on the ‘quality’ of each. For example, Amanda— a woman pregnant with her second child—contrasts her experience of attending an NHS antenatal class with an active birth class she attended.

I found I picked up, there was much more knowledge, there was much more education in the active birthing classes. Whereas in the antenatal classes (NHS) it was very much like right well, this is what’s going to happen and you can have Pethidine, you can have epidural, this is what might go wrong, but there wasn’t really any, you weren’t really educated. I didn’t feel that I was being educated I felt like I was being told, I was being read from a sheet about the different options and not really, I wasn’t being told what was happening to my body and what I could do to help and why it was going to feel like that.

(Amanda, >30, Multiparous, Antenatal, 06/08/2005)

This view of NHS antenatal classes is in stark contrast to that of Angela, who felt that the focus of her class had been the physiology of birth—indicating that the content of the class not only depends on the ethos of who is running them but also on that particular midwives’ knowledge and experience. Active birth (which was the term used by Amanda for the type of class she attended) focuses on enabling women to give birth naturally, encouraging them to take a very active role in the process (Balaskas, 1992a), and may appeal to some women, more than others (Machin and Scamell, 1998). For Amanda, the NHS class seemed far too medical in its approach and did not offer any advice on coping strategies; however, this was given at the active birth class which she paid for personally. Amanda also commented on the different approaches of the two classes, in how they presented the information, either a didactic approach - ‘being told’ in the NHS class or adult learning model whereby knowledge is being passed on for Amanda to evaluate, which may have been down to the approach of the educator.

The goal of antenatal education, whoever it is provided by, should be to inspire women's confidence in their own knowledge and ability, which will lead to them taking a full part in informed choice (Lothian, 2008). Midwives and other antenatal educators must consider the needs and values of their audience when delivering education sessions, in order to be able to respond to the diversity of women's needs without diluting the importance of the childbirth education they are giving (De Vries and De Vries, 2007). There has also been a recent call for midwives to respect women's 'inner wisdom' (Lothian, 2008)— that is, the knowledge women held by virtue of being a woman.

As well as accessing information from recognised sources to inform their expectations about birth, pregnant women also receive information from friends and family in the form of birth stories, which can be either positive or negative in both their content and their potential impact.

I've got actually one friend who I've met, in fact she's a girl that used to live here, she's been really good. She's got four children and I don't know how she does it but she sort of manages to tell me information without it being well this is the right way to do it. She's, I think she's, she's just been good at sort of giving information without saying, well because I did it that way then that's right.

(Angela, >30, Primiparous, Antenatal)

It depends on who you talk to because some people say it wasn't that much, that it wasn't that bad. Or some people say the pain gets as bad as it gets, or whatever. So I think in the end you've got to stop listening to them and just, just wait and see what happens with yourself. Because if you were to, you could go in there thinking this won't hurt and it will, or you can think oh it will hurt and be scared to death and it hurts even more.

(Mary, 20-30, Primiparous, Antenatal)

Storytelling—birth stories in particular—are a universal and ancient teaching and learning method (Bowles, 1995), and women who have been through labour and delivery have an experience to share (Halldorsdottir and Karlsdottir, 1996). Birth stories, according to Callister (2004), are narratives grounded in the pivotal life experience of giving birth—a way of communicating a woman’s experiences to others. Kitzinger (2006) argues that birth stories are a way of framing an event, which describes and explains the woman’s role, as well as a way of a woman seeking to take control and devising meaning and significance in these life-changing events. It has been shown that hearing positive birth stories can transform a pregnant woman’s fear into confidence, and could therefore be a useful tool in birth preparation (Menelli, 2007). Angela highlights above how she benefited from listening to her friends’ birth stories, whereas Mary offers a cautionary note about listening to others’ birth stories and of assuming that one’s own experience will be the same as that of a friend.

Unlike Angela, not all women find the birth stories of friends and relatives helpful or encouraging, and are often subjected to ‘horror stories’ of things going wrong. Listening to others’ stories about how much or how little pain they experienced may lead women to develop unrealistic expectations about their own labour. This is important, given that the evidence cited in chapter 2 suggests that a woman’s preconception of the pain she will experience is likely to be self-fulfilling: those who expect labour to be painful will experience more pain than women who anticipate little pain (Waldenstrom et al., 1996a; 2004). So, although birth stories can be positive, they are fraught with difficulties and therefore should not be relied upon as a basis for information for women’s expectations.

Naomi was supplementing the knowledge she had gained through NHS antenatal classes during her first pregnancy with information she could glean from watching television programmes.

Well everybody who's pregnant watches The Discovery Channel don't they. All this child birth... but I just watch anything that gives me an idea of what it's going to be like.....They probably show you things that you might not think happen and I think it's a good insight into, into labour. Otherwise you would just see from books and stuff wouldn't you, and then they're not really very true to life when you're reading it from a book than what it is when you're watching it on telly.

(Naomi, 20-30, Multiparous, Antenatal)

Naomi, who was pregnant with her second child, was using several of these sources of information to ensure she was fully aware of the options available to her. Naomi's assertion that watching television for information was "something everyone who is pregnant does" was not supported by the majority of women in this study.

The television programmes that were mentioned by Naomi, focused on rare events filmed in an American, medically dominated delivery system, not representative of the system of midwives, obstetricians and anaesthetists in the UK, and not produced with education as the focus.

Several women interviewed, like Naomi, reported supplementing the information from their midwives, with information they could obtain from the popular media, such as the television and the internet. The effect of this type of media should be considered when preparing women to make informed choices in childbirth (Handfield et al., 2006). In a review of 16 papers Lagan and colleagues highlighted that a number of pregnant women (ranging from 5% to 100% in the included studies) , like Naomi,

use television and the internet, to seek social support and to research specific problems (Lagan et al., 2006). It should be noted that Lagan et al (2006) identified that many of the included papers were of small scale descriptive studies, with the evidence being found in the text; they called for high quality research to be undertaken to assess the evidence of effectiveness of the internet for provision of health information. It is accepted by professionals that, when women are involved in decisions during pregnancy and labour, the media can greatly influence their attitudes and knowledge (Handfield et al., 2006). However, Lagan et al. (2006) have highlighted that there is a lack of research on what women do with the information once they have obtained it, and there is also a demonstrated need to develop strategies to help women to identify and evaluate the quality of the information in these resources. As we cannot control the content of the media, we may need to focus our attention on helping women to appraise the information that they access and to use it appropriately.

In the same way that some television programmes may focus on extreme events, so do some pregnancy magazines. Helen, who was pregnant with her second child, looked to pregnancy magazines for detailed information on pregnancy and labour. However, she found that the magazine she had been reading was quite unbalanced in its presentation of the facts.

Well I think they get scare mongered quite a bit. I mean I read one of the magazines I've been reading that Pregnancy and Birth and it's a really good magazine. I remember reading that first time round and it was excellent and I've read it again. But they do scaremonger I've found on certain things, they seem to focus on certain things and it's like ooh, you know. You should be tested for this and you should be tested for that and I think if you're not very confident first time round it will scare the pants off you some of the stuff you read.

(Helen, >30, Multiparous, Antenatal)



The magazine identified by Helen gave detailed information on possible rare events and complications, in the form of case studies, which may inform women, but ought to be read in conjunction with discussions with the woman's healthcare provider to discuss her personal risks of such complications.

It has been difficult to identify any research that focuses on the information needs of multiparous women regarding antenatal education. However, Helen was one of a group of multiparous women who, although they had been through labour previously, felt that, for a variety of reasons, they would like additional information for their second or subsequent pregnancy. Either their need for information had changed - in that they wanted different types or different levels of information - or so much time had elapsed since their first pregnancy that things might have changed, or they wanted to be confident that they had not forgotten anything and that they were up to date with the information they needed. Rebecca was also part of this group of second-time mothers who wanted to take additional advice and direction from their midwives during their pregnancy.

I think the key thing is that, that to have a good midwife is to have a midwife who puts aside her own experiences and says what do you want out of this experience you know? And for me I would like to try to have as little pain relief as possible but if I need the pain relief...I want to, I want to have it, but I don't want to be given only one option you know. I want to be informed. And, and I want a midwife to tell me in her experience it's not worth me going down a certain route, I don't want to just make that decision without telling me that. I think midwives can offer a lot of experience especially if, if they've delivered lots and lots of babies, they can say to you, you know, this, I'm uncomfortable about this or oh this baby's going to be here in half an hour don't worry about it you know, and they can do that in a way which isn't patronising and isn't you know, in my professional experience I can tell you that...

(Rebecca, >30, Multiparous, Antenatal, 16/06/2005)

A midwife's role is one of advisor, guide and advocate, assisting women to make informed decisions, helping the woman to make sense of often contradictory opinions and evidence, whilst recognising the knowledge of the woman (Page, 1988); this is the approach that Rebecca was hoping for. However (as is discussed in chapter 6), not many of the women felt that this was the role played by the midwives.

One of the few occasions when information to support decision making was referred to directly by the women in the study was during Amanda's interview, when she explains why she wants information.

I just wanted all the information so that I could make a decision, so if somebody said to me we think you should have this; I would know what it was. Or if somebody said to me do you want this, or do you want this? I would know and be able to make a kind of informed decision rather than just lie there and just get fiddled around with I suppose.

(Amanda, >30, Multiparous, Antenatal)

Amanda wanted all of the information available to enable her to make an informed choice. Informed choice, as referred to by Amanda, is a mode of decision making whereby the information is passed from clinician to the patient to enable the patient to make a choice. Informed decisions—or informed choice, as it is referred to in the literature—is seen by some as a way for a woman to maintain control over her body and her care (Lichtman, 2004), but may not be what Amanda understand by the term. However, the NCT recently offered a challenge to the 'informed choice' movement by stating that informed choice has become a hollow phrase as women are given little choice, limited information and little control in the hospital birth setting (Newburn,

2002), and that raising women's expectations that informed choice is on offer can confuse and increase anxiety rather than promote control. As an alternative to informed choice, Amanda suggests that the option of not making any decisions antenatally but ensuring that she is fully informed, and therefore able to participate in decision making, may prevent a woman feeling disappointment that her antenatal plans or expectations are not achieved. It is the antenatal educators' task to empower everyone to enable them to negotiate the kind of care that they want (Kitzinger, 2006), as each woman's wants and needs are different.

The birth plan was introduced during the 1980's as a record of how women had used information to develop their expectations and plans for birth. Such plans were initially introduced in an attempt to help women to avoid unnecessary medical intervention, to clarify their desires and expectations and to communicate a plan for care during delivery (Lothian, 2006). That author argued that, in reality, birth plans were seen as being rigid and that, far from promoting communication between women and healthcare professionals, they actually stifled the process. Angela highlighted this problem of the rigidity of birth plans and of not being able to keep to the plan; like Amanda, she suggested it might be more beneficial to be fully informed and to make informed choices only as labour progresses.

My husband made, made a good point and he said you know to some extent all, all, all they're giving you at these classes is the information and sort of saying these are the options and now you can think about what you want to do with that information. You might decide right and have this rigid birth plan, or you might think well actually I'm not going to think about it and I'll go with the flow and I'll just see what happens on the day. It's not like there's millions of different options, it's not like you've got to sit there and study them like an exam, but it, it just gives you that little bit of information I think.

(Angela, >30, Primiparous, Antenatal)

This approach advocated by Angela's husband echoes Amanda's approach of being informed, taking the information on board and using it to make decisions on the day. The concerns identified by the women in this study regarding the birth plan echoed early concerns identified in an editorial in the *Journal of the Royal Society of Medicine* summarising the debate by Inch (1988). Inch commented that birth plans can sometimes be seen as being counterproductive or can lead to menu-type birth plans. However, on the positive side they can be seen as a set of prompts for midwifery staff or a positive learning experience for pregnant women. Angela and her husband recognised (like Amanda previously) that she was being given information that would enable her to prepare to make choices for her labour.

With regard to preparing women for labour, a cautionary note is sounded by Newburn (2002) and supported by Kitzinger (2006) that women may sometimes be misled and feel cheated, when, during labour, they often discover from health professionals that their choices are limited, depending on variables such as how they are progressing in labour, the health of the baby, and the availability of services such as on-call anaesthetists. These limitations and the fact that sometimes, due to the acute nature of the situation there is no real choice, needs to be appropriately conveyed to women antenatally, so they can be prepared for an unexpected situation, something that was not referred to by the women in this study. Women need information not only on the choices available but also on when these choices might not be appropriate. Women in this study did not actually say that they felt cheated, but choices may be limited because of situations that arise during labour, and women should be made aware that this could be the case.

Choice, as has been outlined, is explained during their antenatal class; with the exception of discussing breathing and coping mechanisms, few women mentioned the actual content of the antenatal classes. However, Linda was one of the few who referred to the content of her class; she felt that, in the session she attended, there was too much focus on a 'normal birth'.

It would have been nice to have known a bit more, a bit more detail about being induced actually. 'Cause kind of, in earlier, in the classes and things, the antenatal, the midwife classes they kind of, well they discussed it and I can understand why they stressed you know look this is, this is the exception you know, they talked a lot about the normal birth and none of this will be needed. So they kind of mentioned what was going to happen in inductions and Syntocinon and that kind of stuff, they didn't really dwell on it and I can understand why they didn't dwell on it because they wanted everyone to feel positive about it beforehand like I'm going to have a normal birth. I must admit having spoken to lots of other mums who have had babies recently there's not that many that have had kind of normal births.

(Linda, 20–30, Primiparous, Antenatal)

A normal birth for Linda would have been one that was not induced; it was not related to such interventions for delivery as forceps. Normal birth is commonly taken by midwives to mean a physiological labour and a vaginal birth with little or no external intervention (Lawrence Beech and Phipps, 1999), although this can include a range of deliveries, from no intervention to any birth that did not include caesarean section, ventouse or forceps (Beech, 2007). Gould (2000) argued that 'normal' birth is that which is defined as such by the woman herself, as was the case with Linda, which is problematic in itself as each woman will have a slightly different view of this. The Association of Radical Midwives published figures that suggest that fewer than 10% of women in the UK have true normal births (Beech, 2007). The concept of a normal

birth also implies that there is an 'abnormal birth', which can be guilt inducing for some women (Beech and Phipps, 2004) and does not appear to be a positive way of informing women about choices.

It is unclear whether the term 'normal births' used by Linda was a term used by the antenatal educators or one that was attributed by Linda herself to a particular type of birth. When a birth policy for the NCT was being developed, there was a detailed discussion on whether they should adopt a policy that emphasises informed choice or one that values straightforward 'normal' physiological birth (being aware that the term 'normal birth' can be judgemental in its tone). The policy that was actually developed by the NCT focuses on birth as a positive experience with well-prepared women, so that women should not feel that they have not had a 'normal' birth if things do not go according to plan (National Childbirth Trust, 2002). There has been a call to focus on development of services that encourage an increase in the percentage of straightforward vaginal births alongside expert medical care if complications and high risk necessitate such care (Newburn, 2002). This approach may have been one to which Linda and other women could have related.

Several issues were raised by women in relation to information, with much to do with the level of detail, the accessibility, the balance and accuracy of that information. The maternity service needs to consider ways of harnessing the plethora of information available to women in the public domain. At the very least we need to give women tools to enable them to assess what information is useful and what is not and how it can help them to make decisions pertaining to labour and delivery. The move

suggested by the NCT—of promoting a positive birth experience, rather than a natural or normal birth—is one that could be embraced by antenatal educators across the board, to ensure that women are fully aware of the facts in order to make informed decisions in collaboration with their midwives as labour progresses (Maternity Care Working Party, 2007).

## 5.2 Expectations

Women's expectations regarding labour is a theme highlighted in the background literature and systematic review in this study (Lally et al., 2008) and one that was pursued during the interviews and highlighted in this section. Women use the information they gather from various sources (discussed in the previous section) during pregnancy (Kravitz et al., 1996) and they combine this with their attitude to pain and to labour to form their own antenatal expectations—their assessment of their most likely outcome (Leung et al., 2009) for labour. The expectations formed by women relate to how painful they think labour might be (Waldenstrom et al., 1996a), whether they are expecting labour pain to be a positive (Lundgren and Dahlberg, 1998) or negative experience (Leap, 1997), what relief they will get from the various methods of pain management (Leeman et al., 2003; Peach, 1991) and how long labour will last (Shetty et al., 2005). As discussed in chapter 2, it is important to understand these expectations and the information on which they are based, and to know whether such expectations are achievable if we are to support women in the decisions they need to make (Janzen et al., 2006) for pain relief in labour.

First, we should explore the views of women in the study regarding the nature of labour pain. Mary and Alison demonstrate the contrasting views identified during the interviews: Mary, who was interviewed after the birth of her first child, saw the pain of labour as a positive pain that gave her a sense of accomplishment, whereas Alison acknowledged the fact that pain relief was available and felt it would improve her experience of labour, which aligned her more with the pain-relief paradigm.

It made you feel like, feel like you'd accomplished something. Accomplished something at the end of it. I mean I'm not into, I'm not into martyr-ism or anything like that, it's just that, because I knew what was happening to my body it, I felt like it was my control of the pain

(Mary, 20-30, Primiparous, Postnatal)

I did at the time feel like, oh God you big puff, do you know what I mean. Like that sort of thing. You know why you, God you cannot even cope, other people do. You know people abroad on the fields do it and get up and go back to work and you can't even cope with a little pain. But then at the same time I did think if I can make this nicer then I'm going to make it a nice experience. I'm going to make it a nice experience. I'm not going to get no medal for coming out the labour, the labour, the delivery room saying I did it on me own. Do you know what I mean?

(Alison, 20-30, Primiparous, Postnatal)

The views highlighted by Mary and Alison reflect the current debate in the literature about the nature of labour pain. One view is that pain in labour is a positive pain that produces the positive outcome of birth: 'It hurts so much they want rid of it, but will do anything to get a baby, what makes you stand the pain is that it is positive' (Lundgren and Dahlberg, 1998: 106), otherwise referred to as a pain with a purpose (Kitzinger, 1978) a view that is reflected in Mary's account. The other argument is that labour pain is a negative pain that can be eradicated to get to the endpoint of having a baby, so why 'suffer' unnecessarily—the view upheld by Alison. In this



debate, Leap (1998) states that women across the developed world live in a society that sees the relief of pain to be a major benefit of modern living—an argument that is hard to resist. However, some women want to experience the labour (Waldenstrom et al., 1996b) and to feel the pain; some women gain a strong sense of achievement by feeling in control of the pain (Mander, 2000). Leap (1998) highlighted the ‘pain relief paradigm’ that faces labouring women and their midwives, whereby the offering of pain relief is seen as the essential role of the midwife, to enable a woman to make full use of the benefits of modern technology; this echoes the sentiments expressed by Alison. The second paradigm is that of working with a pain with which women can cope and to which their bodies can respond in a normal labour, as was the case for Mary. Other women interviewed in this study shifted between paradigms, as women often changed views throughout pregnancy and labour.

Alison, who seemed to align herself to the pain-relief paradigm, went on to reflect upon the impact her peers had on her decision to opt for pain relief. When interviewed postnatally, Alison stated that “If I maybes hadn’t have gettin’ as much advice off other people saying, ‘Oh God just get the epidural it’s much easier’, I maybes wouldn’t have went for it”. Kitzinger (2006) argues that often an epidural, for example, is offered when women feel at their most vulnerable, with little emotional support, as was the case with Alison; at this point they are more likely to opt for it. Leap (1997) suggests that women can be directed towards one paradigm over another:—that talking to women antenatally about ‘pain’ rather than ‘pain relief’, can bring about a reduction in the use of pharmacological pain-relief methods. However, Leap’s study was a self-selected sample of women, so may not be generalisable to the wider population of women.

The second expectation that women formed from the information they received was that of how painful labour would be. Lucy and Pauline offered their viewpoints:

Well I have [thought about pain relief] but I have, and I haven't, I know that sounds daft because with being me first baby I don't know what to expect. 'Cos people keep saying to us are you worried, are you not? And I say well no I'm not. Because I, I can't be worried about something what I don't know what I'm going to expect.

(Lucy, 20-30, Primiparous, Antenatal)

That's the problem when it's your first baby you don't know how painful it's going to be, and I think it's fear of the unexpected, just a fear of the unexpected I think. That is what is worrying me more than anything and not knowing how bad it's going to be and how long it's going to go on for.

(Pauline, >30, Primiparous, Antenatal)

These sentiments, of not knowing what to expect, are echoed by many of the women expecting their first babies. Pauline, who is a hospital doctor, listened to what other women had to say and took this into consideration when forming her expectations; she traded in her expert medical knowledge in favour of lay knowledge from other women to inform her expectations about how painful labour might be, while still relying on her expert knowledge to make pain-relief choices (as outlined later in her decision to opt for an epidural). Pauline was worrying about not knowing what to expect, whereas Lucy took the view that it was pointless to worry about something unknown.

Pauline was subject to two parallel knowledge systems—medical and lay knowledge. Usually, the medical or professional systems hold sway over lay knowledge; however, in this case Pauline set aside her professional knowledge, apparently to rely on the

experience of women she knows in order to form her expectations (Davis-Floyd and Sargent, 1997). This is the only such occurrence in this study; it is more usual for women to defer to the expert knowledge of the midwife or obstetrician in forming expectations on things such as the type and level of pain.

Finally, the women discussed their expectations for example with regard to what level of relief or what degree of mobility they would achieve with various methods of pain relief. These expectations were derived from collating information from the various sources as discussed earlier in the chapter, rather than solely from midwives. Lynne, when approaching the delivery of her first baby, was clear what she ideally would like from the options available to remain mobile:

I'd like to be, ideally I'd like to be able to still be mobile and move around and sort of try and take my mind off it that way I wouldn't like to be, I'm, you'll think I'm, I'm not a control freak. It does sound terrible. In my everyday life I'm not... that... sort of, I just think that and from my friends' experience where they've had epidurals and caesareans and things they've just said you know they feel like it's completely taken out of their... they're you know, stuck and it became a bit frightening I think. I would just like to be able to....

(Lynne, >30 Primiparous, Antenatal)

Lynne is clear about some of the values that are important to her, such as mobility and being in control. It is through discussion and clarification of these factors that the options that allow a woman to maintain her values can be discussed with her by a midwife. For example if, as in Lynne's case, mobility is her most important factor, clearly her options would not include an epidural that would remove any mobility. It would have to be explained to Lynne that an epidural could be made available to her but that it would not be in accordance with the values that she has expressed. She

could then use this discussion to form realistic expectations and choices that would fit more closely with her values.

Because women obtain information from a variety of sources, their concepts regarding what pain relief can achieve can sometimes be contradictory, skewed and, in some cases, inaccurate. It has been argued that the provision of inaccurate or incomplete information prevents women from being active participants in labour (Halldorsdottir and Karlsdottir, 1996), by serving to confuse rather than inform. This, once more, adds weight to the argument that women need to be fully informed, with accurate information, in order to engage to the full. Nevertheless, Pauline, despite her knowledge of pain relief from her background as a doctor, was not clear about the effectiveness of some methods of pain relief, about her own ability to cope with pain, or about her values.

My knowledge of other things is I suppose you kind of start off with your non-medication type things so there's your breathing techniques, relaxation techniques, positional, which I'm sure are very good in early, in early stages of labour which obviously I'm going to try and use as much as possible, and then simple analgesics, paracetamol, moving on to strong things such a opiate based things, so things like morphine and Pethidine, again paracetamol is quite a good pain, analgesic but I'm not quite sure how bad it's going to get. ....so I kind of want something that's going to last me all the way through.

(Pauline, >30, Primiparous, Antenatal)

When interviewed postnatally, Pauline explained that she had opted for an epidural; something she knew would take away the pain no matter how strong the contractions became. This decision seemed to be based more on her knowledge of the effectiveness of the epidural than on her knowledge of other methods or of the level of

pain she was going to encounter. Many other women in the study were, like Pauline, happy choosing a method of pain relief that would ensure a pain-free labour throughout, regardless of its impact on their mobility. In contrast, some women in the study were prepared to opt for a method that gave them only limited pain relief (e.g. Entonox), if this meant that they could remain mobile.

There are many difficulties in making choices for childbirth, one of which is the complexity of these decisions. To make such a decision, a woman should consider several issues for each of the options of pain relief, rather than merely the effectiveness of each option at diminishing the pain. A woman may need to consider the following (Dickinson et al., 2003).

The length of the lag period before each option takes effect

- If it will affect the baby
- If it will affect the mother's alertness or mobility
- Whether it will affect a woman's ability to deliver without intervention
- Whether it will affect the baby's ability to feed

This section examines how women draw on some of these elements to make decisions about the types of pain relief. Lynne made a choice that was not based on the degree of pain relief she would receive, but on other factors that were more important to her at the time.

I just think maybe if, if it works (TENs machine) the way I think it might work, it might just give me a bit of extra time, a bit of extra strength maybe to, if you're not experiencing all the pain, it, it can sort of phase it out or, or decrease it I'm just hoping that'll maybe give me a bit more energy.

(Lynne, >30 Primiparous, Antenatal)

The TENS machine was chosen by Lynne to give her more time at home and to preserve her energy for the later stages of labour, rather than because of the degree of pain relief it would offer alone.

Women's attitudes to pain-relief complications or side effects, and the impact they have on their decisions, vary greatly. Not only do these attitudes vary between women, but also individual women's attitudes may change as pregnancy and labour progresses. When referring to pharmacological methods of pain management, Pauline drew on her expert knowledge and the unacceptability of some of the side effects to influence her approach to pain relief, whereas Lucy, a first-time mother, was open-minded about most forms of pain relief, although she expressed concerns about the risks of pethidine:

Yeah. I think people have said that about morphine as well that, and I've had morphine before and I think people do react very differently to it and a lot of them do get this kind of dissociated kind of feeling, it doesn't really take the pain away, it just makes them feel a bit weird and they don't really like that very much. Some people thought it was great, some people thought they didn't really like it

(Pauline, >30, Primiparous, Antenatal)

At the yoga class that I went to, somebody, somebody brought their, somebody who went to the yoga classes brought their baby in to show everyone and had had quite a dodgy experience with Pethidine, and just reading about it as well I kind of feel a bit uncomfortable about not sort of really feeling totally in control of my mind or you know I have heard, 'cos it crosses the placenta it obviously can, you know, a certain amount of it gets, gets into the baby's system as well and can make the baby quite, quite drowsy and things like that so. I mean as I say this is what I'm thinking now, you know I'm trying to be very open minded but you know if at the time I really can't cope with the pain and I really need something then that's probably the only other option I think. Once you've exhausted the gas and air and your TENS machine and things like that, because I'm fairly adamant that I really don't want to have an epidural so.

(Lucy, 20-30, Primiparous, Antenatal)

The language surrounding birth is never value free; it can reveal how we think about birth (Kitzinger, 2005), which may help us to understand Lucy's views on pain relief. Lucy's uncertainty about pethidine is demonstrated by the language she uses, which is neither direct nor specific; in contrast, her attitude and language used in relation to the epidural is both direct and certain. Medical and midwifery staff must understand women's views regarding pain management when communicating risks and benefits. Mander (1998) argues that it may be more useful to classify a side effect as either beneficial or harmful. The individual woman who accesses this information can then decide whether the side effect is acceptable to her. When discussing the various forms of pain relief, many of the women remained open to the options available to them, depending on the level of pain they were going to experience during labour (Gibbins and Thomson, 2001).

Often, midwives find themselves, rather than in the role of giving information, in trying to correct misinformation that the woman has gained from elsewhere (Drife, 2007) and that is being used to make a choice. Alison believes that the risks of taking medication during pregnancy far outweigh the risks of any pain medication she may take during labour.

I think with taking stuff during me pregnancy it's been like 'cause you, they don't know what it does... I mean with an epidural it's on the.. you know like it's not something I'm taking and I'm going to be pregnant for another six months or whatever so it could affect it, it's coming out there and then... so whatever goes in me body might affect it a little bit but it's coming out of me anyways so, but if I was going to start taking paracetamol or co-codamol early on it's going to get in me blood stream and it's going to hang about and it could affect the development whereas the baby's fully developed then and I'm hoping nothing could really damage it then anyways by that point. If I get to that point I'm going to be... feel quite comfortable about it you know.

(Alison, 20-30, Primiparous, Antenatal)

It appears that Alison has either been misinformed or misunderstood the information about the lack of effect that some pain relief can have on the baby during labour. It is this incorrect information that she is using in order to prepare herself for labour and make her decisions. Decisions during labour are influenced not only by logic but also by emotions: a woman will interpret the information she is given in the context of her personal experience and core beliefs (Drife, 2007); this misinterpretation may be the case with Alison.

As well as decisions being influenced by emotion, women who were interviewed rarely stated degree of pain as a reason for choosing the epidural, even though all women had quite definite (if not always accurate) opinions about epidurals. Chris and Alison identify the factors that helped them opt for an epidural.

You can understand why people used to bite twigs you know in the olden days because I just wanted to get a hold of something. But it went from craziness and Lee was upset because he didn't want to see me like that, and I didn't want to be like that and I think it's the not knowing as well how long it's actually going to, if somebody could say to you right you're going to have the baby by six o'clock in the morning and that was quarter past four I would have just carried on because you know right you've only got to put up with...but I thought, my sister-in-law had gone in two weeks beforehand. Her labour had gone on seventeen hours and I thought there's no way I could cope with this for seventeen hours.

(Chris, >30, Multiparous, Postnatal)

The only thing that I knew that would stop it would be the epidural, so I says just, I'll have it. Because it wasn't, I didn't feel like I could have gone on much longer. I had gone two nights with no sleep because I, I was nine days overdue and she gave us a membrane sweep to see if that would move us on.

(Alison, 20-30, Primiparous, Postnatal)



The epidural allowed a change in atmosphere for Chris “from craziness...”, whereas Alison implied a regaining of control—something that she could choose which would stop the pain. Both women referred to the length of labour or the uncertainty surrounding it as a reason for choosing an epidural. Van den Bussche et al.(2007) found that positive attitudes of peers towards an epidural can double the likelihood of a woman choosing one, whereas fears of the side effects can reduce that likelihood.

Some of the recognised side effects of an epidural, such as the possibility of a prolonged labour, including a statistically longer second stage and a greater risk of instrumental delivery (Anim-Somuah et al., 2005; Enkin et al., 2000), were mentioned as playing a part in the decision-making process only by a few women, including Maria:

I'm fairly adamant that I really don't want to have an epidural so.....And just the thought of lying flat on my back it's just, it's just not, being able to feel anything from the waist down, I just think is really quite scary, quite a scary experience. You know again I've had, I've had friends who've had epidurals and both mixed kind of experiences really, but I have heard that you know it can make your labour longer because you can't push as effectively and things like that, and so I'd rather, I'd rather not go there... Yeah, I think if you're the sort of person that says right you know just block out the pain totally, which I know it does, and I can see, I can see a very big, very big argument for, for going with that but I think it's got too many other side effects, for me, anyway.

(Maria, >30, Multiparous, antenatal)

Maria's decision not to have an epidural was, according to her narrative, not based solely on information from midwives but also from that of the experiences of friends. Maria was able to see the positives and how it might be an option for some people who did not want to experience any pain, but for her these benefits were outweighed by the potential risks she identified.

The women in this study accessed a range of information from a variety of sources to equip them for decision making in labour. In the current service provision, according to the women interviewed for this study, information appears to be targeted at primiparous women. However, analysis of the interviews with the multiparous women in this study suggests that they also have needs for information that are not currently being addressed. The overwhelming response from women, when being questioned about their expectations, was that they were not sure what to expect of labour. Yet, given this time of uncertainty, they were being asked to make decisions that they found difficult, and their opinion was that they would like to ‘wait and see’—a situation that may need to be readdressed in terms of antenatal preparation. This approach of waiting to see (termed ‘acceptors’) is one way in which women can engage with choice, in contrast to active choosers, whose language portrays a much more definite choice (Pitchforth et al., 2009). Midwives need to understand each woman’s views regarding pain management—whether she is an acceptor or an active chooser—and to work with each woman to ensure a birth that is congruent with her values and expectations. It is also important to understand what is driving women to make these decisions: for some women in this study, the views of friends, or misinformation, was having the greatest impact on the choices they were making.

## 6 Delivery

This chapter discusses both primiparous and multiparous women's accounts of their experience of childbirth once labour had begun. It encompasses their assessment and experiences of the maternity assessment unit, their experience of pain and pain relief, and the choices and decisions that they made, as well as the impact of their midwives on their overall experience.

### 6.1 Maternity Assessment Unit

When a woman first appears to go into labour she often encounters a degree of uncertainty as to whether she is actually experiencing the start of labour. The clinical definition of labour is the 'presence of regular uterine contractions, leading to progressive effacement and dilatation of the cervix and ultimately the birth of the baby' (Enkin et al., 2000: 282) Generally, a woman's first contact with the hospital will be by telephone with the maternity assessment unit (MAU), to discuss the signs she is experiencing. This uncertainty surrounding the onset of labour needs to be explored more with women during pregnancy, so that they are prepared for the possible early signs. This latent phase of labour, as it is often termed, can be demoralising for some women, who believe that they are in labour and feel they are not being believed or cared for by the midwifery services (Cluett, 2000). Depending on how far advanced in labour the woman is and how well she is coping when she telephones the MAU, she will be told either to remain at home until labour is established or to go to the MAU to be assessed by a midwife. The MAU itself is intended to provide a more appropriate environment for labour assessment (Nolan, 2007) than delivery suite or an obstetric ward.

Once a woman arrives at the MAU she will be assessed on her progress in labour, to ensure, as Mander (1998) identified in her study, that only women who are in active labour are admitted to the delivery suite. If a woman is thought to be in the very early stages of labour she may be sent home and told to use relaxation and coping strategies and mild analgesics for the pain. Once she is deemed by the midwives on the MAU to be in active labour, she will be admitted to the delivery suite. Much of a woman's fear and uncertainty is focused on the moment when she enters the hospital; this is also the time when women feel at their most vulnerable (Enkin et al., 2000), and possibly when they feel least able to cope with the pain. Enkin et al. (2000) argue that this is a time when a woman needs to be welcomed into this strange environment and given comfort. However, in the MAU the midwives have an entirely different set of priorities at this point in labour, based on their need to conduct clinical assessments, engage in ward management and care for other labouring women. The women interviewed in this study had, on the whole negative experiences both of the telephone advice they received and the time they spent on the MAU, which contrasted with the highly positive accounts of their experiences within the delivery suite.

Both Pauline and Chris commented on their initial contact with the MAU, using their telephone support service:

I did feel like I was put off by the midwives, which the, they said you know you're managing to carry on a conversation with me on the phone you know, you're not really catching your breath, it's like well it does really hurt but I'm on the phone so I'm trying to have a conversation. And I got really....the second time round I was quite annoyed that I was being put off because I wasn't screaming down the phone at them basically I think and she said it doesn't sound like you're in established labour and then you get in and you're eight centimetres dilated.

(Pauline, >30, Primiparous, Postnatal)

I says if this is early labour you know I says I don't really want the, the full labour and I was really, really nervous. So he rang the hospital again and they said look bring her in because she's obviously anxious but the chances are we'll check her over and send her home and we got into hospital, got into like the reception and me waters broke. So I was like thinking oh right that's that and by the time they got us in and checked us over I was 6cm dilated.

(Chris, >30, Multiparous, Antenatal)

The MAU telephone service, although largely unresearched in the UK (Nolan, 2007), provides a form of triage for the midwives to assess if an examination is required, the urgency of the examination and a suitable plan of management (DeVore, 1999). The MAU, and the midwives who work there, act as gatekeepers for the delivery suite to limit early, inappropriate admissions by assessing whether the women are in the active stages of labour (Angelini, 1999). Helman (1984) states that, in cases such as Pauline's, one should be cautious: just because there is an absence of pain behaviour (for example, breathlessness) this does not necessarily mean an absence of pain. In addition, at a time when a woman's need for support is greatest (Fox, 2007), it is essential that women do not feel as if they are being kept out of birthing areas for no apparent reason; at the very least, the reasons for this restriction must be explained clearly, which was not the case with either Pauline or Chris. In a study conducted in Sweden with 78 primiparous women, it was found that, of those who reported lack of support, 52% also reported labour pain to be intolerable (Nettelbladt et al., 1976); suggesting that emotional support from midwives at this early stage, and feelings of security, may have a beneficial effect upon a woman's experience of pain. The processes and decisions made upon contacting the MAU need to be explained antenatally to women, so that they understand why they are being advised to take one

course of action over another, and are equipped with their own coping mechanisms that they can use before their admission to the delivery suite.

This feeling of being unsupported, experienced during the phone calls, continued when women were admitted onto the MAU. Jan, a woman delivering her second child, explained the lack of support she received on the MAU and the increased pain she then experienced, whilst Carla articulated the need for privacy, which echoed the sentiments of many other women in the study.

And the only other thing that I really think I would ever change is that assessment thing because it was, it was a real low point and it was very, very horrible and I just felt completely out of control, you know very unsupported and you just don't know when you're going to get something else and on other nights it might be even longer than. So I don't know whether, I was trying to think, it's not that the midwife was unpleasant at all but even just a few sorts of oh, I mean she was definitely positive she says God you're eight centimetres that's really good, then she sort of went to write things down, but if she'd sort of said you're eight centimetres that's really, really good now you know you'll be here for a little while, why don't you just try and remember about your breathing. Even if she'd been shouting from the corner you know

(Jan, >30, Multiparous, Postnatal)

And you know the assessment area, just walking up and down, again I was distracting myself. Other people would come there and you just feel very exposed as well. There's a moment where you are in so much pain you want to really use somewhere private where you can be in pain. I just kept pacing, you know walking up and down in so much pain. I didn't want to come home, because I wanted to just, I want to get finished with this you know. There was a point where I said I'm going home, because I'd rather be...privately, you know than sharing my pain in the labour with everybody. And I think that's something that they should think about and so I think it helped and it was terrible with all the pain, to come home again.

(Carla, >30, Primiparous, Postnatal)

Both women felt unsupported and unable to control their pain. Carla actually chose to go home to regain some privacy and control over her pain. Hodnett and colleagues (2008) concluded in their Cochrane review that a structured approach to labour assessment could lead to increased satisfaction and increase the likelihood of a spontaneous vaginal delivery. This structured approach that Hodnett et al. advocated involved provision of a less clinical area within the hospital, which was the intention of the MAU. However, Hodnett and colleagues also advocated giving women more privacy and assessing their emotional as well as their physical status—which, according to Jan and Carla, did not occur. If the hospital had adopted the structured approach advocated by Hodnett et al., these two women might have received the support they needed. This does not imply a change in service provision but, rather, a change in how women are supported within the service currently provided and in the information given to such women about what care and support they can expect.

As illustrated by the examples cited above, women in this study had generally negative experiences on the MAU. Women tend to rate their satisfaction with care in labour positively, because such an assessment is rating the overall picture of the care they received, rather than that received in the MAU specifically; however, the latter is delivered by a different set of people and is viewed in a different manner by the women themselves. This positive experience is reflected in a Scottish birth study of 1,137 women, 80% of whom were satisfied with their care during labour (van Teijlingen et al., 2003). However, this study makes no distinction between early latent stage care (i.e. on the MAU) and active labour care on the delivery suite, so cannot be easily related to the views expressed by women in my study. At the time of writing, no other study has looked at satisfaction with, or experience of, the care provided on

the MAU as a distinct area of care in labour. It is, therefore, difficult to know whether the negative experiences reported by the women in this study are unique to this particular study population or occur more widely.

## 6.2 Pain

This section reports how women find it difficult to describe the pain they experienced in labour and also how some women used vocal techniques to cope with the pain.

That labour pain is almost impossible to describe has been well documented (Lundgren and Dahlberg, 1998; Nettelbladt et al., 1976). One of the difficulties in describing such pain is that it has different qualities at different stages of labour (Jowitt, 2000), and is a complex interaction of both physical and psychological factors (Lowe, 2002; 1996). All women in this study encountered difficulties in accurately describing the pain they experienced. The following quotes from Debbie and Mary illustrate how women try to liken the pain to a pain that many women will appreciate as a way of describing the pain to them.

It's like bad period cramp and things like that, but nothing like that. It's, it's really horrendous. Well there's nothing you can compare it to, so you can't really describe it. I just never imagined that it would be anything like that.

(Debbie, >30, Primiparous, Postnatal)



You can't really describe it to some, you can't really describe it. It's obviously in, it's obviously in your lower ground area and you can feel it. It's like; it's like no pain on earth. I mean some people kind, think it's like really, really bad period pain, but it's not, it's different, it's a different pain. 'Cause it's different muscles altogether to menstrual pain I think. But, I mean there's somewhat, sometimes it was more intense than others, it gets a bit complicated towards the end because your body wants to push but the midwife doesn't let you because you're not open quite enough. So sometimes that, that makes it more painful because you're going against all urges. So, but it's just a bit different, different. You can't really describe the pain until you you've [been through it]

(Mary, 20-30, Primiparous, Postnatal)

In their attempts to convey what they thought labour pain was like both Mary and Debbie describe the pain as being like menstrual pain, but also very different in some respects. A study by Niven and Brodie (1996) looks at the words women used to describe pain in labour, including aching, cramping, exhausting, frightening, gruelling, sharp, shooting, tearing and throbbing. Some of the qualities of dysmenorrhoea, characterised by cramping, are similar to those of labour pain and often lead women to compare (albeit inaccurately, according to Niven and Brodie (1996), labour pain to period pain. The difficulty encountered by women like Debbie and Mary in describing labour pain poses a significant problem for childbirth educators wishing to inform women about, and prepare them for, a pain that many find impossible to describe.

As far as coping with labour pain is concerned, in every culture women possess skills to reduce pain and enable birth to be a positive experience; these skills may include breathing, movement or vocalisation (Kitzinger, 2002). Vocalisation or toning (voicing the exhalation of breath on a single pitch) is thought to increase the ability to cope with pain and is a useful form of focus (Pierce, 1998). However, both midwives

and women can view such vocalisation as either a positive or negative reaction to pain. Following are two accounts of vocalisation in labour, both women associating screaming with more pain. Susan explains how controlling her screaming signified, for her, control of her pain, whilst Carla, who had a negative attitude to vocalisation, saw the positive effect of an epidural as preventing her from screaming in pain.

Because I think it went perfectly really. Just a bit frightening because I didn't know what to expect, and with the pains getting stronger and stronger I really thought at one point... I mean they says I didn't even shout out. I was quiet and I didn't shout, I didn't cry or anything. So I, I was expecting it to get worse and worse 'cause I've seen people screaming their heads off do you know when they've been in labour and I was expecting to be like that. And when I wasn't I was thinking it's going to get more painful sort of thing and they're going no, no, you're nearly there now, you're going to push him out shortly.....The pain. I really thought it was going to get worse. Because I wasn't screaming, because I wasn't screaming and shouting and I was expecting to be, so I thought well this can't be it. It was agony but I really thought it was going to be a lot worse you know.

(Susan, 20-30, Primiparous, Postnatal)

Yeah. It's quite funny because at six in the morning or something there was this lady who was screaming, my midwife she said I've never heard anybody scream so much and 'cos I thought, my thought is oh my God is that with the, with the epidural? So she went for a coffee and something and suddenly everybody was pressing, we were all pressing the button because it was like, is that, are those screams with the epidural? Because if I got it and got into screaming like that, is it wouldn't be worth it? And she said everybody's asking the same, don't worry she doesn't have one. She was honestly screaming. Aahh mama, help me.

Carla, >30, Primiparous, Postnatal)

Vocalisation of pain is personal and often a woman's unique reaction to the pain she is feeling; it is, therefore, difficult to gauge a woman's pain on this observation alone. Susan and Carla saw vocalisation—'screaming'—as a signifying either the worst pain experienced or being out of control. For example, McCrea (1996), reports midwives

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telling women to make less noise, in case they frightened other women, and to conserve their energy.

Pain (and a woman's reaction to it), as described above, is difficult to predict and often difficult to describe accurately. This unpredictability of pain is one of the difficulties in preparing women for labour. If midwives are unable, antenatally, to accurately predict how painful labour will be, how can we expect to engage women in decision making for relief of a pain they are unable to gauge? Some women can cope well, using various non-pharmacological coping strategies, whereas some benefit from the use of pharmacological methods, as described in the following section.

### 6.3 Progression through the drugs

When women and midwives discuss the various methods of pain relief that are available, it is invariably in a set order—a hierarchical menu—which can be offered in reverse, depending on the ideology of the person offering it (Leap and Anderson, 2004) ([Figure 5](#)~~Figure 4~~). In the culture of choice that exists in the NHS, Leap and Anderson (2004) state that midwives tend to start by explaining the natural methods, then progress to the less invasive (such as gas and air), then opiates and finally epidural. However, doctors often start with the epidural as, in their medical opinion, it is the most effective.

**Figure 51: The pain-relief menu (Leap and Anderson, 2004)**

Methods you can control yourself: water, changing positions, moving, relaxation, breathing techniques, relaxations, psycho prophylaxis, music.
Methods with your chosen attendant: Heat packs, massage, breathing techniques, counting, chanting, labour coaching.
Complementary therapies: herbs, homeopathy, acupuncture, acupressure, reflexology, hypnotism, biofeedback machines.
TENS (Transcutaneous electrical nerve stimulation) machine.
Entonox (inhaled nitrous oxide)
Subcutaneous injections of sterile water in your back
Pethidine (or equivalent injection of opiate)
Epidural anaesthesia

It is argued that midwives ought to be moving away from this fixed hierarchy of pain relief and should present it as a more flexible concept of options that can be mixed and matched (Evans, 2006), emphasising the body's own mechanism for handling labour (Robertson, 2000). Whichever order pain relief is presented in, the midwife's role is to remain neutral to all options, concentrating on the effects of all of the available methods (Kannan et al., 2001).

This next section explores this notion of a stepwise approach to pain relief as well as the reasons given by the women for their choices of pain relief. Alison, a primiparous woman interviewed postnatally, was asked to recount what pain relief she had planned and then what actually happened during her labour.

It was, it was gas, I was going to try the, what do you call it, the gas and air. And then I was going to try the pethidine and then, I think it's pethidine, and then I was going to go for the epidural if it was really bad. And I ended up with the epidural.

(Alison, 20-30, Primiparous, Postnatal)

Alison did not say during the interview that she chose an epidural but that is what she 'ended up with', something that appears to be a passive or a reactive decision rather than a pro-active or pre-considered choice—or, possibly, it was a decision that, owing to the circumstances of her labour, was taken out of her hands. In contrast to the women in the study by Van den Bussche et al. (2007), this was not viewed as an active choice to help her achieve the birth that she wanted, rather a resignation that this was 'what she ended up with'.

Maria, similarly, also implied resignation, in that she took an early decision to have an epidural, rather than it being a pro-active choice.

I was getting a bit fed up so they said "Oh you know why don't you have some pethidine?" and I didn't want to have that. You know I'd heard, I didn't like the side effects and things like that, and they said "You know you can try that and then maybe go for an epidural if you don't get anything from the pethidine", and I just thought well what's the point, if I'm going to have an epidural anyway I might as well just go for it.

(Maria, >30, Primiparous, Postnatal)

The major benefit of an epidural is that it is found to be the most effective form of pain relief in the first stage of labour (Kangas-Saarela and Kangas-Kärki, 1994). The major risk often cited by midwives is that of an increased risk of instrumental or operative delivery (Green and Baston, 2007; Howell et al., 2001). Van den Bussche and colleagues (2007), found that in their study, unlike Alison or Maria, women who chose epidural anaesthesia had a greater desire to enjoy their childbirth; they actively chose an epidural because it was comfortable and safe and because they felt that

suffering during childbirth was needless. Those women in the study by Van den Bussche et al. who did not choose an epidural had more confidence in their ability to tolerate labour pain. However, according to Green and Baston (2007), an increase in epidurals over recent years may be, due to an increased willingness to accept birth technologies rather than a desire for a more comfortable experience. Of the women interviewed for the study reported here, it seemed that many felt the need to justify certain choices, especially when talking about the decision to have an epidural. For example, Alison said:

When you go in the medical assessment unit and she examines you to see if you're far enough on to go into the delivery suite or they send you back home, and she says oh have you got a history of quick labour in your family you know like, because this is going really fast. And I was like, I don't really care, I've got a contraction do you know what I mean? She says what pain relief do you want and I went I hadn't thought about it, I'm, I'm fine at the minute. And I was trying to, and I was thinking to myself God come on you can do it, you know. And then I thought well why should I if I can get something to take the pain away and make it a more pleasant experience, then do that. Do you know what I mean? And I tried the gas and air but I don't, I mean obviously everybody doesn't like being sick, but I'm never sick and I felt sick and then with the gas and air it made it worse and it just felt like a bed spin or something after you've been drunk, it was horrible. And I just couldn't, I thought if I end up being sick here it's going to be even worse so I just, and the only thing that I knew that would stop it would be the epidural, so I says just, I'll have it. Because it wasn't, I didn't feel like I could have gone on much longer. I had gone two nights with no sleep because I, I was nine days overdue and she gave us a membrane sweep to see if that would move us on.

(Alison, 20-30, Primiparous, Postnatal)

Alison seemed to want to justify, why she had the epidural, which she said was not purely for pain relief but because of her lack of sleep and being overdue. Once again, this wasn't expressed by Alison as an active choice but rather as a series of events that culminated in an epidural being her best, if not her only, choice.

The reasons why particular decisions about pain relief are made is the subject of work undertaken by Leap (1998). Leap's work, and that undertaken by Gould (2000), added to the debate around the pain paradigm, women choosing to either eliminate or work with pain. Leap and Gould argued that, if a woman saw labour as the work necessary to achieve birth, then she might move away from the passive role in labour that many women now assume. The argument is that this passive approach increases the medicalisation and the decision to opt for pharmacological pain relief; for some women this is a benefit of modern medicine, whereas for others it is a negative tendency. In the study conducted by Leap (1998), discussing pain, rather than pain relief, with women was thought to have reduced the uptake of pharmacological pain relief: 69% of her sample used no pain relief, although it should be noted that this was a self-selected sample of women, so the results may be exaggerated and may not be transferable. This subtle change in how pain and its relief are discussed with women should be considered when the provision of information is re-assessed.

Involvement in decision making is sometimes promoted uncritically and does not always tackle the issues of whether such involvement leads to control or if, as in the case of Carla, cited below, control can be gained by abdicating this responsibility to others (Green and Baston, 2003; Walker et al., 1995). Carla waited to be offered various forms of pain relief and did not ask for what she wanted; she was guided by her partner and the midwife.

I said I didn't want to use the pethidine and I couldn't cope with the gas and air and I wanted the birthing pool.... and I wanted the epidural which I had. What happened is when I actually went into labour, well I started with con, con, contractions on Friday and it was so painful I just wanted something to kill the pain. But, in hospital they wouldn't offer me the epidural once they admitted me, all they offered was the gas and air and I thought that, that'll do, whatever,

anything, anything that kills the pain a little bit. And then when they took me to the labour bit again they wouldn't offer epidural. They offered me you know the birthing pool, but I just wanted something stronger you know. And the pool I thought I really wanted it but I thought that's going to do nothing. So all they offered was the pethidine so I thought well...

(Carla, >30, Primiparous, Postnatal)

Carla had confidence in the midwives caring for her and was led by them throughout, taking their advice and accepting their suggestions. Women have a need to believe in the staff's expertise; according to Green (1999), they will nearly always follow the advice given by the staff. Green argues that the belief that a woman could, if she had wished to, have made different choices, as in Carla's case may enhance her sense of control (Green, 1999). Rather than being an active participant in the decision-making process, Carla did not request a particular form of pain relief but in this instance deferred to the knowledge of the midwives, even though it went against all the plans she had made antenatally. According to Green (1999), there are times during labour when a woman can actually gain control by actively taking the decision to hand over to the midwife when appropriate; however, there is nothing in Carla's narrative to suggest that she gained control at any point.

How a woman wishes to be involved in the decision-making process should be discussed antenatally, so that she can be supported in a way that gives her confidence in her own ability and the control she desires.



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#### 6.4 Choices, decisions and involvement

This section focuses on how decisions are made during delivery and whether women feel it is appropriate for them to be making decisions in this situation. Although some research reports that all women want to be involved in decision making in labour (Gibbins and Thomson, 2001), others argue that women may wish to defer to someone else in this matter (Yearby, 2000), claiming that their involvement may burden them with an overwhelming sense of responsibility that they do not wish to have (Halldorsdottir and Karlsdottir, 1996).

One strategy by which women are able to prepare for, and to articulate their decisions regarding, labour is to write a birth plan. A birth plan is seen as a tool that may help a woman to identify and discuss her concerns and desires with her care providers (Kaufman, 2007). For some women, writing a birth plan, regardless of its degree of detail or its flexibility, enables them to order their thoughts and preferences and to think logically about their choices. Within the interviews in this study there was a range of women, some who chose to use birth plans and were supported in this, and others who felt they trusted their midwives' experience sufficiently to defer to them for decisions.

Lynne, who was having her first baby, viewed birth plans as a sign of mistrust of the professionals caring for her and, for this reason she decided not to write a birth plan, whereas Chris was actively encouraged by her midwife to write one.

Definitely. I'll absolutely go with, I don't even, I don't even think we're going to bother writing a birthing plan, just because I have no... I have no idea. There's nothing that I don't, as you say I completely trust the professionals they do it three or four times a day, they know what I need and so....

(Lynne, >30, Primiparous, Antenatal)

Well it's me. I mean she's sort of left it up to me, 'cos obviously you get your book and she sort of says you know if you've got any ideas just jot it down. And I haven't really, well I hadn't even thought about it early on, um but then I thought no I want one in place obviously when me notes go to them, you know, you don't know what your pregnancy is, what your labour's going to turn out like second time round, so I thought I want something written in me notes for when I walk in case I, maybes I can't manage to get the words out. But, so, I said I would like to go through it and go through it with her so she said you know well why don't we go up and have a look what's available, and then it might, you might get, be able to put it in a bit more order and, so I thought oh well that's a good idea.

(Chris, >30, Multiparous, Antenatal)

Both women recognised that they had no idea what labour would be like, so are not convinced about making rigid plans beforehand. However, in writing her birth plan Chris was supported by her midwife, who ensured she had all the information she needed to do this; this is another example of how preparation and support for labour is largely dependent on the ethos of the individual midwife. It has been argued that a series of requests or plans set out in the form of a birth plan may only serve to arouse resentment among midwives caring for women in labour (Inch, 1988). Although they are much maligned, birth plans can provide women with an effective voice in the decision-making process (Weir, 2008), especially at an emotional time such as childbirth when they may find it difficult to articulate their true wishes. Brown and Lumley (1998) reported that 21% of the 270 women in their study saw birth plans as an opportunity to consider and become acquainted with their options before labour began, and that 27% saw them as a means of informing others of preferences without

the need for detailed explanations during labour. They also found that women who wrote birth plans (46% of 508) were more likely than those who did not (38.8% of 764) to report having an active say in decision making. However, these data should be interpreted with caution, because, when adjustments were made for other factors, the use of a birth plan was not significantly associated with involvement in decision making.

There was no clear evidence from the interviews in this study that making decisions was a priority for these women. Several interviews seemed to suggest that women preferred not to make decisions during labour or that they found it hard to do so and therefore wanted to defer some, if not all, of the decision making to others. Pauline, despite her medical background and knowledge, nevertheless found it difficult to determine how she could make decisions antenatally.

I think an awful lot, and again talking to friends, they say that you can get into labour and you'll be given lots of choices by the midwives and again it's probably not the time to be given choices. It's kind of you almost want someone to say well actually I think this is actually best for you and the baby now, and it is a bit worrying that you kind of, you kind of float through and you think you're making decisions about the best thing to do but you don't know, you just don't know. Yeah I've got a medical background and I still don't know. You know, so other people must really struggle and think well, and they must spend hours over their birth plan and then just all change on the day.

(Pauline, >30, Primiparous, Antenatal)

When I re-interviewed Pauline postnatally, she had not changed her opinions on the difficulty of having to make decisions at this very emotional time.

I had a clear plan that they very much leave it up to you to decide. They're very, they're not that helpful really. It's very much well what would you like to do? Which I appreciate people have very specific plans or what-have-you but I think you get to a stage where you're in pain, you don't really want to make a decision and you know I just want someone to give me some advice here. And the midwife was quite good because everyone was saying oh you know your eight centimetres dilated, you know, you'll be delivered in a couple of hours you know, I'm sure you'll be fine just with Entonox or whatever. Whereas at least the midwife, when I said how much worse is it going to get, she did say well your waters haven't broken, when they break it's probably going, you will get worse pain. At which point it was like right I'll have an epidural then. 'Cause I did, you know I went through the ooh I've got to eight centimetres I might be all right.

(Pauline, >30, Primiparous, Postnatal)

Throughout her labour Pauline wanted someone to tell her what would be the best course of action for her to take. VandeVusse and VandeVusse (2008) and VandeVusse (1999) would regard this as shared decisions through explanations. This would be a variation on the standard approach to shared decision making, the healthcare professionals explaining what the best option would be, given the stage of labour and her clinical signs. Pauline's part in this would be to find out about the options being suggested and to take part in the decision to opt for it. Pauline found that the approach of the midwife (in not suggesting options but wanting to support Pauline in achieving her own choices, in order that she could make an informed choice) was not helpful at this stage of labour; shared decision making through explanations might have been another option.

The importance of shared decision making and decisions being supported by professionals in relation to a woman's positive birth experience is an issue explored by several studies (Gibbins and Thomson, 2001; Machin and Scamell, 1998), with recognition that it is the role of the midwife to support and facilitate the birth process

(Leap, 1998). Machin and Scamell (1997) who conducted an ethnographic study of women in the north east of England. Machin and Scamell argued that their findings showed that, when advocating shared decision making you had to be sensitive to a woman's cultural values about pregnancy and birth and decision making in healthcare. Those cultural values would be made up by a woman's social background, her education and the model of childbirth to which she subscribed (for example the medical model).

When interviewed postnatally, Gail, like Pauline, was happy that she deferred to the expertise of the professionals in making decisions.

Just the kind of to put your, put yourself in other people's hands a bit. Not be sort of too you know I'm a strong independent woman, I make my own decisions because I think, I think you're very lucky if you can sort of get, you know, be in that situation and be able to, you know, ignore all the professional advice and just go with what you want to do and come out of it the other end, you know having a good experience. I think it's just one of those things where other people sometimes know better than you.

(Gail, >30, Primiparous, Postnatal)

Several papers by Machin and Scamell (1998; 1997) highlight that for the women in their studies it appeared that as their pregnancy progressed, the women became more anxious and, as their anxiety increased, so, too, did the likelihood that they would opt for the safety of the medical expert knowledge. The experience of both Gail and Pauline seems to support this theory. An explanation may be that this handing over to the midwives is more to do with the women recognising their expertise and that women are more likely to trust them enough to let go of control when supported by a midwifery model (Parratt and Fahy, 2003). Some of the women went even further

than deferring to the professionals' expertise and felt, like Carla (who was having her second child), that it would undermine the professionals if the women in labour did not pass the decision making over to the midwives.

No, it was, to be honest I didn't go in with any expectations. I just sort of went in and like right we'll just see what happens. That was how I felt, I was quite happy to take their advice that they suggested worked well for me, I was happy with that, so I didn't go in and sort of say you know I want this and I don't want that an I'm just happy to go with the flow, I don't have any expectations. I don't think I should be telling you know an experienced midwife of twenty years you know you will do this for me, I don't think that's right.

(Carla, >30 Multiparous, Antenatal)

There are spectrums along which women sit regarding birth plans, involvement in decision making and open-mindedness or willingness to change. These often opposing ideas need to be accommodated by midwives in their preparation and support of women, which brings with it again the difficulties of providing individualised information and care. What is important to each woman needs to be determined during pregnancy, so that she can be supported during labour in a way that is appropriate for her.

When considering decision making there is a discussion focusing on two opposing views of whether labour should be approached with an open mind and willingness to change or with a rigid plan which must be adhered to. It has been stated that the more decision making is shared between women and caregivers the more likely the women are to express more positive emotions (VandeVusse, 1999). This investigator also highlighted the fact that, although women wanted to be involved, they never wished overtly to make all the decisions, as was the case with the women in my study. A

midwife can either take the paternalistic view, making decisions for the woman, or she can 'help' each woman to make a choice, recognising the advisability of developing the woman's understanding of her need to be involved in decisions and to take responsibility for them (Yearby, 2000). This involvement by the midwives, rather than the woman making an informed choice, would have been welcomed by the women in this study, and might have helped them to maintain the degree of control they wished for during their labour.

### 6.5 Control

This section focuses on what decisions about pain relief the women made and how these decisions enabled them to stay in control. The women in this study had a wide range of opinions on how different drugs either helped or diminished their sense of control. Control was not always about the choice of drugs; in one case, a woman was prepared to change the place of birth to ensure the control she wished for in her labour. For many of the women, being in control of themselves while they were in pain was the most important factor: for both Lynne and Mary, who were preparing to deliver their first child, remaining in control was a major concern.

I guess it's just the idea of, being out, out, you know out of control sort of, not, I mean this is dreadful I've got no idea but just the amount, just the idea of it all being controlled through drugs and things like that. And you're not actually being able, you know having to be told what to do and...

(Lynne, >30, Primiparous, Antenatal)

The only things I don't, what I don't want right now is, I don't want morphine, pethidine or, or an epidural I don't want the epidural because I like to feel in control of pain, I don't like it taken away so that I can't feel what's happening.

(Mary, 20-30, Primiparous, Antenatal)

It is difficult to differentiate through these interviews whether Mary and Lynne were actually referring to feeling the pain as being important to them, so their bodies knew what to do, or if in fact they are referring to being in control of their bodies, their reactions to pain, something they believe the drugs will not allow them to do.

There is an assumption that all women should assume some control over their labour (Fox and Worts, 1999), but others argue that many women actually feel positive about the safety of medical control (Fox and Worts, 1999; Lavender et al., 1999). In contrast to this idea of medical control being a positive factor, the discussion in the feminist literature is about the power imbalance of the doctor/patient relationship. The feminist argument focuses on loss of a woman's control and her disempowerment, highlighted by the feminist critique of medicalisation. This critique has a tendency to overlook the agency of women who accept medical management and make an active decision to gain medical control. A study by Brewin and Bradley (1982) found that control was not the most important factor for all women; it was those women who had attended antenatal classes who were more likely to expect more control. However, Gibbins and Thomson (2001) acknowledged that the preparation and knowledge which women received at an antenatal class enabled them to make informed choices and to feel in control. It is, therefore, not clear whether women who want control are more likely to attend antenatal classes, or whether those women who attend such classes are thereby empowered to take control; furthermore, should the gaining of control be an objective of antenatal preparation?



When questioning the women about their perception of what the different drugs would do to their degree of control, there were many diverse views, especially regarding Entonox (gas and air). Some women saw Entonox as a pain-management option that would allow them to remain in control of the pain, whereas others saw the side effects of drowsiness as something that would limit their self-control. Lynne and Joan demonstrate both aspects of this argument:

I guess, sort of, just sort of taking the edge off, giving you something to, you know con, not concentrate on, but, but still maintaining that you know that you do what you think you have to do and, and it's still your control sort of...

(Lynne, >30, Primiparous, Antenatal)

Well I, at first I thought like pethidine but then I decided I didn't want it, just because they said it makes you like talk a load of nonsense and like go all funny which they also said like gas and air makes you like, I don't know, a bit high or whatever. But that doesn't seem so bad like, I don't want to be just like off it when I'm, I don't know. Just the thought of like not being in, like I know your not in control of yourself anyway, but do you know what I mean? I don't know, just not... like I wanna be as grounded as I can be really.

(Joan, <20, Primiparous, Antenatal)

The opposing views on how Entonox would affect women were raised by many in the study. In contrast to these differing views on Entonox, it is commonly recognised that opiates can leave a woman feeling powerless to actively cope with labour, therefore reducing her degree of control (Mander, 1998). Naomi, who was pregnant with her second child, expressed concern about the effect of opiates on her control.

I knew about like pethidine, my sister, I think it was she might have had diamorphine.. is that right? and when she told me how hers went I just, I just knew it wasn't for me and... like with me wanting to be in control and to know exactly what was going on and be aware of everything I just knew didn't want that and when I've read, read up on it I didn't want any side effects to be passed onto the baby so..

(Naomi, 20-30, Multiparous, Antenatal)

Despite midwives telling me that they often inform women of the risks and benefits of all the options, Naomi was one of the few women who raised the issue of pharmacological pain relief also having an effect on the baby. This is an important issue to raise, midwives explain in chapter 8 the information they give women, but it seems that this information is not being converted to knowledge for the women.

Regarding epidural anaesthesia and the effect it has on control, women who opt for an epidural appear to be those with a greater fear of childbirth and a desire for passive compliance rather than control within the childbirth process (Heinze and Sleigh, 2003). Although not concurring with the results of Heinze and Sleigh's study, the women in this study discussed epidurals in terms of not being able to move, of being unable to control their movements, but of being in control of themselves, which many women rated highly. Naomi, in her postnatal interview, talked about how different she felt after her epidural.

I was um chatting away, I was making decisions with the midwife, I mean it's like quite big decisions at that point which I was pleased I was able to do..... I was just asking, with the birth of my first child I had retained the placenta, so I asked them to check that that was all cleared like after the birth, which was quite an important thing to get across. And I asked if I could push by myself rather than an assisted delivery which they let us try and that was, that worked out well. And I was just able to tell them like I was having dizzy spells with my blood pressure lowering so they were able to just, whereas if I was on gas and air I wouldn't have got that, any of that across.....definitely. I was able to like take part take part in it and enjoy it as well.

(Naomi, 20-30, Multiparous, Postnatal)

Naomi felt that she was able to be in control, to “take part in it and enjoy it”, and to be involved in some quite complex decisions about her birth. Naomi felt that she wouldn’t have been able to get this information across had she still been under the influence of Entonox and having to concentrate on controlling the pain she was experiencing.

For one woman in the study, Rebecca, the pain relief options she choose did not give her control, she argued that it would require a change in the place of birth to help her exercise more control in the future.

I don’t, I don’t want it to go like it went last time. I had quite a traumatic first birth and I had basically a series of events happened and I felt that I had lost control and I hadn’t been informed properly when I was in labour. So, things kind of went out of control. This time round I’m, I’m planning to be at home because that gives me an element of control that I didn’t feel that I had when I was in hospital. I’m aware that it might, I might, it might not be as painful as it was last time because having talked around people second labours.. yes it still really hurts, but you don’t, you don’t really feel it quite as much and you can often be a lot further along than you think you are because you think you know it’s not really that painful. So I’m not kind of, I’m taking a very easy view about pain relief this time. I don’t, I’m not bothered about not having things accessible like epidurals and, if possible I would like to avoid it because of how it was last time.

(Rebecca, >30, Multiparous, Antenatal)

Rebecca’s view of being able to stay in control only by giving birth at home was the only such opinion expressed by women in this study. Rebecca took this decision as she didn’t feel “properly informed” during her first labour and this led to her feeling out of control, something which she felt better able to manage in her own home.

It has been shown through the interviews with women in this study that the degree to which women want to be in control varies greatly. Where a woman is situated on this spectrum of control affects how she approaches labour, the pain- management options she chooses, the decisions she makes and (in one case) where she decides to give birth. In order to meet each woman's needs and give her the necessary support, midwives must ascertain her values (what is important to her) and preferences (options she is considering) and tailor the care and support around these. Often, the fact that a woman feels that she is in control comes in part from the positive attitudes of the midwives (Gibbins and Thomson, 2001), who are able to guide her through the complex web of decisions facing her. The largely positive experience of the women in this study regarding the care they received from the delivery-suite midwives is discussed in the following section.

## 6.6 Delivery midwives

The labour and delivery-suite midwives, whose goal it is to establish rapport and effective communication, are on the front line of care for labouring women (Camann and Alexander, 2006). After the birth of her second child, Jan, like the majority of women in the study, was very positive about the support she had received from midwives on the delivery suite.

It was extremely busy yeah. So yeah so I was eight centimetres dilated and just all over the place and clicking onto the TENS machine and then when I got into the delivery room she was very, very good. She was very sort of right, what do you want? You're doing very well, this is all, immediately the emotional support kicked in big time which was just what was needed. She sort of did a quick examination and said this is all going really well, try the gas and air, and that really seemed to help this time last time it didn't have any, I had a few puffs of gas and air and then the morphine was given and I was, I was gone. Whereas the gas and air this time really seemed to do something for me and she was just very encouraging saying this is going absolutely fine, you're doing fantastically well and in between puffs I was saying to her oh, or John was saying by the way we were going to have a, the water bath and she said yes, I'll fill it up if you want, but you're not going to have time. And then you know the next puff I said oh and by the way you know we wanted half a dose of pethidine.... Yeah that's fine it's on the trolley if you need it we'll get it, but I don't think you'll have time. So that was perfect because essentially she was saying you can have what you want, um which is what I needed to hear but she knew damn well that there wasn't going to be time for any of this malarkey.

(Jan, >30, Multiparous, Postnatal)

The midwives in this situation were supporting and encouraging Jan to achieve the birth she wanted and that the midwife knew she could achieve. As women are told in Camann and Alexander's book of antenatal information (Camann and Alexander, 2006), and as Jan discovered, midwives may be a woman's most important ally. The part played by Jan's midwife was a major feature of her overall satisfaction. At an evidence-based symposium, Leeman et al. (2003) reported that management of labour pain has a relatively minor role in a woman's satisfaction with childbirth compared with the quality of the relationship with her maternity caregiver and the degree of participation she has in decision making. Evidence that further supports this argument is found in a survey of 519 women, 119 (28.9%) of whom stated that support from their midwives was crucial for achieving a fulfilling experience (Lavender et al., 1999). The whole essence of midwifery is to assist women around the time of childbirth in a way that recognises the equally important physical, emotional and

spiritual aspects (Page, 2000). However, this was not always the experience of women in the study reported here.

Helen felt that her midwives were not as encouraging as she had hoped for but took over control in the delivery suite, which although not what she had wished for, still had a positive impact on the outcome and Helen's experience.

'Cos, when we got to hospital and I sort of had the epidural, I had a bit of a snooze but then her heart rate started to drop and it got to the stage where the sister came in, she wasn't happy to let us continue with the labour. One of the doctors came in and he was like you know I'm not happy about this 'cos her heart rate went right down and wasn't coming back up as quick and then it just went down and stayed down. And I was sort of you know, I don't really want a caesarean kind of thing and the doctor was like I'm sorry but we're going to have to intervene now and the midwife was like don't worry about it you know, you'll not need one. I want you to do this when I tell you, I want you do that when I tell you. She had Gary involved and between sort of like the three of us we managed to get her out just as he was away preparing the trolley. So we sort of did everything that she asked and we got the outcome we wanted.

(Helen, >30, Multiparous, Postnatal)

Helen reported that she was instructed what to do by the midwife, who had taken charge when the situation became clinically urgent and she was able to go on and deliver vaginally. Antenatally, Helen had stated that she wanted to stay in control of the pain and the situation around her, but when a complication arose she was happy to defer to the knowledge and skills of the midwife and to relinquish the control of decision making to her. This is illustrative of a situation where shared decision making is not appropriate, when there is a clinical urgency and not choices to be made but, rather, clinical protocols for this situation to be followed.

Gail experienced a midwife who was supportive and encouraging in her approach in wanting Gail to make the decisions.

One of those yeah and um, she was just like this is really hard you know there's pain relief here, just have it. That was very much her opinion and you know, and at the time I was yeah, yeah I'm just going to keep my options open sort of thing. And then another midwife that looked after me when I was in delivery she was a lot younger and she was trying to, she was sort of saying well it's up to you, you could do this, you could do that and, she was, she wasn't trying to push me in any particular direction and I think at that point I really needed somebody to tell me what to do. I didn't feel that I was really able to, to make a decision, but, but I think she kind of felt that she didn't want to, she didn't want to push me into any particular direction, she had to be fairly um you know neutral about the whole thing. And, and I didn't find that very helpful

(Gail, >30, Primiparous, Postnatal)

Gail's midwife tried to stay detached and neutral and encourage Gail to be engaged in the decision-making process, leaning more towards informed choice than shared decision making. However, Gail did not find this type of support useful as it left her feeling unsupported and unable to make decisions. She would have preferred a much more shared approach to decision making, rather than being left to make informed choices.

Chris, unlike most of the other women, didn't mention the midwives very much in her interview and reported a very different experience—an apparently 'hands off' approach of the midwives:

Yeah. They just really, it was, I mean (Yeah) they were there and I knew they were there and they were very much just sort of, in the background.

(Chris, >30, Multiparous, Postnatal,)

Chris was aware that the midwives were close by but felt very much that they were in the background and didn't intervene as she happily progressed on her own with minimal intervention. This underlines, again, the importance of finding out antenatally how each individual wants to be supported; this approach would not have been appropriate for Gail, but was what Chris needed at this time.

The hospital where the study was undertaken is a teaching hospital, so student midwives were involved in the care of women on the unit and contributed to the positive experience of Angela.

I mean one thing, another thing that was quite funny on my birth plan when they talked about students and stuff and I was like I would prefer not. And when I'd gone through to the um the delivery part, they'd said oh you know this is, this is your midwife and I can't remember the girl's name now who is a student, and actually that worked out better than I could have ever hoped. Because obviously a midwife has got three ladies she's looking after and she'll come and see you every ten or fifteen minutes and keep an eye on you. This student was with me constantly so every time I had a contraction, and this is was before John's mum arrived, she was there and she was like holding my hand and she would remind me how to breath with the gas and air and you know she was talking to me and suggesting different ways like the um, the blow up ball, you know like the ones you do the sit-ups on sitting on that and suggesting different ways of sitting on the bed so before we'd got down the sort of, the epidural route, she was suggesting lots of other ways. And I was walking around and she was really, really good and I thought oh if I'd dismissed that and said no I definitely don't want a student, I would have had all the time in between when the midwife was, and I never noticed really when the midwife came in and out because she was, she seemed so in control of the situation.

(Angela, >30, Primiparous Woman, Postnatal)

Although a student midwife was not something Angela wanted when she had thought about it antenatally, on reflection postnatally she contributed her positive experience to the role played by the student midwife. It has been said that a student midwife, who often is responsible for caring for only one woman at a time, is able to offer



continuous support and thus is able to establish a rapport with the woman and is more confident and able to offer reassurance (Thorstensson et al., 2008).

The continuity of care, such as that offered by Angela's student midwife, during labour is something that has been positively highlighted in the results of the recent Cochrane review (Hodnett et al., 2009) as leading to shorter labour and the decreased likelihood of women reporting dissatisfaction. Hodnett and colleagues also reported that continuity of care seems to be most effective when started in early labour. The student midwife was able to offer suggestions for options Angela might try to help with her pain management, and gave Angela the impression that she was "so in control of the situation", while still involving her in any decisions that needed to be made, that Angela was full of confidence in the care and support she was receiving.

Throughout pregnancy women stress the importance of receiving care from the same caregiver (Enkin et al., 2000), this continuity of midwives is something that was not experienced by Joan or by many of the other women in the study during their labour.

There was, I had a first midwife who I started to get to really like and then like she went off her shift and I got really upset but then the new one when I got used to her she was nice too. But it was just like she was there and just left me and it was sad when she left.

(Joan, <20, Primiparous, Postnatal)

A changeover of midwives during a long labour often occurs on a busy labour unit, and should be explained to women. Despite negative accounts about lack of continuity, the majority of women in the study were positive in their narratives about

the midwives. Many women have identified specific aspects of care that they either liked or disliked from the midwives; Rebecca's description went a little further.

Well I don't mind really but I think the key thing is that, that to have a good midwife is to have a midwife who puts aside her own experiences and says what do you want out of this experience you know. And for me I would like to try to have as little pain relief as possible but if I need the pain relief then, I need it

(Rebecca, >30, Multiparous, Antenatal)

It is with this type of dialogue that a woman is able to share what she would like to achieve, what is important to her—not just the practical aspects of which pain-relief options she would like. There should be a discussion about her values and expectations regarding how she wants to approach labour, what control she hopes to have and how involved she wishes to be in the decision making. Once these elements have been discussed with the midwife, the latter can provide the support and encouragement and the options that the woman has identified to enable her to achieve the birth she is hoping for.

This chapter has provided details of women's expectations and experience of delivery. The women's expectations are often at odds with those of the midwives, as discussed in chapter eight. However, in order for midwives to understand why women are ill prepared, they must understand the expectations of such women, the information that these women need, and how the information given affects the women's choices in labour. The following chapter describes the women's reflections postnatally, examining how their experience may have changed their views.

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## 7 Postnatal

All women in the study were re-interviewed within six weeks of the birth of their babies. During this interview they were asked to reflect upon their antenatal expectations and their actual experience of labour, the details of which were discussed in the preceding chapters. This chapter concentrates on how women considered the experience of labour would affect their choices in the future, or advice they would give to others.

There is an argument that a form of reconstruction of the birth occurs after labour; this is when a woman's recollection of pain is based upon a number of things other than just pain. There is a suggestion that the overall intensity of labour is often remembered but the specifics are forgotten (Niven and Brodie, 1996; Terry and Gijbers, 2000). Niven and Murphy-Black (2000), in a review of the literature about the factors affecting such recall, found that in several studies a woman's recall was often vivid but not always entirely accurate. This possible inaccuracy of recall should be borne in mind when reading, in this chapter, the accounts of women's labours in this study. Conde el al. (2008) found, in their study of childbirth experience and satisfaction, that women's recollections over the first 6 months following delivery had a tendency to be less negative, more positive and have fewer worries than immediately after birth. Conde et al. also argued that, after six months postnatally, women perceived their labour pain as being less severe than it actually was. It is thought that sometimes this skewed reconstruction that mothers undertake of their childbirth experience during this early postpartum period may influence their mood

and their predisposition to become pregnant again (Conde et al., 2008). This positive mood may also affect any decisions they may make in future pregnancies about their pain. When assessing women's experience of birth, taking this body of evidence into consideration, it is important to recognise that women may need time to work through their birth experience (Waldenstrom, 2003) to formulate an account that is more accurate, rather than an immediate postnatally reactive interpretation of the birth. Their birth story may not be formed immediately; it may take a few weeks of telling and re-telling the story to form the final version of events. However, in contrast to the work by Niven and Brodie (1996) and by Conde et al. (2008), Bennett (1985) found that recall was actually accurate at both three weeks post partum and at two years, and showed little difference between these recollections. After reflection on this literature, and taking into consideration the time and financial constraints of the project, it was decided to contact women in this study at three weeks post partum, in order to gain the most accurate description of women's versions of the reality of their labour and how this might affect their future decisions.

### 7.1 Future choices

Women's experiences and the decisions they made during their first labour often help to shape any advice they would offer others—or, indeed, any choices they would make for future pregnancies (for example, the place of birth or the method of pain relief used). Women in this study ranged from those who were definite in their opinions of what others should do and what they would do in future, to those women like Alison, whose advice would be to 'wait and see'.

I wouldn't say to somebody ooh get an epidural because it's up to them and everybody's pain threshold's different and I'd had no sleep for two nights and there was a lot of factors contributing to why I just give up. Do you know what I mean? Because I was like oh I give in, just give us something. Do you know what I mean? But if I'd had more sleep.....my advice to somebody else would be just see how it goes, see what you can cope with do you know what I mean? But don't make it unpleasant. If you can't cope with it and you really, if it's stressing you out, get something like that because it's, it's the most amazing thing that you'll do in your life, so don't make it an experience you don't ever want to

(Alison, 20-30, Primiparous, Postnatal)

Alison recognises that, although she had an epidural, it's not for everyone, because everyone reacts differently to pain; Alison gives additional reasons to legitimise her use of the epidural, which include lack of sleep, as discussed in chapter 6. Alison implied that, rather than making a pro-active decision to have the epidural—a decision which, she maintains, might have been different if she had had more sleep beforehand—she 'gave in', more a resignation than a decision. In their study, Heinze and Sleigh (2003) found that women who had been given an epidural had little desire to participate actively in the childbirth process. Alison did not have this tendency and, in fact, initially wished to be involved but, after struggling to cope, 'just gave up'. However, Alison seems comfortable with the result and advocates making it a more pleasurable experience by taking on board more pain relief, if absolutely necessary.

In contrast to Alison, Pauline highlights the lack of negative effects that an epidural has over some of the other options, rather than basing her reasons for choice on the positive effects of the epidural.

I'd say, ooh you've got to have an epidural. I would, and that's based not on, not knowing what it would have been like with pethidine you know and I appreciate that but I think the epidural was, was very good and it was my choice to not have it re-sited to be completely pain free and I'm sure I would have been completely pain free.....because the side that worked, worked fantastically and it really did make me appreciate the bit that didn't hurt when the bit that did hurt. And you know it must have taken away a significant proportion of my pain, it was very, very good and you don't feel disorientated or have your memory affected by it like you can, some people do with pethidine, for me gas and air didn't work.

(Pauline, >30, Primiparous, Postnatal)

In contrast to the two previous women, Susan felt that there were negative aspects of her labour which would mean for any future deliveries she would change not only the approach to her next labour but also change the place of birth so she could receive the pain relief and support she felt she needed.

I mean I would try and get this idea, and says maybe have it at home now....Like a pool at home... 'Cos the only thing that really bothered us was the midwives...not... they felt useless basically being around the pool and not being able to do anything and.. I just wanted to tell them to go away really but ...So I'd probably just probably think seriously about having a home birth.... 'Cos she says I didn't even have to deliver him you delivered him yourself. She didn't, she didn't know what to do. She just stood there and she felt useless. She says I felt useless there was no point in us being there, but obviously she had to be for when he was born. But that's the only thing really.

Susan, 20-30, Primiparous, Postnatal)

Susan felt that although she had had a positive birth experience, the midwives had not contributed to this: she was able to cope on her own with little input from the midwives. Susan was negative in her opinion of the delivery-suite midwives, that they had little involvement in her labour and delivery. This first labour experience had given her the confidence to know she had the ability to cope with the pain on her own.

Susan continued in her interview with some very clear advice about pain relief in general.

Don't jump straight into getting pain relief give it like, give it a chance do I know what I mean? Because it's only really at the peak of the contractions where it gets really unbearable and... just give it a chance I suppose. One of them says to me that it's going to end shortly, do you know what I mean? You'd be so disappointed if you go and get the epidural and that. And then I kept remembering that when I was in labour just keep going, doing what you're doing. Trust your body I suppose.

(Susan, 20-30, Primiparous, Postnatal)

Susan, from her antenatal interview, had a very positive attitude to being able to cope with the pain and wanted to give birth in water. Even though her peers advised her against it in favour of an epidural, and she wasn't given any information about water birth by her midwife, she was quite clear what she wanted. As information was not given to Susan by her midwife she had to turn to 'unofficial' sources for help. It has been argued that, for alternative methods of pain relief to be effective in reducing the rate of pain medication, a woman must have an active commitment as well as emotional support (Copstick et al., 1986), Susan had the commitment from early in pregnancy for a water birth, but had no support or information from family or from midwives. Susan's advice for other people was to wait and see what the birth experience is like, and to 'avoid an epidural if you can cope on your own, as you may feel disappointed, you need to trust in your own body to do the right thing'. This advice was echoed in the results of a study by Lundgren and Dahlberg (1998), who conducted a study of nine women who chose to give birth at an alternative birth centre in Sweden. Those women, like Susan, reported the importance of being able to handle the pain by having the confidence to trust in their own bodies' ability to deal with the

pain and to trust in the process of labour. However, the results of that study should be treated with caution as it comprised a selective group of women who wished to give birth in an alternative birth centre, so may have had more confidence in their bodies to labour and delivery naturally without medical intervention, and who would have been supported in their choice by the staff working in the birth centre.

Heather, like Alison and Susan, advises others to 'wait and see', as well as advocating knowing about all of the available options, which would enable a woman to deal with any situation that arises. As well as 'waiting to see', according to Heather it is important for a woman to have someone to support her during labour, so that she can make the decisions that she wants.

That they make sure they know about all the different options. I would then say just see how it goes once they get in there. Because I think that you can't, it was easier just to think well I'll see how it is and then I'll tell you, and then I'll tell you what I want. Like what I did, if there was anything you really definitely don't want just make sure your birth partner knows. Because when you're in pain and you're begging for it after the baby's, if I had had pethidine I would have been devastated after he was born. Because I really didn't want it, even if it hadn't have done anything to him I would still have been thinking well I could have, I could have made him have to have an injection. So, just to make sure that whoever you are with knows what you definitely don't want

(Heather, 20-30, Primiparous, Postnatal)

Heather recognises that having rigid plans and sticking to decisions made antenatally may be hard when a woman is actually in labour; her birth partner must help, so that no impulse decisions are made that might be regretted afterwards. Heather is clear, after her own experience that firm decisions regarding pain relief cannot be made before labour begins; however, a woman should have all the information she needs, and should have discussed her views with the birth partner. By having the information



antenatally, she can be fully aware of the side effects and limitations of any choices she may make, and can remain engaged in the decision-making process throughout labour. This approach, advocated by Heather, is one based around shared decision making, ensuring that the patient/woman has sufficient knowledge and is clear about her own values to make a decision in collaboration with her health professionals when necessary.

The advice from the majority of women in this study is to ensure that pregnant women are fully informed but should not make final choices before labour begins; that they should be aware that, although things may not go according to plan, by being fully informed they will be adequately prepared to engage in discussions about the options available during their labour. Both antenatal education and midwifery support need to be updated if women are to achieve the level of support and engagement they are requesting.

## 8 Professionals

In this final results chapter I present data from the health-professionals' focus groups to illustrate the views and concerns of professionals caring for women during pregnancy and labour. As described in more detail in chapter 4, the focus-group with professionals included delivery-suite midwives, community midwives, obstetricians, anaesthetists, health visitors and antenatal educators involved in the care of pregnant women.

In this chapter areas identified from analysis of the focus groups are examined and discussed, these are:

- Professionals' accounts of the information they give to women in order to prepare them for labour
- Professionals' views of how well prepared women are for labour
- Professionals' accounts of how labour is managed in practice Professionals' views of choice and decision making in labour.

The professional<sup>s</sup> give accounts of their version of the world regarding pregnancy and labour. Within these narratives, the professionals give details of the difficulties and barriers that they, as professionals, have had to overcome. I have identified similarities and differences, within and between professional groups and illustrated with appropriate quotes.

## 8.1 Professionals' accounts of how they prepare women for labour

What professionals tell women about pain in labour largely depends on how they themselves view pain, which is highlighted by the following three quotes. In the quotes professionals attempt to articulate how they believe pain in labour to be different from other types of pain and therefore how it should be approached and treated in a different manner. This first quote is from an obstetric registrar:

I suppose the pain is very different from the way you experience pain in other disciplines where pain usually is a sign that maybe you should run away from whatever that experience is or it's because something's going wrong and therefore it's a sign of a problem. Pain in labour is part of the process and we can make plenty of people pain free or not give them any pain. But it's a very different scenario from other areas, where pain means we must rush you to theatre and fix it.

(Obstetric Registrar, FG4)

A community midwife, responsible for preparing women for labour, identifies labour pain as a positive pain. She said:

I talk about it [pain] at the classes as well that it's a positive pain, I don't say it's not going to be painful because I think that's unrealistic and I think it depends whether you call it discomfort or you call it a pain, but and those words would mean different things to different women.

(Community Midwife, FG1)

Similarly, a delivery suite midwife conveys the advantages of embracing pain.

If you're ill with say an appendicitis pain and the whole idea is to stop that pain and to make them well. This is, it's a natural process and it's a pain with a purpose and that they can either work with the pain, or you know, fight against it and make things a little bit more difficult for them.

(Delivery Suite Midwife, FG 3)

Both the obstetric registrar and the delivery-suite midwife believe that labour pain differs from other pain, a pain with a purpose and which does not necessarily signal that something is wrong. The community midwife identified labour pain as a 'positive pain' used by many (Kitzinger, 1978; Leap, 1998; Lundgren and Dahlberg, 1998) to differentiate labour pain from other types of pain, positive in a sense that it is leading to the delivery of the baby, it has a purpose. Pain in other clinical settings is something that ordinarily indicates real or potential damage (Mander, 1998), whereas the pain of labour is attributed to the normal stretching, pressure and tearing associated with delivery (McCrea, 1998). The midwives in this study seemed to view childbirth as a natural process and, for this reason, often seek to encourage women to cope naturally with the pain they are experiencing. In contrast, the obstetricians who were used to dealing with pain in other clinical settings, appeared to want to eliminate any pain or discomfort experienced by women, as they would expect to do in other areas of clinical care.

How a professional views the pain of labour may determine how they this pain to a woman. How women are prepared for labour may also depend on how the midwife passes on information about the various forms of pain relief. The following quote illustrates the detailed information a midwife says she passes on in the hope of informing a woman so that she can make informed choices.

I usually run through all pain relief from the bottom upwards. I would start with the simplest up to the most complicated pain relief and I always just always kind of systematically talk about the benefits of each pain relief and the negative aspects of it and I usually quite heavily weigh the negative aspects of pain relief, purely because I think often people often give things like diamorphine without, you know, really discussing the sedative effect on the baby and therefore women are ill prepared for a baby that might need oxygen at delivery. And I think with the preparation of that it might, it might influence their choices but at least they've made an informed consent to have something that might have a knock-on effect to another aspect of their delivery. And the same with epidurals, I will talk about what the negative sides of that and often you know kind of the negative lists from an epidural are actually quite long you know, there are a lot of areas to discuss although it still is a kind of you know, very good pain relief and women will often outweigh you know the negative aspects with the positive, but they need to know them to discuss them further if they need to.

(Community Midwife, FG1)

This community midwife says how she structures her approach to giving information systematically, giving both the positives and negatives of each method of pain relief. However, she also offers an explanation of how and why she emphasises the negative aspects of two of the pharmacological options, but does not acknowledge that by doing this, may not be giving the balanced view that she set out to achieve. This failure to give a balanced view is a criticism levelled at information currently provided (Coulter et al., 1999). Several other midwives also give similar accounts of what information they give to women. The data collected in this study suggests that the information given by the obstetricians differs radically from that given by the midwives. This point is illustrated in the following quote by an obstetrician who speaks about becoming involved in pain management only at the point when there is a need for medical intervention.

In terms of pain relief, we get involved as doctors usually when we're going to add to the pain that women are already suffering. So the vast majority of pain that occurs on delivery suite doesn't occur as a direct response from the doctor it occurs as a response from labour and the pain and discomfort that is part and parcel of that. The point at which we get involved as obstetricians is usually because of some intervention, either you're going to augment labour or you're going to deliver a baby and at that stage when you're discussing those procedures, that goes hand in hand with a discussion about pain relief because they're painful procedures on top of what they're personally already experiencing.

(Consultant Obstetrician, FG4)

This account suggests that this obstetrician wants to 'protect' women from the negative outcome of experiencing any pain that may result from their intervention.

Moore (1997) and Duncan and McEwan (2004) noted that clinicians are aware of the possible negative outcomes of women experiencing severe pain and in their caring role will endeavour to protect them from potential adverse psychological problems, by ensuring that effective analgesia is provided before the start of medical intervention such as instrumental delivery (Enkin et al., 2000).

One obstetrician recognises the almost impossible and unenviable task that midwives have of preparing women, one which is not expected of nurses working in other clinical areas. He states:

Look at it from the midwife's point of view, we put them in an impossible situation they talk to a large number of women antenatally about labour, they may be community midwives, they might be on the delivery suite we never ask a nurse on the ward to tell the patient what the operation will be and what the anaesthetic they're given will be, so of course they're going to talk about things that they're much more comfortable talking about. Do we blame ourselves for taking a lack of interest in giving that sort of information? Is it not seen as part of our job if you like, none of us have a session dedicated to antenatal information. So, it works both ways. We don't get actively involved, we're not asked to be actively involved and yet we expect them to answer difficult questions Whereas she could talk 'till the cows come home about the midwifery aspect. And yet, they have, you have this unusual situation where she is the front line person on the delivery suite that has so much of an impact on people's choices.

(Consultant Obstetrician, FG4)

The obstetrician recognises that the midwives have a unique role in preparing a woman for labour, something that is not expected of nursing staff in other clinical areas. This again raises the argument as to who is actually responsible for ensuring that women are adequately prepared. Research suggests that both obstetricians and anaesthetists ought to play a part in ensuring that full and accurate information is available to women during the antenatal period, and that they should not confine their information giving to when labour is in progress (White et al., 2003). This research suggests that at present, information giving tends to be left to the midwives and antenatal educators alone during the antenatal period, with anaesthetists being involved during labour only if an epidural is requested, and obstetricians being involved only if complications arise or intervention is necessary.

However, given this proposal of involvement, the obstetricians have not made a move to become involved in this information-giving process, to offer information on the options available. Such a move to involve obstetricians, suggested by White et al. (2003), to encourage active participation of obstetricians and anaesthetists in antenatal education might give rise to a more balanced provision of information. In this model a woman would receive information from all the professionals who might be involved in her care during labour and delivery.

In addition to discussing the information they gave to women, in the focus groups professionals explored their views of the realities and difficulties encountered in

informing women. They cited the following as all having potential effects on the information given:

The questions to which women want an answer;

- How the information needs of women change throughout their pregnancy;
- The difficulties encountered when giving information during labour;
- The effect that the perspectives of the professionals, especially the midwives, have on the information provided.

During the focus groups, in order to see if the information needs of the women were being met, the midwives were asked to think about the questions women asked them regarding pain relief. Most midwives were in agreement about the questions women routinely asked. These are described below:

How long does it take to take effect? It tends to be the one.....Will it affect the baby? It's often something that people want to know about....They don't necessarily think how will it affect my labour really, I think perhaps we try to give information on that because being completely honest pain relief does affect a labour.

(Community Midwife, FG1)

It seems from the quote above and the agreement that followed from other midwives, that the midwives believe they know what questions women ask, and what kinds of information they are asking for. However, at no point during these focus groups did any of the professionals mention actually giving the women the information they had requested or information that would answer their questions. It has been previously stated that the content of antenatal classes are not based on the needs of attendees but on the messages the educator believes should be given (Murphy-Black, 1990). The



professionals in this study concentrated on giving women information on how the pharmacological methods of pain relief might affect their labour, for example. In addition, no mention was made, in any of the focus groups, of midwives explaining how long it might be before pain relief starts to take effect, which is something the women felt was important to know. It should also be noted that the answers to the questions women were asking are not covered in the MIDIRS leaflets either (MIDIRS, 2003c). It seems, therefore, that in this regard none of the sources of information accessed by the women were meeting their information needs.

In a cohort study of women, Lothian (2007) showed that some women do not absorb information, even when it is given during the antenatal classes. This questions the effectiveness of the current content and delivery of antenatal education. It may be that the information that women want is actually being given, but that it is not being provided in a format or at a time that is either accessible or acceptable to them and therefore does not translate into knowledge. It would seem that the questions women are asking should be considered when developing the content of antenatal education. These questions concern factors that are important for women to contemplate when making decisions and are therefore integral to the success of the decision-making process.

Discrepancies have been highlighted between what midwives reported providing to women, information that midwives tell us women are seeking, and the information that, in their interviews, women told me that they wanted. There are also additional obstacles caused by having a range of sources of information and women wanting

different levels of information, at different time points in pregnancy and labour, provision requiring a service providing individualised information. The quote below illustrates how midwives are conscious of how women's views, expectations and requirements for information change as their pregnancy progresses.

They can be, you know, you get them to about 20 weeks and they can be really, really frightened sort of looking at this labour. They cannot get their head round that. Like "goodness me, this is going to be terrible". If you see the same woman later on and she gets to about 37 weeks it's like "oh bring it on, I've had enough of this". And you can see the change that they get ready, that's probably why pregnancy goes on so long.

(Community Midwife FG 1)

In an early influential paper Christensen-Szalanski discussed how women's needs for information and what they wanted during labour shifted between late pregnancy and early labour. When the women in the study were interviewed at 36 weeks, the dominant preference was for avoiding anaesthesia, whereas during labour the dominant preference had shifted to avoiding pain (1984). In relation to Christensen-Szalanski's work, the challenge for those who deliver care to pregnant women is to be sensitive in assessing the values and preferences of the woman at the different points during pregnancy, as these help to form the women's expectations for labour and for preparing them appropriately (Waldenstrom et al., 1996b). It seems, from the focus groups with professionals, that they are aware of what is important to women but do not incorporate this into their preparation. Very often, parent education classes are criticised for being held too late in pregnancy (Lavender et al., 2000). In this study health professionals throughout the focus groups were continually grappling with the practical problems of the optimum time to pass on information to women and when they were going to be most receptive.

Acknowledging that there are difficulties in accommodating the changing values and attitudes of women during pregnancy, professionals also have to overcome the issue of being able to give a range of information to a wide range of women, as illustrated in quotes from an anaesthetist and a midwife.

I'm not sure that we can improve things, because it's just such a cross-section of society that we're dealing with and trying to inform people you can educate them until the cows come home but if they are not interested they can't, either A aren't intelligent enough to know what you're saying, or B aren't interested, or C have got certain expectations that they're not going to work from.

(Anaesthetist FG 4)

You have the highly motivated people at one end of the scale and you have the people who are just pregnant at the other end of the scale and they'll take the advice of their mum and their best friend and their aunty and probably just do as well. Probably better actually...It's very difficult because you invite them to the classes, they don't want to come because they don't want to know about it and then you say but how are you going to deal with the pain relief, with the pain in labour and they don't want to know about it. It's, that's their choice, you can't force it on them.

(Community Midwife- FG2)

Both professionals acknowledge, in different ways, that each woman, for a variety of reasons, has different antenatal information needs. With this in mind, it is difficult to see how one format, one medium and one level of information given to all women at one time point in pregnancy will ever meet the requirements of all women, which implies a radical overhaul of the present antenatal education provision. Information should be provided in a way that is accessible to all women in whatever format it is presented. It may be necessary to provide different levels of information to suit women's needs in order to support the decision-making process.

Because of this diverse group of women, assumptions are sometimes made regarding what information different groups of women will want or need. It was wrongly assumed that Susan a woman from the more deprived area of the city, (Section: 7.1) would not want a water birth, so she was not given any information about this by her midwife. It is important that individual values are ascertained, rather than making assumptions at a group or population level, so that women receive the information they have requested. However, there is also an argument for providing all women with information on all methods of pain relief, in case events in labour lead to different choices that had not been anticipated.

It is difficult to determine at what point, during pregnancy or labour, information should be given to women. The anaesthetist quoted below maintains that women are not receptive to information during labour, which puts into question the advisability of obtaining consent for the epidural during this time.

By the time you get to somebody who's in extreme pain they don't care. You know, you could tell them, I don't know, I mean I don't know I mean I wouldn't be surprised if you could tell them there was probably a 10% risk of them having a numb leg afterwards and at that stage when they're in that amount of pain, and especially if they've already been through trying everything else, they don't care. They just want the pain to go away....I have had one woman who as I started telling her about the complications she said look I just don't care, do not tell me anything more I cannot listen get on and do it....I mean I always make a point of stopping talking while they've got a contraction. Because I think there's no point going through well any of the spiel, not any of it.

(Anaesthetist, FG4)

The anaesthetist acknowledges that this is not the ideal time to be telling women the risks and benefits of an epidural. However, in the present provision of care it is often the only time when an anaesthetist comes into contact with such women as part of the consent process which consists of disclosure, understanding and decision making (Gerancher et al., 2000). Aside from information giving being far from ideal at this point, Christensen-Szalanski (1984) argues that preferences expressed by women during active labour may bear little relation to their ante- or postnatal preferences. Women in labour are more likely to be concentrating on remaining in control rather than listening to and weighing up the risks and benefits of treatments. It is from this work that Christensen-Szalanski argued that, using women's preferences during labour to decide on treatment options was not the best way to maximise long-term satisfaction. However, in contrast to this work, more recently others have found that women are, indeed, able to understand information on epidural anaesthesia during labour and that this understanding is not affected by pain, anxiety or opioid premedication (Jackson et al., 2000). This debate gives rise to the question asked by many: can women in the throes of labour give consent to an epidural (Smedstad and Beilby, 2000) or should some of this information be given antenatally, with only the actual, final decision be given during labour?

Although it is recognised by those who have investigated this area, that the possible complications of an epidural can be discussed early in pregnancy, it was felt by the anaesthetists in this study that it is impossible for a woman to know how she is going to react to the pain of labour until it happens (Jackson et al., 2000). Jackson et al. (2000) suggest that consent for an epidural should be a two-part process—one part for risks to be completed while the woman is pain free during the antenatal period and the

other, for benefits, to be discussed during labour, which would ensure full disclosure and comprehension to assist in the decision-making process. However, this approach of only providing only risk information antenatally may not allow the woman to fully weigh up the pros and cons as part of the shared decision-making process until she was in labour.

Professionals in this study who care for women in pregnancy and labour clearly recognise that there are difficulties and barriers to overcome when preparing women for labour. During the focus groups, several of the professionals volunteered their ideas of what the preparation ought to include. Both an obstetrician and a community midwife offer their views below on how women should be prepared. They advocate making sure that the basic tenets of labour are covered and that women understand the physiology of labour.

I do think there needs to be an explanation of the fact that labour is not called labour for nothing, it is not a pain-free procedure. It cannot be a pain-free procedure you know if you think about, unless you have (an epidural) you know because how can doing that not hurt at least a little bit.

(Obstetric Registrar, FG4)

Well if I waved my magic wand it would be that people would understand the physiology of the process more and people would understand how their bodies worked and so if we do anything in our teaching it is about making people understand. It's like you said earlier Alison, this is how it's meant to feel you know, it's, you can call it as many different words as you like you know, discomfort, pains, rushes, sensations, anything you like, but whatever it feels like that's how it feels like for you but that's normal. That's how it's meant to be. And I think if women understood the physiology of what's happening to them and we could support them through that, then I think that we would have far more women who would be willing to move around more in labour, follow into things and not feel so 'stiff upper lip' that they have to behave in a certain way

(Community Midwife, FG1)

This community midwife's view seems to represent that of many others in her focus group. Midwives appeared to believe that, if women understand that the pain they are feeling is a normal pain and there is no need for concern- they will also understand that the pain will stop as soon as delivery is complete, they will then be better able to cope with labour without a heavy reliance on pharmacological methods of pain relief. It has been argued that it is imperative to re-focus antenatal education on a more flexible and innovative approach to labour, including coverage of birth physiology (Eames, 2004; Evans, 2006).

The following section looks at how well prepared the professionals believe the women are after receiving this information and antenatal education that they provide.

## 8.2 Professionals' views of how well prepared women are for labour

The previous section dealt with the ways in which professionals gave information to women in the hope of preparing them for childbirth. Later, in the focus groups, professionals went on to discuss how they were surprised by the degree to which the women in labour seemed unprepared, regarding their expectations of the pain, of pain relief and of the length of labour despite this provision of information.

It always amazes me the number of women who, and this is women of all ages who, who you go into you know, they go "I didn't realise labour would hurt". Not that I didn't realise labour would hurt this much, because you know, but the fact that they didn't seem to acknowledge the fact that it would hurt at all

(Junior Doctor, FG4)

There's a lot of people that I think, I don't know, I think its been alluded to already, that people have come in with actually no perception of what kind of pain they're going to be in and have made no decisions as to what they would like to do in labour. We've got two ends of the scale, we've got people who come in who know absolutely nothing and we've got as Elaine said people who come in and they've been on the internet or watched TV, they know everything. And some, but both groups of people can have unrealistic expectations, a lot of people come in with pre-conceived ideas how their labour's going to go, what they're going to use and if it deviates from that, if they don't just use gas and air and the pool and they are in so much pain that they want either an opiate or it might be an epidural, you've got to be very careful as a midwife to not make them feel that they've failed

(Delivery Suite Midwife, FG3)

The delivery-suite midwife supports the claim made by the previous junior doctor that women have little idea about the reality of the pain they will experience. The fact that the professionals perceive the women to be ill-prepared also has implications for the pain these women will experience. Research by Green and Baston (2003), Green et al. (1998) and Green (1993) concludes that women who do not expect labour to be painful, actually go on to experience more pain, as they are not prepared to cope with the rigours of labour. Despite the thirst for information reported by women in this study and the earlier descriptions of the information reported by professionals as being passed on to women, women are still ill-prepared. However, as already noted, women appear to ask one set of questions and healthcare professionals are providing a different set of information.

According to professionals in the focus groups, women lack not only in terms of preparation regarding the pain that they will experience in labour but also in their knowledge regarding the length of labour.



You know, I find, I find it quite interesting just to ask women you know when I'm on the delivery suite, you know, when do you think you'll have your baby? And they ask the mother [of the mother-to-be] who's undoubtedly there these days, when do you think she'll have the baby and ask the partner and it's absolutely staggering that they think the baby, the baby's going to be here in a couple of hours time. And I say well you know roll the clock on another twelve hours and you may be right.

(Delivery Suite Midwife, FG2)

There has been little research about women's perceptions of the duration of labour; much of the research conducted in this area is focused on the impact of interventions on the length of labour (Impey, 1999). A dilatation rate of 1 cm per hour in the active phase of labour is often accepted as the cut-off rate between normal and abnormal labour, but should be interpreted with caution (Enkin et al., 2000), as women progress at different rates and do not always fit into a textbook standard of labour progression. Some women have long latent phases or mid-labour plateaux (Walsh, 2005), the occurrence of which needs to be explained antenatally so that women are prepared not only for the average length but for variations and can form their own realistic expectations of how long their labour will last. One midwife offered a reason for this perceived overall lack of preparation: she felt it was more likely to be as a result of 'information overload' rather than too little information.

I think the thing I'm seeing more and more is that ladies aren't prepared for the pain they're going to be in when they come onto .... more so in the younger ones or first time labours, it doesn't matter how old they are, they're coming in and they're not, whether the information is not coming through from the antenatal classes, if they have indeed attended them, or on the upturn scale of that they've got too much knowledge from the internet and they're absolutely terrified, which is very difficult for us to then turn around. They think everything is going to go wrong. But on the whole it's they're not prepared for the pain that labour can produce.

(Community Midwife, FG1)

It would seem that, although women's accounts suggest they feel prepared for childbirth, by reading and by attending classes, professionals perceive that many women are still remain unprepared for the realities of labour (Block, 2007; Cronin, 2003). Continuing the discussion about informal information from sources such as television, Szczepinska (1995) questioned whether in fact women are being misled by misinformation and the impersonal information provided by the television and internet. Szczepinska goes on to question whether women, because of this misinformation, expect too much and therefore are not prepared for events not going to plan. This notion of being misled by misinformation would fit with this midwife's argument of too much negative information.

In order to try to address this perceived lack of preparation for labour, the two midwives' outlines their own approach, of preparing women for what is a natural process. The midwives speak about informing women about the role of naturally occurring endorphins and enabling women to have confidence that their bodies will be able to cope.

I think pain relief is something there if things aren't going well, if labour is slowing down or whatever, that it's there, but there's more natural methods that women should be aware of and the confidence to know that this is what their body's going to do and how to work with it instead of just injecting something to take it away.

(Community Midwife, FG2)

I think we've got to achieve a balance and I think we largely speaking do that and we all, we all have a responsibility to let women know that their bodies are designed to do this process and, that if they allow the process to unfold in the comfort of their own home where they're still surrounded by familiar things and well supported by a partner if that's the case, and then allow endorphins to take over and be, and help in the process of labour. But then the balance part comes in when the guilt part, afterwards when a woman has had everything and thinks well, you know, the midwife told me you know my body's supposed to be designed to do it. Well not everybody's body will respond in the right way and will do that and not every woman's pain threshold is the same and we have to be able to adapt to meet that individual woman's needs. I think that's what midwives are very good at doing.

(Parent Educator, FG1)

This midwife, although a promoter of natural childbirth, understands that midwives need to adapt to meet the needs of the individual and to prepare a woman in the way that she herself wants to be prepared, and not necessarily in the way the midwife wants to prepare her. A study by Brauer-Rieke (2003) supports this notion of the woman deciding how she wants to approach labour focussing on place of birth. This place-of-birth study argued that the best place for a woman to give birth is not necessarily the home, or the medical environment of the hospital, but the place in which the woman wants to be and in which she feels most comfortable (Brauer-Rieke, 2003), listening to what the woman wants and not what the professional wants.

Both of these midwives, supported by many of the others in the focus groups, believe that the way to combat the perceived unpreparedness they are witnessing is to go back to the basics of getting women to understand the natural process and the role their body can play in helping them to cope. However, even this information must be presented to women in a format that is accessible to them and that they understand, before it can start to have an impact.

All the professional groups involved in the focus groups were united in one view—namely, that they believed most women were not well prepared for the rigours of labour, and their expectations were far removed from what they saw as reality.

There was no clear indication from any of the professional groups as to where the responsibility lies for such lack of preparation of women. It is not just the professionals, but the women themselves, who perceive this lack of preparation; This lack of preparation supports the work undertaken by Lavender et al. (1999) who conducted a questionnaire survey as part of a larger randomised controlled trial on intervention in prolonged labour. The survey found that 154 (37.4%) pregnant women in their study felt ill-prepared for labour, because of either a lack of information or their own unrealistic expectations. In their later work, Lavender et al. (2000) found, in a descriptive longitudinal study, that antenatally up to 80% of women felt prepared for labour but, when questioned postnatally, they declared that they had not been as prepared as they had previously thought. Only 30% of women in the study believed they had been adequately prepared, when asked to look retrospectively at their own labours. It has also been shown that women who strive, but fail, to achieve unrealistic expectations, may ultimately feel unsuccessful or dissatisfied (Kannan et al., 2001). As indicated by Soltani and Dickinson (2005), there is no easy solution. Women in their study were asked for their views on the information provided during pregnancy. Although over 90% of women had read and understood the information on all the health topics covered, nevertheless that information had had little, if any, effect on attitudes or behaviour in 50% of the women (Soltani and Dickinson, 2005). Time after

time, research is finding that women are ill-prepared for labour (Lavender et al., 2000; Lavender et al., 1999) and that the information they are receiving is having little impact (Soltani and Dickinson, 2005) – which adds weight to the argument that the way in which women are currently prepared is not effective and that the whole approach needs revising.

It is important to recognise that professionals' views on whether or not women are adequately prepared is affected not only by the women's knowledge but also by the professionals' own attitudes to labour and the information they offer women. Yearby (2000) argues that the key to effective antenatal education is to prepare women for the intensity of the contractions without inducing fear. It is, therefore, crucial that women should have balanced information available, based on current evidence and local provision of services and information that is accessible to these women and not based on the perspective of the carer.

### 8.3 Professionals' reflections of labour in practice

This section will focus on the professional's observations of how they saw labour unfolding in the reality of an often busy labour ward; something that they felt women did not appreciate.

In contrast to the level of discussion by the women in the study, there were only two references to the maternity assessment unit (MAU) by the professionals and these

were both regarding the work priorities of the staff on the unit rather than with the women's experiences.

Because I think from the MAU point of view though the pain relief aspect is not their priority, they're looking at a woman and they say are you in labour, or are you not

(Delivery suite Midwife, FG3)

When a woman is in the early stages of labour, her first point of contact is with the MAU, as discussed in detail by the women in chapter six. Several of the midwives spoke of the old system, of admitting women in labour directly onto the delivery suite rather than via the MAU, in a positive light. They felt that the old system had enabled them to build a rapport with women so that they could support them better, as is illustrated in the following quote:

I must admit I prefer when we used to admit directly, in some ways directly onto delivery suite and you would look after them from then on, even when you build the initial rapport with somebody and you get a feeling what have you, whereas somebody comes on then they want some diamorphine or whatever. I mean your sometimes thinking well you know lets go back a little bit, do we need to be at this point and you don't want to tread on other peoples' toes, not that I would anyhow, but I would still do what I sort of like re-assess what's going on.

(Delivery suite Midwife, FG3)

This sentiment of stepping back and reassessing is echoed by many of the midwives, who felt that women's pain often becomes out of control while on the MAU as they had not had support before their admission to the labour ward and were anxious. As these women were admitted on to the delivery suite, the delivery midwives wanted to take a step back, in case pain relief was not required once support systems had been

put into place. Even though the delivery midwives recognised that women were entering the delivery suite unable to control their pain, there was no mention of changes needed to support these women before their admission.

I think you've got to be careful in that sort of situation not to go straight ahead and give them diamorphine or something because you know, you get the phone call this lady needs some pain relief. It is important to have that conversation that Emma's talking about, 'cause otherwise if you said here's your diamorphine when they arrived you could slow the labour down, you could stop things and that wouldn't be exactly the best, in the woman's best interest so it is important to have that again and once they've got here.

(Delivery suite Midwife, FG3)

A Cochrane review supports this argument for support reducing the need for pain relief (Hodnett et al., 2003). Hodnett and colleagues (2003) found that continuous support throughout labour was likely to lead to shorter labours, spontaneous vaginal delivery and less likelihood of analgesia or reporting of dissatisfaction. These findings are supported by further research on satisfaction (Leeman et al., 2003) and a viewpoint with which the midwife cited above seems to concur.

The importance of support was recognised by many of the midwives in the study, acknowledging that the introduction of support when women come through to the delivery suite can help those women who had previously been feeling out of control to control their own pain. An example of this increased control in the delivery suite is illustrated by the following midwife.

We've had a lady, one centimetre, primip, prima first baby extremely distressed, so distressed she'd bypassed the M.A.U. unit, came in rolling round the floor, with a lot of support and things, got her into the pool and continually supporting that woman, she actually got out of the pool for her epidural thinking I'll have an epidural now, and she was fully dilated and delivered the baby standing up and that was all the pain relief that lady had had. So if you'd denied her going in the pool and given her diamorphine that wouldn't have been a great option.

(Delivery suite Midwife, FG3)

As proposed by the Cochrane review (Hodnett et al., 2003), this woman required a lesser degree of pain relief, as a result (in the estimation of the midwife) of the support and encouragement she was able to offer the woman once on the delivery suite.

Midwives acknowledge the importance of support, although also recognising that they are not always able to provide the necessary support owing to the pressures of the work environment and the workload; decisions are sometimes taken that may not be in the best interests of the individual woman but are made with the interests of all women on the delivery suite and of the staff working there in mind.

When the unit's very busy you have people in for the induction suite for example, who are contracting, or having cramps, you're busy with somebody else, they get minimal input. You go in and "there's a couple of paracetamol", we've all had to do it and then the woman's not really being supported. When you're able to get them out of that environment into a room with them by yourself you can provide much better one to one support and care and they might actually have been desperate in the induction suite, but once you get them in the room, they say "oh I'm all right" because I think there's the confidence that someone's there, that's talking to them.

(Delivery Suite Midwife, FG3)

Often, decisions like the one referred to by the midwife on the inductions suite, are made in relation to management of the delivery suite in collaboration with other



colleagues in order to alleviate the pressure when many women are labouring at once, or when a limited number of midwives are available (Devlin, 2008), or in emergency situations. The midwife recognises that once they are able to provide one to one support a woman's need for pain relief often subsides.

Midwives also indicated that, ideally, they would want to use their experience and professional judgement to offer guidance to the women on what their choices are, based on their progression and the wellness of the baby, not on volume of work on the delivery suite.

It depends on how the labour progresses doesn't it? You can judge from vaginal examinations and the way the woman is as to how she's progressing. If you knew that the baby was in an OP position and you know the labour had gone on for hours and hours, then would probably be a good time to say look if you're struggling this could go on another few hours maybe an epidural would be a good idea now. Similarly, if a woman is sort of coming up to full dilatation then she'll say "right, knock us out now, I've had enough". Sometimes you can say look you've got a short time, you're nearly there, get through it, you know. It depends you get to know your woman as well in labour and you get to know how they are.

(Community Midwife, FG2)

Midwives appeared to be clear of their role, the role of the different settings within the maternity unit and how the additional support they can offer on the delivery suite can help a woman in her delivery and, in some cases, reduce the need for pain relief.

However, midwives need to ensure that women themselves are aware of the support that they can expect during each stage of their labour, in the various settings within the hospital, so they can prepare different support strategies to help them cope. The following section looks at the professional's perceptions of decision making that

occurs in labour, and the similarities and differences in this respect between professional groups.

#### 8.4 Professionals' perceptions of decision making in labour

One of the main topics for discussion in the focus groups with the professionals was whether they regarded women as being prepared to a level that would enable them to make choices and decisions. Professionals also considered whether women should be involved in decision making, the role of shared decision making and how much the midwives and other professionals could be, and ought to be, influencing this decision. There is an understanding among the professionals that pregnant women who are about to give birth are a different category of patient to others in a hospital setting and ought to be treated differently – a point well illustrated by the community midwives in the following quotes.

That it's not a medical situation; they're not going in as a patient they're going in as a pregnant with choice, and that they would be expected to engage in some sort of discussion about what they want.

(Community midwife, FG4)

I think there's a traditional, you give over your rights and you're done to - when you get to hospital, and so that is something that's introduced from a very early stage throughout the pregnancy. You're not going to be done to, you're going to be expected, to have some ideas about what's right for you, and an informed choice concept.

(Community midwife, FG4)

It seems that midwives in particular expect women to engage in the decision-making process, something they would not expect of patients in other clinical areas. Hewson (2004) argues that there is an expectation by healthcare professionals that all pregnant women will wish to engage in, and make decisions about, their care, making an assumption that women value choice highly and value the right to accept or refuse treatment or examination as a fundamental human right. Levy argues that women should be enabled to make choices during childbirth (Levy, 2004), but not persuaded to if they wish to have others make decisions for them. However, decision making is not straightforward, and women may feel the pressure of being in a highly emotionally charged environment and experience an overwhelming sense of risk, for both themselves and the unborn baby (Kirkham, 2004). To enable choice in this environment is, therefore, a highly complex and skilled process (Levy, 2004) – one for which information and support systems need to be in place to assist women in making shared decisions (Weller, 2005).

Although midwives are aware of the demand for women to be increasingly involved in decision making, there is also recognition that some women do not want to make their own decisions. In such circumstances, midwives are in the difficult situation of making sure women comply with the medical practices and policies as well as ensuring they fulfil their obligation to provide choice (Edwards, 2004). In the absence of any clear choice, and with a perceived increasing risk for themselves or their baby, women may wish for a clear recommendation or guidance from the professionals looking after them (Fielding and Lam, 2003). This is one area where many of the midwives and the obstetricians in this study disagreed in their approach either to offer choice or give a recommendation.

I think when you talk to them most people make some sort of decision. I think that a lot of people are influenced by the midwife looking after them, but basically it is very frustrating when people won't make a decision of their own. I've found that a couple of times when they, they just say well what do you think? And you cannot like, what I think doesn't matter really, it's what they think and...you can't answer them can you because you don't know what sort of thing they feel?

(Delivery Suite Midwife, FG3)

I think it our duty to make a recommendation like that but to make that as a recommendation rather than put a demand upon the woman that she must do it.

(Consultant Obstetrician, FG4)

The first quote illustrates the midwives' reticence in recommending a course of action at a time when women are often extremely vulnerable to suggestion, echoing the work of Levy (2004). This quote is more in line with informed decision making, handing over the decision process to the woman once information has been passed on, as something women in earlier chapters said was not helpful. The consultant obstetrician, in stark contrast to the midwife, saw recommendations as a sense of duty, which some might see as erring on the side of paternalism. However, it may be that these midwives do not have the shared decision-making skills to be able to guide the conversation to find out what is important to the woman, to present appropriate choices based on those values, and to be a partner with her in the decision-making process.

Although other obstetricians agreed with the notion of making recommendations to women, they were cautious about how these recommendations should be proposed to women.

Well I don't think, I don't think that making a recommendation does not leave the decision with the woman, obviously there's ways of making recommendations that might bias someone one way or the other, but at the end of the day we're on delivery suite to make recommendations and we're not there to say well I'm not going to do that unless someone thinks of it so yes much of the time we are making recommendations for pain relief based upon interventions we want to do ..... but that is very different from saying you must or I think, or I'm not going to do this unless you do that.

(Obstetric Registrar, FG4)

The obstetricians were careful to couch this in terms of a recommendation rather than a demand or instruction, removing themselves from the paternalistic approach to medicine, in a hope of ensuring that the women are still engaged and feel they have some control over the situation, whilst being fully informed and conversant with the clinicians' recommendations.

Even though the midwives will have witnessed many births, they explained how they feel reluctant to offer advice and also how they find it 'frustrating' when women refuse to take an active role. Shared decision making would allow the midwives to see that they have an expert view to bring to the decision process in the same way the woman has her own view which needs to be considered – both equal partners. The professionals discussed how they approached decision making, as well as how capable they felt that the women were to be involved in the decision-making process. There was a recognition by many professionals, illustrated by the following quote, that women have different capabilities of being engaged in the decision-making process, and their ability to do this should not be assumed. This proposition about women's capabilities is similar to that raised by the professionals in regard to women's abilities to understand information.

I think there are some women who are very capable of engaging at that level but there are some women who would find that very, very difficult and are scared of the idea of having to engage in any decisions.....I think we've gone completely from no choice to absolute choice without taking cognisance of the women who are not capable of making a choice and I think, I assume, I don't know but I assume that often they may get through with absolutely nothing because they're not capable of making a comment or engaging in that level of discussion, or they end up with something inappropriate for them because they're not capable.

(Community Midwife, FG1,)

Part of shared decision making is about finding out the extent to which the patient – the woman in this case– wants to be involved. By discussing the degree of engagement initially, the woman can be more appropriately supported. Symon argued that, provided that a woman is mentally competent, she should be able to make decisions concerning her care (Symon, 2006). However, according to midwives, some women still approach labour with little knowledge on which to base these decisions – which raises questions about their competence. This particular midwife raises the concern that the healthcare system has gone from a very paternalistic approach, to one beyond shared decision making, to one where there is an expectation that women will make an informed choice. A move towards shared decision making would allow the midwife to bring her experience, as well as the woman's values, into the decision process.

Robinson and Thomson showed that clinicians are not always good at assessing patient preferences (Robinson and Thomson, 2001). Therefore if the professionals caring for them are to learn about women's knowledge, values and preferences, shared decision making must start with listening to women (Kirkham and Stapleton, 2004). The following quote illustrates how a midwife struggles to reconcile a

woman's unknown values with the midwife's own opinion of the next appropriate step.

Especially when people have come in you know they're trying TENS or they might have the acupuncture or, they've tried a lot of alternative things and they get to the stage where they're absolutely desperate and sometimes I don't know if it's they want permission to have something else when they say what do you think, but then as a midwife and you've looked at their birth plan and discussed it and simply think am I letting them down if I say right go on then have some, I would have some diamorphine, you think, well it's very difficult to judge what they want from you. Whether they want you to say no don't have any keep going and you can see this really distressed person. Or, whether to say well I would have something now, because I think that's very individual.

(Delivery Suite Midwife, FG3)

Midwives have difficulties in supporting women in their choices if their values have not been clarified antenatally. In obstetrics, these values are not routinely communicated to the professionals caring for them. In fact, the midwife in the following quote sees this practice as something of an ideal.

I think also for me in an ideal world it would be to say if somebody wants to be involved in informed choice then that's an option, but if somebody feels they cannot, they're not capable of making a choice, to be directed. To have that option to say I would rather be directed by professionals.

(Community Midwife, FG2)

There is recognition, by the midwives in particular, that they would like to be aware if women cannot make decisions and wish to be directed, but at present there are no examples of this happening routinely in this study.

Research (detailed in chapter 1) has been undertaken in the decision-making field regarding assessment of the quality of decisions made, a ‘good quality’ decision being one that is based on specific knowledge and where the decision is congruent with the values of the patient (Sepucha et al., 2007). It is also argued that care can be judged as appropriate only if, as well as meeting professional standards, patients’ preferences and values are incorporated in the process (Thomson et al., 2001). The difficulty in judging the quality of a decision on whether values are congruent with the decision itself is that, in childbirth, as previously illustrated, woman’s values are not routinely sought and cannot therefore be incorporated into any measures of decision quality. Decision support or decision aids may be one way to allow midwives to structure risk information and help patients to clarify their values in healthcare decisions (O’Connor et al., 2003b).

Some research suggests that patients do not always wish to be involved in decision making (Robinson and Thomson, 2001), with some people feeling reassured that the doctor or midwife is in control (Lavender et al., 1999). This is something that health professionals are aware of – that women must also be allowed to opt out of the process.

These professional views demonstrate that, in order to provide women with the type of support they need, during pregnancy a woman’s values must be established and communicated to professionals. This elicitation of values should focus not just on what type of pain relief she might want and who is to be present at the birth, but to what extent she would like to be involved and how she would like to be informed



about her choices. This would enable professionals caring for a woman in labour to have an opportunity to discuss antenatally or in the early stages of labour, their understanding of strategies for coping with pain that they might employ at various stages.

Pain is part of labour (Leder, 1986), which may be experienced by some women as a trauma and by others as a difficult challenge in a fulfilling life event (Simkin, 2000). As described earlier, the women interviewed in this study regard the pain of labour as differing from the pain of an illness: some see it as part of the natural process and are motivated to cope without artificial help; others prefer medical methods of analgesia (Hofmeyr et al., 2007). The midwives in this study also see the pain of labour as differing from that from an acute or chronic illness and believe that it should be approached in a different manner. Sinclair (2001) argues that tensions often exist between the professionals caring for women in pregnancy and in labour, especially with regard to how labour is approached and how medical technology is utilised by the different professional groups. According to Schuman and Marteau (1993), and echoed by the professionals in the study reported here, obstetricians are more likely to view pregnancy as a state with risks, while midwives are more likely to view it as a normal process, whereas pregnant women hold views in between these two. The anaesthetists in this study viewed pain as something to be eliminated, the only effective method being an epidural, whereas many of the midwives wanted to enable women to work with the pain to achieve a natural birth. Schuman and Marteau (1993) went on to consider that, if such differing perspectives existed within the same team providing care to pregnant women, as was the case in their study, it might reduce the effectiveness of this care by adversely affecting communication, creating professional

conflict and ultimately affecting decision making. This tension within professional groups was not something that was identified by either the professionals or the women in the study reported here. However, what was found was confusion over who should provide women with information; to what level of detail this should be provided; at what point in pregnancy or labour such information should be given; and who should take responsibility for ensuring that women are engaged in this decision-making process.

## 9 Discussion

The key findings that were presented in the results chapters are discussed in this chapter within the context of the wider fields of shared decision making and pain relief in labour.

The results identified fall into three primary areas; the first of which emphasises the discrepancy that exists between expectations and realities; how well midwives perceive women are prepared for labour; how the women themselves view their level of preparation; and how this perceived lack of preparation is underpinned by no-one appearing to know who is responsible for ensuring women are prepared appropriately. The second area relates to the information provided for women, which does not always seem to translate into knowledge or understanding and often does not appear to match the information that women say they require. The final area concerns the elicitation of women's values: there is no current mechanism within antenatal care to clarify women's values and to incorporate these into the decision-making process. I have demonstrated that a lack of clarification of such values limits midwives ability to fully support women in understanding what is important to them. These three issues have implications for antenatal education, information provision and midwifery support, and should be considered in the context of the relativist theoretical approach that was adopted, how the research was undertaken and by whom it was undertaken. These implications are discussed in the following sections, which assess the strengths and weakness of the study and present my own thoughts about this research.

## 9.1 Discussion of the strengths and weaknesses of the study

Reflexivity is an integral part of qualitative research, reflecting upon ways in which there may have been bias and acknowledging that my own background and values are important. Reflexivity is seen as an important step in striving for objectivity and validity (Ritchie and Lewis, 2003). I took the opportunity to be reflexive and consider the approach I adopted, and whether different decisions on how the study was conducted would have resulted in different outcomes, which are illustrated in this section on the strengths and weaknesses of the study.

The major strength of this research is that it investigates an obstetric setting in which decisions are not made in a 'traditional' episodic nature, a setting and a model of decision making which has yet to be fully investigated. Pregnancy and childbirth differ from other clinical contexts in being an area in which the patients involved are not ill and are viewed in a different manner by the professionals looking after them. The decisions made for pain relief in labour differ from other clinical decisions in that the action of getting pain relief is separated from the decision by, sometimes, several weeks. The types of decisions also differ, because, although the choices are made in advance, the final decision and action take place in an evolving and sometimes urgent clinical situation. This research has been able to identify a model of support for decision making that may fit the needs of women preparing for labour in a way that previous research, conducted in other clinical settings, has been unable to do because of the differences in context of pregnancy and labour described above.

The approach decided upon following the systematic review at an early stage in this study was qualitative, to enable me to gain an in-depth understanding of the subject area. This approach has been one of the strengths of this research, in that the qualitative methods used allowed me to explore my stated research objectives in detail. The use of quantitative methods might not have highlighted some of the issues such as who has responsibility for the preparation for labour which have not been previously highlighted in the literature. Examination of shared decision making in childbirth is an emerging field of research and one which, has benefited from an in-depth, hypothesis-setting, qualitative approach.

A further strength was in my chosen theoretical approach. The relativist approach adopted assumes no single truth but multiple realities. This relativist approach enabled me to explore versions of events as retold/constructed by the women and the midwives and the impact that these had on their behaviours and decisions. For example, some women said they believed there to be a barrier to accessing an epidural and developed strategies to overcome this; however, this difficulty was not evident to the midwives. By adopting a relativist stance, whether this problem existed was of little relevance to my analysis: what was important was how women reacted to, and prepared to overcome this hurdle that was a reality in their reconstruction of events. If I had adopted a realist approach I would have needed to undertake some observational work to record what happened in the various settings and to have compared this with how people were interpreting events. Although this would also have been a worthwhile examination of the area, it would not have allowed me to examine what was important to the participants and where there were similarities and differences, in the way that my relativist approach enabled.

A methodological strength of this work is the repeated longitudinal interviews of two groups of women, from pregnancy through to the early postnatal period. A longitudinal interview approach is an unusual approach given the resource implications and has not been undertaken in the decision making research field. Longitudinal studies such as this allow the impacts, consequences and outcomes of an intervention, in this case labour, to be examined (Ritchie and Lewis, 2003). This approach allows an understanding of the changes in knowledge, attitude and decisions occurring at the individual level (Robson, 1993) at different points in pregnancy. This approach also enabled an examination of the developments of the individual narratives over time, using the relationships built between the participants and myself to gain insight into a personal and emotional subject (Thomson and Holland, 2003).

The study has some limitations, the first of which concerns the difficulties in recruitment of women to specific parts of the planned project. I found it difficult to recruit women in the early stages of pregnancy and women who had recently delivered and this led to those particular groups being unrepresented in the study. With hindsight, it might have been easier to recruit women for the postnatal group during the later stages of pregnancy, with further contact after they had delivered. On investigation into the recruitment issues, midwives involved in trying to recruit the women described the difficulties that they had encountered in explaining the research on a postnatal ward a matter of hours after delivery, before women were discharged (see section 4.4.1).

The second limitation concerns the characteristics of the women involved in the study, compared with the sample I set out to recruit. I tried, with the help of the community midwives, to gain a spread of women of different ages and different backgrounds in order to include a wide range of experiences. However, the women included in the study were a self-selected group, who were motivated to take part in the research. There are some groups who are overrepresented in the study, such as older, more educated women, and some groups such as 16-20 year olds, who despite efforts by the midwives, were still underrepresented.

In summary, the strengths identified have enabled me to explore this context using the most appropriate methodologies and adopting an appropriate theoretical stance. This has enabled me to investigate the area fully, exploring many viewpoints. The limitations caused by the recruitment issues identified have had an impact on inferences I am able to make from my findings. I may not be able to apply my findings to all pregnant women but I can apply them to the large proportion of the target audience represented in this study. Further work will be needed with larger, more diverse samples, in order to validate my findings in a wider, more diverse population.

## 9.2 Reflections

As a researcher, it is important throughout the study to reflect on the process, the results and my own impact. Reflexivity enables researchers to examine how they may have shaped the data collection by their own prior assumptions and experiences,

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which can influence the most inductive of enquiries (Mays and Pope, 2000). An account of a researcher's reflections enables public scrutiny of the integrity of the research by offering a methodological log of the research decisions (Finlay, 2002). However, it is difficult to account completely for the impact researchers have on the research being undertaken, because so much of what transpires takes place within deeper levels of consciousness (Cutcliffe, 2003). Nevertheless, if it is acknowledged by the person conducting the analysis that they have had some such impact, although its extent may be uncertain, this can be taken into account during the interpretation and discussion of the results. An example of my impact was acknowledging that people may not have wanted to share their own preferences for pain relief with me in case they were different from my own.

At the beginning of the study I was not pregnant although I did have two children, so I had experienced my own labours, understood to a certain extent what pain in labour was like, had my own knowledge of the different pain-relief options available and my opinions about each of them. I recognised that these were my unique experiences and views, and was careful not to express my opinions during the interviews. However, some interviews that had started very slowly and in which it took a while for the women to open up, became more conversational when the women asked me whether I had children. After this disclosure, the women seemed more comfortable in knowing that I had children and had a shared experience. It is recognised that there are some shared understandings that can come only from having lived through similar experiences (Lippman, 2005), such as childbirth. Letting the participant know a little about yourself is commonly referred to as a presenting of self (Goffman, 1959). This presentation of self is a way of making the interviewer/interviewee relationship feel



more reciprocal and is thought to make the research participants feel more comfortable when discussing issues of which the interviewer has had some experience (Hallowell et al., 2005, Chpt.3), and this was certainly my impression with women in this study.

As the fieldwork progressed, I became pregnant with my third child, and I was still interviewing women in the latter stages of my pregnancy. Women immediately knew that I was pregnant and often asked what pain relief I was going to choose or what I thought about certain methods of pain relief. This was difficult, I did not want to appear unwilling to share my own experiences when I was asking them to share theirs; at the same time, I did not want to influence their response as a result of my own, very personal, experience. On these occasions I tried to give limited information to the women during the interview, in order not to influence their responses to my questioning; for example, I would say that I had 'experienced two very different labours in terms of pain relief requested'. As I was heavily pregnant during some of the interviews, this shared position may possibly have encouraged those women to talk more freely about their hopes and expectations and enabled me to gain a greater understanding of their viewpoint. Alternatively, my own pregnancy may have persuaded some women to cut short their interviews, as they would understand how hard it is to work when heavily pregnant.

Women were also inclined to ask whether their views about the side effects of different pain-relief options were correct. It was important for me not to offer an opinion, as I was trying to obtain their opinions rather than to test their knowledge,

and I did not want to influence their answers. However, I was aware from an early stage in the study that some women had gaps in their knowledge, about which they asked me questions, or incorrect information on which they were basing their choices. In these circumstances, I mentioned the antenatal classes at the end of the interview and suggested that those women should contact their midwife to ensure all the information they had was correct, as was suggested by Oakley (1981) in her reflections on conducting interviews with pregnant women. Oakley, in such interviews, when asked for information or advice would give answers where possible and also would refer to appropriate antenatal literature, the health visitor or GP (Oakley, 1981).

However, I found it difficult to remain neutral and to express no opinion at all when some of the women's views either differed dramatically from mine or were even the same as my own. I tried not to react either positively or negatively to what the women were disclosing, but merely to respond in a way that was encouraging and supportive. I felt that the women might have altered what they were going to say if I had agreed with them or shown some surprise at their response, so I tried to remain neutral throughout.

As well as being a woman pregnant with my third child I was also a health services researcher with several years experience, with a background in social science research. This background gave me the advantage of being able to look carefully at the given situation and drawing upon my previous interviewing experience to probe the women and health professionals carefully and considerately for further

information. However, my professional research background may have also put up barriers between myself and the women: they may have perceived me to be an outsider with no empathy for their situation. I tried to balance this possible feeling of me being different from them as a researcher by disclosing some of myself as a woman, showing I had shared similar experiences.

In summary, I felt that the fact that I had children and was pregnant with my third child for many of these interviews brought more positives than negatives. The negative aspects I brought to the interviews in terms of my impact as a researcher were more to do with me having difficulty remaining open to exploring views that possibly differed radically from my own, and in not giving away too much of myself in order to avoid influencing women in their responses. The positive effects I had on the interviews included the women feeling more able to open up to someone whom they perceived as being in a situation similar to their own.

When I conducted the focus groups, I noted how the groups ran and anything which I thought might be of benefit to me, for subsequent data analysis. I was aware, during the focus group with the community midwives, that there were tensions within the group between midwives with very different attitudes. A lot of my time and energy during this particular focus group (FG1) was spent ensuring that no particular midwife dominated the group or prevented anyone else from taking part. This role of mediator is very difficult, but I was able to draw upon previous experience of running focus groups to ensure the discussions were fruitful, that everyone had a voice and no-one was criticised for their opinions.

With regard to my own pregnancy, when I was conducting the focus groups I was in the early stages of pregnancy, showed no physical signs and did not offer any information about my pregnancy to the groups. In all the groups, I was asked if I had any children and where they were delivered. I had not given birth to either of my first two children at the study hospital; although I did go on to deliver my third child there. I think that the fact that I had borne children meant that the professionals knew I would understand what they were talking about, checking back with me in the interviews asking whether I knew what they were discussing. I was able to confirm that I had not delivered at the study hospital (as I had delivered at one of the community hospitals in the same area), they were confident that I had not been one of their patients, which had the positive effect that they were able to be open about their experience of providing maternity care.

In summary, I consider that my own pregnancy added positively to my impact on the study as a whole, especially when my pregnancy became visible. The effect however, was not to such an extent that I believe results or conclusions drawn were significantly altered. What follows is a detailed discussion of the main themes that have been highlighted through my research, bearing in mind the strengths and limitations and my own personal reflections of this study which I have identified.

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### 9.3 Discussion of research aims

The original aims of my study were as follows:

1. To carry out a systematic literature review covering women's experiences of labour and pain relief in labour;
2. To ascertain the views and expectations of various groups of women and professionals using qualitative methodology in order to develop appropriate decision support;
3. To develop the most appropriate decision support for choice of pain relief in labour in order to assist women's decision-making process.

The systematic review was written up and submitted for publication in a peer-reviewed journal (Lally et al., 2008); that review in full, without the constraints of word count for the publication, comprises a substantial element of the background to this study in chapter 2. The literature review highlighted a discrepancy between women's expectations regarding pain relief in labour and their experience. Several gaps, including that between expectations and experience were equally apparent in the results of my own qualitative study, and form a major part of the discussion in this chapter.

The second aim of the research was to ascertain the views and expectations of the study participants in order to develop appropriate decision support. Ascertaining participants' views and expectations involved discovering how decision making regarding pain relief in labour is currently viewed and how this process could be improved; this aim was achieved through the interviews and focus groups.

Recommendations for changes to practice and future decision support, based on the findings, are included in the 'Conclusions' chapter.

As stated in my third aim, I initially set out to develop a tool to support women in decision making. However, at a very early stage of my research it became apparent that, owing to constraints of time and funding, and because of the development work that would be needed, this would not be achievable in the time available. I could at this stage have chosen to adapt a tool that had been developed for another area of obstetrics, this was an option I considered. However, given that there was little written about what is understood about the decision making process during pregnancy and labour in relation to pain, I felt that this would have been missing out a key step in the development process. My other concern which prevented me from doing this is that there was an increasing push to implement shared decision making in contexts that had not been fully examined and I did not want to add to this. My efforts, therefore, focused on understanding how women are informed and how they make decisions as part of their preparation for labour, and how midwives prepare women for this process as part of their antenatal care. From this investigation I hoped to be able to ascertain the most appropriate ways of supporting both women and the professionals that care for them in this decision-making process. I have reflected upon the highlighted results to identify features of the most appropriate decision support that might be developed as part of future research, as well as service developments that might go some way to supporting women in labour. The most appropriate ways of supporting women in decision making are highlighted in the 'Conclusions' chapter.

The following sections in this chapter discuss how the results contained in my thesis have helped me to achieve my aims, as well as detailing the most important issues raised by the results. Although I have presented the results for the women and the

professionals separately, there are commonalities and issues that cut across both groups. My discussion and conclusions bring together the views of all respondents in order to gain an in-depth and comprehensive understanding of decision making in labour, with reference to three key result areas—namely, discrepancy between expectation and realities, information, and clarification of values. The discussion of these key areas takes into account the two main themes of the thesis—shared decision making and pain relief in labour—and how the key results affect these areas.

#### 9.4 Discrepancy between expectation and realities

As discussed in the systematic review, several discrepancies were identified between women's expectations and their experiences regarding type and level of pain, length of labour, what pain relief they would need and their degree of control. Many of these discrepancies were also identified with the women during the interviews. In addition, this study has identified new areas of importance, including the gap between the expectations of the women and those of the professionals.

All the professionals spoke of how ill prepared they perceived women to be when they came to hospital in labour; whereas, the women themselves thought they were adequately prepared when questioned antenatally. Community and delivery suite midwives reported women holding unrealistic expectations and having ill-informed ideas: for example, some women expected the pain in labour to be comparable to a headache or menstrual pain, or were expecting labour to last a few hours; others appeared not to have considered how painful labour might be, or had not even thought about the full range of pain-relief options. However, it should be noted that my

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relativist approach to these data means that I am not looking for the ‘truth’, or believe in the midwives’ version of reality over the women’s. My own relativist standpoint means that I understand how everyone has their own version of their reality and it is how this affects their attitudes or their behaviour that is important. However, given this theoretical approach, it is important to recognise that, if the midwives view women as being ill-informed, they may give information on options they think women may need, whereas, if women believe they are adequately informed, they may not listen to or retain the information they are being given, considering it superfluous. The evidence from the interviews and focus groups with women and professionals supports the results from the systematic review—that a gap exists between expectations and what happens in labour—but my work gives additional insight to other areas where expectations differ—such as how ill prepared the midwives think the women are, discrepancies over the role of the MAU, and the place of the birth plan in supporting decision making.

The literature in the systematic review (chapter 2) pointed to the need for antenatal education that encompasses a realistic presentation of labour, including the physiology, in order to help women form their expectations, as well as antenatal education that addresses women’s fears and concerns. By promoting the formation of realistic expectations I am not advocating a reduction in women’s current expectations or implying there is only one reality, but ensuring what women expect is more closely matched with likely events in labour—for example, in terms of how long labour will last. By better understanding the expected length of labour, women would be able to make better judgements on the support and pain relief they might need, in view of the length of time that the pain is likely to last. This is also true if women have a more



accurate understanding of the type, level and duration of pain they may experience, and the pain-relief options open to them. Several studies support this finding, identifying the need for women to accept the possibility of needing some form of pain relief (Green et al., 1990; Kangas-Saarela and Kangas-Kärki, 1994).

So, while offering support to the issues highlighted in the systematic review, my research raises the question of why, even when some information is apparently given (according to the midwives), women are still regarded by midwives as being so ill prepared. It is not clear whether this is caused by a lack of correct information, lack of information in a format that is accessible to the women or un-receptiveness to the information by the women. The formation of expectations and subsequent decisions is supported when correct information is presented in an accessible format, and a discussion takes place whereby the woman's knowledge is assessed and her concerns or values discussed (Edwards and Elwyn, 2009; O'Connor et al., 2004). Expectations can never be exact, as the previous discussion of the 'expectations' literature has identified; expectations relate to something that is uncertain, and this point should be raised with women when discussing their preferences. On the basis of this discussion my view would be that in order to narrow the gap between actual experience and expectations, women should be provided with accurate evidence-based information, in a format that they can take in at a time when they are receptive to such information.

My results show that expectations regarding pain in labour are formed by amassing a variety of information from several sources (some more reliable than others), with friends and family identified as being one source with a significant impact (Fenwick

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et al., 2005). There is no guidance about whose responsibility it is to ensure that women have all the necessary information and that they understand it. If women are unsure of whose is responsible for ensuring they have a complete set of information on options available to them, there are two possible courses of action. The first course of action is that some women may take on the responsibility to prepare themselves and to access alternative sources of information for options about which they have not received enough information from their midwives—for example, breathing and relaxation techniques. Alternatively, some women may expect the midwives to take on the responsibility for preparing them, thus limiting their choices to the information given to them from one source, i.e. their midwives. Without clarity on whose responsibility it is, some women are unwittingly limiting the information upon which to base their expectations.

As an alternative to forming expectations (as discussed in chapter 2), some authors advocate encouraging women to identify hopes rather than expectations (Beaton and Gupton, 1990; Fenwick et al., 2005; Gibbins and Thomson, 2001) with a hope being classed as an ideal expectation (Leung et al., 2009). A criticism which might be levelled at this proposal is that this is purely semantics. However, there is a case for women to acknowledge what they would hope would happen in their ideal birth, as well as recognising that things might not go according to this ideal plan, and that they have considered how they might deal with any situation that could arise. This approach fits in with the model of ensuring that all women have a basic understanding of all of the options (Entwistle et al., 2008), which would enable them (in collaboration with their midwives) to engage in a discussion about their hopes and expectations and to clarify their values and ideals for labour.

The second discrepancy is that surrounding the maternity assessment unit (MAU), what women expect to happen and the role of the unit as seen by the midwives. The MAU was mentioned by most of the women in the study, when asked about their experience on contact with the hospital when in labour, but was raised by the midwives only when they were questioned directly about it. The women saw the MAU as one area where support was generally lacking: no pain relief was available and they viewed the unit as a barrier to their entry to the delivery suite. The midwives themselves see the MAU as the most appropriate place to undertake triage of women in early labour to ascertain whether they are still in the latent phase of labour, and better managed at home, or in active labour and needing admission to the delivery suite. The midwives described their role in the MAU as one of taking a history of the pain, carrying out basic clinical examinations and monitoring women as required. After discussion, the midwives recognised that this might be perceived as lacking direct support for women who are in pain and looking for personal support and encouragement. Women were not aware, when they entered the MAU, that no pain relief would be available; it could be that, if the purpose and the processes of the MAU were explained more clearly to women antenatally, they might have strategies to cope with pain while being assessed or waiting to be assessed. It might be of benefit to women if midwives demonstrated more explicitly their understanding that this is a time of great anxiety and vulnerability (Enkin et al., 2000), and that some privacy, support and possibly pain relief (Fox, 2007) might be required to help women cope with their pain. The women in the interviews spoke of 'the hospital' and did not differentiate between the different clinical areas or recognise that different pain-relief options were available in the different areas. None of the women mentioned having

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the role of the MAU explained to them; their expectations of what support and pain relief would be available and what would be offered to them on the MAU were incorrect. Lack of expected support, even in these early stages of labour, has been found to make women feel less able to cope with the pain they are experiencing (Nettelbladt et al., 1976). It is thought that lack of support during this early phase of labour may lead to women feeling that they are unable to control their pain, as was identified by one of the midwives. This lack of control may lead to women opting for pain relief immediately on admission to the delivery suite, rather than waiting for continuous midwifery support to have an effect, as was identified by a delivery-suite midwife (FG3, Section 8.3).

The final discrepancy between the women and the professionals that was identified was with regard to the birth plan. Birth plans were originally intended as a way to help women to have some control over decisions made during their labour and delivery (Fahy, 2002; Kaufman, 2007). The women that I interviewed antenatally were anticipating completing the birth plan as a way of formalising their preferences, so that delivery-suite midwives would be aware of their choices if they were in too much pain to articulate them. Most midwives (and a few of the women) in this study seemed to have little regard for birth plans, seeing them as a rigid tool, with some of the women (antenatally) seeing the birth plans as a possible cause of resentment from the midwives (Inch, 1988). The narratives clearly highlighted a problem, in that some midwives were reluctant to discuss birth plans, but some of the women were expecting to complete them and became anxious when this was not part of their antenatal preparation with their midwife. Although birth plans seem to be much maligned by midwives, research has shown that they do have positive elements,

allowing women to look at the options and order their thoughts (Brown, 1998; Weir, 2008), which was the view expressed by those women I interviewed who had drawn up such a plan. My results suggest that the role of birth plans should be re-examined. I propose that we should consider two options for this future development: either for birth plans to be revised, to enable production of a document that has flexibility and shows an understanding of the options available, or to relinquish the birth plan and to produce a new document that does not carry with it the (poor) preconceptions embedded in midwives' views of the birth plan but is a new document incorporating clarification of values and preferences.

It is important to place this discussion on identified discrepancies in the context of the wider themes of shared decision making and pain relief in labour. In summary, first and foremost, women find it difficult to form realistic expectations upon which to make their decisions about something of which they have no experience. This would support a proposal of not asking women to make decisions antenatally, but rather to ensure that they are fully informed and ready to be engaged and involved in decision making once labour begins. Secondly, there is a lack of understanding by the women of what type of support and pain relief is provided on the MAU, leading to women feeling unsupported and unable to control their pain. The role of the MAU should be clarified antenatally, to ensure that women are prepared for each stage of their labour and are aware of the support and pain relief that they can expect at each of those stages, with the possible addition of some pain relief such as Entonox being available on the MAU. Finally, for each woman to be supported in a way that is appropriate for her, her hopes, expectations and values must be communicated effectively to those caring for her. Because the current birth plan is an inadequate means of such

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communication, alternative ways of effectively explaining each individual woman's values, for example, must be found.

## 9.5 Information

The three discrepancies between the women in labour and the professionals supporting them that are highlighted in the previous section are due, in some part, to problems with information—where this information is accessed, how it is presented, how it is communicated and whether or not it is translated into knowledge. We must consider the possibility that choices for pain management may be restricted by the information provided and that, if women do not have access to all appropriate information, they are making decisions based on only partial or even misinformed knowledge of the options.

First, let us consider the suggestion that choices for pain management are being restricted by the information provided. The data from women's interviews and from the literature suggest that, for a variety of reasons, not all women obtain or get access to all the information that is necessary either in their opinion or in the opinion of the midwives. One example of this failure is that, whereas professionals advocate the inclusion of the physiology of birth in antenatal education (Eames, 2004; Evans, 2006), this was included in private antenatal classes but not highlighted as being covered in the NHS class. This shows that different groups of women receive different information, depending on what antenatal class they attend. Similarly, many of the women wanted topics such as relaxation and breathing to be covered by the NHS antenatal classes, but this, at present, is covered in any detail in private classes.

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The NHS has been criticised in the past for its lack of preparation of women for coping with labour pain by using breathing and coping techniques (Nolan, 1999), but this criticism does not appear to have elicited any appropriate action. Some women commented that they felt that they would be unable to cope by using breathing techniques as they did not have the necessary background information or skills; thus, rather than inspiring a woman and building up her confidence in her own ability to cope (Enkin et al., 2000; Lothian, 2008), in some cases NHS classes appeared to have the opposite effect. This lack of information on breathing and relaxation techniques is just one example of how women who attended the NHS classes had their choices limited by lack of detailed information. The women and the professionals differed in their opinions about which elements of antenatal education were missing from the current provision: some women thought they lacked vital information regarding breathing and relaxation that would help them to cope with pain in labour; midwives, on the other hand, felt that the current preparation of women lacked details regarding the physiology of labour. From this discussion I propose that antenatal education should be refocused so that both perspectives are considered, to ensure that women are getting—and that professionals are giving—the information necessary for them to be informed about the risks and benefits, to enable them to consider their preferences and to engage in decision making during labour. If particular elements of antenatal preparation cannot be provided, then all women should be told where they can obtain this support.

The second issue is that, if women do not have access information on all the options, they cannot make informed choices. The women in this study reported that, because the antenatal education classes provided only partial information, they were unable to

consider all pain relief options available. Some women sought additional information only on the options they thought they might use, and discounted others before receiving information about them. This approach, of accessing information only on the type of pain relief they expected to use, was also mentioned by the midwives, who recounted instances where women had gone into labour hoping to use Entonox only; because they had not considered any other type of pain relief, when they needed additional pain relief they had no knowledge upon which to draw.

It is difficult to get the balance right on what information should be provided: if too much is given, then it can become a bewildering choice for women (Raynes-Greenow et al., 2007). Nevertheless, if women are to be sufficiently informed in order to participate in decision making, then they must have a basic understanding of all the possible pain-relief options. One approach to resolve the problem of too little information for some and too much for others is to adapt the model regarding information provision on screening proposed by Entwistle et al. (2008). This requires a basic level of information for all, with access to more detailed complex information for those who request it. The basic level of information would include a summary of risks, benefits and outcomes of each option and how each option might affect particular values such as preferences for mobility and avoidance of pharmacological methods of pain relief. This approach would ensure that all women knew the basic risks and benefits of all options for pain relief, even if they hoped not to have to use them. The optional information might include more detailed data on outcomes and other people's experiences and preferences (DIPEX, 2010; Entwistle et al., 2008). This more extensive information could be used by women to explore in greater depth those issues they were unsure or concerned about. This approach should cover all



options available in the local area and would ensure that choices were no longer made on the basis of incomplete information.

Women given information from antenatal classes may also choose to peruse the popular media (such as television, the internet and magazines) for additional information (Lagan et al., 2006); the health service has little influence over this aspect of information provision. To counteract the uncontrolled provision of health information and to correct partial or misleading information from other sources, the NHS has developed a website—NHS Choices (National Health Service, 2010)—that is designed to help patients to make choices by bringing together high-quality evidence, information on ‘what’s good’ and ‘what’s not so good’, supported by information videos. However, this does not appear to be a resource that midwives are promoting or women are accessing. If women are to be responsible for accessing their own information, they must be directed to reliable sources of information and guided on how to use them effectively to inform their choices (Enkin et al., 2000; Lagan et al., 2006). This approach may help women to access the information they require and may alleviate some of their concerns—for example, regarding the biased or unusual case histories that are portrayed in some magazines. It may also encourage the professionals to embrace or to recommend some of the good-quality information that is available, such as NHS Choices (National Health Service, 2010), to complement or provide more detail to the information that they have been providing.

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## 9.6 Values

Values, which are a component part of shared decision making, are broad principles, approaches, attitudes or beliefs held by people (Edwards and Elwyn, 2009)—precepts that are important to them. In the literature there are frequent references to the need to elicit an individual's values in order to ensure the choices they make are in line, or congruent, with these values (Edwards and Elwyn, 2009; Elwyn et al., 2006; O'Connor et al., 2007; Sepucha et al., 2007). The values that people hold can affect the decisions they make: for example, in labour, if it is important to a woman that she avoids medication, she may opt for a water birth. The values women in this study expressed throughout pregnancy ranged from an aversion to pharmacological intervention, maintenance of a natural approach to labour, to the ability to remain mobile. According to the women in this study the opportunities to discuss these values with their midwives was limited. The values held by a midwife may include avoidance of medical intervention and/or avoidance of pharmacological pain relief. At no time during the interviews and focus groups was there any discussion of the midwives attempting to clarify the women's values or the women to articulate theirs. Given the evidence from within the shared decision-making field on the necessity to clarify values and to use them to guide decisions (O'Connor et al., 2003a; O'Connor et al., 1998), steps to elicit these values should be built into the antenatal preparation to enable both the women and the professionals to engage fully in the decision-making process. Such values will facilitate discussion about what options closely match what is important to the women and ensure that subsequent choices are congruent with these values.

Women do not just need to know about the available pain-relief options, their modes of administration and possible side effects, but must also be made aware of the consequences, i.e. what the choice of a particular pain-relief option might mean to them. For example, if a woman chose to have an opiate for pain relief but also wished to have a water birth, she would have to delay her entry into the water (National Institute for Health and Clinical Excellence, 2007); in other words, administration of the opiate would affect the stage at which she could have the water birth she was hoping for. The midwives should discuss with each woman such information regarding the available options, and how specific choices of pain-relief options would affect her preferences for birth, in order to clarify what each woman values most and, if necessary, which of her values she is prepared to compromise in order to obtain the pain relief and the birth she would like.

Sepucha et al. (2007) have suggested that values, and their relationship to decision making, are inextricably linked to the quality of the decision being made—i.e. that the measurement of the quality of a decision includes the extent to which the decision is congruent with (matches) the values of the person making the decision. At present, women's values are not routinely sought during pregnancy, which makes it very difficult to assess the quality of their decisions for pain relief using this metric. It is possible that discussion of a woman's values and preferences with the midwife would help the woman to develop more realistic expectations (Gibbins and Thomson, 2001), as the midwife would be able to provide her clinical insight and guidance into such preferences and expectations. It is also important to recognise that it is not only the women, but also the midwives, who have values. Each midwives' values regarding pregnancy and labour may affect how she supports women or what advice she offers.

However, the midwives involved in the focus groups asserted that they set aside their own values to give the women the birth they were striving for. There is evidence of the positive impact of reflective practice in midwifery, reflective practice promotes the giving of (clinically appropriate) advice based on the midwife's clinical judgement rather than on her own personal values (Kerrigan, 2006). Although midwives in this study asserted that they sought to keep their own values separate, Kerrigan investigated the negative impact of a 'throw-away' comment from a midwife on a woman's pain-relief choice. This led Kerrigan to suggest that midwives should always reflect on whether the information they are giving is positive and will positively influence women's care. The more effective midwives become at reflective practice, the better able they will be to assist women to reflect on their own decision-making process to help them to improve women's ability to apply the process in the future (Guimond et al., 2003).

These three key issues—of 1) the discrepancy between the expectations and realities of labour, 2) information provision and 3) the clarification of values, emerge continually as important areas for consideration throughout the interviews and focus groups. The following conclusions consider these key issues and highlight the possible impact of this work on the key research fields of pain relief in labour and shared decision making as well as on practice.

## 10 Conclusion

This concluding chapter highlights conclusions of my work detailed within the implications of and recommendations from, the key findings of this study concerning pain relief and shared decision making in labour. By improving our understanding of decision making within the context of pain relief in labour, I hope to demonstrate the value of the approach taken.

### 10.1 Impact of my findings on the field of pain relief in labour

My research informs the field of pain relief in labour and midwifery in the following areas.

#### 1. Information

It is important that we recognise the needs of both women and midwives to enable engagement in decision making. My research generates a hypothesis that basic information must be available for everyone, with detailed information provided for those who require it. This would ensure that all women have access to sufficient information to engage in decisions.

#### 2. Antenatal preparation

My research suggests that the current delivery of antenatal education is not preparing women adequately for the decisions that need to be made during labour. This implies that the way in which the information is currently being delivered is not being transferred into knowledge by the women.

3. Clarification of values

An essential element to be addressed, and one that will have a major impact on the preparation of women for labour, is that of clarification of values. Discovering what is important to each woman would enable midwives to discuss which options might fit with these values and would also help each woman to receive the support desired during labour.

The conclusions relating to pain relief in labour will be of most interest to those working within an obstetric setting. These findings relate to how antenatal care and care during labour can be changed to enable engagement by women in decision making, something that midwives in particular and those involved in designing and delivery antenatal preparation would be most interested.

## 10.2 Impact of research on shared decision making

This body of work informs the field of shared decision making in the two following areas.

1. Antenatal preparation

I have argued that various elements of decision making can be carried out antenatally, such as the provision of information, the assessment of knowledge and the clarification of values, with some discussion of hopes or preferences. If such discussions are held antenatally, this would ensure that women are fully informed about all the possible options and are clear on their risks and benefits and how their values affect each of these choices, but they would not have to make a decision antenatally—merely express a preference. This would ensure that a woman was making decisions during labour in reaction to the level of pain and control she

was experiencing, based on knowledge she had gained antenatally and on how she had considered these choices in relation to her values.

## 2. Urgency of the decision

Shared decision making is suitable for decisions that are preference sensitive, where several options are clinically effective and where there is time to consider the options and for the patient to make a decision in collaboration with their healthcare professional (Edwards and Elwyn, 2009). Shared decision making is not appropriate in an emergency situation, such as a myocardial infarction. It could be argued that, although pregnancy itself is not an urgent clinical condition and labour is not an emergency, there are elements of unpredictability about it and events during labour may rapidly become of a more urgent clinical nature. Owing to the unpredictability of labour, some decisions about pain relief may not fit into the accepted model of shared decision making: there are times during labour when, because of emerging urgent clinical situations, midwives and clinical staff are in a better position to recommend a course of action and the women need to be made aware that this may happen in order to achieve the best outcome of a healthy mother and baby.

These two key findings will be of most interest to those conducting research in SDM either in obstetrics or patient care generally. It offers insights into the context of SDM in labour that will help for those planning future implementation.

### 10.3 Recommendations for practice based on findings.

The context within which these changes will be recommended is within a health service where one of the key priorities is to encourage engagement in decision making (Department of Health, 2009a) and where there is an acknowledged right and responsibility of all patients to be fully informed and have an active role in decisions that affect their healthcare (Department of Health, 2010; FIMDM, 2010). The National Patient Survey (Department of Health, 2009a) has also identified that being involved in decisions about their healthcare is important to patients. That survey found that 48% of inpatients following discharge expressed a desire for greater involvement in decisions about their care, a statistic that has not changed over recent years (Department of Health, 2009a). These data indicate a population and a health service that will both be receptive to change that will improve decision making and engagement. The following section outlines the recommendations for changes in practice that will resolve some of the issues highlighted in this thesis. Some of these recommendations, such as provision of information and decision support, can be implemented rapidly in the local area and could be promoted nationally once the effectiveness of such an intervention has been evaluated. Other recommended changes, such as those to antenatal education and revisions to the birth plan, will require change at a national (and, possibly, policy) level and will take longer to implement.

#### 1. Refine provision of information

It is necessary for the maternity service to refine its provision of information to pregnant women regarding pain relief in labour. Such information should be accurate, based on current evidence and in line with local and national guidelines. This revised information should be



given to all pregnant women—regardless of which midwifery base they are booked into, which antenatal class they attend, or their birth preferences. This information should include details on the pain-relief options available, as well as the impact of each option on the woman and her unborn baby, how long it would take to have an effect, and where and at what stage of labour each option would be appropriate (e.g. in the home, on the MAU or in the delivery suite). As well as this basic level of information, provision should be made for those women who require a greater depth of information.

2. Support decision making in labour.

To support decision making in labour, skills development is necessary for both women and their midwives. It is important for women to be enabled to assess the quality and accuracy of information and to collate this information to help them make a decision. Midwives need training and support to enable them to provide information in a balanced way, to be reflective about their practice and to help women to clarify their values and incorporate these into their decisions. These newly adopted skills by midwives would be demonstrated throughout the antenatal education sessions, providing appropriate information to each woman in a way that can be easily translated into knowledge that she could use to make decisions. It will be important for the sustainability of this skills development to ensure it becomes part of their pre-registration training.

3. Content of antenatal education

A critical examination of the current content and mode of delivery of antenatal education provision is needed. Currently, the information that is provided is regarded by the women as not being comprehensive; they therefore feel that they must access several other sources of information in order to gain a complete overview. If we are to equip women with the

skills to engage in decision making throughout pregnancy some antenatal education will need to be provided in the early stage of pregnancy. This early skills development will prepare women for the decisions they have to make regarding labour. The format of the antenatal classes will need to be reviewed to ensure that different methods of teaching are utilised, such as audio visual or web based to accommodate different learning styles of the women.

#### 4. Clarification of values

In my proposed review of the antenatal support given to women there needs to be a focus on how midwives can establish what is important to women, clarifying their values. Several of the women in this study did not receive the support they needed—a situation that could have been avoided if the midwives had been aware of what the women valued in their labour.

Midwives need the skills to be able to identify what is important to each individual woman and to communicate these to the clinical staff caring for women in labour.

#### 5. Birth plan

The current birth plan must be reviewed, to assess its suitability as a tool for assessment of knowledge, clarification of values and communication to support decision making. It may be beneficial to look at restructuring the birth plan on the basis of the Ottawa Decision Support Framework (ODSF) (O'Connor, 1998). The ODSF has a section on knowledge assessment, values clarification and current preferences. If these elements are incorporated into a birth plan that can be completed after discussion between the midwife and the woman and then shared with the delivery-suite staff, it could go some way to ensuring that each woman's values are upheld during labour and that she gets the support and pain relief that is appropriate for her.

## 10.4 Recommendations for future research

To support the more complex recommended changes in practice, such as a change in antenatal education, skills development and the revision of the birth plan, the following research is necessary.

### 1. Information provision.

It is necessary to identify what key items of information are needed to support effective shared decision making. A recent Cochrane review highlighted the need for the degree of detail that needs to be included in decision aids in order for them to have a positive effect on decision quality needs to be explored (O'Connor et al., 2009). It is expected that decision aids will include information on the health condition, the options available, associated risks, benefits and probabilities as well as scientific uncertainty (O'Connor et al., 2009). However, it will be necessary to identify what women and professionals see as basic or essential information and what they see as enhanced information to enable decision making regarding pain relief in labour, to incorporate into any decision-support tools.

### 2. Knowledge

Research is needed into the optimal transference of information on the different options, their risks and benefits, into knowledge, as this does not seem to be taking place at present. Work has been undertaken on the most appropriate ways to present the risks and benefits of treatment options to patients (Gigerenzer, 2002), but these findings need to be tested within the context of antenatal preparation. This proposed research also needs to investigate at what specific time in pregnancy the information should be given (when women will be most

receptive), and in what format information should be presented (e.g. on paper, by video, or on the internet) to ensure understanding by a wide range of women.

3. Decision support.

To develop decision support that is acceptable to both women and professionals, for use during pregnancy regarding decisions about pain relief, which assesses women's knowledge and clarifies values. Researchers investigating the most appropriate form of decision support may need to acknowledge that it may be an option in pregnancy not to make decisions antenatally, but to ensure that women are fully informed, are able to express their preferences and have the skills to engage in shared decision making during labour.

Both women and professionals are making decisions in pregnancy and labour regarding pain-management options. However, until women's values are included, it is difficult to see how women can effectively engage in the decision-making process. To engage more women in decisions regarding their healthcare, as advocated by the NHS, there is a need to provide more than information: support is needed for the process of encompassing knowledge and clarifying values for both the women and the professionals who prepare them for labour. Some immediate changes can be made to improve the process, such as provision of accessible, accurate information. Other changes will require a review of the current service provision, both locally and nationally, and further research will be needed to underpin these changes. To ensure that these changes are embedded in practice and that the skills become routine for midwives, they must become part of midwifery training, as well as becoming integrated into routine care.

### 10.5 The most appropriate way of supporting women

One of the initial research objectives was to develop the most appropriate tool to support women to make decisions about pain relief in labour. This objective was later revised to one of identifying the most appropriate tool. In order to do this, it is necessary to consider the issues highlighted in this study and the subsequent recommendations for practice and research.

The most appropriate way of supporting women is to ensure that, at the beginning of pregnancy, midwives start to prepare women to make decisions throughout pregnancy by giving them the skills necessary to be involved in shared decision making. Such skills would include the women knowing they can ask questions if they are unsure, to have identified reliable sources of information, being clear about what is important to them and being able to share in the decision-making process with health professionals involved in their care. In order for this to be possible, many of the recommendations listed above must be implemented. It is also important to reconsider the necessity to ask women to make decisions or plans antenatally for pain relief in labour. It might be more beneficial to concentrate efforts on informing women and engaging in discussions around their values and how these affect each specific choice, rather than to make plans for such an unpredictable event as labour.

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## References

- Abdullah, N. R. (2002) *Pain relief in Labour: Parent education in the community*. Newcastle upon Tyne: Medical School, University of Newcastle.
- Aly, E. E. (2000) 'Are we willing to change?', *Anaesthesia*, 55, pp. 419-420.
- Angelini, D. J. (1999) 'Obstetric triage in 10 US midwifery practices', *Journal of Nurse-Midwifery*, 44, (5), pp. 493-509.
- Anim-Somuah, M., Smyth, R. and Howell, C. (2005) *Epidural versus non-epidural or no analgesia in labour*. Chichester: Wiley.
- Arney, W. R. and Neill, J. (1982) 'The location of pain in childbirth: natural childbirth and the transformation of obstetrics', *Sociology of Health & Illness*, 4, (1), pp. 1-24.
- BabyWorld (2008) Available at:  
[http://www.babyworld.co.uk/community\\_intro/birthstories\\_home.asp](http://www.babyworld.co.uk/community_intro/birthstories_home.asp) (Accessed: 20.12.08).
- Balaskas, J. (1992a) *Active Birth : The New Approach to Giving Birth Naturally*.. Boston: Harvard Common Press.
- Balaskas, J. G. Y. (1992b) *Water Birth*. London: Thorsons.
- Barnato, A. E., Llewellyn-Thomas, H., Peters, E., Siminoff, L., Collins, E. and Barry, M. (2007) 'Communication and Decision Making in Cancer Care: Setting Research Priorities for Decision Support / Patients Decision Aids', *Medical Decision Making*, pp. 626-634.
- Barry, M., Fowler, F., Mulley, A., Henderson, J. and Wennberg, J. (1995) 'Patient reaction to a program to facilitate patient participation in treatment decisions for benign prostatic hyperplasia', *Medical Care*, (33), pp. 771-782.
- Bassett, C. (2004) *Qualitative research in health care*. London: Whurr
- Baum, F. (1995) 'Researching public health: Behind the qualitative-quantitative methodological debate', *Social Science and Medicine*, 40, (4), pp. 459-468.
- Beaton, J. and Gupton, A. (1990) 'Childbirth expectations: a qualitative analysis', *Midwifery*, 6, pp. 133-139.
- Beech, B., L; and Phipps, B. (2004) 'Normal Birth : women's stories', in Downe, S.(ed), *Normal Childbirth : Evidence and Debate*. Edinburgh: Churchill Livingstone, pp. 67-78.
-

---

## References

- Beech, B. L. (2007) 'Defining and recording normal birth', *AIMS Journal*, 19, (4). Available at: <http://www.aims.org.uk/> (Accessed 13/07/2011)
- Bekker, H., Thornton, J. G., Airey, C. M., Connelly, J. B., Hewison, J., Robinson, M. B., Lilleyman, J., MacIntosh, M., Maule, A. J. and Michie, S. (1999) *Informed decision making: an annotated bibliography and systematic review*. Havant: Health Technology Assessment.
- Bennett, A. (1985) 'The Birth of a First Child: Do Women's Reports Change Over Time?', *Birth*, 12, (3), pp. 153-158.
- Benoit, C., Wrede, S., Bourgeault, I., Sandall, J., De Vries, R. and van Teijlingen, E. R. (2005) 'Understanding the social organisation of maternity care systems: midwifery as a touchstone', *Sociology of Health & Illness*, 27, (6), pp. 722-737.
- Berg, B. L. (2004) *Qualitative Research Methods*. 5th edn Boston: Pearson.
- Birth Choice UK (2009) *Birth Choice UK*. Available at: <http://birthchoices.co.uk/> (Accessed: 23.11.2009).
- Block, J. (2007) 'Are women really asking for it?', *Journal of Perinatal Education*, 16, (4), pp. 7-8.
- Bohra, U., Donnelly, J., O'Connell, M. P., Geary, M. P., MacQuillan, K. and Keane, D. P. (2003) 'Active management of labour revisited: the first 1000 primiparous labours in 2000', *Journal of Obstetrics and Gynaecology*, 23, (2), pp. 118-120.
- Bowles, N. (1995) 'Storytelling: A search for meaning within nursing practice', *Nurse Education Today*, 15, (5), pp. 65-69.
- Bowling, A. (1997) *Research methods in health*. Buckingham: Open University Press.
- Brauer-Rieke, G. (2003) 'Labor Pain: a Natural Approach to Easing Delivery.', *Journal of Midwifery & Women's Health*, 48, (6).
- Brewin, C. and Bradley, C. (1982) 'Perceived control and the experience of childbirth', *British Journal of Clinical Psychology*, 21, (4), pp. 263-269.
- Britten, N. (1995) 'Qualitative interviews in medical research', *British Medical Journal*, 311, (699922 July), pp. 251-253.
- Britten, N., Jones, R., Murphy, E. and Stacy, R. (1995) 'Qualitative research methods in general practice and primary care', *Family Practice*, 12, (1), pp. 104-108.
- Brown, L. (1998) 'Clinical audit. The tide has turned: audit of water birth', *British Journal of Midwifery*, 6, (4), pp. 236-43.
- Brown, S. J. and Lumley, J. (1998) 'Communication and decision-making in labour: do birth plans make a difference?', *Health Expectations*, 1, (2), pp. 106-116.
-

---

## References

- Bryman, A. and Burgess, R. G. (eds.) (1994) *Analyzing Qualitative Data*. London: Routledge.
- Bulmer, H. (1969) *Symbolic Interactionism*. Englewood: Prentice Hall.
- Callaghan, G. D. and Wistow, G. (2006) 'Public, Patients, citizens, consumers? Power and decision making in primary health care', *Public Administration*, 84, (3), pp. 583-601.
- Callister, L. (1995) 'Beliefs and perceptions of childbearing women choosing different primary health care providers', *Clinical Nursing Research*, 4, (2), pp. 168-80.
- Callister, L. C. (2004) 'Making Meaning: Women's Birth Narratives', *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 33, (4), pp. 508-518.
- Camann, W. and Alexander, K. J. (2006) *Easy labor: Every woman's guide to choosing less pain and more joy during childbirth*. New York: Ballantine Books.
- Capogna, G., Alahuhta, S., Celleno, D., De Vlioger, H., Moreira, J., Morgan, B., Moore, C., Pasqualetti, P., Soetenst, M., Van Zundertl, A. and Vertommen, J. (1996) 'Maternal expectations and experiences of labour pain and analgesia: a multicentre study of nulliparous women', *International Journal of Obstetric Anesthetists*, 5, (4), pp. 229 - 235.
- Care Quality Commission. (2010) *Maternity Services Report*. London: CQC.
- Carlton, T., Callister, L. C. and Stoneman, E. (2005) 'Decision Making in Laboring Women: Ethical Issues for Perinatal Nurses', *The Journal of Perinatal & Neonatal Nursing*, 19, (2), pp. 145-154.
- Carstoniu, J., Levytam, S., Norman, P., Daley, D., Katz, J. and Sandler, A. N. (1994) 'Nitrous Oxide in Early Labor: Safety and Analgesic Efficacy Assessed by a Double-blind, Placebo-controlled Study', *Anesthesiology*, 80, (1), pp. 30-35.
- Carter, S. M. and Little, M. (2007) 'Justifying Knowledge, Justifying Method, Taking Action: Epistemologies, Methodologies, and Methods in Qualitative Research', *Qualitative Health Research*, 17, (10), pp. 1316-1328.
- Caton, D. (1999) *What a blessing she had chloroform*. New Haven and London: Yale University Press.
- Caton, D. (2004) 'Medical science and social values', *International Journal of Obstetric Anesthesia*, 13, (3), pp. 167-173.
- Chamberlain, G., Wright, A. and Steer, P. (1993) *Pain and its relief in childbirth: The results of the national survey conducted by the National Birthday trust*. Edinburgh: Churchill Livingstone.
- Charles, C., Gafni, A. and Whelan, T. (1997) 'Shared decision-making in the medical encounter: what does it mean? (or it takes at least two to tango)', *Social Science and Medicine*, 44, (5), pp. 681-692.
-



---

## References

- Charles, C., Gafni, A. and Whelan, T. (1999a) 'Decision-making in the physician-patient encounter: revisiting the shared treatment decision-making model', *Social Science and Medicine*, 49, (5), pp. 651-61.
- Charles, C., Whelan, T. and Gafni, A. (1999b) 'What do we mean by partnership in making decisions about treatment?', *British Medical Journal*, 319, (7212), pp. 780-782.
- Christensen-Szalanski, J. J. J. (1984) 'Discount Functions and the Measurement of Patients' Values: Women's Decisions During Childbirth', *Medical Decision Making*, 4, (1), pp. 47-58.
- Cluett, E. R. (2000) 'The onset of labour: implications for practice', *The Practising Midwife*, 3, (7), pp. 16-19.
- Cluett, E. R. and Burns, E. (2009) *Immersion in water in labour and birth*. London: Wiley.
- Conde, A. A., Figueiredo, B., Costa, R., Pacheco, A. and Pais, A. I. (2008) 'Perception of the childbirth experience: continuity and changes over the postpartum period', *Journal of Reproductive and Infant Psychology*, 26, (2), pp. 139-154.
- Copstick, S. M., Taylor, K. E., Hayes, R. and Morris, N. (1986) 'Partner support and the use of coping techniques in labour', *Journal of Psychosomatic Research*, 30, (4), pp. 497-503.
- Corbin, J. and Strauss, A. (2008) *Basics of qualitative research*. Thousand Oaks, California: Sage.
- Coulter, A., Entwistle, V. and Gilbert, D. (1999) 'Sharing decisions with patients: is the information good enough?', *British Medical Journal*, 318, (7179), pp. 318-322.
- Cresswell, J. W. (1998) *Qualitative inquiry and research design*. London: Sage.
- Cronin, C. (2003) 'First time mothers identify their needs, perceptions and experiences', *Journal of Clinical Nursing*, 12, (2), pp. 260-267.
- Cutcliffe, J. R. (2003) 'Reconsidering Reflexivity: Introducing the Case for Intellectual Entrepreneurship', *Qualitative Health Research*, 13, (1), pp. 136-148.
- Davis-Floyd, R. E. (1994) 'The technocratic body: American childbirth as cultural expression', *Social Science & Medicine*, 38, (8), pp. 1125-1140.
- Davis-Floyd, R. E. and Sargent, C. F. (1997) *Childbirth and Authoritative knowledge*. Berkeley: University of California Press.
- De Vries, C. A. and De Vries, R. G. (2007) 'Childbirth Education in the 21st Century: An Immodest Proposal', *Journal of Perinatal Education*, 16, pp. 38-48.
-

---

## References

- Declercq, E. R., Sakala, C., Corry, M. P., Applebaum, S. and Risher, P. (2002) *Listening to mothers: Report of the first national U.S. survey of women's childbearing experiences*. New York: Maternity Center Association.
- Denzin, N. K. and Lincoln, Y. S. (eds.) (2000) *Handbook of Qualitative Research*. 2nd edn London: Sage.
- Department of Health. (1993) *Changing Childbirth*. London: HMSO.
- Department of Health. (2000) *The NHS plan*. London: HMSO
- Department of Health (2001) *The expert patient: a new approach to chronic disease management for the 21st century*. Available at: <http://www.expertpatients.nhs.uk/index.aspx> (Accessed: September 2010).
- Department of Health. (2003) *Patient and public involvement in the new NHS*. London: HMSO.
- Department of Health. (2005) *Statistical Bulletin : NHS Maternity Statistics*. London: HMSO.
- Department of Health. (2007) *Maternity Matters: Choice, access and continuity of care in a safe service*. London: (7586).HMSO.
- Department of Health. (2009a) *National Patient Survey*. London: HMSO.
- Department of Health. (2009b) *NHS Maternity Statistics*. London: HMSO.
- Department of Health. (2010) *NHS Constitution*. London: HMSO.
- Devlin, K. (2008) 'Midwives forced to deal with three births at a time', *Daily Telegraph*, 22nd September 2008.
- DeVore, N. E. (1999) 'Telephone triage: A challenge for practicing midwives', *Journal of Nurse-Midwifery*, 44, (5), pp. 471-479.
- Dickinson, J. E., Peach, M. J., McDonald, S. J. and Evans, S. F. (2003) 'Maternal satisfaction with childbirth and intrapartum analgesia in nulliparous labour', *Australian & New Zealand Journal of Obstetrics & Gynaecology.*, 43, (6), pp. 463-8.
- DIPEX (2010) *HealthTalkonline*. Available at: <http://www.healthtalkonline.org/> (Accessed: 26.01.2010).
- Discovery Health (2008) *Discovery Health*. Available at: <http://health.discovery.com/centers/pregnancy/pregnancy.html> (Accessed: 30.12.2008).
- Dowswell, T., Bedwell, C., Lavender, T. and Neilson, J. P. (2009) *Transcutaneous electrical nerve stimulation (TENS) for pain relief in labour*. London: Wiley.
-

---

## References

- Drife, J. (2007) 'Putting risk into context', *The Obstetrician and Gynaecologist*, 9, (1), pp. 42-47.
- Dudley, N. (2001) 'Importance of risk communication and decision making in cardiovascular conditions in older patients: a discussion paper', *Quality and Safety in Health Care*, 10, (90001), pp. i19-i22.
- Duncan, T. and McEwan, A. (2004) 'An evidence-based approach to the management of abnormal labour', *Current Obstetrics & Gynaecology*, 14, (4), pp. 277-284.
- Eames, C. (2004) 'Midwives role in preparing women for birth', *British Journal of Midwifery*, 12, (7), pp. 447-450.
- Edwards, A., Hood, K., Matthews, E., Russell, D., Russell, I., Barker, J., Bloor, M., Burnard, P., Covey, J., Pill, R., Wilkinson, C. and Stott, N. (2000) 'The effectiveness of one-to-one risk communication interventions in health care : a systematic review', *Medical Decision Making*, 20, pp. 290-7.
- Edwards, A. and Elwyn, G. (2001a) 'Understanding risk and lessons for clinical risk communication about treatment preferences', *Quality and Safety in Health Care*, 10, (90001), pp. i9-i13.
- Edwards, A. and Elwyn, G. (eds.) (2001b) *Evidence based patient choice*. Oxford: Oxford University Press.
- Edwards, A. and Elwyn, G. (eds.) (2009) *Shared decision making in health care: Achieving evidence-based patient choice*. Oxford: Oxford University Press.
- Edwards, N. P. (2004) 'Why can't women say no?', in Kirkham, M.(ed), *Informed choice in maternity care*. Hampshire: Palgrave Macmillan, pp. 1-29.
- Elwyn, G. and Edwards, A. (2001) *Evidence based patient choice*. Oxford: Oxford University Press.
- Elwyn, G., O'Connor, A., Stacey, D., Volk, R., Edwards, A., Coulter, A., Thomson, R., Barratt, A., Barry, M., Bernstein, S., Butow, P., Clarke, A., Entwistle, V., Feldman-Stewart, D., Holmes-Rovner, M., Llewellyn-Thomas, H., Mounjid, N., Mulley, A., Ruland, C., Sepucha, K., Sykes, A., Whelan, T. and The International Patient Decision Aids Standards, C. (2006) 'Developing a quality criteria framework for patient decision aids: online international Delphi consensus process', *British Medical Journal*, 333, (7565), pp. 417-423.
- Enkin, M. K., Keirse, M. J., Neilson, J. P., Crowther, C., Duley, L., Hodnett, E. and Hofmeyr, J. (2000) *A guide to effective care in pregnancy and childbirth*. Oxford: Oxford University Press.
- Entwistle, V. A. (2000) 'Supporting and resourcing treatment decision-making: some policy considerations', *Health Expectations*, 3, (1), pp. 77-85.
-

---

## References

- Entwistle, V. A., Carter, S. M., Trevena, L., Flitcroft, K., Irwig, L., McCaffery, K. and Salkeld, G. (2008) 'Communicating about screening', *British Medical Journal*, 337, (sept227671), pp. a1591.
- Eriksson, M., Mattsson, L.-Å. and Ladfors, L. (1997) 'Early or late bath during the first stage of labour: A randomised study of 200 women', *Midwifery*, 13, (3), pp. 146-148.
- Evans, M. (2006) 'The 'pain relief talk': is it informing, frightening or empowering? Time to evaluate the focus ', *MIDIRS Midwifery Digest* 16, (2), pp. 265-268.
- Fahy, K. (2002) 'Reflecting on practice to theorise empowerment for women: using Foucault's concepts', *Australian Journal of Midwifery: Professional Journal of the Australian College of Midwives Incorporated*, 15, (1), pp. 5-13.
- Fairlie, F. M. and Walker, J. J. (1999) 'Intramuscular opioids for maternal pain relief in labour: a randomised controlled trial comparing pethidine with diamorphine', *British Journal of Obstetrics and Gynaecology*, 106, (November), pp. 1181-1187.
- Fenwick, J., Hauck, Y., Downie, J. and Butt, J. (2005) 'The childbirth expectations of a self-selected cohort of Western Australian women', *Midwifery*, 21, (1), pp. 23-35.
- Fielding, R. and Lam, W. W. T. (2003) 'Communicating risk: Doctor's recommendation is decision making in uncertain conditions', *British Medical Journal*, 327, (7428), pp. 1404.
- FIMDM (2010) *The foundation for Informed Medical Decision Making*. Available at: <http://www.fimdm.org/about.php> (Accessed: 20th February 2010).
- Finlay, L. (2002) "'Outing" the Researcher: The Provenance, Process, and Practice of Reflexivity', *Qualitative Health Research*, 12, (4), pp. 531-545.
- Fox, B. and Worts, D. (1999) 'Revisiting the critique of medicalized childbirth: a contribution to the sociology of birth', *Gender and Society*, 13, (3), pp. 234-46.
- Fox, S. (2007) 'Campaign for normal labour: Support in early labour', *Midwives*, 10, (7), pp. 319.
- Fridh, G. and Gaston-Johannson, F. (1990) 'Do primiparas and multiparas have realistic expectations of labour', *Acta Obstetrica et Gynecologica Scandinavica*, 69, pp. 103-109.
- Gerancher, J. C., Grice, S. C., Dewan, D. M. and Eisenach, J. (2000) 'An evaluation of informed consent prior to epidural analgesia for labor and delivery', *International Journal of Obstetric Anesthesia*, 9, (3), pp. 168-173.
- Gibbins, J. and Thomson, A. M. (2001) 'Women's expectations and experiences of childbirth', *Midwifery*, 17, (4), pp. 302-13.
- Gibbs, G. R. (2002) *Qualitative data analysis: explorations with NVivo*. Buckingham: Open University Press.
-

---

## References

- Gigerenzer, G. (2002) *Reckoning with risk: Learning to live with uncertainty*. London: Penguin Books.
- Gilbert, R. E. and Tookey, P. A. (1999) 'Perinatal mortality and morbidity among babies delivered in water: surveillance study and postal survey', *British Medical Journal*, 319, (7208), pp. 483-487.
- Glaser, B. G. (1965) 'The Constant Comparative Method of Qualitative Analysis', *Social Problems*, 12, (4), pp. 436-445.
- Goffman, E. (1959) *The presentation of self in everyday life*. New York: DoubleDay.
- Gould, D. (2000) 'Normal labour: a concept analysis', *Journal of Advanced Nursing*, 31, (2), pp. 418-27.
- Green, J. M., Kitzinger, J. V. and Coupland, V. A. (1990) 'Stereotypes of childbearing women: a look at some evidence', *Midwifery*, 6, (3), pp. 125-32.
- Green, J. M. (1993) 'Expectations and experiences of pain in labour: Findings from a large prospective study', *Birth*, 20, (2), pp. 65-72.
- Green, J. M., Coupland, V. A. and Kitzinger, J. V. (1998) *Great Expectations: A prospective study of women's expectations and experiences of childbirth*. Cheshire: Books for Midwives Press.
- Green, J. M. (1999) 'Commentary: What Is This Thing Called "Control"?', *Birth*, 26, (1), pp. 51-53.
- Green, J. M. and Baston, H. A. (2003) 'Feeling in control during labor: concepts, correlates, and consequences', *Birth*, 30, (4), pp. 235-47.
- Green, J. M. and Baston, H. A. (2007) 'How women become more willing to accept obstetric intervention and does this relate to mode of birth? Data from a prospective study', *Birth*, 34, (1), pp. 6-13.
- Guba, E. and Lincoln, Y. (1994) 'Competing paradigms in qualitative research', in Denzin, N. and Lincoln, Y. (eds) *Handbook of Qualitative Research*,. London: Sage, pp. 105-117.
- Guimond, P., Bunn, H., O'Connor, A. M., Jacobsen, M. J., Tait, V. K., Drake, E. R., Graham, I. D., Stacey, D. and Elmslie, T. (2003) 'Validation of a tool to assess health practitioners' decision support and communication skills', *Patient Education and Counseling*, 50, (3), pp. 235-245.
- Halldorsdottir, S. and Karlsdottir, S. I. (1996) 'Journeying through labour and delivery: perceptions of women who have given birth', *Midwifery*, 12, (2), pp. 48-61.
- Hallowell, N., Lawton, J. and Gregory, S. (2005) 'Self', in *Reflections on research*. Maidenhead: Open University Press, pp. 42-70.
-

---

## References

- Handfield, B., Turnbull, S. and Bell, R. J. (2006) 'What do obstetricians think about media influences on their patients?', *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 46, (5), pp. 379-383.
- Health Care Commission. (2008) *Towards better births*. London: Health Care Commission.
- Heinze, S. D. and Sleigh, M. J. (2003) 'Epidural or no epidural anaesthesia: relationships between beliefs about childbirth and pain control choices', *Journal of Reproductive & Infant Psychology*, 21, (4), pp. 323-333.
- Helman, C. (1984) 'Pain in Culture', in Helman, C.(ed), *Culture, Health and Illness*;. Bristol: Wright, pp. 156-159.
- Hewson, B. (2004) 'Informed choice in maternity care', in Kirkham, M.(ed), *Informed choice in maternity care*. Hampshire: Palgrave Macmillan, pp. 30-47.
- Hingorani, A. and Vallance, P. (1999) 'A simple computer program for guiding management of cardiovascular risk factors and prescribing', *British Medical Journal*, (318), [\(7176\)](#), pp. 101-5.
- Hodnett, E. D. (2002) 'Pain and women's satisfaction with the experience of childbirth: A systematic review', *American Journal of Obstetrics & Gynaecology*, 186(5), (Supplement), pp. S160-S172.
- Hodnett, E. D., Gates, S., Hofmeyr, G. J. and Sakala, C. (2003) 'Continuous support for women during childbirth', *Cochrane Database Systematic Reviews*, 3, pp. CD003766.
- Hodnett, E. D., Stremler, R., Willan, A. R., Weston, J. A., Lowe, N. K., Simpson, K. R., Fraser, W. D. and Gafni, A. (2008) 'Effect on birth outcomes of a formalised approach to care in hospital labour assessment units: international, randomised controlled trial', *British Medical Journal*, 337, ([7668aug28](#)), pp. a1021-1029.
- Hodnett, E. D., Gates, S., Hofmeyr, G. J. and Sakala, C. (2009) *Continuous Support for Women During Childbirth*. Chichester: Wiley.
- Hofmeyr, G., Neilson, J. P., Alfirevic, Z., Crowther, C. A., Dulley, L., Gulmezoglu, M., Gyte, G. M. L. and Hodnett, E. D. (2007) *A Cochrane pocketbook: Pregnancy and childbirth*. Chichester: Wiley.
- Howell, C. J., Kidd, C., Roberts, W., Upton, P., Lucking, L., Jones, P. W. and Johanson, R. B. (2001) 'A randomised controlled trial of epidural compared with non-epidural analgesia in labour', *British Journal of Obstetrics and Gynaecology*, 108, (1), pp. 27-33.
- Hughes, D., Simmons, S., Brown, J. and Cyna, A. (2003) *Combined spinal-epidural versus epidural analgesia in labour*. Cochrane Database of Systematic Reviews
- Impey, L. (1999) 'Maternal Attitudes to Amniotomy and Labor Duration: A Survey in Early Pregnancy', *Birth*, 26, (4), pp. 211-214.
-

---

## References

- Inch, S. (1988) 'Birth plans and protocols', *Journal of the Royal Society of Medicine*, 18, (2), pp. 121-122.
- Jackson, A., Henry, R., Avery, N., Van Den Kerkhof, E. and Milne, B. (2000) 'Informed consent for labour epidurals: What labouring women want to know', *Canadian Journal of Anesthesiology*, 47, (11), pp. 1068-1073.
- Janzen, J. A., Silvius, J., Jacobs, S., Slaughter, S., Dalziel, W. and Drummond, N. (2006) 'What is a health expectation? Developing a pragmatic conceptual model from psychological theory.', *Health Expectations*, 9, pp. 37-48.
- Johnson, M. I. (1997) 'Women's health. Transcutaneous electrical nerve stimulation in pain management', *British Journal of Midwifery*, 5, (7), pp. 402-5.
- Jowitt, M. (2000) 'Pain in labour-is it insufferable? Mothers' experience and attitudes', *Midwifery Matters*, 85, pp. 12-16.
- Kabakian-Khasholian, T., Campbell, O., Shediak-Rizkallah, M. and Ghorayeb, F. (2000) 'Women's experiences of maternity care: satisfaction or passivity?', *Social Science & Medicine*, 51, (1), pp. 103-113.
- Kangas-Saarela, T. and Kangas-Kärki, K. (1994) 'Pain and pain relief in labour: parturients' experiences', *International Journal of Obstetric Anesthesia*, 3, pp. 67-74.
- Kannan, S., Jamison, R. N. and Datta, S. (2001) 'Maternal satisfaction and pain control in women electing natural childbirth', *Regional Anaesthesia & Pain Medicine*, 26, (5), pp. 468-72.
- Kaufman, T. (2007) 'Evolution of the birth plan', *Journal of Perinatal Education*, 16, (3), pp. 47-52.
- Kerrigan, A. (2006) 'The mother-midwife partnership: A critical analysis of intrapartum care', *British Journal of Midwifery*, 14, (6), pp. 346-350.
- Kirkham, M. (2004) *Informed choice in maternity care*. London: Palgrave Macmillan.
- Kirkham, M. and Stapleton, H. (2004) 'The culture of maternity services in England and Wales as a barrier to informed choice', in Kirkham, M.(ed), *Informed choice in maternity care*. London: Palgrave Macmillan, pp. 117-142.
- Kitzinger, J. (1995) 'Qualitative research: introducing focus groups', *British Medical Journal*, 311, (7000-29 July) pp. 299-302.
- Kitzinger, S. (1978) 'Pain in Childbirth', *Journal of Medical Ethics*, 4, pp. 119-121.
- Kitzinger, S. (2002) 'Natural childbirth is inappropriate in a modern world', *International Journal of Obstetric Anesthesia*, 11, (1), pp. 30-32.
- Kitzinger, S. (2005) 'The language of birth', *MIDIRS Midwifery Digest*, 15, (2), pp. 207-210.
-

---

## References

- Kitzinger, S. (2006) *Birth Crisis*. Oxford: Routledge.
- Kravitz, R. L., Callahan, E. J., Paterniti, D., Antonius, D., Dunham, M. and Lewis, C. E. (1996) 'Prevalence and sources of patients'unmet expectations for care', *Annals of Internal Medicine*, 125, pp. 730-737.
- Lagan, B., Sinclair, M. and Kernohan, W. G. (2006) 'Pregnant women's views of internet : A review of published and unpublished evidence', *Evidence Based Midwifery*, 4, (1), pp. 17-23.
- Lally, J., Murtagh, M., Macphail, S. and Thomson, R. (2008) 'More in hope than expectation: a systematic review of women's expectations and experience of pain relief in labour', *BMC Medicine*, 6, (1).
- Lavender, T., Walkinshaw, S. A. and Walton, I. (1999) 'A prospective study of women's views of factors contributing to positive birth experience', *Midwifery*, 15, (1), pp. 40-6.
- Lavender, T., Moffat, H. and Rixon, S. (2000) 'Research. Do we provide information to women in the best way?', *British Journal of Midwifery*, 8, (12), pp. 769-75.
- Lawrence Beech, B. A. and Phipps, B. (1999) 'Normal birth: Women's stories', in Downe, S.(ed), *Normal Childbirth: Evidence and Debate*. Edinburgh: Churchill Livingstone, pp. 67-78.
- Lazarus, E. (1997) 'What do women want? Issues of choice, control, and class in American pregnancy and childbirth', in Davis-Floyd, R. E. and Sargent, C. F.(eds) *Childbirth and Authoritative Knowledge*. Berkeley: Uni. of California Press, pp. 132-159.
- Leap, N. (1997) 'Being with Women in Pain: do midwives need to rethink their role', *British Journal of Midwifery*, 5, (5), pp. 263-264.
- Leap, N. (1998) 'A fresh approach to pain in labour', *New Zealand College of Midwives Journal*, 19, pp. 17-18.
- Leap, N. (2000) 'Pain in labour: towards a midwifery perspective', *MIDIRS Midwifery Digest*, 10, pp. 49-53.
- Leap, N. (2001) *No gain without pain*. Available at: <http://www.birthinternational.com/articles/leap02.html> (Accessed: 12th March 2009).
- Leap, N. and Anderson, T. (2004) 'The role of pain in normal birth and the empowerment of women', in Downe, S.(ed), *Normal childbirth: evidence and debate*. London: Churchill Livingstone., pp. 25-38.
- Leap, N. and Newburn, M. (2010) 'Working with pain in labour: an overview of the evidence', *Perspective*, (6).
-



---

## References

- Leder, D. (1986) 'Towards a phenomenology of pain', *Review of Existential Psychology and Psychiatry*, 19, (2), pp. 255-256.
- Leeman, L., Fontaine, P., King, V., Klein, M. C. and Ratcliffe, S. (2003) 'The nature and management of labor pain: part I. Non pharmacologic pain relief', *American Family Physician*, 68, (6), pp. 1109-12.
- Leung, K. K., Silvius, J. L., Pimlott, N., Dalziel, W. and Drummond, N. (2009) 'Why health expectations and hopes are different: the development of a conceptual model.', *Health Expectations*, 12, pp. 347-360.
- Levesque-Lopman, L. (1983) 'Decision and experience: A phenomenological analysis of pregnancy and childbirth', *Human Studies*, 6, (1), pp. 247-277.
- Levy, B. (2004) 'How midwives use protective steering to facilitate informed choice in pregnancy', in Kirkham, M.(ed), *Informed choice in maternity care*. Hampshire: Palgrave Macmillan.
- Lichtman, R. (2004) 'Medical models and midwifery: The cultural experience of birth', in Van Teijlingen, E. L., G; McCaffery, P; Porter, M(ed), *Midwifery and the Medicalization of Childbirth ; Comparative perspectives*. New York: Nova Science, pp. 205-213.
- Lippman, A. (2005) 'Self', in Hallowell, N., Lawton, J. and Gregory, S.(eds) *Reflections on Research*. Maidenhead: Open University Press.
- Lothian, J. (2006) 'Birth Plans: The Good, the Bad, and the Future', *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 35, (2), pp. 295-303.
- Lothian, J. A. (2007) 'Listening to Mothers II: Knowledge, Decision-Making, and Attendance at Childbirth Education Classes', *Journal of Perinatal Education*, 16, pp. 62-67.
- Lothian, J. A. (2008) 'Choice, Autonomy, and Childbirth Education', *Journal of Perinatal Education*, 17, pp. 35-38.
- Lowe, N. K. (1996) 'The pain and discomfort of labor and birth', *JOGNN Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 25, (1), pp. 82-92.
- Lowe, N. K. (2002) 'The nature of labor pain', *American Journal of Obstetrics and Gynecology*, 186, (5).
- Lundgren, I. and Dahlberg, K. (1998) 'Women's experience of pain during childbirth', *Midwifery*, 14, (2), pp. 105-10.
- Lundgren, I. (2004) 'Releasing and relieving encounters: experiences of pregnancy and childbirth', *Scandinavian Journal of Caring Sciences*, 18, (4), pp. 368-375.
- Machin, D. and Scamell, M. (1997) 'The experience of labour: using ethnography to explore the irresistible nature of the bio-medical metaphor during labour', *Midwifery*, 13, (2), pp. 78-84.
-

---

## References

- Machin, D. and Scamell, A. (1998) 'Changing practice. Using ethnographic research to examine effects of 'informed choice'', *British Journal of Midwifery*, 6, (5), pp. 304-9.
- MacVicar, J., Dobbie, G., Owen-Johnstone, L., Jagger, C., Hopkins, M. and Kennedy, J. (1993) 'Simulated home delivery in hospital: a randomised controlled trial', *British Journal of Obstetrics & Gynaecology*, 100, (4), pp. 316-323.
- Mander, R. (1998) *Pain in childbearing and its control*. Oxford: Blackwell Science.
- Mander, R. (2000) 'The meanings of labour pain or the layers of an onion? A woman-oriented view', *Journal of Reproductive and Infant Psychology*, 18, (2), pp. 133-141.
- Maternity Care Working Party. (2007) *Making normal birth a reality: Consensus statement from the Maternity Care Working Party*. London: National Childbirth Trust.
- Mays, N. and Pope, C. (1995) 'Rigour and qualitative research', *British Medical Journal*, 311, (6997), pp. 109-112.
- Mays, N. and Pope, C. (2000) 'Qualitative research in health care: Assessing quality in qualitative research', *British Medical Journal*, 320, (7226), pp. 50-52.
- McCrea, B. H. (1996) *An investigation of rule governed behaviours in the control of pain management during the first stage of labour*. PhD thesis. University of Ulster.
- McCrea, B. H. (1998) 'Scientific Background', in Mander, R.(ed), *Pain in Childbearing and its Control*. Oxford: Blackwell Science, pp. 51-60.
- McCrea, B. H. and Wright, M. E. (1999) 'Satisfaction in childbirth and perceptions of personal control in pain relief during labour', *Journal of Advanced Nursing*, 29, (4), pp. 877-884.
- McCrea, H., Wright, M. and Stringer, M. (2000a) 'The development of a scale to assess control in pain management during labour', *Journal of Reproductive and Infant Psychology*, 18, pp. 105-115.
- McCrea, H., Wright, M. E. and Stringer, M. (2000b) 'Psychosocial factors influencing personal control in pain relief', *International Journal of Nursing Studies*, 37, (6), pp. 493-503.
- Melzack, R. and Wall, P. D. (1967) 'Pain mechanisms a new theory', *Survey of Anesthesiology*, 11 (2), pp. 8-90.
- Menelli, S. (2007) 'Positive Birth Stories', *Midwifery Today*, Winter, (84).
- MIDIRS. (2003a) *Epidural pain relief in labour*. Bristol: MIDIRS.
- MIDIRS. (2003b) *Non-epidural pain relief*. Bristol: MIDIRS.
- MIDIRS. (2003c) *Non-epidural strategies for pain relief during labour*. Bristol: MIDIRS.
-

---

## References

- MIDIRS. (2005a) *The informed choice initiative*. Bristol: MIDIRS.
- MIDIRS. (2005b) *The use of water during childbirth*. Bristol: MIDIRS.
- MIDIRS (2010) *Midwives Information Resource Service*. Available at: <http://www.midirs.org/development/midwiferyweb.nsf/home> (Accessed: 3/10/10).
- Milner, I. (1988) 'Water baths for pain relief in labour', *Nursing Times*, 84, pp. 38-40.
- Moore, S. (1997) *Understanding pain and its relief in labour*. Edinburgh: Churchill Livingstone.
- Mulley, A. G. (1989) 'Assessing Patients' Utilities: Can the Ends Justify the Means?', *Medical Care*, 27, (3), pp. S269-S281.
- Mulley, A. G. (2009) 'Inconvenient truths about supplier induced demand and unwarranted variation in medical practice', *British Medical Journal*, 339, (eet207727), pp. 1007-1009.
- Mumsnet (2008) *Mumsnet*. Available at: <http://www.mumsnet.com/> (Accessed: 30.12.2010).
- Murphy-Black, T. (1990) 'Antenatal Education', in Levey, V. and Alexander, J.(eds) *Antenatal Care: A research based approach*. Basingstoke: Macmillan, pp. 88-104.
- National Childbirth Trust. (2002) 'The NCT birth policy: 12 principles', *The Magazine of the NCT - New Generation*, (Feb).
- National Health Service (2009) *Selected statistics by NHS trust and site 2007-2008*. Available at: <http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1112> (Accessed: 09th September 2009).
- National Health Service (2010) *NHS Choices*. Available at: <http://www.nhs.uk/livewell/pregnancy/pages/painrelief.aspx> (Accessed: 26.01.10).
- National Institute for Clinical Excellence. (2003) *Guideline 6: Antenatal Care : Routine care for the healthy pregnant woman*. London: NICE.
- National Institute for Health and Clinical Excellence. (2003) *Guideline 6: Antenatal Care : Routine care for the healthy pregnant woman*. London: NICE.
- National Institute for Health and Clinical Excellence. (2007) *Intrapartum Care: care of healthy women and their babies during childbirth*. London: RCOG Press.
- Nettelbladt, P., Fagerstrom, C.-F. and Uddenberg, N. (1976) 'The significance of reported childbirth pain', *Journal of Psychosomatic Research.*, 20, (3), pp. 215-221.
- Newburn, M. (2002) 'A birth policy for the National Childbirth Trust', *MIDIRS Midwifery Digest*, 12, (1), pp. 122-126.
-

---

## References

- Niven, C. and Gijbbers, K. (1984) 'Obstetric and non-obstetric factors related to labour pain', *Journal of Reproductive and Infant Psychology*, 2, (2), pp. 61-78.
- Niven, C. (1992) *Psychological Care for families: Before, during and after birth*. Oxford: Butterworth Heinemann.
- Niven, C. A. and Brodie, E. E. (1996) 'Memory for labor pain: Context and quality', *Pain*, 64, (2), pp. 387-392.
- Niven, C. A. and Murphy-Black, T. (2000) 'Memory for Labor Pain: A Review of the Literature', *Birth*, 27, (4), pp. 244-253.
- Nolan, A. E. (1999) 'Antenatal education: Past and future agendas', *Practising Midwife*, 2, (3), pp. 24-27.
- Nolan, J. (2007) 'Delivery Suite assessment Unit: Auditing innovation in maternity care', *British Journal of Midwifery*, 15, (8), pp. 506-510.
- O'Cathain, A., Walters, S. J., Nicholl, J. P., Thomas, K. J. and Kirkham, M. (2002) 'Use of evidence based leaflets to promote informed choice in maternity care: randomised controlled trial in everyday practice', *British Medical Journal*, 324, (~~16 March~~7338), pp. 1-5.
- O'Connor, A. (1995) 'Validation of a decisional conflict scale', *Medical Decision Making*, 15, (1), pp. 25-30.
- O'Connor, A. (1998) *Ottawa Decision Support Framework*. Available at: <http://decisionaid.ohri.ca/docs/ODSF.pdf> (Accessed: March 2).
- O'Connor, A., Stacey, D., Entwistle, V., Llewellyn-Thomas, H., Rovner, D., Holmes-Rovner, M., Tait, V., Tetroe, J., Fiset, V. and Barry, M. (2003a) 'Decision aids for people facing health treatment or screening decisions', *The Cochrane Library*, 1.
- O'Connor, A., Stacey, D. and Jacobsen, M. J. (2004) 'Ottawa Personal Decision Guide'.
- O'Connor, A., Bennett, C., Stacey, D., Barry, M., Col, N., Eden, K., Entwistle, V., Fiset, V., Holmes-Rovner, M., Khangura, S., Llewellyn-Thomas, H. and Rovner, D. (2006) *Decision aids for people facing health treatment or screening decisions*. Cochrane Collaboration John Wiley and Sons, L.
- O'Connor, A., Bennett, C., Stacey, D., Barry, M., J., Col, N. F., Eden, K., Entwistle, V., Fiset, V., Holmes-Rovner, M., Khangura, S., Llewellyn-Thomas, H. and Rovner, D. (2007) 'Do Patient Decision Aids Meet Effectiveness Criteria of the International Patient Decision Aid Standards Collaboration? A Systematic Review and Meta-analysis', *Medical Decision Making*, pp. 554-574.
-

---

## References

- O'Connor, A. M., Tugwell, P., Wells, G. A., Elmslie, T., Jolly, E., Hollingworth, G., McPherson, R., Bunn, H., Graham, I. and Drake, E. (1998) 'A decision aid for women considering hormone therapy after menopause: decision support framework and evaluation', *Patient Education and Counseling*, 33, (3), pp. 267-279.
- O'Connor, A. M., Légaré, F. and Stacey, D. (2003b) 'Risk communication in practice: the contribution of decision aids', *British Medical Journal*, 327, (25-Sept7417), pp. 736-740.
- O'Connor, A. M., Bennett, C. L., Stacey, D., Barry, M., Col, N. F., Eden, K. B., Entwistle, V. A., Fiset, V., Holmes-Rovner, M., Khangura, S., Llewellyn-Thomas, H. and Rovner, D. (2009) *Decision aids for people facing health treatment or screening decisions*. The Cochrane Database of Systematic reviews: Wiley.
- Oakley, A. (1981) 'Interviewing women: A contradiction in terms', in Roberts, H.(ed), *Doing Feminist Research*. London: Routledge, pp. 30-61.
- Odent, M. (1983) 'Birth under water', *The Lancet*, 322, pp. 1476-1477.
- Olofsson, C. H., Ekblom, A., Ekman-Ordeberg, G., Hjelm, A. and Irestedt, L. (1996) 'Lack of analgesic effect of systemically administered morphine or pethidine on labour pain', *British Journal of Obstetrics & Gynaecology*, 103, (10), pp. 968-972.
- Oweis, A. and Abushaikh, L. (2004) 'Jordanian pregnant women's expectations of their first childbirth experience', *International Journal of Nursing Practice*, 10, pp. 264-271.
- Page, L. (1988) 'The Midwife's Role in Modern Health Care', in Kitzinger, S.(ed), *The Midwife Challenge*. London: Pandora Press.
- Page, L. A. (2000) *The new midwifery: Science and sensitivity in practice*. Edinburgh: Churchill Livingstone.
- Parratt, J. and Fahy, K. (2003) 'Trusting enough to be out of control: a pilot study of women's sense of self during childbirth', *Journal of the Australian College of Midwives*, 16, (1), pp. 15-22.
- Patton, M. Q. (1980) *Qualitative Evaluation Methods*. Beverley Hills: Sage.
- Patton, M. Q. (1999) 'Enhancing the quality and credibility of qualitative analysis', *Health Services Research*, 34, (5), pp. 1189-1208.
- Peach, M. J. (1991) 'The King Edward Memorial Hospital 1000 Mother Survey of Methods of Pain Relief in Labour', *Anaesthesia & Intensive Care.*, 19, (3), pp. 393-9.
- Peel, J. (1970) *Domiciliary Midwifery and Maternity Bed Needs: the Report of the Standing Maternity and Midwifery Advisory Committee* London: HMSO.
- Petticrew, M. and Roberts, H. (2006) 'How to appraise the studies: An introduction to assessing study quality', in Petticrew, M. and Roberts, H.(eds) *Systematic reviews in the social sciences: A practical guide*. Oxford: Blackwell Publishing, pp. 125-163.
-

---

## References

- Pierce, B. (1998) 'The practice of toning in pregnancy and labour: Participants experience', *Complementary therapies in nursing and midwifery*, 4, (2), pp. 41-46.
- Pitchforth, E., van Teijlingen, E., Watson, V., Tucker, J., Kiger, A., Ireland, J., Farmer, J., Rennie, A., Gibb, S., Thomson, E. and Ryan, M. (2009) "'Choice" and place of delivery: a qualitative study of women in remote and rural Scotland', *Quality & Safety in Health Care*, 18, (1), pp. 42-48.
- Pope, C. and Mays, N. (2000) *Qualitative Research in Health Care*. London: British Medical Journal Books.
- Pope, C., Ziebland, S. and May, N. (2000) 'Analysing qualitative data', *British Medical Journal*, 320, (7227), pp. 114-116.
- Potter, J. (2003) *Representing Reality: Discourse, Rhetoric and Social Construction*. London: Sage.
- Pregnancy and Birth. (2008) *Pregnancy and Birth Magazine*. London: Bauer Media.
- Public Health Resource Unit. (2006) *Critical Appraisal Skills Programme: Making sense of the evidence*. Oxford: Institute of Health Sciences.
- Pyron, M. and Myers, S. T. (1996) 'Participation/Nonparticipation factors of refresher childbirth classes', *The Journal of Perinatal Education*, 5, (4), pp. 21-28.
- Rajan, L. (1993) 'Perceptions of pain and pain relief in labour: the gulf between experience and observation', *Midwifery*, 9, (3), pp. 136-45.
- Ranta, P., Spalding, M., Kangas-Saarela, T., Jokela, R., Hollmen, A., Jouppila, P. and Jouppila, R. (1995) 'Maternal expectations and experiences of labour pain--options of 1091 Finnish parturients', *Acta Anaesthesiologica Scandinavica*, 39, (1), pp. 60-66.
- Rapley, T. (2008) 'Distributed decision making: The anatomy of decisions-in-action', *Sociology of Health and Illness*, 30, (3).
- Rapley, T. (2010) 'Some pragmatics of data analysis', in Silverman, D.(ed), *Qualitative research, theory, method and practice*. London: Sage.
- Raynes-Greenow, C. H., Roberts, C. L., McCaffery, K. and Clarke, J. (2007) 'Knowledge and decision-making for labour analgesia of Australian primiparous women', *Midwifery*, 23, pp. 139-145.
- Reynolds, F. and Crowhurst, J. A. (1997) 'Opioids in labour-no analgesic effect', *Lancet*, 349, (January 4).
- Rice, P. L. and Ezzy, D. (1999) *Qualitative Research Methods: a health focus*. Oxford: Oxford University Press.
-

---

## References

- Richardson, T. E. (ed.) (2003) *Handbook of Qualitative Research Methods for Psychology and the Social Sciences*. Oxford: BPS Blackwell.
- Ritchie, J. and Spencer, L. (1994) 'Qualitative data analysis for applied policy research', in Bryman, A. and Burgess, R. G.(eds) *Analyzing Qualitative Data*. London and New York: Routledge, pp. 173-194.
- Ritchie, J. and Lewis, J. (eds.) (2003) *Qualitative research practice*. London: Sage Publications.
- Roberts, C., Raynes-Greenow, C., Nassar, N., Trevena, L. and McCaffery, K. (2004) 'Protocol for a randomised controlled trial of a decision aid for the management of pain in labour and childbirth [ISRCTN52287533]', *BMC Pregnancy and Childbirth*, 4, (1), pp. 24.
- Robertson, A. (2000) 'Tell me about the pain', *The Practising Midwife*, 3, (7), pp. 46-47.
- Robinson, A. and Thomson, R. (2001) 'Variability in patient preferences for participating in medical decision making: implication for the use of decision support tools', *Quality in Health Care*, 10, (Supplement 1), pp. i34-i38.
- Robson, C. (1993) *Real World Research*. Oxford: Blackwell.
- Roter, D. and Hall, J. (1992) *Doctors talking with patients / Patients talking with doctors*. Westport: Connecticut Auburn House.
- Salmon, P., Miller, R. and Drew, N. C. (1990) 'Women's anticipation and experience of childbirth: The independence of fulfilment, unpleasantness and pain', *British Journal of Medical Psychology*, 63, pp. 255-259.
- Say, R. E. and Thomson, R. (2003) 'The importance of patient preferences in treatment decisions-challenges for doctors', *British Medical Journal*, 327, (7414), pp. 542-5.
- Schott, J. (2001) 'Antenatal Education "How much should we say?"', *The Practising Midwife*, 4, (7), pp. 45-47.
- Schuman, A. N. and Marteau, T. M. (1993) 'Obstetricians' and midwives' contrasting perceptions of pregnancy', *Journal of Reproductive and Infant Psychology*, 11, (2), pp. 115-118.
- Seale, C., Gobo, G., Gubrium, J. F. and Silverman, D. (eds.) (2007) *Qualitative Research Practice*. London: Sage.
- Sepucha, K., Ozanne, E., Silvia, K., Partridge, A. and Mulley, A. G. (2007) 'An approach to measuring the quality of breast cancer decisions', *Patient Education and Counselling*, 65, (2), pp. 261-269.
- Shapiro, A., Fredman, B., Zohar, E., Olsfanger, D. and Jedeikin, R. (1998) 'Delivery room analgesia: an analysis of maternal satisfaction', *International Journal of Obstetric Anesthesia*, 7, (4), pp. 226-30.
-

---

## References

- Shetty, A., Burt, R., Rice, P. and Templeton, A. (2005) 'Women's perceptions, expectations and satisfaction with induced labour-A questionnaire-based study', *European Journal of Obstetrics & Gynaecology and Reproductive Biology*, 123, (1), pp. 56-61.
- Silverman, D. (1993) 'Beginning Research', in Silverman, D.(ed), *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. London: Sage, pp. 1-19.
- Simkin, P. (1989) 'Non-pharmacological methods of pain relief during labour', in Chalmers, I., Enkin, M. and Keirse, M. J. N. C.(eds) *Effective Care in Pregnancy and Childbirth*. Oxford: Oxford Medical Publications, pp. 1182 - 1195.
- Simkin, P. (2000) 'Commentary: The Meaning of Labor Pain', *Birth*, 27, (4), pp. 254-255.
- Sinclair, M. (2001) 'Birth technology: cameos from the labour ward', *RCM Midwives Journal*, 4, (3), pp. 85-7.
- Slade, P., MacPherson, S. A., Hume, A. and Maresh, M. (1993) 'Expectations, experiences and satisfaction with labour', *British Journal of Clinical Psychology*, 32, (Pt 4), pp. 469-83.
- Smedstad, K. G. and Beilby, W. (2000) 'Informed consent for epidural analgesia in labour', *Canadian Journal of Anesthesiology*, 47, (11), pp. 1055-1059.
- Smith, C. A., Collins, C. T. and Crowther, C. A. (2001) *Complementary and alternative therapies for pain management in labour*. Oxford: Cochrane Database of Systematic Reviews.
- Sofaer, S. (2002) 'Qualitative research methods', *International Journal for Quality in Health Care*, 14, (4), pp. 329-336.
- Soltani, H. and Dickinson, F. M. (2005) 'Exploring women's views on information provided during pregnancy', *British Journal of Midwifery*, 13, (10), pp. 633-636.
- Symon, A. (2006) 'The risk-choice paradox', in Symon, A.(ed), *Risk and Choice in Maternity Care* Philadelphia: Churchill Livingstone, pp. 1-11.
- Szczepinska, I. (1995) 'Expectations nurtured in childbearing women', *British Journal of Midwifery*, 3, (11), pp. 574.
- Terry, R. and Gijsbers, K. (2000) 'Memory for the quantitative and qualitative aspects of labour pain: a preliminary study', *Journal of Reproductive and Infant Psychology*, 18, (2), pp. 143-152.
- Thompson, A. G. H. and Sunol, R. (1994) 'Expectations as determinants of patient satisfaction: Concepts, Theory and Evidence', *International Journal of Quality in HealthCare*, 7, (2), pp. 127-141.
-



---

## References

- Thomson, R., Bowling, A. and Moss, F. (2001) 'Engaging patients in decisions: a challenge to health care delivery and public health', *Quality in Health Care*, 10, (Supplement 1), pp. i1.
- Thomson, R. and Holland, J. (2003) 'Hindsight, foresight and insight: the challenges of longitudinal qualitative research', *International Journal of Social Research Methodology*, 6, (3), pp. 233.
- Thorstensson, S., Nissen, E. and Ekström, A. (2008) 'An exploration and description of student midwives' experiences in offering continuous labour support to women/couples', *Midwifery*, 24, (4), pp. 451-459.
- Thrift, N. (1999) 'The place of complexity', *Theory, Culture and Society*, 15, (3), pp. 31-69.
- Toscano, A. and Pancaro, C. (2003) 'Obstetric analgesia: back to the future?', *Journal of Maternal-Fetal and Neonatal Medicine*, 14, (1), pp. 6-7.
- United Kingdom Central Council for nursing midwifery and health visiting. (1994) *Complementary therapies and the registered nurse, midwife and health visitor*. London: UKCC.
- Van den Bussche, E. A., Crombez, G. B. C., Eccleston, C. D. and Sullivan, M. J. L. (2007) 'Why women prefer epidural analgesia during childbirth: The role of beliefs about epidural analgesia and pain catastrophizing', *European Journal of Pain*, 11, pp. 275-282.
- van der Hulst, L., van Teijlingen, E. R., Bonsel, G. J., Eskes, M., Birnie, E. and Bleker, O. P. (2007) 'Dutch women's decision-making in pregnancy and labour as seen through the eyes of their midwives', *Midwifery*, 23, (3), pp. 279-286.
- van Teijlingen, E., Hundley, V., Rennie, A. M., Graham, W. and Fitzmaurice, A. (2003) 'Maternity Satisfaction Studies and Their Limitations: "What Is, Must Still Be Best"', *Birth*, 30, (2), pp. 75-82.
- VandeVusse, A. and VandeVusse, L. (2008) 'Reality Television as a Source of Information about Birth: The Messages and Their Implications', *Journal of Midwifery & Women's Health*, 53, (5), pp. 482.
- VandeVusse, L. (1999) 'Decision Making in Analyses of Women's Birth Stories', *Birth*, 26, (1), pp. 43-50.
- Waldenstrom, U., Borg, I. M., Olsson, B. and Skold, M. (1996a) 'The childbirth experience: a study of 295 new mothers', *Birth: Issues in Perinatal Care*, 23, (3), pp. 144-53.
- Waldenstrom, U., Vergman, V. and Vasell, G. (1996b) 'The complexity of labor pain: experiences of 278 women', *Journal of Psychosomatic Obstetrics & Gynecology*, 17, (4), pp. 215-228.
- Waldenstrom, U. (2003) 'Women's memory of childbirth at two months and one year after the birth', *Birth: Issues in Perinatal Care*, 34, (4), pp. 247-254.
-

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## References

- Waldenstrom, U., Hildingsson, I., Rubertsson, C. and Radestad, I. (2004) 'A negative birth experience: prevalence and risk factors in a national sample', *Birth.*, 31, (1), pp. 17-27.
- Walker, J. M., Hall, S. M. and Thomas, M. C. (1995) 'The experience of labour: a perspective from those receiving care in a midwife-led unit', *Midwifery*, 11, (3), pp. 120-129.
- Walsh, D. (2005) 'How long is too long?', *British Journal of Midwifery*, 13, (12), pp. 756.
- Watkins, L. and Weeks, A. D. (2009) 'Providing information to pregnant women: how, what and where?', *British Journal of Obstetrics & Gynaecology*, 116, (7), pp. 877-879.
- Weed, M. (2008) 'A Potential Method for the Interpretive Synthesis of Qualitative Research: Issues in the Development of meta interpretation', *International Journal of Social Research Methodology*, 11, (1), pp. 13-28.
- Weir, J. (2008) 'Informed consent and the birth plan', *Practising Midwife*, 11, (7), pp. 171-178.
- Weller, B. F. (2005) 'Parent power and choice!', *Infant*, 1, (3), pp. 73.
- Wennberg, J. and Gittlesohn, A. (1982) 'Variations in medical care among small areas', *Scientific American*, (246), pp. 120-134.
- White, L. A., Gorton, P., Wee, M. Y. K. and Mandal, N. (2003) 'Written information about epidural analgesia for women in labour: Did it improve knowledge?', *International Journal of Obstetric Anesthesia*, 12, (2), pp. 93-97.
- Winterton, N. (1992) *Winterton Report: Second report on maternity services*. London: HMSO.
- Wright, M. E., McCrea, H., Stringer, M. and Murphy-Black, T. (2000) 'Personal control in pain relief during labour', *Journal of Advanced Nursing*, 32, (5), pp. 1168-1177.
- Yearby, M. (2000) *Pain in Childbearing: Key issues in management*. Edinburgh: Baillière Tindall.
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## Appendices

Appendix 1: Qualitative Table

<u>Reference:</u> <u>Author</u> <u>Year /</u> <u>Country</u>	<u>Data</u> <u>Collection:</u> <u>Participants</u> <u>/study</u> <u>population</u>	<u>Analysis</u>	<u>Key Findings</u>	<u>Appraisal</u>
Beaton(1990)  Canada	In-depth Interviews in In 3 <sup>rd</sup> trimester  N=11	Content analysis	No basis for comparison of pain, largely the unknown that provoked fear and anxiety. Women often optimistic about ability to cope. Wanted to avoid analgesics if possible but willing if necessary.  Role of support: helping them maintain control and act as go- between with staff.	No mention of reflexivity  One of the childbirth educators recruited the women at the beginning of the class
Carlton(2005)  USA	In depth interviews  N=33	Ethnographic	Whether women wanted a "safe" passage or an "enhanced" passage had strong influence on satisfaction. Midwives have the potential to help women have realistic expectations. Hospital based education helped to socialise women about 'appropriate' ways of giving birth rather than educating	Sample of participants contacted to reflect upon and clarify findings.  Not clear when interviews where conducted
Davis – Floyd(1994)  USA	In depth interviews  N=40	Technocratic model	Most who gave birth in hospital felt pain was bad, not to feel pain was good and was their intrinsic right as a modern women.  Even if birth wasn't natural as planned – still pleased if they felt in control of their decisions. The major discontents women expressed was not the administration of anaesthesia but withholding it	Little information on how the information was collected or analysed
Fenwick (2005)  Australia	Telephone interviews with women who were pregnant or had given birth in last month  N=202	Explorative descriptive design and constant comparison	Birth choices based on whether women expect labour to be a medical condition with risks or a normal natural process.  Often had expectations but also hopes of what would happen.	Description of data meetings and audit sample given of how the data was analysed and themes generated  Newspaper recruitment used to gain a wide range of women
Gibbens (2001)  England	Unstructured interviews at 38 weeks and 2 weeks Postnatally  N=8	Phenomenolo gical	Confidence links to higher expectations and positive experience. Anxiety associated with less positive expectations and experience. Midwives need to discover wishes of women to respect and support them.	Clear description of the analysis used.  Draft findings given to each participant for verification and anonymity.
Haldorsdottir(19 96)  Iceland	Interactive interviews  N=14	Pheno- menological	Women's circumstances affected their birth experience. Women felt a failure because they were in more pain than expected. They longed for a sense of security involving a need for information and explanation. If needs fulfilled experience is positive, midwives need to know needs	Investigator triangulation, peer debriefing, member checks and others interviewed for referential adequacy. Reflexive journal kept

Appendix 2

<u>Reference:</u> <u>Author</u> <u>/Year /</u> <u>Country</u>	<u>Data</u> <u>Collection:</u> <u>Participants</u> <u>/study</u> <u>population</u>	<u>Analysis</u>	<u>Key Findings</u>	<u>Appraisal</u>
Hodnett (2002)	Systematic Literature review	Pain and women's satisfaction with the experience of childbirth	4 factors identified – personal expectation, support from care-givers, quality of relationship with caregivers, involvement in decision making  Discrepancy theories predict satisfaction based on difference between what is expected and what is received. None of the studies distinguished between expectation and preferences.	Results presented qualitatively – difficult to read tables
Kabakian (2000) Lebanon	Semi structured interviews within 3 months Postnatally N=117	Thematic	Belief from rural women that delivery entailed a lot of "suffering" for women and this was expected. Consequently many women did not request pain relief because they did not expect painless deliveries. In Beirut women demanded epidurals and strove for a painless delivery	No clear description of process of analysis or reflexivity of researchers.  Rural areas lack any infra-structure of health care provision at all – so limited generalisability
Lavender (1999) England	Questionnaire 2 days Postnatally N=412	Thematic	Expectations played a part in whether they considered experience fulfilling. 34% felt unprepared for labour – either lack of information or unrealistic expectations.	Themes generated by 2 researchers independently
Lundgren & Dahlberg (1998) Sweden	Interviews 2-4 days postnatally N=4 primiparous , 5 multiparous woman	Phenomenological	Pain is hard to describe – it is contradictory.  Pain brought women closer to their baby. Risk that we compare and treat pain in childbirth as like pain in illness. Suggestion that antenatal training involves intense training of the body	Bracketing of knowledge, experience of the phenomena
Lundgren (2004) Sweden	Synthesis of 4 studies N=39	Phenomenological	Women experience pain in a way that gave meaning to transition to motherhood. Control is important but means different things to different women. Midwives responsibility that women do not exceed the limit of their ability.	Not clear how the data were collected in the original studies.  Original interviews were not read by authors.
Machin (1998) England	Observations from early pregnancy to several months Postnatally N=80	Ethnographic	Information is always received by people who already have existing values and ideas. National Childbirth Trust women all felt empowered but didn't go on to fulfil this in delivery. Cannot assume one message will be effective in a diverse society	No evidence of reflexivity – although data came from many different sources

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Appendix 2

<u>Reference:</u> <u>Author</u> <u>/Year /</u> <u>Country</u>	<u>Data</u> <u>Collection:</u> <u>Participants</u> <u>/study</u> <u>population</u>	<u>Analysis</u>	<u>Key Findings</u>	<u>Appraisal</u>
Machin and Scamell (1997)  England	Interviews, participant and non-participant observation throughout pregnancy and childbirth  N=80	Ethnographic	National Childbirth Trust were confident and wanted a natural childbirth. Women felt compelled to take responsibility. Those who received NHS antenatal care did not challenge interventionist medical approach, their priorities were only for a healthy baby and painless labour. Those receiving NHS antenatal care never aspired to notion of control. But as labour started women who had received National childbirth Trust antenatal education became vulnerable and accepting of the medical model	Discussion with researcher, re-assess priorities, check techniques

Appendix 2: Quantitative Table

<u>Study:</u> <u>Authors/</u> <u>Year/</u> <u>Country</u>	<u>Method: Participants /</u> <u>Study population</u>	<u>Main Outcome measures /</u> <u>Aim of study</u>	<u>Key Results</u>	<u>Appraisal</u>
Brown & Lumley (1998) Australia	Population based postal survey.  6-7 months postnatally. N=1333. Response rate = 62.5%	Use of a written birth plan. Relationship between use and overall satisfaction and involvement in decision making	Women who wrote birth plan more likely to be happy with what was done to relieve pain - 49% vs. 28.5% and to report always having an active say in decisions - 46% vs 38.3%	Acknowledges under- representation of non- English speaking. Postal questionnaire- no obvious bias
Callister (1995) USA	Phenomenological – mixed methods study.  N=60	Utah test to measure belief and perceptions about childbirth including fear, locus of control, participation and personal values	Positive experience enhanced when congruency between the philosophy and expectations of childbearing women and their health care providers.  Women with Obstetrician emphasised the perceived safety of medical management and risk of childbearing. Community deliveries emphasised the need for control or ability to meaningfully influence decisions	No evidence or explanation of the analysis of the qualitative data
Capogna et al. (1996)  Europe	Structured Interviews and Visual Analogue Scale satisfaction  Last months of pregnancy and 24 hours postnatally  N=611 (>100 women from 5 countries)	Expectations and experiences of pain and pain relief in primiparous women	Maternal expectations differed between countries. Knowledge of pain relief varied between hospitals, 47% of Italians, 64% of Portuguese, 94- 100% of British, Belgium and Finnish mothers were aware of epidural. Older mothers were best informed while younger mothers had more pain before analgesia.  Those who said they could control pain had more pain before analgesia. Mothers who expected more pain were more likely to be satisfied with analgesia p=<0.001. Maternal satisfaction positively correlated with pain expected (SR.0.25 p=<0.001).	Birth itself approached differently in some countries  Timing of the postnatal interview could introduce bias

Appendix 2

<p><u>Study:</u> <u>Authors/</u> <u>Year/</u> <u>Country</u></p>	<p><u>Method: Participants /</u> <u>Study population</u></p>	<p><u>Main Outcome measures /</u> <u>Aim of study</u></p>	<p><u>Key Results</u></p>	<p><u>Appraisal</u></p>
<p>Fridh &amp; Gaston-Johansson. (1990) Sweden</p>	<p>Expectation questionnaire, midwifery assessment and Visual Analogue Scale.  32 weeks antenatally, during labour and 2 days postnatally  N=50 primiparous and 88 multiparous</p>	<p>Assessment of expectation, in-labour pain and relationship between expected and actual pain</p>	<p>Primiparous women rated actual pain worse than expected.  No significant difference between expected and actual medication needed.  Neither group able to predict degree of pain</p>	<p>No mention of non-responders.  Not clear if it was a different midwife who scanned women to the one who recruited</p>
<p>Green, Kitzinger, Coupland. (1990) England</p>	<p>Postal questionnaire  30-32, 36 weeks antenatally and 6 weeks postnatally  N=751 Response rate = 74%, 92% and 96%</p>	<p>Attitudes, knowledge and expectations  Edinburgh Postnatal Depression scale</p>	<p>The more years of education the more importance placed on being informed. Women educated beyond 16 more likely to expect some control over non-emergency decision making. 2/3rds of women who had ceased education at 16 wanted to at least have decisions discussed.  20% pain in labour was not as expected</p>	<p>limited results, repeated in greater detail in a later paper</p>
<p>Green (1993) England</p>	<p>Postal Questionnaire.  28-30, 36 weeks antenatally and 6 weeks postnatally  N=751 Response rate = 74%, 92% and 96%</p>	<p>Overall satisfaction and wellbeing.  Edinburgh Postnatal Depression scale</p>	<p>77% expect pain to be quite or very painful.  Strong relationship between worried about labour pain and worried about pain in ordinary life  20% found pain not as expected  Strong relationship between expectation and experience.</p>	<p>Postal – no response bias noted.  Asked questions about drugs to a further 853 women to validate the response</p>

Appendix 2

<p><u>Study:</u> <u>Authors/</u> <u>Year/</u> <u>Country</u></p>	<p><u>Method: Participants /</u> <u>Study population</u></p>	<p><u>Main Outcome measures /</u> <u>Aim of study</u></p>	<p><u>Key Results</u></p>	<p><u>Appraisal</u></p>
<p>Green &amp; Baston (2003) England</p>	<p>Postal Questionnaire</p> <p>29 and 35 weeks antenatally and 6 weeks postnatally (based on repeated "Great expectations" study by Green 1990)</p> <p>N=1146 Response rate = 59.9%, 90.86% and 92.19%</p>	<p>Assessment of control outcomes: control of what staff do, control of own behaviour and control during contractions</p>	<p>20% felt in control in all three ways, 20% felt out of control for all three.</p> <p>67% expected to be in control of staff, 37% in control of behaviour and 53.8% in control during contractions.</p> <p>For multiparous women expectations of control of behaviour and during contractions were major predictors of their experience</p>	<p>Replication of "Great expectations" study</p> <p>Largely representative sample although biased towards well educated and those whose partners were employed</p>
<p>Kangas-Saarela &amp; Kangas-Karki (1994) Finland</p>	<p>Questionnaire, 1 day Postnatally N=339 Response rate = 82%</p>	<p>Evaluate attitude to labour and pain relief</p>	<p>Majority had positive attitude to pain relief – 88% had planned to request it</p> <p>In 50% of cases the midwife suggested pain relief. 43% pleased with pain relief, 17% disappointed.</p>	<p>Limited satisfaction scoring – very pleased/fairly pleased disappointed</p>
<p>McCrea, Wright &amp; Stringer (2000a) Ireland</p>	<p>Rules questionnaire within 48 hours of delivery N=300</p>	<p>Assess rule governed behaviours relating to control of pain management in labour.</p>	<p>Primiparous women concerned antenatally with controlling emotions. Multiparous women placed more emphasis on being fully informed. Little difference between those rules before childbirth and those that applied in practice.</p>	<p>Observational data reflected what women said.</p> <p>Excluded women who had epidural as not involved in decision about pain relief</p>
<p>McCrea, Holly Wright (1999) Ireland</p>	<p>Questionnaire, within 48 hours of delivery N=100</p>	<p>Examine influence of personal control on women's satisfaction with pain relief</p>	<p>Expected labour to be "quite painful" and were "worried about pain"</p> <p>Personal control a fact which could influence satisfaction.</p>	<p>Bias discussed – however, asking within 48hours – may skew results</p>

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Appendix 2

<p><u>Study:</u> <u>Authors/</u> <u>Year/</u> <u>Country</u></p>	<p><u>Method: Participants /</u> <u>Study population</u></p>	<p><u>Main Outcome measures /</u> <u>Aim of study</u></p>	<p><u>Key Results</u></p>	<p><u>Appraisal</u></p>
<p>Oweis and Abushaikha (2004) Jordan</p>	<p>Questionnaire during pregnancy. N=77</p>	<p>Expectation of childbirth experience, nursing and support during labour and birth</p>	<p>Most women expected a negative childbirth experience. 92% scored &gt;75 – average 85 out of 100. 78% expected it to be painful</p>	<p>No antenatal education provided. No family member allowed in to support during birth – limited generalisability</p>
<p>Peach (1991) Australia</p>	<p>Survey, within 24hours of delivery N=1000</p>	<p>Pain experience, analgesia and satisfaction.</p>	<p>More pain than expected reported by Primiparous women . Dissatisfaction more likely to be associated with instrumental delivery rather than pain. Satisfaction with medical care determined by explanations and participation in decision making.</p>	<p>Results given in numbers rather than % - misleading as very small percentages</p>
<p>Rajan (1993) England</p>	<p>Secondary analysis of National Birth Survey.  During labour and within 6 weeks postnatally  N= 6459 and 1149</p>	<p>Perceptions of women's experience of pain and pain relief and the professionals who attended them.</p>	<p>6% planned on not using pain relief, only 3% actually did not. Non-pharmacological methods tended not to be included in the methods the clinicians talked about. Clinicians tended to give primary consideration to the method that fell into their remit to administer.</p>	<p>Limitation of secondary analysis of data – leaves gaps that are unanswered</p>
<p>Ranta (1995) Finland</p>	<p>Antenatal survey N=360 primiparous / 731 multiparous Response rate= 86%</p>	<p>Expectations of level of pain and anticipated need for pain relief.</p>	<p>96% received sufficient information. 4% multiparous and 14% primiparous (p&lt;0.0005) expected not to use analgesia. 20% actually received no pain relief. 95% satisfied with care despite difference in pain relief management.  Those having instrumental deliveries most dissatisfied</p>	<p>Pain intensity recorded by midwife - Subjective measurement</p>

Appendix 2

<p><u>Study:</u> <u>Authors/</u> <u>Year/</u> <u>Country</u></p>	<p><u>Method: Participants /</u> <u>Study population</u></p>	<p><u>Main Outcome measures /</u> <u>Aim of study</u></p>	<p><u>Key Results</u></p>	<p><u>Appraisal</u></p>
<p>Salmon et al (1990) England</p>	<p>Antenatal and Postnatal questionnaire N=106 and 82 Response rate = 92% and 95%</p>	<p>Identification and rating of the dimensions women use to evaluate their experiences.</p>	<p>Evaluation of childbirth multi-dimensional. Women's ratings of the painfulness of childbirth unrelated to either their feelings of achievement or the extent to which they described their experience as pleasant or unpleasant. A painful birth is just as likely to have positive evaluation as a pain free one.</p>	<p>Actual methods very vague – no details of actually how it was done and how the ratings were made and at what time points ante and postnatally</p>
<p>Shapiro et al (1998) Israel</p>	<p>Structured interview one day Postnatally N=324</p>	<p>Maternal perception of delivery room experience</p>	<p>Significant difference of pain relief administered to primiparous and multiparous (<math>p &lt; 0.0001</math>).  45% of primiparous and 36% of multiparous women anticipated suffering extreme or unbearable pain.  Before analgesia 68% of primips and 65% of multips described pain as unbearable</p>	<p>Unclear how sample reflects population.</p>
<p>Slade et al (1993) England</p>	<p>Questionnaire at 36-39 weeks and within 72 hrs Postnatally N=81</p>	<p>Emotional, medical and control aspects of labour.</p>	<p>Expectations and experience of pain were similar. Duration of labour was sig. underestimated.  Women who expected to have medication or epidural generally did.  Expectations regarding pain levels not sig. different from those experienced.  Expectations and experience of pain did not affect satisfaction.</p>	<p>Conducted in antenatal clinics and on postnatal wards – could have affected the responses given.</p>

Appendix 2

<p><u>Study:</u> <u>Authors/</u> <u>Year/</u> <u>Country</u></p>	<p><u>Method: Participants /</u> <u>Study population</u></p>	<p><u>Main Outcome measures /</u> <u>Aim of study</u></p>	<p><u>Key Results</u></p>	<p><u>Appraisal</u></p>
<p>Waldenstrom (1996a) Sweden</p>	<p>Questionnaire within 45 hrs after birth. N=295 Response rate= 88%</p>	<p>Experience of pain intensity and affective dimension in relation to expectation.</p>	<p>52% experienced pain as more difficult than expected. Women with severe pain had more often attended antenatal class, expected labour to be painful, dissatisfied with info and support and received more pain relief. 40% described pain as negative, 28% as positive.</p>	<p>Retrospectively asked them about expectations and experiences. The birth experience may colour what they remember their expectations being</p>
<p>Wight et al (2000) Ireland</p>	<p>Questionnaire prior to and 72 hours Postnatally N= 50 primiparous and 50 multiparous women</p>	<p>Rules held prior to and after childbirth</p>	<p>Little difference in rules held by women and midwives. Findings showed women's expectations met with their experiences. Multis now feel they know how much pain they can bear and should therefore make decisions</p>	<p>No details on how the study was conducted  Observation conducted to record what actually happened to see if this matched up with what the women recorded happened.</p>

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**Appendix 3: Patient Information Leaflet**

**Patient Information Leaflet**

**Decisions regarding pain relief in labour**

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve.

Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

**Thank you for reading this.**

**What is the purpose of the study?**

In this study we want to get your understanding of the different forms of pain relief available during your labour. Also to find out where you get your information from, how you make your decisions and if you feel you could be given any additional information to support you in this important time in your pregnancy

**Why have I been chosen?**

You have been chosen because you are pregnant with your first baby and are booked to have your baby at the RVI.

**Do I have to take part?**

No, it is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason by informing either the researcher involved in the project or your midwife. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.

**What will happen to me if I take part?**

You will be invited to attend an interview when you are approx 13 weeks pregnant to discuss your views on pain relief during labour. You will then be invited when you 34-36 weeks pregnant to an interview to discuss any decision you have made about your choices regarding pain relief to use during labour.

If you raise any concerns that you have regarding your pregnancy, labour or pain relief during the course of the interview, you will be given information on how you can access the appropriate source of support

The interviews will last no more than an hour and will be confidential, and with your agreement will be taped. The tapes will be held until the interviews have been transcribed, they will then be destroyed.

**What are the possible benefits of taking part?**

This study will hopefully give us the information we need to provide women who are pregnant in the future the correct information to make choices about pain relief.

**Will my taking part in this study be kept confidential?**

Anything discussed within the interview will remain confidential.

All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognised from it.

Your GP will be notified of your participation in the trial

**What will happen to the results of the research study?**

The results of this study will be published following the analysis of the interviews. If you wish a summary will be sent to you.

It is important to stress that you will not be identified in any report/publication.

**Who is organising and funding the research?**

This research is being funded by the Medical Research Council, and is being co-ordinated by the School of Population and Health Sciences, the Medical School, University of Newcastle in collaboration with the Department of Obstetrics and Gynaecology at the RVI

*You will be given a copy of the information sheet and a signed consent form to keep, if you have any further questions please contact:*

Joanne Lally  
Research Associate  
School of Population and Health Sciences (Public Health)  
4<sup>th</sup> Floor, William Leech Building  
Medical School  
University of Newcastle University  
NE2 4HH

0191 222 5643

**Thank you very much for taking the time to read this information**

**Appendix 4: Health Professional Information Leaflet**  
**Decisions regarding pain relief in labour**

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve.

Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

*Thank you for reading this.*

**What is the purpose of the study?**

This is a qualitative study to gain your understanding of the different forms of pain relief available during labour. Also to find out where you get your information from, how you assist women in making decisions and if you feel you could be given any additional information to support you in this.

**Why have I been chosen?**

You have been chosen because you involved in the care of pregnant women who are booked to have their baby at the RVI.

**Do I have to take part?**

No, it is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason by informing the researcher involved in the project.

**What will happen to me if I take part?**

You will be invited to attend a discussion group with other professionals to discuss your views on pain relief during labour. The focus groups will last no more than an hour and will be confidential and with your agreement will be taped. The tapes will be held until the focus groups have been transcribed, they will then be destroyed.

**What about other people?**

Women taking part in the study will have given informed written consent to take part

**Would taking part be kept confidential?**

Anything discussed within the focus group will remain confidential to that group.

All information which is collected about individuals during the course of the research, including audio recordings, will be kept strictly confidential. It is usual to store the tapes in case there are any queries about the study in the future but they will not be heard by anyone who is not involved

with the study. Any information that leaves the researcher will have your details removed so that you cannot be recognised from it.

**What will happen to the results of the Research study?**

It is usual to publish the results of a study in a medical or midwifery journal so that we can share understanding and ways to improve care. You would not be identified in any such article. If you would like to be informed if such an article were published, or would like any other feedback from the study, then you can contact the researcher during or after the study and she will be happy to help you.

**What are the possible benefits of taking part?**

This study will hopefully give us the information we need to provide women who are pregnant in the future the correct information to make choices about pain relief.

**Will my taking part in this study be kept confidential?**

All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognised from it.

**Who is organising and funding the research?**

This research is being funded by the Medical Research Council, and is being co-ordinated by the School of Population and Health Sciences, the Medical School, University of Newcastle in collaboration with the Department of Obstetrics and Gynaecology at the RVI

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