The experience of pain in the context of childbirth for Hong Kong Chinese women: a longitudinal cohort interview study

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Student Declaration

I declare that while registered as a candidate for the research degree, I have not been a registered candidate or enrolled student for another award of the University or other academic or professional institution.

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School of Community Health and Midwifery

Abstract

Childbirth, the biggest life event for a woman, is a complicated process. Childbirth pain not only involves physiological sensations, but also psychosocial and cultural factors. In addition, the way the woman handles the pain is affected by the meaning she attributes to it. In order to understand the experience of Hong Kong Chinese women in terms of childbirth in general and childbirth pain in particular, and to learn the meanings attributed, a longitudinal qualitative descriptive study was conducted with the aim of exploring the experience and meaning of pain in the context of childbirth for Hong Kong Chinese women. The study was informed by a systematic review and metasynthesis of existing relevant literature. Since people's attitudes, beliefs and behaviours may change over a period of time, data were collected from the participants at 4 different time points: around 36 weeks of pregnancy; on postnatal day 3; 6-7 weeks after birth; and 10-12 months after birth. Purposive sampling was employed and a total of 10 Hong Kong Chinese women (5 primiparous and 5 multipararous women) were recruited for the study. The data were collected via semi-structured interviews, informed by phenomenological principles. The resulting data were described using thematic analysis

The results from the metasynthesis together with the four interviews yielded 5 meta-themes: *The cultural norms*; *The trajectory of pain sensation; Facing or escaping the pain; Someone to be with me;* and *Achievement and growth through the unforgettable experience.*

For these participants, satisfaction with their childbirth experience was not related to the pain they experienced, but to the care they received from their husbands and midwives, as well as to their own sense of achievement. Although the women remembered the fact of their pain over time, their affective noxious memories decreased as their concentration was on their mothering and parenting experiences.

Finally, the meta-themes were interpreted in the light of Maslow's hierarchy of needs, and a model was proposed to help women to handle childbirth pain in the future.

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Guide to abbreviations and terminology

IUI	Intrauterine Insemination
TENS	Transcutaneous electrical nerve stimulation
LK Massage	The LK Massage Programme has been designed by midwives based on research into the best way of doing massage during labour. LK stands for Linda Kimber, who led the development of the technique.

SECTION ONE: BACKGROUND

CHAPTER ONE

OVERVIEW OF THESIS

1.1 Introduction

Childbirth is one of the biggest life events for a woman and her family. It is vital for society, as it results in new life and ensures the future of humankind. While the birth of a baby is usually a joyful event, there are still risks for mother and baby and unexpected or uncontrolled problems can arise at any time. Pregnant women tend to look forward to the birth, and are at the same time anxious about complications and the health of their unborn baby (Melender, 2002). Childbirth pain is also of concern for pregnant women. In general pain makes people feel uncomfortable or distressed. In most circumstances, people try to avoid pain or to escape from it when it occurs. However, when it comes to childbirth pain, the situation is different, for the pain leads to the birth of the baby. Although it is a physiological condition, the feeling and interpretation of pain is influenced by psychological and sociocultural factors. However, increasingly, the focus of most maternity care providers is on the provision of pharmacological pain relief to address the physical sensations of pain without paying attention to the psychosocial, emotional and cultural aspects. While some of these methods are very effective, they also have side effects for mothers and their babies.

While pharmacological solutions have been the primary response to labour pain for decades in some high income countries, in others this has been a

much more recent development. In the setting for this thesis, Hong Kong, the use of drugs to treat labour pain has only become widespread in the last generation or so. Childbearing Hong Kong Chinese women may therefore have diverse expectations and experiences of childbirth pain that may provide insights into the meaning of and ideal response to pain in labour and birth, both for this population and for others in the same transitional state.

In relation to the sociocultural perspectives related to childbirth, traditional Chinese culture had many taboos or norms that guided women from pregnancy to delivery. Some of these have been carried from one generation to the other. There are some foods such as watermelons and or bananas that the pregnant woman should not eat and some things that the pregnant woman should not do, such as hammering on walls, as senior members of society believe that it might affect the well-being of the unborn baby. In traditional Chinese culture, women's status in the family was low and women were socialized to be submissive. This socialization not only made women passive, it also made them reluctant to speak up to protect their own rights, as such actions might embarrass their fathers or husbands and the family. This may be one of the reasons why there are few records on pain relief methods that traditional Chinese women used during childbirth. Indeed, there is little research on the views and experiences of Chinese women in general and of Hong Kong Chinese women in particular in relation to their expectations and experiences of childbirth pain and pain relief methods, even in the 21st century.

The initial aim of the study was "to undertake an exploration of the meaning

of childbirth and views and experiences of childbirth pain relief among Hong Kong Chinese women from the third trimester of pregnancy to one year after birtht". However, the study evolved iteratively (details would be discussed in chapter 3). The final aim was revised as follows:

"To undertake an exploration of the meanings underpin Hong Kong Chinese women's views and the embodied experience of childbirth, and of pain in labour, and from the third trimester of pregnancy to one year after birth."

The intent of the study underpinning this thesis was to develop a model of care related to labour pain needs using a woman-centered approach to improve the quality of care. The focus was on enhancing the capacity of the woman to go through a meaningful childbirth process with a sense of achievement.

To develop a model of care for provision of quality care to the women, it was necessary to identify the elements that need to be included in its formulation. According to Pittrof et al (2002), quality of care addresses issues related to medical, emotional and social outcomes, user and provider satisfaction, as well as financial outcomes. Hulton et al (2000) identified ten elements that contribute to the quality of maternity care. Six of them were related to the provision of care, while four were related to women's experience of care, such as human and physical resources; cognition; respect, dignity and equity; and emotional support. These elements match some of the significant concepts of woman-centred care indicated by Leap (2000, 2009), and notably those related to women's experience. For Leap, the components of this are: "*focuses on the woman's individual needs,*

aspirations and expectations"; "*recognizes the need for women to have choice, control and continuity care from a known caregiver or caregivers"*; "*encompasses the needs of the baby, the woman's family and other people important to the woman",* "*addresses the woman's social, emotional, physical, and psychological, spiritual and cultural needs and expectations*"; and finally, "*recognizes the woman's expertise in decision making*". With reference to the above, woman-centred care was the focus for the study, as it acknowledged to enhance the women's experience in childbirth.

Recently, Renfrew et al (2014) have examined, comprehensively and systematically, the contribution of midwifery to the quality of care of woman and infants globally, and the role of midwives and others in providing midwifery care. The findings concluded that midwifery had a particular contribution to the quality care process identified in the framework: "*in regard to education, information and health promotion; assessment; screening, and care planning; and promoting normal processes and preventing complications in the context of respectful care that is tailored to need and works of strengthen women's capabilities."* (Renfrew et al, 2014). Such findings supported a system-level shift to the woman and newborn, from the focus on identification and treatment, to preventive and supportive care that works to strengthen women's capabilities.

In order to end preventable maternal and newborn morbidity and mortality, WHO and others have developed a Quality of Care model (Tuncalp et al, 2015). This care model has two significant inter-linked dimensions, i.e. provision of care and experience of care. The experience of care includes

effective communication, receiving care with respect and dignity, and the social and emotional support that is most relevant to the woman herself.

These developments indicate that Quality of Care for the woman and the newborn has been of increasing interest in recent decades. It can be noted that woman-centered care, or tailor-made care, is the central focus in all these developments.

Woman-centered care approach is therefore essential for the provision of good quality maternity care. To achieve this, it is important for the midwife not only to be “With the woman” in terms of continuous support (Hulton et al, 2000, Romano & Lothian, 2008) but also “for the woman” in terms for individualized care that tailored to their needs in the provision of care (Renfrew et al, 2014). In other words, the midwife should provide continuous care and work with the woman to provide the care for the woman that is specific and is according to the woman’s needs and situation (Leap, 2009).

The data generated by the study led to a consideration of Maslow’s Hierarchy of Needs as a framework for this model. The findings showed that the participants had various needs during the childbirth process, ranging from the need for food and drink, to mobilization, and partner support. All of these helped with relief of pain symptoms. Unexpectedly, some women reported that they gained in self esteem, and some accounts suggested a sense of achievement that could be interpreted self-actualization. This was evidence in the form of personal growth and a sense of maturity in

successful motherhood. This led to the use of the model of care based on Maslow's Hierarchy of needs to interpret the data.

The elements of the model align with the experiential components of quality of care approaches outlined above. Each woman has various needs which are situational and culturally specific especially during the childbirth process. In this connection, the development of the care model based on Maslow's Hierarchy of needs could be part of a Quality of Care approach for maternity care.

The findings suggested that provision of care based on this model could enhance the capacity of midwives to provide care to the woman not only in fulfilling their basic physiological, safety, and love and belonging needs. It could also provide a means by which midwives can provide the conditions in which women can meet their esteem needs, and their needs for self-actualization.

In order to address this aim, the study involved a literature review with different approaches to understanding pain in general and childbirth pain in particular; an overview of the historical and current norms in this area in Hong Kong Chinese society; a metasynthesis of current research literature; and a longitudinal study of some Hong Kong Chinese women who were interviewed four times (at 36 weeks gestation, a few days after birth, two months postnatally, and at around a year after the birth of their baby).

The thesis is comprised of 12 chapters divided into 4 sections. The information in each section is used to support the building of the subsequent section.

The first section provides the background to the study. Chapter two addresses the nature of pain, both in general and in terms of childbirth pain in particular. It offers a view of pain through a range of lenses, including the physiological, biochemical, sociocultural, and psychological perspectives. This chapter also provides an overview of traditional Chinese culture in relation to women and to childbirth. The development of midwifery in Hong Kong is touched on. This information provides the basis for the study.

The second section includes the theoretical perspective and methodology of the study and the metasynthesis. Chapter three includes an exploration of a range of possible theoretical and methodological approaches to addressing the aims of the study and provides a rationale for the chosen approach. The methodology of the longitudinal qualitative study, the details of the design of the study, the methods of the study, (one-to-one based interviews with semi-structured questions), the rationale for the sample size (five primiparous women and five multiparous women), recruitment of participants, and the method for data analysis are provided in this chapter. Chapter four presents the detailed methods used for the metasynthesis and the findings of the review. These findings were used to enhance the development and analysis of the longitudinal qualitative study.

Section three is focused on the results from the longitudinal qualitative study. Chapter five provides a short introduction to the results. Chapter six to nine present the findings from each time point in turn. The main themes at each point are presented with related quotes to support the themes. These chapters do not include references to the wider literature. Chapter ten synthesizes the data from each time point into meta-themes and situates these data alongside current knowledge in this area with appropriate reference to current and relevant literature.

Section four brings all the data together, including an overview of the general pain literature, a discussion of cultural norms in Hong Kong, and the findings from the metasynthesis and the longitudinal cohort study. Chapter eleven offers a summary of the strengths and limitations of the study and interprets the data presented throughout the thesis through the lens of Maslow's Hierarchy of Needs. This chapter also presents a potential model to help women to 'face or escape' childbirth pain based on the findings of the study. The final chapter offers my reflexive thoughts relating to my presuppositions and how these may have influenced choices, responses and interpretations in the process of undertaking the study. This chapter also reflects on how engagement with the study may have changed my views and responses for the future.

1.2 Conclusion

This chapter has presented an overview of the study and of the organization of the thesis. My intention is to offer both an academic analysis and a possible model that can minimize women's fears and adverse experiences of

childbirth pain. The study is also one of the few qualitative analyses in this area that has been undertaken in Hong Kong. I hope that more such studies can be done to illuminate the needs of pregnant and postnatal women and of those providing maternity care

CHAPTER TWO

THE NATURE OF PAIN IN GENERAL AND OF CHILDBIRTH PAIN IN PARTICULAR

2.1 Introduction

Childbirth pain is not a disease or illness; it is related to the process of delivery of a baby, the next generation of the family. Psychological, social and cultural factors can have significant impacts on women in childbirth, and affect their response to pain and use of pain relief methods. This chapter includes a brief review of pain theories, the pain mechanism and the role of endogenous opioids, and the psychological, social and cultural factors influencing pain in general. These theories are then applied to childbirth and an overview of the historical and current cultural norms that frame childbirth pain responses for Hong Kong Chinese women is provided as a basis for the rationale for the study presented in this thesis.

2.2 Overview of the nature of pain

Pain is a universal human experience (McCaffery & Beebe, 1989; Beecher, 1959). From a physiological perspective, it is a sensation of discomfort produced when tissue is damaged (Muir, 1980; Hosking & Welchew, 1985; Schmitt, 1977). Pain is therefore functional; it serves a purpose (Downe, 2008). It acts as a signal to inform people when something is happening to their bodies so they react or respond consciously by finding ways to relieve the pain or subconsciously by moving from the source of pain by reflex. Hence, it can be seen as a kind of protective mechanism in the body (Muir,

1980; Park, Fulton, & Senthuran, 2000). It is the most common reason for seeking health care (McCaffery & Beebe, 1989; McMahon & Miller, 1978.). Although pain has a physiological basis, the way it is expressed is subjective and psychologically mediated: it is there when the person experiencing it says it is (Beecher, 1959). It is a therefore a unique personal experience (Parsons & Preece, 2010). The severity of pain varies among individuals, as the unpleasant sensation varies with the emotional state, anxiety, or anticipation of disaster, for instance (Beecher, 1959). In addition, the intensity of suffering is largely determined by what the pain means to the person experiencing it (Beecher, 1956; Parsons & Preece, 2010). This variation of meaning has consequences when dealing with individuals in pain (Parsons & Preece, 2010).

2.3 Theories of pain

The definition of pain has evolved with the development of pain theories. In 1968 Mountcastle defined pain as the sensory experience evoked by stimuli as a result of injury (Wall, 1984). However, this definition ignores the psychological aspects of pain and fails to incorporate the affective, motivational, and cognitive dimensions of pain as integral parts of the experience (Melzack & Wall, 1982). In 1979, the taxonomy committee of the International Association for the Study of Pain chaired by Mersky defined pain as an unpleasant sensory and emotional experience related to actual or potential tissue damage. In addition to this definition, crucial notes were added to this sentence stating that pain is a subjective and learned experience related to injury in early life. The committee members also indicated that this definition avoids tying pain to the stimulus and

activity induced in the nociceptor and nociceptive pathways by a noxious stimulus is not pain, but a psychological state, even though pain most often has a proximate physical cause (Wall, 1984). According to the above two definitions, the concept of pain evolved from solely a physiological condition to involvement of the psychological and emotional state of an individual in perceived pain. This concept of pain is still used. Further developments in this way of framing the concept of pain and of pain mechanisms have demonstrated that social and cultural factors also contribute to the activation of pain mechanisms (Payne & Horn, 1997).

Theories such as the specificity theory, the patterning theory and the gate control theory have been developed to explain the pain mechanism.

2.3.1 Specificity theory

The specificity theory, which developed in the mid-nineteenth century, proposed that there are specific pain receptors and transmitters for perceiving pain. This comprises a system for detecting pain stimuli with its own special receptors, peripheral nerves and pathways to specific areas of the brain (Payne & Horn, 1997; Melzack & Wall, 1965). This theory assumes that the human skin comprises a multitude of unique sensory 'spots' for either touch, cold, warmth or pain, and that free-nerve endings, which are specific pain receptors, are commonly found (Gatchel & Turk, 1999; Payne, & Horn, 1997). The specific pain receptors move to seek specific pathways from the receptors to the spinal cord and then the brain (Payne & Horn, 1997). There is a direct link between elements in the system. Pain fibers connect a peripheral receptor and a specific brain site. This theory

could not explain pain that did not have any obvious physical pathology and hence could not accommodate sensations of pain without a pathological cause. The problem with this explanation was linear, as injury was directly equated with pain and psychological factors were ignored (Payne & Horn, 1997). In addition, according to Beecher (1959) the meaning of the injury mediates the pain response, which is also a factor affecting pain. Similar tissue damage does not necessarily result in similar pain across individuals and this is in part due to a constellation of psychological, social and cultural variables (Payne & Horn, 1997). As such, clinical and psychological evidence fails to support the specificity theory of pain.

2.3.2 Patterning theory

The patterning theory is the opposite of the specificity theory. This theory, proposed by Goldscheider, explains different painful sensations as a result of some form of central summation process in the pain mechanisms (Melzack, 1993). In this theory, it is suggested that all fiber endings are alike and pain is produced by intense stimulation of nonspecific receptors (Melzack & Wall, 1965). “There are no specific receptors and no specific endings” for pain (Melzack & Wall, 1965). When triggered by usually non-noxious stimuli, the transmission of peripheral sensory information is summated at the dorsal horn, with pain information being transmitted to the brain only if the level of output at the dorsal horn exceeds a threshold. This theory suggests that the sensation of pain is the result of spatial and temporal patterns of neural transmission (Payne & Horn, 1997), and the differences in the patterning and quantity of these peripheral nerve fiber discharges cause differences in the quality of the sensation (Gatchel & Turk,

1999). A good example is that minimal tactile stimulus to an area might cause a feeling of touch and a stronger pattern of tactile stimuli could cause pain. In other words, strong and mild stimuli of the same sense modality produce different patterns of neural activity. However, the theory fails to address the differences in the free nerve endings as it insists that they are all alike and non-specific to receive sensory information. This is contrary to physiological evidence suggesting a great deal of receptor specificity (Payne & Horn, 1997). In addition, this theory did not gain acceptance on the point that pain is determined entirely by impulses in a straight-through transmission system from the skin to the pain center in the brain, as it ignored the effect of psychological variables on pain (Melzack & Wall, 1965).

2.3.2 Gate Control Theory

Both the specificity theory and patterning theory are too simple to explain pain, as they look at pain solely from the physiological point of view. There is no room for psychological contributions, such as attention, anxiety, past experiences and the meaning of the situation (Melzack, 1993). The development of the gate control theory included psychological factors in explaining the sensation of pain. The gate control theory was published in 1965 by Melzack & Wall. The main feature is that pain fiber transmission is modulated at the base of the spinal column by a ‘gate’ (Payne & Horn, 1997). In addition to the spinal cord mechanism, the brain processes as well as the feed-forward and feedback transmission had to be integrated into the theory (Melzack, 1993, p.617). Melzack and Wall proposed that there is a mechanism in the dorsal horns of the spinal cord which acts like a gate,

inhibiting or facilitating transmission of nerve impulses from the body to the brain via specific pain fibers with large or small diameters, as well as the dynamic action of the brain processes (Melzack, 1993; Payne & Horn, 1997).

This theory suggests that there are three spinal cord systems and pain phenomena are determined by interactions among these systems. These systems consist of (1) the cells of the substantia gelatinosa in the dorsal horn, (2) the dorsal-column fibers that project toward the brain, and (3) the first central transmission (T) cells in the dorsal horn. (Melzack & Wall, 1965). Stimulation of the skin evokes nerve impulses which are transmitted to this three- spinal cord system. The substantia gelatinosa modulates the afferent patterns before they influence the T cells, and hence, functions as a gate control system. The afferent patterns in the dorsal column system act as a central control trigger which activates selective brain processes that influence the modulating properties of the gate control system. The T cells activate neural mechanisms which comprise the action system responsible for response and perception (Melzack & Wall, 1965). According to Melzack (1993), the pain impulse is transmitted by the small-diameter fibers (A-delta and C), and the activity of the small fibers tends to facilitate transmission, i.e. open the gate. The activity of the large diameter (A-beta) fibers, the rapid conducting fibers, tends to inhibit transmission, i.e. close the gate. The relative amount of activity in the large diameter (A-beta fibers) and small diameter fibers in the feed-forward transmission (afferent activity) influences the spinal gating mechanism. Melzack & Wall (1965) indicated that the large and small fibers counteract each other in the system. Many of

the large fibers are inactive in the absence of a stimulus. However, there is ongoing activity carried predominantly by small myelinated and unmyelinated fibers which holds the gate in a relatively open position. When there is a stimulus on the skin, it produces a disproportionate relative increase in large-fiber over small- fiber activity. The afferent fibers contain large-fiber impulses which fire the T cells and also partially close the presynaptic gate, thereby shortening the barrage generated by the T cells. If the stimulus intensity is increased, more receptor-fiber units are recruited and the firing frequency of active units is increased. The output of the T cells rises slowly. If stimulation is prolonged, the large fibers begin to adapt, producing a relative increase in small-fiber activity. This causes the gate to open further and the output of the T cells rises more steeply. It is significant to note that if the large-fiber steady background activity is artificially raised at this time by vibration or scratching, it overcomes the tendency of the large fibers to adapt and the output of the cells decreases. This explains why people tend to massage or lightly rub skin when there is pain, as massaging the skin creates a stimulus and hence increases large fiber activity, which results in closing the gate. When the gate closed, it reduces the feelings of pain. Opening or closing the gate thus allows or blocks the transmission of impulses to the brain and affects pain perception (Muir, 1980; Yerby, 2000; McCaffery & Beebe, 1989; West, 1981; Kjervik & Martinson, 1986).

The gating mechanism is also influenced by nerve impulses that descend from the brain, the feedback transmission (efferent activity). Melzack & Wall (1982) indicated that a specialized system of large fibers activates

selective cognitive processes that influence, via the descending fibers, the modulating properties of the spinal gating mechanism. Further, when the output of the spinal cord transmission (T) cells exceeds a critical level, there is activation of the action system, which involves those neural areas that underlie the complex, sequential patterns of behaviour and experience characteristics of pain. It is significant to note that the theory not only emphasizes modulation of inputs in the spinal dorsal horns, it also emphasizes the dynamic role of the brain in pain processes, which includes psychological factors. The brain acts as an active system that filters, selects and modulates input, while the dorsal horns are not only passive transmission stations but sites at which dynamic activities – inhibition, excitation and modulation — occur, and as such, the central nervous system is an essential component in pain processes (Melzack, 1993).

2.4 Hormonal theories related to pain

Great advances have been made in understanding the factors influencing pain information modulation and the mechanisms which underlie them. According to Horn & Munafò (1997), these advances include identification of the neurotransmitters responsible for the transmission of pain information through isolation of endogenous morphine-like substances, the endogenous opioids, which appear to act as a natural, self-regulatory pain control mechanism. They also include increasing evidence of central neural changes following peripheral tissue or nerve damage, which may explain certain pathological pain states. These advances have helped explain the correlation of psychological processes and factors known to modulate the pain sensation.

The identification of endogenous opioids enhances understanding of the correlation of physiological and psychological processes as well as adding detail to the concept of descending signals modulating the pain sensation (Horn & Munafò 1997). Endorphins, one form of the body's endogenous opioids, can affect the opening or closing of the gate (Kjervik & Martinson, 1986). They appear naturally at the spinal level as an internal pain-regulatory system by inhibiting pain information transmission and thus affect the descending signals and modulate the pain sensation by closing the gate. Endorphins therefore function as analgesics by modulating the pain sensation (Horn & Munafò 1997; West 1981). This helps increase the pain threshold (Swanson 1985). Endorphins also produce a sense of well-being. There is evidence that release of endogenous opioids takes place only when activity at the aerobic threshold is maintained for at least 20 minutes (Horn & Munafò 1997). There therefore appears to be a self-regulating system in the body, which by means of release of endogenous opioids closes the gate when encountering situations or exogenous events causing pain. However, when pain persists, the opportunity increases for psychological factors to mediate pain sensations (Horn & Munafò 1997).

2.5 Pain threshold and pain tolerance

According to Melzack & Wall (1982), four types of pain thresholds can be measured via experiments using electric shock or radiant heat as the stimulus. These thresholds are (a) the sensation threshold or the lowest threshold, the point that a sensation such as tingling or warmth is first reported, (b) the pain perception threshold, i.e. the point when a person reports that the stimulation feels painful, (c) pain tolerance or the upper

threshold, the point when the subject withdraws or asks to have the stimulation stopped and (d) encouraged pain tolerance, the same as the upper threshold, but here, the person is encouraged to tolerate a higher level of stimulation. With encouragement, the person is able to tolerate pain at a level higher than the upper threshold of pain tolerance (Melzack & Wall, 1982). Hence, it can be said that the pain threshold is the first perception of the stimulus as painful and pain tolerance refers to a point at which a person reports that he or she does not want to tolerate the stimulus any longer (Elton, Stanley & Burrows, 1983). Pain threshold and pain tolerance are particularly relevant to expectations and experiences of childbirth pain and they will be referred to in chapter seven to ten.

2.6 Psychological and cultural perspectives on pain

As noted above, it is meaningless to talk about pain solely from the physiological point of view without considering psychological factors, such as fear and anxiety, past experiences, the meaning of pain, as well as local cultural norms around the degree to which pain can legitimately be expressed. According to Melzack & Wall (1982), "Pain differs from person to person, culture to culture." Hence, stimuli that produce intolerable pain in one person may be tolerated by another person, as pain perception is a highly personal experience which depends on cultural learning, the meaning of the situation, and other factors that are unique to the individual. The amount and quality of pain people feel are also determined by their previous experiences and how well they remember them, and by their ability to understand the cause of the pain and to grasp its consequences.

2.6.1 Emotional, cognitive and psychological factors

According to Niven (1994), the experience of pain is comprised of three components: sensory or perceptual, emotional, and cognitive. The sensory or perceptual component relates to sensory information, the emotional component influences the degree to which one desires to escape from pain, while the cognitive aspect determines the meaning of the sensory experience. Hence, pain perception is influenced by the meaning of the experience to a person (McMahon & Miller 1978; Muir 1980). When a person finds meaning in pain, there is markedly less suffering or less pain than when pain is found to be meaningless.

Depending on the meaning of the situation, the same nociceptive stimulus may result in different pain experiences in the same individual (Elton et al. 1983; Melzack & Wall, 1982). In a classic study conducted by Beecher (Elton et al., 1983), soldiers who were wounded in a battle reported feeling little pain and required little medication. However, civilians who suffered similar injuries required more medication. These differences were related to the situations that the soldiers and civilians encountered. The soldiers interpreted that the danger from the battlefield had decreased, as they were no longer required to go to the battlefront, while civilians in car accidents viewed their pain as a disaster and showed a high level of anxiety. In addition, pain was interpreted as unbearable when help was unavailable, but was reduced or disappeared when pain relief was at hand (Melzack & Wall, 1982). Thus, perceived pain is affected by the meaning people put on the pain.

Psychological factors such as anxiety, loneliness, attention and distraction affect perceived pain as they are affective variables related to cognition. An increase in anxiety potentiates pain as it is an affective variable (Elton et al., 1983). Since anxiety is related to cognition, when the anxiety level is reduced, there are changes in cognitive factors and thus an increase in pain tolerance (Elton et al., 1983). Touching or massage can increase pain tolerance as "touch evokes emotion" (Kay, 1982). This can reduce the feeling of anxiety and therefore increase tolerance to pain (Elton et al., 1983).

Anticipation of pain can raise the level of anxiety and affect the intensity of perceived pain. Hence, providing information alone cannot reduce levels of anxiety. The significant ingredient is providing the person with skills to cope with pain and anxiety, i.e. to provide the patient with a sense of control. Reassuring people that they have control over pain, even though they may not, can provide some help towards the pain threshold. With a sense of control, anxiety decreases and consequently the pain threshold increases (Melzack & Wall, 1982; Elton et al., 1983). When people are taught how to cope with their pain, it is significantly reduced. Cognitive strategies, such as building a sense of control, can therefore modify the pain experience (Elton et al., 1983).

Attention to pain will tend to result in perceiving it more intensely than would otherwise be the case (Melzack & Wall, 1982). Distraction of attention away from pain can reduce or diminish the pain being perceived. Pain is diminished when attention is directed toward other events, such as

exciting games, books, films or music, and this provides a simple approach to pain relief (Melzack & Wall, 1982). Music is a common auditory input that people use to decrease pain. Hypnosis is another method of distraction, as the subject's attention is focused intensely on the hypnotist while attention to other stimuli is markedly reduced. However, repeated hypnosis by a professional may become less effective and the duration of effects is shorter (Melzack & Wall, 1982). In general, the effect of distraction of attention is limited. In addition, it is effective only if the pain is steady or rises slowly in intensity (Melzack, Weisz and Sprague, 1963), as opposed to being acute and sudden in onset.

2.6.2 Cultural factors

Over the last few decades, it has become apparent that pain perception is a result of an active system which can be modified by past experiences and social learning, with social and cultural factors also playing roles in the explanation (Horn & Munafò, 1997). As Melzack and Wall (1982) have noted: "Cultural background has a powerful effect on the pain perception threshold." Culture is not a simple phenomenon, as Illich (1977) has stated, "Cultures are systems of meanings". Culture is the source of human thought and behaviour and it brings things into view for people and endows them with meaning (Crotty, 1998). Cultural norms can act to make pain tolerable by integrating it into a meaningful experience and by interpreting its necessity (Illich, 1977). However, it can also have the opposite effect. As a consequence, people of different cultural backgrounds respond to pain differently, even though, objectively, the physiological response may be similar between different cultural groups. The description of traditional

Chinese culture below might illustrate the way it could influence Chinese women's responses to childbirth pain.

Various studies have shown that different culture groups rate stimuli differently. Some may rate pain more intensely than others as they find the pain more unpleasant (Callister, 2003). Cultural factors determine which symptoms or signs are perceived as abnormal and the pain behaviour in response to pain (Helman, 1990). As in childbirth pain, some women in a cultural group may suppress their responses to pain by keeping silent, while women from another cultural background may express their discomfort.

Illich argues that modern urban society detaches pain from any subjective or intersubjective context in order to conquer it. Resulting cultural norms perceive pain as intolerable (Illich, 1977). This situation demands the development and use of painkillers. As a consequence, the person in pain is left with less and less social context to give meaning to the experience (Illich, 1977). In addition, traditional culture socializes boys and girls in very different ways. They are educated to have different expectations of life and to develop emotionally and intellectually in particular ways, subject to different norms of dress and behavior and different responses to pain expression. Cultural norms therefore contribute a set of guidelines towards different genders as they programme the individual in how they should perceive, think, feel and act as either a male or a female member of that society (Helman, 1990).

Although there is a cultural effect in an individual's response to pain,

individual differences exist within cultural groups. Thus, the pain experience should be understood within the context of the person's beliefs, values, coping strategies, and life experiences (Callister, 2003).

2.7 Childbirth pain

Childbirth pain is different from almost all other pain sensations as it does not usually signal underlying pathology. It can, however, be explained in the context of the various theories explored above.

Physiologically, childbirth pain is functional; it acts as a sign to alert women to find a safe shelter for delivery. Psychologically and culturally, it is a unique and complex sensory and affective experience that differs from the acute or chronic pain of disease, trauma, or surgical or medical procedures (Niven & Murphy-Black, 2000). Cognitively, the meaning of childbirth includes feelings of fulfilment and achievement once the baby is born (Salmon & Miller, 1990). Culturally, according to Arney and Neill (1982) a woman's past experiences and present situation influence her experience of childbirth pain and her attitude towards pregnancy and motherhood seems to be of special importance in this connection.

There have been many studies of effective pain relief in childbirth. There is a global debate about the efficacy, meaning, and consequences of widespread use of labour pain relief (Lowe, 2002; Caton, 2002). There is good evidence that the most effective forms of pain relief do not lead to increased well-being following labour (Heinze & Sleigh, 2003) and that

some effective forms of pain relief may even have adverse effects on women and babies (Anim-Somuah, Smyth, & Howell, 2005). Nevertheless, according to Waldenström & Schytt (2009), some pregnant women fear labour pain and their worries increase when childbirth is approaching. Since cultural origin influences reactions to painful stimuli, it is to be expected that there are different meanings of childbirth pain in different cultures or societies, as women interpret, perceive and respond to childbirth culturally (Kay, 1982). It is therefore important to know the underlying meaning of childbirth pain in different cultures or societies if effective support is to be given to labouring women from particular cultural settings. In the following section, the cultural norms that frame the response of Hong Kong Chinese women towards childbirth pain will be reviewed, along with the current situation related to childbirth pain relief. This provides the basis for the focus and design of the study reported in this thesis.

2.8 Meaning of childbirth pain for Hong Kong Chinese women

2.8.1 Historical aspects

- ***Traditional Chinese culture***

In traditional Chinese culture, the woman's social status in the family was much lower than that of the man. Confucius (551 BCE – 479 BCE), the great teacher of China, produced many influential ideologies which were carried forward or developed by his students or followers. Some of them were related to gender and these affected the fate of women for many centuries, as evidenced in 'The Three Bonds' in Confucius' ideology. This

refers to the authority of the ruler over the minister, the father over the son, and the husband over the wife, and were prominent in Confucian literature over almost four centuries (Li, 2000). This enhanced the building of power of the husband over his wife with the consequence that the wife could easily be turned into a virtual house slave (Li, 2000).

Today, Chinese 'New Culture' Confucianism could be read as the sacrifice of individuals for the sake of families, a process in which women were usually the first to be sacrificed (Ebrey, Foreword for Li, 2000). It could be further illustrated by the 'Three Submissions' (or 'Three Obediences' as translated) (In Chinese term - Sam Jong). 'Three Submissions' was included in the book "Lessons for Women" (Nujie) (the book was translated as Admonitions for Women), written by Ban Zhao in the Han Dynasty. It is one of the "Four Books for Women" (Nusishu) which taught women how to become good wives and goodmothers. The 'Three Submissions' of women were to obey their father before marriage, their husband after marriage, and the eldest son should they become widows (Cheung, 1997; Leung 1990). Women at that time were taught to be submissive under a male in the family. Since one of the critical roles of the woman was to reproduce and raise sons to perpetuate the family line and to take care of the family (Cheung, 1997), it was thus the woman's fault if she could not produce a son. In the "Four Books for women", it was stated that the husband could expel the wife for seven reasons. One of these was failing to produce a son (Leung 1990; Cheung 1997). This gave the husband the right to marry another woman.

As Mencius is reported to have said, “The father teaches sons the way of good men; the mother teaches daughters about marriage”. Before her daughter’s wedding, a mother would say, “After getting married, you must be respectful and diligent and do not go against your husband’s will. Women’s way is to obey” (Li, 2000). Another Confucianism concept, “The absence of talent in a woman is a virtue” (Ebrey, Foreword for Li, 2000), probably helped explain why Chinese women seldom had chances to obtain education but were taught cooking and domestic management, while boys were educated to prepare them for public life (Chan, 2003). Without education to prepare for public life, it was difficult for them to find work; hence, women could not easily live independently and thus had to play a submissive role in the family.

The Confucian ideology of gender, called the ‘inner-outer’ (nei-wai), further kept women within the house. In this ideology, the husband’s function was ‘external’ (outer), i.e. to earn a living and handle social functions, whereas the wife’s function was ‘internal’ (inner), i.e. to handle the household work, cooking, nurture the children, etc. (Li, 2000). The focus of women was thus on issues that occurred inside the house, and they were concerned with household activities and nurturing the children. Without education and opportunities for employment, together with suppression of female personal opinions, it was difficult for women to resist this oppressive situation.

Given this history, even in the early twentieth century, midwives report seeing some women who cried when they were told that their baby was female. Although there has been an increase in opportunities for education

and work for girls and women, deep-rooted traditional Chinese culture related to having a son in the family still existed. This was a clear demonstration that the influence of Confucianism was significant, for the fundamental ideas have continued within a culture which rationalized the suppression of woman while promoting the power of men.

■ ***The emergence of female midwives and the move to hospital delivery***

The first medical school in Hong Kong was established in 1887. Before its establishment, traditional Chinese medicine was the major treatment used. In 1937, a general hospital and a maternity hospital were designated as teaching hospitals for the school of medicine. As a consequence, there was a gradual increase in the acceptance of biomedicine by Chinese people. Despite the perception that Western medicine could help reduce maternal and neonatal complications related to childbirth, Chinese women resisted moving to a hospital for labour and birth in the early 1900s, not the least because of cultural resistance to male attendance at childbirth at a time when male doctors delivered babies in hospitals. Changing attitudes and the emergence of formally trained (female) midwives in 1906 led to a gradual increase in hospital births among Chinese women. Since the late 1950s, home births in Hong Kong have become a rarity.

Prior to this time, most births took place at home, attended by women who did not have any formal midwifery training, but who were experienced in attending births. Support from the spouse during childbirth was limited as it was a taboo to accompany the woman during labour. There are very few records of techniques and supportive approaches used to ease labour pain or

of women's responses to their labour experiences. Anecdotal accounts of retired midwives suggest that up until very recently, Chinese women rarely requested any kind of pain relief. Traditional Chinese medicine or any local knowledge of herbs was seldom used for childbirth pain relief. This is in marked contrast to other pre-industrial societies, where herbs and manipulation techniques were (and are) commonly used. Anecdotally, women tolerated pain in labour as it represented a sacrifice for their babies. Callister et al (2003) noted that this approach has been seen in many cultures and it is perceived as a test of womanhood and the first act of motherhood. The only pain- relieving approach reported by traditional Hong Kong midwives during informal discussions was abdominal massage. According to the gate theory described above and to psychological theories of the effect of relieving anxiety and of distraction, this is likely to have had some effect.

It is possible that this lack of access to external pain relief was associated with the place of women in society. As illustrated above, up until a generation or so ago, Chinese society was strongly male- dominated (Leung, 1990; Cheung, 1997). In a traditional agricultural Chinese society, the social status of women in the family was much lower than that of men. As such, women were socialized to work for the benefit of the paternal family, and, later the husband's family, and to tolerate adverse situations for the advantage of these families. As a result, there was a high tendency for women to (have to) accept sacrifice for the family and the children. From the anecdotal accounts of retired midwives, this included an acceptance of labour pain as a part of the main duty of women. It was taken for granted

that the happiness of the mother after the birth of the baby overrode the memory of pain in labour. Due to the low status of females and the functional need for a male in the family in an agricultural society, the value of having a son was higher than a daughter. Hence, the joy and happiness of women in having sons was more significant and enduring than having girls. Anecdotally, then, the focus was not on pain in labour, but on the gender of the baby, as the status of the women in the family could be directly affected. Hence, 'sacrifice' in giving birth to offspring could be theorized as a component of the meaning of childbirth pain for Chinese women.

2.8.2 The current situation

In parallel with the introduction of western systems and philosophies of biomedicine and changes in the political and socioeconomic situation in Hong Kong, women began to gain opportunities for education and employment (Cheung 1997). Educational opportunities for girls were further enhanced by law. Since 1971, primary level education has been compulsory for all. In 1978, nine years of free education were provided for children between the ages of six and fourteen years (Leung, 1990). Gradually, this changed the women's status in the family.

At the same time, childbirth moved into the hospital setting. Since the 1950s, most births in Hong Kong have taken place in hospitals and maternity homes. Since the closing of maternity homes in the 1980s, all births take place in hospitals. This complex mix of cultural change, hospital delivery with the spouse accompanying his partner during labour, changing gender roles, and the move from an agricultural to a technological society,

particularly in Hong Kong, has influenced women's expectations and attitudes towards labour pain over one or two generations. With the increasing use of technology, the meaning of pain as a positive marker of sacrifice has gradually diminished. Pharmacological pain relief is now used by most women during labour. Hong Kong therefore provides a cultural setting where a relatively recent paradigm shift has occurred in terms of the experience of, response to, and interpretation of labour pain.

2.9 Pain relief methods used in Hong Kong

As noted above, in the past, there was no obvious use of any pain relief methods to relieve childbirth pain. Family support during labour was weak as the husband could not accompany his wife during labour due to taboos on attending childbirth in old Chinese culture. The woman relied only on the birth attendant during the labour process. However, with the provision of opportunities for education and the increase in opportunities for employment, as well as the changes from an agricultural to a technological society, the status of Hong Kong Chinese women increased. Women now tend to learn about childbirth pain from their relatives and friends. Childbirth pain has gradually become more of a focus. Pregnant women know more about the pain relief methods available in biomedicine. There has been a shift in the use of pain relief methods from tolerating pain to use of non-pharmacological and then pharmacological pain relief methods. Pharmacological methods include Entonox, pethidine and epidural anaesthesia. According to data from the study hospital, in 2008, 3636 women experienced labour with an outcome of either a vaginal birth or an

emergency caesarean section. There were 1663 pethidine injections and 369 women used epidural analgesia. These findings are typical for all maternity hospitals in Hong Kong. Non-pharmacological methods are also used. These include breathing exercises, relaxation exercises, transcutaneous electrical nerve stimulation (TENS), music, a birth ball, and in the past few years, the introduction of LK-Childbirth massage.

In Hong Kong, out-patient service for antenatal and postnatal care is free of charge. Eight public hospitals, including the study hospital, provide maternity care. Thus, all pregnant women in Hong Kong have access to care from trained personnel throughout pregnancy, and during and after delivery. There are similarities and differences in the care provided between the study hospital and the other 7 public hospitals.

The study hospital (Hospital A) and another public hospital (Hospital B) are teaching hospitals which provide training for medical students at two universities in Hong Kong. Hence, these two hospitals have medical students and medical teaching staff from these two universities. The medical staff participate in the provision of medical services in these two hospitals.

All public hospitals allow husbands to stay with their wives during the labour process. The practices of routine pubic shaving and enemas were abolished years ago, however, it is still common for women in labor to have continuous fetal heart monitoring. Women are provided with both pharmacological and non-pharmacological pain relief methods for labour pain relief. The pharmacological methods, such as Entonox, pethidine and

epidural analgesia, are the same across the eight public hospitals. However, there is some variation in the provision of non-pharmacological methods. The breathing method is commonly taught in all 8 hospitals. One hospital promotes the use of aroma therapy for pain relief, while the study hospital (Hospital A) and another hospital (Hospital C) had started to provide birthballs and childbirth massage as non-pharmacological methods at the time the study was conducted. In addition, the study hospital also provides TENS to women for childbirth pain relief. In addition to the development of non-pharmacological pain relief methods, the study hospital has made special efforts to enhance normal births. This includes allowing women to eat and drink during labour unless there are identified risks; enabling women to move freely and use different positions during labour and birth in the absence of complications; avoiding excessive vaginal examinations by only performing the procedure every 4 hours if labour is progressing normally; reducing unnecessary episiotomies and delaying cord clamping. All these enhancements were used during the study. The study hospital has had the lowest episiotomy rate among the 8 public hospitals (Table 1) for several years. In 2011, after data collection for the study started, the overall episiotomy rate at the study hospital was 8.7% for multiparas and 53.8% for primiparas, whereas rates at the other hospitals ranged from 18.2% to 55.9% for multiparas and 62.3% to 98.4% for primiparas.

Table 1: Episiotomy rates for primiparas and multiparas in public hospitals in Hong Kong

Year	Episiotomy rate for primiparas		Episiotomy rate for multiparas	
	Study hospital (%)	Other public hospitals (%)	Study hospital (%)	Other public hospitals (%)
2011	53.8	62.3 - 98.4	8.7	18.2 - 55.9
2012	44	58 - 97	6	16 - 49
2016	30.6	61.9 - 91.4	4.8	16.8 - 34.2

In general, midwives in Hong Kong advocate breastfeeding. In line with this, in the hospital where the study was conducted, midwives advocate skin-to-skin contact between mother and baby immediately after birth, even following caesarean section. This has not been done as actively in the other seven public hospitals.

2.10 Conclusion

This chapter has demonstrated that the sensation of pain is highly complex and cannot be explained by physiology alone. Psychological, social and cultural factors also play a significant role in pain perception. The gate control theory is well validated and includes psychological factors in the appreciation of the sensation of pain. Endogenous opioids are significant as they induce an analgesic effect. Psychological factors can modulate opening or closing of the gate and the intensity of pain is largely determined by what it means to the person. The meaning of childbirth pain for a

particular woman therefore affects her perception of it and her response to it. Whether she wants to use pain relief methods is significant. The overview in this chapter provides a platform for understanding Hong Kong Chinese women's responses to childbirth pain in the past and present. The lower social status of Hong Kong Chinese women in the past affected their need for support and pain relief during childbirth. With changes in the social status of women in the family, there has been a shift in the use of pain relief methods as a result of possible changes in the meaning of childbirth pain. However, effective pain relief does not necessarily predict a positive response to childbirth. Understanding in more detail how the meaning of childbirth shifts between the antenatal and postnatal periods could provide a basis for a more nuanced approach to the provision of support for women in terms of their experience of pain in childbirth in the future. This thesis is focused on this issue. The next chapter will set out the aims, objectives, methodology and methods of the study.

SECTION TWO: METHODS AND METASYNTHESIS

CHAPTER THREE

AIMS, OBJECTIVES, THEORETICAL PERSPECTIVE, METHODOLOGY AND METHODS

3.1 Introduction

The previous chapter has set out the background to the nature of pain in general and childbirth pain in particular and located the thesis in the context of childbirth pain in Hong Kong Chinese women. In this chapter, the process of arriving at the final research focus for this study is presented. The epistemology, theoretical perspective, methodology and methods for the study are discussed. The data collection procedure/protocol is then described, including the method for participant selection, and how ethical considerations were considered.

3.2 Development of the research focus for the study

In the early planning stages for this study, my original intention was to explore the cultural meaning of labour pain for Hong Kong Chinese pregnant women and their expectations and experiences related to the use of different methods of dealing with labour pain. This initial idea was refined over the first few months of the study through conceptualization, based on thinking, reading, rethinking, and reviewing the available supportive data (Brink, 2006). During this process, I came to understand that my original assumptions about the effect of traditional Chinese culture on Hong Kong Chinese women in the 21st century were inaccurate and this influenced the

way the focus of the research project was then reframed. The context of the rapid changes over the last generation in Chinese society in general and Hong Kong Chinese society in particular form an important backdrop to this process of thinking and rethinking the study focus. Some of these issues have already been explored in chapter two; they are briefly summarized here.

3.2.1 My initial idea

In the early planning stages of the study, I believed that gender power relations in Chinese culture would still have a noticeable effect on women's behavior during labour and birth. As noted in chapter two, until the middle of the twentieth century, Chinese society was strongly male-dominated (Leung, 1990; Cheung, 1997). The significance of producing a son has been deeply embedded for centuries. Such concepts were carried forward not only through teaching but also via socialization, which has passed such cultural norms from one generation to another. With anecdotal reference to childbirth in these social and cultural conditions, Hong Kong Chinese women talk about childbirth pain as a sacrifice for their baby. From the anecdotal accounts of retired midwives who were interviewed to frame this study, this sacrifice included an acceptance of labour pain as a part of the main duty of women. It was taken for granted that the happiness of the mother after the birth of the baby overrode the memory of pain in labour. Based on this background and as a qualified midwife, I was interested in the cultural meaning of labour pain for Hong Kong Chinese women and, consequently, their expectations about and experiences of specific pain relief methods for childbirth pain in the 21st century. However, when reviewing

the situation in Hong Kong during early data collection at the very beginning of my study, which was framed around an assumed preference for a son and the associated meaning of childbirth pain and of pain relief, I noted that there were marked changes in the situation in Hong Kong, and that these assumptions were no longer relevant or meaningful in this context.

According to the Census and Statistics Department of the Hong Kong Special Administrative Region (HKSAR), 2013, the percentage of women obtaining education at a degree level increased from 2.5% in 1986 to 18.3% in 2012. Given the rapid shift in the educational background of women in society and the results of economic growth in Hong Kong, there has been a demand for an increased workforce and therefore, an 83.5% increase in women entering the labour force in one generation between 1986 and 2012 (Census and Statistics Department, HKSAR, 2013). At the same time, land inheritance laws changed in the New Territories of Hong Kong in 1994 to allow for equality between men and women (Stern & Merry, 2005). The HKSAR has continued to enact laws to protect women from discrimination since 30 June 1997 after the return of Hong Kong to China.

I realized that such changes also seem to have brought about changes in how women think about childbirth. Since the majority of women who have a job are of reproductive age, the birth rate has gradually dropped over the past decade. The age of women having their first baby gradually increased from 25.1 in 1981 to 30.5 in 2012 (Census and Statistics Department, HKSAR, 2013). The number of births dropped from 86751 in 1981 to 54134 in

2000. The imperative to have children, or specifically a son, has therefore, gradually decreased as woman have gained economic independence and status in the family and in society. This might have an influence on how childbirth in general and childbirth pain in particular are perceived by Hong Kong Chinese women. The data on the use of pharmacological pain relief in the study hospital (given on page 41 in chapter two) also suggested a shift in women's views, from childbirth pain as a sacrifice to childbirth pain as unnecessary distress. I therefore considered changing my research topic to be more focused on individual expectations and experience of childbirth generally, as well as of labour pain specifically, over the whole childbirth episode (from pregnancy and through the postnatal period). This new focus did not carry such strong a priori preconceptions about how the local cultural context might influence these expectations and experiences and it went beyond a narrow focus on how specific kinds of pain relief might be viewed in this context.

According to Guba and Lincoln (1994), human behavior cannot be understood without reference to the meanings and purposes attached by human actors to their activities. In this connection, the individual meanings, expectations, and experiences of women relating to childbirth and childbirth pain relief were arguably a more relevant subject for the study than the general cultural context of childbirth, especially as this research topic had not been previously addressed with Hong Kong Chinese women.

3.2.2 The revised research focus

Based on the review of the relevance of my initial topic, the research focus

for the study was adjusted to a broader topic with the aims of the study being readjusted as a consequence:

"To undertake an exploration of the meanings underpin Hong Kong Chinese women's views and the embodied experience of childbirth and of pain in labour, from the third trimester of pregnancy to one year after birth."

The study was designed with the following objectives:

1) To explore the meaning of and the views about childbirth of Hong Kong Chinese women at different time points in the childbirth episode (pregnancy and in the early and late postnatal period).
2) To learn about the expectations and experiences of Hong Kong Chinese women in relation to labour pain and labour pain relief (pharmacological and non-pharmacological methods).
3) To identify the nature of support that Hong Kong Chinese woman say that they need during labour and birth, based on respondents accounts of childbirth and of labour pain.

The ultimate intention was to build on the results arising from this study to design and test a working model for supporting women through labour pain that was based on an in-depth study grounded in local beliefs, meanings and values.

3.3 The theoretical perspective for the study

Brink (2006) notes that "A paradigm is an overarching philosophical framework of the way in which scientific knowledge is produced". Guba and Lincoln (1994) described paradigms as basic belief systems that deal with ultimate or first principles and that represent a worldview of the individual's place in it and the range of possible relationships to that world and its parts. According to Parahoo (2006), the paradigm which framed the researcher' s approach to the world influences the nature of phenomena he or she was engaged with as well as the way they could be studied and the designs and methods which were the most appropriate to answer the research questions. Moody (1990) thought that "a paradigm serves as a 'set of lenses' with which to view reality and it assists in describing, explaining, or understanding phenomena of interest to the disciplines".

Following on from all these definitions, the notion of a paradigm can be characterized by three basic principles, the ontological, the epistemological, and the methodological (Guba, 1990).

- The ontological question asks, "What is the nature of the "knowable"? Or, what is the nature of "reality"'?
- The epistemological question asks, 'what is the nature of the relationship between the knower (the inquirer) and the known (or knowable)?'
- The methodological question asks, 'How should the inquirer go about finding out knowledge?'

The next section addresses these issues in the context of the current study.

3.3.1 Ontology

The first question that the researcher has to answer in formulating the question of inquiry is “What is there that can be known?”, “What is the nature of reality?” is another way to express the ontological question (Guba & Lincoln, 1989). Ontology is concerned with “issues of existence or being as such” (Guba & Lincoln, 1989), hence, something is there that can be known. Benner (1994) indicated that ontology is related to what constitutes our knowing. Learning the skills of interpretative phenomenology can be enhanced once the ontological concerns are recovered and “the research questions can shift from what it is to know (epistemology) to why and how we ‘know’ some things and not others and what constitutes our knowing (ontology)” (Benner, 1994). Thus, ontology refers to a patterned set of assumptions about reality (Dykes, 2004). Crotty (1998) considered that “the ontological notion asserting that realities exist outside the mind, is often taken to imply objectivism, an epistemological notion asserting that meaning exists in objects independently of any consciousness”. With this relationship, the epistemological approach of my study was based on this ontology stance.

In relation to my research question, the ontological concern was on childbirth pain. This pain occurs when the woman is in labour. Hence, pain is physiological in nature and it can be seen as functional to the person as it is a kind of protective mechanism in the body (Muir, 1980; Park, Fulton, & Senthuran, 2000). Childbirth pain gives a signal to alert the women to find a safe shelter for delivery. However, the feeling of pain is not solely a physiological issue as it can be affected by psychological, social, emotional

and cultural factors, as well as the person's past experiences (Beecher, 1959; Parsons & Preece, 2010). Hence, pain is a unique personal experience (Parsons & Preece, 2010) which depends on cultural leaning, the meaning of the situation and other factors that are unique to the individual (Melzack & Wall, 1982). (For the details on pain, please refer to chapter two, page 27-42). As such, pain is a real phenomenon and not just a constructed one, and it is mediated by psychological, social, emotional and cultural factors. The ontological stance of my research question is based on the fact that childbirth pain exists and it is real. The epistemological approach of the study was based on this ontological stance and it will be discussed in the next section.

3.3.2 Epistemology

Maynard and Purvis state that "epistemology is concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate" (Maynard & Purvis, 1994). Epistemological perspectives tend to fall into three broad areas, objectivism, subjectivism, and interpretivism.

- ***Objectivism – Positivism and Post-positivism***

According to Crotty (1998), objectivism is "the epistemological view that things exist as meaningful entities independently of consciousness and experience, that they have truth and meaning residing in them as objects, and careful research can attain that objective truth and meaning". This perspective imposes the view that the object under scrutiny exists and carries its own intrinsic meaning. When humans and other entities

recognized it, they were simply discovering a meaning that had been lying there in wait for them all along (Crotty, 1998). Since objectivism constitutes the received world view of the emerging natural sciences, it underpins the theoretical perspective of positivism (Guba & Lincoln, 1994). The epistemological stance of objectivism is thus closely allied with positivism (Crotty, 1998). According to Crotty (1998), positivism offers assurance of unambiguous and accurate knowledge of the world. It is related to knowledge which is "grounded firmly and exclusively in something that is posited". Positivism is closely linked to modernist ideas of empirical science and the scientific knowledge in positivism "contrasts sharply with opinions, beliefs, feelings and assumptions that are gained in non-scientific ways". The "alleged objectivity of scientific knowledge" thus forms the distinct point of difference for positivism. The viewpoint of positivism towards meaning is another distinct point. In positivism, meaning is discovered and can be grasped objectively. In other words, meaning is already inherent in the objects under scrutiny prior to and independently of any consciousness of them.

Post-positivism is associated with Karl Popper (Crotty, 1998). He established the principle of falsification, based on the idea of science as hypothetico-deductive, substituting falsification for verification at the heart of scientific method. The argument for this approach was that it is impossible, logically, to prove something to be true in absolute terms. However, proving a theory to be false is always a possibility (Crotty, 1998). To sum up, the scientific knowledge in positivism emphasises empiricism which requires quantification and collection and collation of quantitative

data, and testing hypotheses by deduction (Lavender, Edwards & Alfirevic, 2004).

Given that positivist approaches don't deal with opinions, beliefs, feelings and assumptions, it was clear that the quantitative approach with positivist or post-positivism as the epistemological stance was not suitable for a study that aimed to explore the meaning of childbirth and the views and experience of childbirth pain relief among Hong Kong Chinese women. I therefore moved to considering the next broad epistemological perspective, that of constructionism or interpretivism.

■ ***Subjectivism***

Subjectivism is the second epistemological stance. In it, "meaning does not come out of an interplay between subject and object but is imposed on the object by the subject….the object makes no contribution to the generation of meaning" (Crotty, 1998). In subjectivism, meaning is made out of something external to the object of scrutiny or understanding; meaning is being imported from somewhere else; it is not a function of interaction between the subject and the object to which it is ascribed (Crotty, 1998). Since I believe that meaning comes from interaction with ontologically 'real' phenomena (in the case of this study, labour pain), and that it is a function of interpretation through thinking about the actual experience, subjectivism is not an appropriate perspective from which to understand the research question. It is therefore not discussed further in this chapter.

3.3.3 Interpretivism (constructionism and constructivism)

According to Crotty (1998), constructionism is "the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context". "Hence, meaning is not discovered or created but constructed by human beings as they interact with the world they are interpreting. As such, different people may construct meaning in different ways, even in relation to the same phenomenon" (Crotty, 1998). The world and objects in the world are thus partners with those who make meaning of it, in generation of that meaning. One of the phrases associated with this approach is therefore "There is no meaning without a mind" (Crotty, 1998). Constructionism claims that "meaning does not inhere in the object waiting for someone to come upon it", but involves consciousness, as constructionism mirrors the concept of intentionality (Crotty, 1998). "Consciousness is directed towards the object and the object is shaped by consciousness" (Crotty, 1998). It is significant to note that "not only is consciousness intentional, but human beings, being-in-the-world in their totality, are intentionally related to their world" (Crotty, 1998). In addition, humans are social beings, and therefore, as claimed by social constructionism, meaningful reality is socially constructed (Crotty, 1998). Hence, culture, as a set of control mechanism governing people's behaviour, acts as a source affecting human thought and behaviour (Crotty, 1998). It therefore may also affect interaction and hence interpretation and construction of meaning.

There is a difference between constructivism and constructionism. "Constructivism for epistemological considerations focuses exclusively on 'the meaning-making activity of the individual mind', whereas the focus of constructionism includes 'the collective generation (and transmission) of meaning" (Crotty, 1998). In relation to my study, constructivism seems to be a suitable epistemological stance, as the aim of my study is to learn about the meaning and experience of childbirth and childbirth pain in individual Hong Kong Chinese women undergoing a very personal and individual experience (childbirth). Their meanings and experiences are individualized as they have their own interpretations in making meanings related to childbirth and childbirth pain.

The fundamental philosophical perspective of constructivism is interpretivism. This approach "looks for culturally derived and historically situated interpretations of the social life-world" (Crotty, 1998). The focus of interpretivism is on social constructions and human interpretations. There are three historical philosophical streams under this general umbrella, namely symbolic interactionism, phenomenology, and hermeneutics (Crotty, 1998). In research terms, these equate to specific methodological approaches as described below.

- ***Symbolic Interactionism***

Symbolic interactionism is an interpretivist methodology (Lavender et al., 2004) that "explores the understandings abroad in culture as the meaningful matrix that guides our lives" (Crotty, 1998). It argues that human beings behave towards 'things' that they encounter on the basis of meanings that

these things have for them. “The meaning of these things is derived from and arises out of social interactions” (Blumer, 1969). The emphasis that symbolic interactionism places is on individuals as active, negotiating and interpreting agents in the world (Lavender et al., 2004). Hence, through interaction such as communication via language and other symbols, people construct meanings which are “handled” and “modified through an interpretive process” (Blumer, 1969). People become aware of the perceptions, feelings and attitudes of others and interpret their meanings and intent only through dialogue (Crotty, 1998). Symbolic interactionism is influenced by cultural anthropology and specifically ethnography (Crotty, 1998). Ethnography is an approach relying on data collection in the natural environment (Parahoo, 2006). Ethnographers are interested in knowing how the culture in which individuals live influences their behaviours. It is significant to note that ethnographers emphasise that human behavior can only be understood if studied in the setting in which it occurs, as the setting holds the essential shared meanings, perceptions, language, values and norms of a specific cultural milieu (Parahoo, 2006). In ethnography, the researcher is the main instrument of data collection and data are collected from as many sources as possible within ethical and legal boundaries. The main method is participant observation where it is possible and feasible to understand the social realities of groups of people (Parahoo, 2006). Such a method is obviously inductive and flexible for data collection. However, this method is not suitable for my study as the emphasis of my study is not on the construction of cultural perspectives, but on identifying themes and phenomena from individual participants. Hence, this method is not the choice for my study.

■ ***Phenomenology – Husserlian Phenomenology***

Phenomenology originated in the philosophical writings of Husserl, a German philosopher. Husserl set out at the beginning of the 20th century to 'investigate consciousness as experienced by the subject" (Parahoo, 2006). "Phenomenology aims at gaining a deeper understanding of the nature or meaning of our everyday experiences" and "it attempts to gain insightful descriptions of the way people experience the world prereflectively, without taxonomising, classifying or abstracting it" (Van Manen, 1990). It is a systematic attempt to uncover and describe the structures, the internal meaning structures, of lived experience which cannot be done via empirical observations (Van Manen, 1990). In other words, phenomenology focuses on describing how people experience phenomena, i.e. the way individuals interpret their "lived experiences" and the way in which they express them (Parahoo, 2006). Through phenomenological human science, it attempts to explicate the meanings as we live them in our everyday existence, our lifeworld (Van Manen, 1990). It is explicit as it attempts to articulate through the content and form of text the structures of meaning embedded in lived experience (Van Manen, 1990). Thus, the main task of the researcher is to describe phenomena as experienced and expressed by the participant. It should be noted that "Husserlian phenomenology endeavors to bracket off or lay aside the influences of culture and enculturation to expose the human lived experience of a phenomenon in its purest form" (Lavender et al., 2004). With 'bracketing' it suspends "the researcher's own preconceptions, beliefs or prejudices so that they do not influence the description of the respondent's experience" (Parahoo, 2006). However, it is not easy to achieve as it is not possible for people "to suspend totally their

presuppositions nor to account for all of them, especially if they are not aware that they are using them" (Parahoo, 2006). This is the main feature of Husserlian phenomenology. In general, the main focus of the Husserlian phenomenological approach is on description (Steen & Roberts, 2011). In relation to the method in phenomenology comprises a set of procedures and steps to guide the data collection and analysis processes (Parahoo, 2006).

Husserlian phenomenology was not the choice for my study since it would have been difficult for me to undertake bracketing effectively. I am a midwife with extensive experience and prior assumptions about the nature of childbirth and of women's experiences with it. I was aware of some of these presuppositions, but I also knew that I may have had other assumptions and views that I was not consciously aware of. I therefore felt that any attempt at bracketing would have been futile. To find out how to deal with this, I next moved to consider hermeneutic phenomenological approaches.

- ***Hermeneutics – Heremeneutic phenomenology***

Heidegger, a student of Husserl, stressed the importance of knowing how respondents come to experience phenomena in the way they do (Parahoo, 2006), i.e. understanding it "from the inside" (Van Manen, 1990). He developed his own phenomenological approach, known as 'hermeneutics', the science of biblical interpretation. It provides guidelines for interpreting Scripture (Crotty, 1998). In hermeneutics, "sharing of meaning between communities or individuals is to situate hermeneutics within history and within culture" (Crotty, 1998). Hermeneutic phenomenology is concerned

with interpretation of the structures of experience and with how things are understood by people who live through these experiences and by those who study them (Wojnar & Swanson, 2007). Hermeneutics from a Heideggerian perspective is focused on the experience of understanding, recognizing that this depends on how researchers interpret collected data in terms of their own personal experience and understanding. This approach, therefore, rejects the use of 'bracketing'. Those who work with this approach claim that bracketing is difficult to achieve as it is not possible for people to completely suspend their presuppositions, especially if they are not aware that they are using them (Parahoo, 2006). Hence, the rejection of bracketing is the most significant difference between Husserlian and Heideggerian phenomenology.

Language and texts are significant in Hermeneutics: "The way we speak is considered to shape what things we see and how we see them, and it is these things shaped for us by language that constitute reality for us" (Crotty, 1998). Language is thus one of the important means for transmitting of meaning. It should be noted that the language shared between the speaker and the listener is vital when language is discussed in Heideggerian phenomenology. The speakers use words to express their thoughts and listeners are able to understand as long as they share the language that a speaker employs (Crotty, 1998). This is not limited to oral exchanges. Texts are seen as another means of "transmitting meaning – experience, beliefs, values – from one person or community to another…reading the text is like listening to someone speak" (Crotty, 1998).

To sum up, hermeneutics emphasizes the importance of interpretation of meaning by the researcher through the process that includes their personal experience and understanding in the social environment and culture but without bracketing. Language and texts are important in hermeneutics as these tools enhance the transmission of meaning among people.

With reference to my study, the aim of the study was to explore the meaning of childbirth and childbirth pain for Hong Kong Chinese women. The epistemological stance was thus a constructionist epistemology, as *"meaning is constructed not discovered*" (Gray, 2014), and the theoretical perspective was interpretivism. The specific interpretivist approach that was planned for the study was hermeneutics. The main differences between hermeneutics and other interpretivist approaches lies in different conceptions of meaning. Hermeneutics considers that "*understanding is produced in that dialogue, and not reproduced by the interpreter"* and that "*meaning is negotiated mutually in the act of interpretation, it is not simply discovered"* nor "*reproduced by the interpreter*" (Schwandt, 2000). This introduces the idea that traditions, which *"shape what we are and how we understand the world",* enhance the understanding of the text, since such shared traditions between the interviewee and the interviewer make sense of the interpretation of the social action or text. Thus, in some sense tradition governs interpretation (Schwandt, 2000). In addition, the use of the hermeneutic circle in the process of interpretation enhances the understanding of the text, bearing upon human affairs or cultures that guide human lives, as there is movement between the individual reader and a text, i.e. the reader needs to move dialectically between the part and whole, in the

mode of the hermeneutic circle (Crotty, 1998). The part-to-whole interplay is formed by the interaction between the interpreter and the interpretive tradition. To understand the individual parts, the whole text needs to be referenced, and vice versa. (Gadamer, 1989). As Wojnar and Swanson (2007) have said: "When the primary goal is to appreciate the holistic context of participants' experience and finding meanings in what participants said and received, hermeneutic phenomenology is an ideal methodology". I therefore considered that the use of a hermeneutic approach was appropriate for interpreting the meaning of the women in my study, particularly as it was longitudinal, and, therefore, the whole (the complete episode from pregnancy to a year postnatal) could be interpreted in the light of the parts (the data in each specific interview) and vice versa.

In the original design for the study, the philosophical and theoretical stance suggested hermeneutic interpretive phenomenology as a method, and Van Manen's approach for analysis. However, this method of analysis requires thick and in-depth data obtained from the interview, to enable the possibility of phenomenological interpretation. In the event, it was noted that data obtained from the first interviews were relatively limited (the details of the duration of the interviews are presented on p151-153 and Table 11-12) and factual. Despite probing, reflexive accounting, and alteration of the interview approach, it was difficult to encourage the interviewees to offer information related to feelings and meanings. Finally, this led to a decision to handle the data thematically, rather than phenomenologically. As the interviews accumulated in numbers of participants, and with continued

engagement with each participant over time, important insights emerged, in terms of patterned responses and thematic interpretation, so this approach was appropriate for the kind of data emerging from the interviews. (Braun & Clarke, 2006; Willis et al, 2016).

To sum up, the theoretical perspective chosen for my study is interpretative phenomenology and specifically, Interpretive Hermeneutics (Heideggerian phenomenology). The next section of this chapter sets out the methodology and methods for the study, based on this perspective, and mediated by the early stages of data collection.

3.4 The study methodology

Methodology is the way of finding out knowledge (Guba & Lincoln, 1989). It consists of the strategy, plan and action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes (Crotty, 1998; Maynard and Purvis, 1994). As indicated in the previous sections, the hermeneutic (interpretive) phenomenology approach would be used in this study as it was most useful as a framework for examining contextual features of a lived experience as generated from a blend of meanings and understandings articulated by the researcher and participants (Wojnar & Swanson, 2007). The theoretical assumptions provide the bases for the choice of particular research methods.

There are two fundamental means of transmitting messages from one person to another, i.e. via texts and speech. In this interpretation, meaning is expressed through the texts that humans write, the speech uttered, the art

they create and the actions they perform (Crotty, 1998). Hermenutically, reading a text is very much like listening to someone speak; the speaker/writer uses words to express his/her thoughts, and listeners/readers, using the same language of the writer/speaker, are able to understand the message the writer/speaker delivers. The listener can put themselves in the place of the speaker and recognize what the speaker intends to convey. (Crotty, 1998). From this philosophical stance, it is logical to collect data on meanings through face-to-face interview as, through speech, there is a mutual exchange of the message from the speaker to the listener. In addition, the actions and the behavior of the participants in terms of body language also provide cues to the interviewer who can then seek to interpret the underlying meaning of the speaker, in the same way as the body language, phrasing, and approach of the interviewer subtly conveys messages to the interviewee. Interviews thus offer a means of understanding what the participants want to communicate and the interview text offers a basis for analysis with reference to their own words (Parahoo, 2006). In view of the significance of lived experience in this context as expressed in language and text, interviews were the appropriate method for this study. Interviewing approaches generate data from participants directly through the use of language and the subsequent act of transcribing the interviews into text creates a hermeneutic basis for interpretation.

Data analysis in this context is the activity of making sense of, interpreting or theorizing about data (Schwandt, 1997). It involves both cognitive processes and the application of varying structured techniques (Watson, Mckenna, Cowman & Keady, 2008) with the aim to obtain the meaning

behind the text. As indicated on page 71, this philosophical and theoretical stance of the original design for the study suggested hermeneutic interpretive phenomenology as a method, and Van Manen's approach for analysis. Such method of analysis requires thick and in-depth data obtained from the interview so as to enable the possibility of phenomenological interpretation. However, the data obtained from the first interviews were factual and relatively limited (the details of the duration of the interviews are presented on page 151-153 and Table 11 & 12). Despite the employment of probing, reflexive accounting, and alteration of the interview approach, it was difficult to encourage the interviewees to offer information related to feelings and meanings. This served for the change in decision in handling the data. As the interviews accumulated in numbers of participants, and with continued engagement with each participant over time, important insights emerged, in terms of patterned responses and thematic interpretation, so this approach was appropriate for the kind of data emerging from the interviews. (Braun & Clarke, 2006; Willis et al, 2016). Under these conditions, in-depth phenomenological analysis as proposed by Van Manen was not possible. I therefore used simple thematic analysis to analyse the data in this study. The process of this analytic strategy is further discussed in the section on data analysis on pages 155-157 below.

The possible reasons for the short interview and the implications for the findings and synthesis of the data are explored in more depth in the discussion chapter (page 325) of this thesis.

3.5 The study methods

According to Parahoo (2006), the qualitative approach is "inductive, interaction, holistic and it is mainly carried out by flexible and reflexive methods of data collection and analysis", and "findings are presented in a variety of formats, such as descriptions, themes, conceptual models or theories". The purpose is to understand human experience from the viewpoint of the research participants via their own words and in the context in which they live and work. In addition, this approach allows different interpretations of the same phenomenon (Parahoo, 2006; Brink, 2006). It is generally agreed that a more inductive approach is used in qualitative research, in which "the research is open to ideas which can emerge out of listening or observing people but also from examining and re-examining her own perspectives on the subject during and after data collection" (Parahoo, 2006).

3.5.1 Initial systematic review of relevant current qualitative research

As part of the process of the study, metasynthesis was conducted with the aim to learn more about women's views on and experiences of childbirth, labour pain and labour pain relief. The aim of a metasynthesis is to interpret the combined data obtained from a number of similar studies in order to gain new insights and explanations of phenomena or a theory (Cluett & Bluff, 2006; Jensen & Allen, 1996). Such information facilitates understanding and highlights the relevance and benefits of applying qualitative findings to practice (Cluett & Bluff, 2006). To sum up, metasynthesis facilitates knowledge development by bringing together qualitative findings on phenomena (Jensen & Allen, 1996).

The search strategy for the metasynthesis was carefully designed to locate relevant information and to ensure the results were manageable. The first step was to set the aim, and search questions and list the key-words for the search. The second step was to set the time period covered by the search. This was then followed by selecting the databases for the search. Since the topic for the metasynthesis consists of elements related to psychological and social factors as well as humanities, related databases were also selected for the search. The inclusion and exclusion criteria for screening and selection of relevant papers were set. The abstracts of the papers were significant for screening. The details of the methods for this phase are provided in chapter 4.

3.5.2 Longitudinal interview study

Through interviews, informants give words to their experience (Thomson, Dykes & Downe, 2011). This is an important point as the researcher needs the phenomena to be expressed by the people involved and not by others (Thomson, Dykes & Downe, 2011). As such, the meaning of the experiences of the study participants that lie between the lines of what is said can be uncovered by the researcher (Thomson, Dykes & Downe, 2011). In the process of interaction and interpretation, the researcher and the informants cogenerate an understanding of the phenomenon being studied (Wojnar & Swanson, 2007).

People's attitudes, beliefs and behaviours may change over a period of time, and their perception of any specific phenomenon will also evolve over time (Parahoo, 2006). Through longitudinal study, the evolution of some

phenomena can be observed (Polit & Beck, 2012). It may thus be appropriate to consider data collection at intervals in order to capture any change that may take place. Given the known differences between expectations of and experiences of childbirth, which were reinforced by the findings from the metasynthesis review, I decided that this study should be undertaken longitudinally, with the intent of identifying if there were any changes in the meaning and experience perceived by respondents in relation to childbirth and childbirth pain relief. With reference to findings about women's expectations, views and experiences of childbirth in general from a variety of cultural settings around the world, it was decided with the supervisory team that data would be collected from participants at 4 different time points: around 36 weeks of pregnancy; on postnatal day 3 (before discharge from hospital); 6-7 weeks after birth (before the women returned to work); and at 10-12 months after birth.

3.5.3 Recruitment of respondents

The aim of most qualitative research is not to generalize the findings themselves but to create transferable insights or theories. Large numbers of participants are not usually required to identify useful thematic insights or mid-level theories (Polit & Beck, 2012). It is generally suggested that sampling should continue until theoretical saturation is reached, i.e. no new categories occur during data collection (Macnee, 2004). A prime criterion for sampling from a phenomenological perspective is that the person has experienced the phenomenon that is under study and that they are willing and able to articulate their experience for the study (Polit & Beck, 2012). There are three types of sampling usually used in this kind of research, i.e.

convenience sampling, snowball sampling and purposive (or theoretical) sampling. According to Polit & Beck (2012), convenience sampling is something like a volunteer sample, in that the most easily recruited people are asked to take part without consideration of whether they are representative of any particular group. It is an economical, easy and efficient way to obtain sample participants. It tends to work well with participants who need to be recruited from a particular clinical setting or from a specific organization (Polit & Beck, 2012). One drawback is that the sample may not provide the most information-rich source. Snowball sampling is where the researcher asks early informants to invite their own contacts to take part. This method has distinct advantages over convenience sampling from a broad population or community group as the researcher may spend less time screening people to determine if they are appropriate for the study; hence, it is cost-efficient and practical (Polit & Beck, 2012). The disadvantage of this approach is that the eventual sample might be restricted to a rather small network of acquaintances (Polit & Beck, 2012). Purposive or theoretical sampling involves the researcher making a judgment about the participants for the study (Watson et al., 2008). The researcher recruits the participants if they suit specific characteristics that can best inform the research (Steen & Roberts, 2011).

In this study, purposive sampling method was used to recruit participants. The strength of purposive sampling lies in the fact that it is tailored for the specific purpose of the study and the sample is selected to include those who suit the purpose, and to exclude those who do not do so. Inclusion and exclusion criteria are used to define the limits of the sampling. (Etikan,

Musa, & Alkassim, 2016). The set criteria for the selection of participants in this study was Cantonese speaking Chinese women born and living in Hong Kong, as the focus of the study was on Hong Kong Chinese women. In addition, since the study was conducted in the local hospital, the sample was thus the pregnant women obtaining obstetric services in this hospital. It is known that, in general, multiparous womn have obstetrically easier labours than primigravid women (Norr et al, 1980) which might lead to differences in the childbirth experience. For this reason, both primipara and multipara women were invited to take part. Women who planned not to have a vaginal delivery were excluded to avoid recruiting those who would not be experiencing labour.

Symbolic representation requires the belief of the represented that the selected participants shared their interests (Pitkin, 1967). The selected participants in this study had common concerns when facing the childbirth process, i.e. the pain and the outcome of the delivery. Since the selected participants were of the same nation, had the same culture, and were all booked with, and giving birth in a typical Hong Kong hospital, they are likely to represent Hong Kong Chinese pregnant women who give birth in this kind of setting. However, because the women were recruited antenatally, it was not possible to sample for labour and birth characteristics. Critically, in the event, all the primiparous women in the study had induction of labour, which is not true for all Hong Kong Chinese primiparous women. Given the impact of induction of labour on perceived labour pain, the symbolic representativeness for primiparous women who are not induced is likely to be low.

As indicated in my research question, pregnant Hong Kong Chinese women were my target participants. To enhance recruitment of the participants, pregnant women were recruited from the antenatal clinic situated in the local hospital where I worked. The women's antenatal records were scanned to check if they fulfilled the inclusion and exclusion criteria (Table 1) before they were approached and invited to participate in the study.

Table 1: Criteria for selection of participants

Inclusion Criteria	Exclusion criteria
■ Cantonese- speaking Chinese women born and living in Hong Kong ■ Womens at the antenatal clinic in the study hospital who intend to give birth in the same hospital ■ Around 36 weeks of gestation	■ Known psychological problems or psychiatric disorders ■ Not planning a vaginal birth ■ Pregnancy complications or problems with fetal condition

Assistance was obtained from the midwives in the clinic to enhance the recruitment of participants. This also helped to avoid possible undue pressure on the women, in contrast to me asking them directly, as I held the post of the Head Nurse of the Department in the hospital and if women were aware of this, it might have affected their willingness or intention to join the study. The midwives working in the clinic were briefed about the method of recruiting the participants. A protocol for recruitment of participants was produced (Table 2).

Table 2: Protocol for recruitment of participants

Step 1: Clinic midwives screen outpatient records to identify potential participants with reference to the inclusion and exclusion criteria. **Step 2:** When these women come for antenatal check-ups, the midwives will approach them during their preliminary assesment before they meet the obstetrician and ask if they would like to join the study. In addition, the midwives will also ask the women if they intend to deliver in our hospital as according to statistics, around 20% may choose to deliver in another (private) hospital. **Step 3:** With preliminary agreement, I will meet the women to explain the study, their participation (4 interviews) and their right to withdraw if they agree to participate. They will be given an information sheet (Appendix 7) with details about the purpose of the study and how the potential participant can contact me or my supervisor for more information. . **Step 4:** If a woman agrees to participate in the study, a consent form (Appendix 8) will be signed. Thereafter, I will make appointments for the face-to-face interviews.

It was planned that ten participants would recruited; five primiparas and five multiparas. It was determined that ten participants would probably be sufficient to generate theoretical saturation, with the option to recruit more if saturation did not occur. Theoretically, data saturation was reached when no new data was identified for coding, and no new themes could be yielded

(Fusch & Ness, 2015). In the first round of interviews, the final few that were conducted did not generate any findings that were completely new, so it was assumed that saturation was reached. For later interviews, it was more difficult to be sure, as the experiences were more diverse. This is an issue in longitudinal studies with defined timelines, when it is not pragmatically possible to go back and recruit more participants for the early stages if theoretical saturation is not so apparent in the later stages.

The study was longitudinal and took a year for each woman to complete. To avoid significant drop out of participants that may affect the duration of the study, it was agreed that extra participants would be recruited to fill the gap if any dropped out at any stage. Two participants (I007 and I008) did drop out. Both were multiparous women. One could not be contacted after the first interview and another participant was recruited (I011) to fill the gap. The first interview data obtained from participant I007 was excluded. Another participant (I008) could not be contacted when she was approached for the third interview. Since data from the first and second interviews had been obtained from her and due to the significant 16-week difference in the time gap, it was considered that theoretical saturation of the data was unlikely to be affected, so a further participant was not recruited. This resulted in a total of 9 participants, i.e. 5 primiparas and 4 multiparas, in the third and fourth interviews. The data obtained from participant I008 in the first and second interviews were included in the analysis.

3.5.4 Data collection procedures

Semi-structured interviews were planned for the study as they allow

flexibility in coverage, enabling the researcher to follow up interesting topics that emerge in the interview in addition to ensuring that all key areas are addressed (Watson et al., 2008; Lavender et al,, 2004). Structured open-ended questions were used to explore the meaning of childbirth and the views and experiences of childbirth pain and of pain relief in childbirth as indicated in the aims of the study. In order to enhance data collection, the interview schedule included prompts (Appendix 9) to ensure that all the areas of interest were covered.

Since qualitative research usually involves collection of data in real-world, naturalistic settings, and these settings influence what the women say and how they say it (Polit & Beck, 2012), I was concerned that the choice of interview setting might affect the data. For the convenience of the participants and their need for privacy, they were free to choose the place they preferred for the interview, such as their home, a room in the clinic, or the hospital interviewing room for the first, third and fourth sessions. However, in the second interview, since each participant was in the hospital on the postnatal wards, the venue for the interview was within the hospital compound. All interviews were conducted and transcribed word for word in Cantonese and then translated into English for analysis by a paid assistant. Double translations of 5 interviews were done by another person with good English/ Cantonese language skills and I counterchecked the two sets of translations to ensure there was no discrepancy. This is one of the methods that I employed to ensure the quality of the translation. The issues arising as a result of this process are discussed in more detail on page 154-155.

3.5.5 Ensuring the quality of the research – Trustworthiness

According to Guba and Lincoln (1985), trustworthiness is about ensuring 'truth value'; the applicability, consistency and neutrality of the qualitative research. All these are related to confidence in the findings obtained and how these findings are interpreted. This in turn affects the extent to which the findings of a particular inquiry have applicability in other contexts or with other population groups and how one can establish the degree to which the findings of an inquiry are determined by the subjects (respondents) and conditions of the inquiry and not by the biases, motivations, interests, or perspectives of the inquirer (Guba & Lincoln, 1985). Guba and Lincoln (1985) have proposed a taxonomy for the trustworthiness of qualitative research, i.e. credibility, transferability, dependability and confirmability, which parallel the internal validity, external validity, reliability and objectivity, respectively, of the quantitative research. These concepts are briefly explained below and then I set out the steps taken to ensure they were met in the current study.

- ***Credibility*** refers to "confidence in the truth of the data and interpretations of them". It involves two aspects: "firstly, carrying out the study in a way that enhances the believability of the findings; and secondly, taking steps to demonstrate credibility to external readers" (Guba & Lincoln, 1985). The findings will be found to be more credible if the inquirer is able to demonstrate a prolonged period of engagement (to learn the context, minimize distortions, and build trust), to provide evidence of persistent observation and to triangulate,

by using different sources, different methods, and sometime multiple investigators, the data that are collected (Guba & Lincoln, 1985).

- ***Dependability*** refers to "both factors of stability (reliability) and phenomena or design- induced change" (Guba & Lincoln, 1985). It involves asking if the findings of an inquiry could be repeated if it were replicated with the same (or similar) participants in the same (or a similar) context (Polit & Beck (2014). Credibility cannot be attained in the absence of dependability.

- ***Confirmability*** is concerned with "establishing that the data represent the information participants provided and that the interpretations of those data are not imagined by the inquirer" (Polit & Beck, 2014). To achieve this criterion, findings must reflect the participants' voices and the conditions of the inquiry, not the researcher's biases, motivations, or perspectives (Polit & Beck, 2014).

- ***Transferability*** depends on the degree of similarity between sending and receiving contexts. It needs sufficient descriptive data provided by the original investigators for empirical evidence about contextual similarity (Guba & Lincoln, 1985). Hence, it is the responsibility of the investigators to provide the data base that makes transferability judgments possible on the part of potential users in the future (Guba & Lincoln, 1985). In other words, it is the extent to which qualitative findings can be transferred to or have applicability in other settings or groups (Polit & Beck, 2014).

Peer debriefing can be employed to ensure the quality of the data to enhance the trustworthiness, so that the peer can probe the researcher's biases, explore meanings, and clarify the bases for particular interpretations or the content of the accounts being presented (Brink, 2006; Watson et al., 2008). Other than that, the researcher should consider his or her own feelings and reactions to the participants and their accounts. This may be done by means of reflection after the interview so that those reading the reflective account can judge what particular personal bias is involved in the interpretation. Since qualitative research is concerned with seeing through the eyes of the participants (Lavender et al., 2004), the researcher can invite the research participants to review, validate and verify the researcher's interpretations and conclusions (Watson et al., 2008). This is an important strategy used to maximize credibility as it can ensure that the facts have not been misconstrued (Brink, 2006) and that credibility and confirmability can be achieved. Finally, in writing up the research, it is important to use the participant's own words for the theme headings and to provide detailed quote material, to minimize the risk of imposing pre-existing theoretical concepts (Watson et al., 2008). In other words, the descriptions of the theme must be illustrated with extracts from the interviews. It can demonstrate that the results are grounded in the text, the participant's own words.

In relation to the data collection in my study, credibility was addressed through prolonged periods of engagement with the participants over the longitudinal period of the study and triangulation across and between the interviews over time both within and between participants. Methods to ensure dependability included a clear description of how the study was

conducted and how the focus and methods evolved over time (see the discussion of the change in the research focus on page 54-57, the rationale for the change from phenomenological analysis on pages 67-72 and the issues with translation on page 154-155 for example). This also included the maintenance of careful records to show how the analysis was constructed from the raw data (see Appendix 11).

The data obtained from the interview were translated and then analysed and constructed into themes and subthemes using 6 steps, i.e. transcribe, translate, categorize the quotes, refine the categorization with analysis, construct the themes, and finally refine the constructed themes into main themes and subthemes. The first step was to transcribe the recorded data into words followed by translation into English, as the interview was conducted in Cantonese. Data translation is increasingly common among social research (Birbili, 2000). For this study, translation was needed to share the study findings data with the supervisory team, so that they could understand the data and contribute to the analysis and interpretation. I acknowledge that some subtle details are often lost in translation. However, in this case, I am a fluent Chinese and English speaker, and I conducted all the interviews, checked the transcripts, and verified the translation of the data, so missing data due to translation from Chinese to English was not likely, and I could interpret some of the more subtle nuances between the Chinese and the English. In addition, a midwife was invited to translate a few copies of the interview text to compare the translated data performed by the initial translator to identify any discrepancy in the translation of the quota. All these actions were taken in order to minimize the problems

related to translation from one language to another, such as the language, power, and bias in the translation (Temple & Young, 2004).

After translation, quotes from each of the participants were extracted and categorized according to the interview questions. This categorization of quotes was then refined with further analysis. These helped to construct the initial themes. These themes were grouped together and re-analysed to enhance the emergence of the main themes and the subthemes.

Confirmability included reflexive accounting throughout (see the discussion of my initial beliefs about how the position of women might influence their choice of labour pain relief in chapter two and the reflexive chapter at the end of the thesis.) The extensive use of quote material in the findings also reinforced confirmability.

The description of the study site on pages 48-51 and the demographics of the participants on page 149-150 are provided as a way of optimizing potential transferability.

Each respondent was provided with a summary of each of their own interviews after each meeting to validate and verify the information to ensure the credibility of the data. These summaries were used to check the main points obtained from the interview to ensure there was no discrepancy or misinterpretation. (Appendix 11)

3.6 Methods of analysis

After the data were collected, they were analyzed with the aim of identifying the themes related to the study. The term 'theme' refers to an element which occurs frequently in the text (Van Manen, 1990). Most approaches to qualitative data analysis involve the integration and synthesis of narrative data with the aid of a coding procedure after which the data are reduced to themes and categories (Brink, 2006, Macnee & McCabe, 2008). Thematic analysis can be done manually or using computer software packages such as Nvivo, or QSR International (Steen & Roberts, 2011). It is a systematic process and takes time and patience to do as the data may need to be revisited many times for categorization if done manually. Meanings and understandings are reached through this interpretative journey (Steen & Roberts, 2011).

For interpretative phenomenology studies, there are two main frameworks that are commonly used for analysis of the data, namely Colaizzi's (Ghada, 2012) and Van Manen's frameworks (Van Manen, 1990). Van Manen, a phenomenologist from the Utrecht School, combines characteristics of descriptive and interpretive phenomenology (Polit & Beck, 2014). According to Van Manen (1997), "Theme analysis" is the "process of recovering the theme or themes that are embodied and dramatized in the evolving meanings and imagery of the work". The meaning of the theme in phenomenological description and interpretation is significant. Hence, this process enhances invention, discovery or disclosure through grasping and formulating a thematic understanding, as a free act of "seeing" meaning.

On the assumption that my methodological approach would generate rich, in-depth interview data and based on my theoretical and methodological perspective, I decided to use Van Manen's approach for data analysis to identify the themes, the meaning behind them, and hence the phenomena for my study. However, as noted above, after the initial round of interviews which were based on the initial focus chosen for the study, I realized that, despite careful probing, the participants provided very short interviews. This limited the use of Van Manen's approach. As a result, I decided to use a simple thematic analytic approach. I continued with this for all the analyses, even though later interviews, with an adapted interview schedule to fit with the broader focus of the study, generate longer and more in-depth accounts from the women.

According Braun and Clarke (2006), "a theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set." Braun and Clarke (2006) provide a guide for thematic analysis which contains 6 phases. I followed these 6 phases for the thematic analysis. They include: getting familiar with the data; generating initial codes; searching for themes; reviewing themes; defining and naming themes; and producing the report. The details of the analytic process and of the findings are presented in chapters five, six, seven, eight and nine.

I decided not to use a software package for my analysis because the software was new to me and it would take time to get use to the system. I used Microsoft word to process the data with the use of tables and different

colors to signify quotes from different participants. With this processing, I could read and reread the data and this enabled me to categorize the data and construct the themes.

3.7 Ethical considerations

The ultimate aim of health research is to improve the general health and well-being of people. Clinical research with humans is justifiable if it seeks knowledge that has the potential to benefit people and society in addition to addressing academic and theoretical interest (Steen & Roberts, 2011). However, there are times when health research can involve hazards to individual participants. There is therefore a need to ensure that the protection, rights and dignity of individuals are reconciled with the demands of scientific enterprise and research (Steen & Roberts, 2011).

Ethical consideration is thus an integral part of a research study and the researcher has the obligation to ensure that the research is ethically designed and conducted. There are ethical guidelines and principles that have been developed to protect and safeguard the rights and dignity of the person who participates in the research. There are four basic principles that are relevant to research that involves human beings which underpin ethics. These are respect for autonomy, non-maleficence, beneficence and justice (Steen & Roberts, 2011). Informed consent is a vital part of ensuring that participants are fully informed of their rights and of issues related to their participation in a study (Steen & Roberts, 2011).

The main ethical threats were the possibility for perceived coercion into

joining the study (due to the power differential between myself and the participants), data protection (as I was a midwife and a manager at the hospital, so there was a need to ensure that research data was kept strictly separate from clinical data/use in clinical practice), and the risk of distress for the participants in recounting possibly difficult birth experiences. The issue of potential coercion was dealt with by seeking the help from my colleague to invite the women who met the set criteria for the study. In so doing, the women were not influenced by my position in the organization in terms of agreeing or not to join the study. I only approached them once they had agreed to the principles of participation. At this point, I explained the details of the study to the potential participant before they considered signing the consent.

The issue of data protection, and keeping research data separate from clinical data and clinical use was dealt with in a range of ways. Clinical data were handled according to the policies of the hospital. Identifiable interview data were only seen by me. Personal data were locked in my office, which was only used by me when I conducted the interviews. After data collection, all the hard copy data related to research was kept in a drawer at home, in room that was not accessed by anyone else. Electronic versions of the data were saved onto my personal computer, and password protected.

In terms of potential distress for the participating women, anyone reporting a history of significant emotional or psychological problems after a previous birth when first asked to take part was not eligible to continue. Once the woman had agreed to participate, there is a system in place in the study

hospital to assess the woman's postnatal emotional condition during the postnatal period and if needed, the woman could be provided with psychological support. If any of the participants had exhibited emotional distress when she recalled her childbirth experience, the interview would have been stopped, and she would have been offered referral to this service, and to her clinical midwives for necessary assessment and follow up.

In relation to my study, aside from the prevention of coercion into joining the study, the participants were assured that there would not be any effects related to their treatment or services obtained if they declined the offer to join the study or if, having joined up, they left the study, and that all the data relevant to them would not be identified with their real name or any identifying details. They were provided with the study information sheet (Appendix 7) which contained the purpose of the research and information on participation in the research. The phone or address needed for contacting the researchers was also provided in the information sheet. In addition, a written consent (Appendix 8) was prepared to ensure they knew their rights in the study. Application for ethics approval was made to and granted from the Research Ethics Committee of the relevant hospital and the University of Central Lancashire.

3.8 Reflexive section

During the process of interviews, especially in the first two rounds, I was in uniform and had told the participants my position in the hospital when I interviewed them. I am aware that my position in the hospital especially

when I was in uniform might have been a concern to the participants and that might have affected their response, since I clearly had a particular kind of power in this relationship. However, I also considered that, in being open about my position, I was telling the participants the truth. My work required me to do the ward round on regular base, and there was a chance that I would meet some of the participants during this time. If I did not tell them my position, they might feel I did not tell them the true picture from my part and might have reservations towards the study and in provision of data, and especially towards the care they may receive during the childbirth process. As such, I considered that being honest and transparent to the participants in relation to my position was appropriate. I was also explicit in telling them that one reason for doing the study was for quality improvement. Throughout the interviews, my personal perception was that there was a minimal effect of unequal power relations on the flow of the interviews. Indeed, at the time of the final interviews, one year after birth, many participants were relaxed and talked to me after the interview to share their experience in baby care, and to ask me about my experiences as a midwife in this area. I felt they trusted me; some even revealed personal information related to their family. However, I made these observations from my own position as a midwife, manager, and an employed woman. I acknowledge that I cannot know for a fact if power relations had a strong effect on the participants, because I did not ask them about this, and I cannot speak for their own position.

In terms of my personal views on childbirth pain, I had worked in Obstetrics and Gynaecology department for more than 16 years from a Ward Manager

to Department Operations Manager at the time of data collection. I had seen lots of deliveries and observed the changes in the women from the time I was a pupil midwife to the time when I was the Department Operations Manager. I considered that there were three main changes in the Hong Kong Chinese women towards their response to childbirth pain. When I was a pupil midwife in mid 1980's, I witnessed that the majority of women did not request pain relief; they just quietly struggled with childbirth pain. At that time, most of the women were housewives and their husbands were the main breadwinner. I believed that the way women responded to labour was due to the traditional Chinese culture, in which women were being socialized to be submissive and to tolerate hardship for the welfare of the family. The situation had changed when I worked as a Department Operations manager some 10 years later. I noted that more and more women were asking for pain relief methods. At that time, the available pain relief methods were mainly pharmacological, including Entonox, pethidine and epidural analgesia. Entonox and pethidine were commonly used as they were easily available, and provided by the midwives upon the women's request. For epidural analgesia, most of the woman seem to consider that it was invasive and might affect their health in future, so it was not a common method for pain relief in Hong Kong at that time. I considered that the change in the use of pain relief was related to profound changes in Hong Kong society. More and more women were working mothers instead of housewives, and they also contributed financially to the family. The status of the women in the family and in the society at large had improved, women were more confident in themselves and become more vocal in demanding that their needs were met. The status of women continued to improve as

their education level increased and as they entered higher paid jobs. In parallel, I observed that women became more vocal about their need for labour pain relief. However, the pain relief methods available for childbirth pain remained the same.

As the Department Operations Manager, I introduced the TENS machine to the maternity department, specifically for obstetric use as a kind of non-pharmacological pain relief method. In addition, the use of music therapy, and the development of other kinds of non-pharmacological pain relief method was started. The use of birth-ball was advocated and training was available for the midwives around 2006. Contact was made with the physiotherapy department with the aim of providing birth-ball classes to the pregnant women who were planning to give birth in our hospital. The midwives started to consider mobilizing the women from the bed to the birthball during the childbirth process. One to two years later, LK Massage (a childbirth massage technique) was introduced to Hong Kong from UK. Knowing the effects of the LK massage, I made efforts to advocate for midwives in my hospital to learn this massage method, in order to provide more non-pharmacological pain relief methods to the woman, and to assess the effects of doing this. I observed that this massage technique seemed to work well in helping women to cope with childbirth pain.

I believed that if childbirth progressed under normal physiological conditions, the majority of the women would be able to tolerate the childbirth pain to a certain level. Providing the women with non-pharmacological pain relief methods was therefore designed to reduce

the side effects of opioids and other drugs, not only for the women, but also for their babies (in terms of successful breastfeeding).

My belief in the value of therapeutic touch and massage was stimulated when I had the experience of assessing the labour progress of a particular woman by laying my hands on her abdomen to feel for the intensity and the frequency of the uterine contraction when I was a pupil midwife. To my surprise, this woman thanked me for helping her to relieve the labour pain for she felt that I was performing massage on her tummy to make her feel less pain. Such experience made me believed that touching and caring was actually related to the physical and psycho-social care to the woman. It seemed that touching transmitted the message of accepting someone, and the woman that I mentioned felt that she was accepted and cared for, even though my actual intent at the time was to assess her labour progress.

More generally, I believe that women will do what they can for the benefit of their baby, not just because they are Chinese women, but due to the instinct of a mother. I also believe that, through the childbirth process, if it goes well, women become mature, and are enabled to take up the role of a mother more effectively.

3.9 Conclusion

This chapter has presented the final focus, aims, and objectives of the study. After reviewing various theoretical perspectives, the argument has been made for the use of constructivism as the epistemological perspective and

Hermeneutic phenomenology, which is concerned with interpretation of lived experience, as the theoretical and methodological perspective. The two phases of the study have been described (the metasynthesis and the longitudinal interview study). The methods to be used for the longitudinal interview study have been presented in detail, along with an explanation of changes that occurred in the early stages of the study. The next chapter will address the detailed methods for and findings of the metasynthesis, and how this helped frame the questions asked in the longitudinal cohort phase.

CHAPTER FOUR

A META-SYNTHESIS OF WOMEN'S VIEWS ON CHILDBIRTH AND PAIN RELIEF IN LABOUR

4.1 Introduction

The previous chapter has presented the rationale for the choice of the theoretical perspective, methodology and methods for the current study. It has also explained why and how some of the original choices in these areas were changed as a result of data from the initial data collection period. The metasynthesis presented in this chapter was part of that process, as well as informing the synthesis of the results from the empirical data collection. The chapter describes the meta-synthesis approach in general, the specific methods used for this review, and the results that were obtained from it. It concludes with a discussion of the meaning of these results for current understanding in the field and for the results of the longitudinal cohort study that is presented in subsequent chapters.

4.2 Background

As discussed in chapter two, pain in general, and childbirth pain in particular, is a complex phenomenon. There is extensive literature on the physiology and psychology of pain in general. However, there are fewer studies available on how people make sense of pain. This is particularly relevant for the field of childbirth pain, given that uniquely in human experience, it is an intense sensation that is linked to a physiological process with strong (and usually positive) meanings for women and their families.

Identifying the current literature in this area to find what pain and pain relief means for childbearing women within and across cultures can provide insights into what is known already and where there are still gaps in this knowledge. The intention was to inform the interviews and the overall analysis as presented in the rest of this thesis.

The aim of the metasynthesis presented in this chapter was therefore, to learn more about women's views of and experiences with childbirth, labour pain and labour pain relief.

4.3 Methodology

Metasynthesis is a relatively new technique for examining qualitative research (Jensen & Allen, 1996). Like all systematic research, it is related to "doing research on research" (Bondas & Hall, 2007). The aim of a metasynthesis is to interpret the combined data obtained from a number of similar studies and in doing so, gain new insights and explanations of phenomena or a theory (Cluett & Bluff, 2006; Jensen & Allen, 1996). It enhances understanding and highlights the relevance and benefits of applying qualitative findings to practice (Cluett & Bluff, 2006). According to Barroso, Gollop, Sandelowski, Meynell, Pearce & Collins (2003), metasynthesis is more than a summing up of research findings as it involves analyses and theory-generating syntheses that remain faithful to the interpretive rendering in each study. It facilitates knowledge development by bringing together qualitative findings on phenomena (Jensen & Allen, 1996).

4.4 Design

4.4.1 Search strategy

As with all systematic review methods, the search strategy in metasynthesis approaches should be carefully designed to locate relevant information and to ensure the results are manageable. This also helps the reviewer to remain focused on the subject and to stay within the limits of the intended search (Steen & Roberts, 2011). There are different steps in the search strategy for a metasynthesis for qualitative studies.

Step 1: Setting the aim and search questions and listing the key-words for a search

As noted above, the aim of this metasynthesis was to learn more about women's views of and experiences with childbirth, labour pain and labour pain relief. The key-words, terms and phrases for the search of qualitative studies using electronic databases could thus be set with reference to the search question based on the following four elements:

- Women's views or experiences with pain in labour;
- Women's views or experiences with labour pain relief;
- The meaning of pain in labour for women;
- The meaning of childbirth

The search terms based on these elements are given in Table 3.

Table 3: Search terms

Population	Event 1	Event 2	Outcome
Women OR Woman OR Mother OR Maternal	Intrapartum OR Labour (labor)OR Childbirth OR Birth OR Confinement OR Delivery	Pain OR Contraction OR Rushes	Expectations OR Experiences OR Meaning OR Views OR Viewpoint OR Feelings

Using the term 'pain' will also capture 'pain relief'. Based on this table, the search terms were combined as follows: "(woman or women or woman's or women's or mother or maternal) AND (intrapartum or labour or labour or childbirth or birth or confinement or delivery) AND (pain or contraction or rushes) AND (expectations or experiences or meaning or views or viewpoint or feelings)".

Step 2: Setting the time period covered by the search

For this review, the search period covered 1970 to 2013 (the year the search was run). This was because around the world, childbirth moved from the home to the hospital from this point onwards and this move was mirrored by an increasing use of interventions and pharmacological pain relief for labour and birth. Studies published after 2013 are included in the discussion section of this thesis.

Step 3: Databases used for the search

The topic is not only related to midwifery and birth, it also consists of elements related to psychological and social factors as well as humanities. Hence, the following databases were searched:

Academic Search Complete; E-Journal; MEDLINE with full text; PsyCINFO; CINAHL plus with full text; socINDEX with full text; AMED, Social Science Abstract; Humanities International Complete; and PsycARTICLES.

Reference lists of included studies were screened by backchaining, and the contents pages of around 50 journals were regularly checked from the time the review was carried out via Zetoc through one of the supervisory team (SD).

Step 4: Inclusion and exclusion criteria

To ensure the search captures data relevant to the area of interest and that it does not include data that are not relevant, criteria for selection are needed (Jensen & Allen, 1996). The following criteria were set for the search for relevant data for this metasynthesis.

Table 4: Inclusion and Exclusion Criteria for Research Papers

Aspect	Inclusion criteria	Exclusion criteria
Type of study	■ Good quality research papers using any qualitative methods	■ Studies that only resulted in quantitative data ■ Letters to editors ■ Opinions ■ Commentary ■ Studies with inadequate information to establish the quality of the research
Participants	■ Women entering labour at term who underwent labour (including those who had emergency Caesarean sections)	■ Women with elective or emergency Caesarean sections who did not undergo the labour process
Focus of study	■ Studies designed to assess the women's viewpoints and experiences with pain in labour ■ Studies designed to assess the meaning of childbirth, including labour pain, from the perspective of women postnatally.	■ Studies where midwives or other caregivers' views were the focus
Method of study	■ Interview ■ Focus group interview ■ Phenomenology ■ Ethnography ■ Grounded theory ■ Discourse analysis ■ Narrative analysis ■ Action research	■ Quantitative data only e.g. Questionnaire, rating scale
Language, context	■ Any language ■ Any country/context	■ No language, context or country restriction

Step 5: Recording of hits at the abstract and full text stage and tabulation of the inclusion process.

To ensure an audit trail, printouts of all hits from the search were made. A code number was allocated to each of the hits, which included the author, the year and the source of the paper. The reasons for excluding each paper from the search according to the inclusion and exclusion were recorded on a table. The code number enabled location of the related paper when needed. Abbreviations were used to represent why the paper was excluded, for example, 'D' represented duplicated copy; 'A' represented the exclusion criteria related to the type and focus of study; 'B' related to the participants; 'C' related to the study method; and 'Z' related to language problems. Decisions on inclusion at the full text stage were made after agreement by two reviewers after the full text papers had been read and tabulated at the final stage (IL and SD Director of Studies). Appendix 2 includes the tables used for the review.

The full characteristics of the included studies were logged on tables designed for the purpose (see Appendix 6a, 6b and 6c for these studies and the codes they refer to).

Step 6: Analytic approach

The meta-ethnographic approach proposed by Noblit and Hare (1988) was used to identify categories and hence the themes for the metasynthesis. This approach focuses on constructing interpretations, not analyses (Noblit & Hare, 1988). The meta-ethnographic approach for meta-synthesis involves the translation of studies into each other (Noblit & Hare, 1988).

This is done through attention to the interpretations of the data in the original studies through the eyes of the researchers for each included study (Noblit & Hare, 1988). The synthesis of the studies can be done using three different approaches, it can be reciprocal, i.e. about similar things, or refutational, i.e. where some elements of one study can refute those of another one, and/or a line of argument can be constructed (Noblit & Hare, 1988). In reciprocal translation, the synthesis integrates similar elements, such as the key concepts, ideas, themes, organizers and / or metaphors of the studies. According to Noblit & Hare (1988), refutation is an interpretation designed to defeat or critique another interpretation. Using this approach of interpretation, there is a need to transform an implied refutation into an explicit one before attempting a meta-ethnographic synthesis. Refutations also employ the similar process of metaphoric reduction, which serves as the basis of translations for a meta-ethnographic synthesis (Noblit & Hare, 1988). The line-of-argument synthesis includes inference based on the included studies to see what can be said as a whole about the data from the perspectives of organization, culture, etc. (Noblit & Hare, 1988). Based on a grounded theory perspective, analysis is accomplished by repeated comparisons between studies (Noblit & Hare, 1988). Both clinical inference and grounded theorizing rely on the examination of similarities and differences between cases and on holistic schemes of integration.

- ***Identifying categories and themes and the line of argument synthesis***

Initially, all quotes were extracted from each of the included papers into a predesigned findings table (see Appendix 3). These data were linked to the code number for each included paper, as given in table 6 and in Appendix 3.

Each quote was allocated to a separate row to enhance the subsequent procedure of categorization. This enhanced easy reference to the original paper. As the quotes were entered into the table, categories and themes started to emerge and each new set of quotes were then tested against these categories to see if they reinforced these emerging findings (reciprocal translation). At the same time, attention was paid to quotes that did not fit into the emerging categorization, as these would lead to a refining of the categories (reciprocal translation). Finally, the emerging thematic structure was synthesized to create an overarching line of argument synthesis.

4.5 Results

4.5.1 Included papers

The search strategy generated a total of 1485 hits. It was repeated three times and the same numbers of hits were generated each time.

In the first screening, a total of 42 papers were found to be duplicated. After excluding these, 1443 remained. After the first screen, 1318 hits were excluded according to the exclusion criteria only. In the second screening of the remaining 125 hits, the inclusion and exclusion criteria were used and the full text was read if information in the abstract was not sufficient for inclusion or exclusion. The second screening excluded another 97 hits, leaving 28 hits. Seven papers which required the full text to confirm were reviewed in full by two reviewers (IL and SD), and finally, 10 papers were included (Appendix 4).

One of the papers that was located but not included was a prior systematic

review with aims similar to the current one (Lally, Murtagh, Macphail, & Thomson, 2008). This review was not included in the metasynthesis as it did not contain any quote material but the reference list was checked for relevant studies. There was a total of 13 papers included in this systematic review (Appendix 5). Five of these 13 papers were potentially relevant to the current search. Four out of five papers met the criteria and they were also included in the meta-synthesis that I work on making a total of 14 papers (Table 6). I reviewed the reasons why these extra four papers were not originally included in my review. Two did not come up through the search strategy. The other two did. One (paper A11 in Table 6) had been excluded by mistake. The other (paper A13 of Table 6) was excluded due to misinterpretation, as when I read the abstract, I noted that the qualitative data included in the paper had been collected alongside a large randomized trial. Without careful review, I had considered this a quantitative study and excluded it in my initial screen.

Table 5: Summary of number of papers finally selected from my search

Screening of papers	No. of papers
Total number of hits	1485
Duplications	42 (omitted papers)
First screen using the exclusion criteria – abstract	1318 (excluded)
Second screen using the inclusion and exclusion criteria – abstract and full text	97 (excluded)
Net remaining to be screened and confirmed by supervisors	28
Final selection from 28 papers	10

Table 6: Papers selected from the search for the metasynthesis

Re-code	Original code	Title	Authors
A1	138	Giving Birth: the voices of Ghanaian women	Wilkinson SE & Callister L C, (2010)
A2	86	Labour concerns of women two months after delivery	Fowles E F (1998)
A3	67	The experiences of African women giving birth in Brisbane, Australia	Murray L, Windsor C & Parker E (2010)
A4	244	Women's experience of pain during childbirth	Lundgren I & Dahlberg K (1998)
A5	556	How women experience the presence of their partners at the birth of their babies	Bondas-Salonen T (1998)
A6	895	Primiparous women's experience of labour in Harare, Zimbabwe	Murira N, Ashford R & Sparrow J (2010)
A7	1210	Narratives of birth and the postpartum: analysis of the focus group responses of new mothers	DiMatteo M R, Kahn K L & Berry S H (1993)
A8	36	Maternal reflection on labour pain management and influencing factors	Imami Nur Rachmawati (2012)
A9	507	Fear and suffering during childbirth among Thai women	Chuahorm U, Sripichyakarn K, Tungpunkom P, Klunklin A, & Kennedy H P (2007)
A10	554	Giving birth: The voices of Ecuadorian women	Callister L C, Corbett C, Reed S, Tomao C, & Thornton K G (2010)

A11	B1	Childbirth expectations: a qualitative analysis	Beaton J & Gupton A (1990)
A12	B2	Decision making in laboring women: Ethical issues for perinatal nurses	Carlton T, Callister L C & Stoneman E (2005)
A13	B6	Journeying through labour and delivery: perceptions of women who have given birth	Halldorsdottir S, & Karlsdottir S I (1996)
A14	B9	A prospective study of women's views of factors contributing to a positive birth experience	Lavender T, Walkinshaw S T & Walton I (1999)

Note:

Original code = the code given to each of the hits from my search

Re-code = a set of new codes given to the selected papers both from my search and from papers in a systematic review entitled "More in hope than expectations: systematic review of women's expectations and experience of pain relief in labour", to standardize the codes for easy reference

Papers no. A1 – A10 were obtained from my search.

Papers no. A11 – A14 were selected from the papers in the above-mentioned systematic review

4.5.2 The selected studies

While there are clearly defined criteria for quality assessment for quantitative research, *"there is a sharp conflict between demands for explicit criteria and arguments on the part of some qualitative researchers that such criteria are neither necessary nor desirable"* (Hammersley, 2007). Although some may consider guidelines for qualitative research are desirable, and some may advocate using criteria derived from both art and science to measure the quality (Thorne, 2004), however, it is really

challenging to the qualitative researchers to produce such guidelines (Hammersley, 2007). For this study, integrity, transparency and transferability were considered to be significant factors to assess the quality of qualitative research (Walsh & Downe, 2006). The review undertaken for this study used a template for metasynthesis designed by Downe, Walsh, Simpson & Steen designed in 2009, including a characteristics table, and a taxonomy for assessing the quality of qualitative studies, based on the criteria of credibility, transferability, dependability and/or confirmability of the studies as described by Lincoln and Guba (1985). The characteristics table required information including the author, date and country, aims, theoretical perspective and methodology, the setting for the study, the sample selection strategy and sample size, and characteristics of the participants, method of data collection and data analysis. Ratings from A – D was then given to the papers according to the degree to which credibility, transferability, dependability and/ or confirmability of the study was likely to be enhanced or diminished. There were concerns about whether all the papers, including those with low quality, should be included. However, while the grading system helped to reflect the number of flaws in the study, it does not specify which grading to give the paper, or if any of these flaws are more or less fatal. Thus, I played an important role in deciding which papers should be included or excluded with reference to the grading of the papers. There were no perfect solutions, as including a paper with low quality might affect the quality of the meta-synthesis; however, excluding the papers with flaws might affect the inclusion of relevant information for the meta-synthesis. In the end, my decision was informed both by the quality of the paper, and by the degree to which including or excluding the

paper could have informed the emergina analysis. In the event, none of the included papers were assessed as having significant flaws, so they were all included for the metasynthesis.

The characteristics of the studies were extracted from the papers and summarized in table format to have a clear picture to ensure the papers were appropriately included (Appendix 6a, 6b, 63c). It was noted that the studies in the 14 papers covered a wide range of areas, including Asia, Africa, Europe, South America and North America. The participants in two papers (paper no. A4 and A12) were primiparous and multiparous women; in four papers (paper no. A2, A6, A9 and A14) they were primiparous woman; while two papers (paper no. A1 and A5) involved multiparous women only. The other six papers did not indicate if primiparous or multiparous women or both had been involved in the study. In addition, only two papers (no. A2 and no. A4) indicated the month and year that the studies were conducted. Ten of the 14 studies focused on perceptions, experiences and expectations of women towards childbirth. The number of women participating in these studies ranged from 7 to 615. The large variation in the sample sizes among these studies was mainly due to the methods for data collection. In 12 studies, interviews (including focus group interviews) were used for data collection and the number of participants ranged from 7 to 41. In the other 2 studies, questionnaires were used and the sample sizes ranged from 168 to 615. In addition, the majority of the papers did not indicate the theoretical perspectives of the study. In the event, none of the included papers were assessed as having significant flaws, so they were all included for the metasynthesis.

With reference to the aim of the meta-synthesis, the women's views of, and experiences with, childbirth, labour pain and labour pain relief were the concern. It was agreed with the supervisory team that the thematic analysis of the data in the selected papers would be based on the quotes presented in the published version of each paper. There is significant debate about how to analyse qualitative papers in metasynthesis. The positions taken range from those who use strict content analysis (counting how often a word or phrase is used in a published paper) to those who say, since qualitative data is a co-production between the researcher and the researched, it is essential to go back to the original transcripts and to involve the original researchers in the metasynthesis. In their discussion of various issues relating to the conduct of metasynthesis, Thorne at al (2004) raised questions about study inclusion, and specifically noted that the issue of quality of studies remains to be determined. Between both of these extremes, most of those doing metasynthesis either include quote material as published, as a proxy for the whole transcript, but acknowledging that these quotes have been subject to selection by the study authors; or they analyse both the quote data as published, and the authors themes. For this study, to get as close to the original transcripts but without the resources to seek them out in full, the decision was made to work with published quote material.

After extracting all the quotes, I started to categorize them with related headings, such as baby care, childbirth and childbirth pain, etc. After a few round of categorizing the quotes for the relevant themes, new themes finally emerged and synthesized findings could be drawn into new summary themes. Data that were not relevant to the subject of maternal labour pain

(such as cultural responses towards infertility, abortion, number of children related to the high infant mortality rate) were excluded. In relation to the extraction of quotes from the paper, I am aware of the potential limitations, for I had to rely on the selections of the index researcher for each included paper. There was, of course, more data relating to the themes that the concerned researchers had not presented in their original paper, but that might have been of significance to the meta-synthesis. However, without the resources to obtain the authors' whole transcripts, I could only use what was available in the included papers.

4.6 Findings

Since the focus of the metasynthesis is on the views and experiences with childbirth and pain relief in labour, other information not related to these aspects was not included in this metasynthesis. A total of 15 main themes were obtained with 4 synthesized findings (Table 7). The themes and synthesized findings will be discussed below.

Table 7: New themes and synthesized findings

No.	New Themes	Synthesized findings
1	Be with me	The need for support from the midwife
2	In need of a caring midwife	
3	I feel the difference	
4	Believe me	
5	Take care of my needs	
6	The need to be respected	
7	The need to know more	
8	Need the company of husband	The need for a supportive husband
9	Rely on a supportive husband	
10	Pain is difficult to describe	The experience of childbirth pain
11	Meaning of childbirth pain	
12	Various responses to childbirth pain	
13	Choice of pain relief methods	
14	In control	Self-actualization in childbirth
15	The success	

4.6.1 Synthesized finding and themes:

4.6.1.1 The need for support from the midwife

With reference to the extracted quotes, the first synthesized metaphor is “the need for support from the midwife”. It contains 7 new themes. The first 4 themes are related to the care or action / behavior of the midwives which will have some impact on the feelings of the woman. The effect of the actions or behavior of the midwives on the emotions and psychological factors that affect the woman in facing the challenge of childbirth appeared

to be significant. The other 3 themes are related to the needs of the woman. They are: take care of my needs; the need to be respected; and the need to know more. These 3 themes reflect the needs that women demand during the childbirth process. If the midwife cannot identify the needs of the woman, she will not be able to take action to fulfill these needs. However, notifying her about the women's needs may not necessarily mean taking action to fulfill the needs, as the knowledge, experience and value of the midwife will probably influence her decision in taking any actions. All the themes are focused on the care provided by the midwife that is needed by the woman during the childbirth process. Thus, "the need for support from the midwife" is the synthesized metaphor of these 7 new themes.

Be with me

It was noted that leaving the woman alone during childbirth created feelings of insecurity, worry and anxiety. She would feel afraid and discouraged and the pain was not relieved. She was not sure if she could give birth naturally and she would think that she was not wanted by the midwife or health care provider. The woman would have negative thoughts when the midwife was not with her. On the other hand, a woman felt that she was being well taken care of when the midwife walked through the labour process with her. With the company of the midwife, the woman felt in control and strong. The positive effect of staying with the woman would be enhanced by providing her with an empowering touch. A few of the women stated that they felt good and felt concern directed towards them when the midwife touched them or held their hands. The touch made the women feel warm and welcome and this made them feel strong to face the challenging

childbirth process. All these reflected that women need psychological support and a sense of security or safety. The presence of a midwife can provide these. Hence, the midwife staying with the woman is important as the effect can be significant.

- ***Feeling positive***

  "[The nurse] was with me all the time, touching my hands. I think about her, and I wanted to go to find her to thank her because she was an incredible help." (A7)

  "You know, it's easier for them to just go in and cut it out than it is to take the time and hold the women's hand and let her go through as many hours as she's going to go through, and help her through that process instead of just knocking her out." (A7)

  "I felt like a mixture of a strong and weak woman. I perceived myself as weak because I didn't have control and that felt very uncomfortable...[However,] I perceived myself as very strong as soon as this midwife came. All this feeling of helplessness and the feeling that I wasn't doing well enough just disappeared." (A13)

- ***Feeling negative***

  "I don't blame them. I know they are busy, but…you feel you need someone, you know, even if you want something and you press for the nurse and they don't come. You feel like…maybe they don't want you; they don't want to help you." (A3)

  "When I was alone and in pain, I wondered why they did not help me. It seemed I was alone. I was not sure I would give birth naturally. I thought it would be better to have a cesarean birth." (A9)

  "She (a nurse) told me that she would turn off the light and leave me alone. I was frightened because I did not want to be alone. I needed

someone to help me...I was rather afraid of being alone." (A9)

"In the beginning, I was alone and discouraged... The more painful, the more discouraged. It was a pain that had no relief. It was suffering." (A9)

In need of a caring midwife or health care provider

Midwives or health care providers tended to use their professional point of view to decide on the care that women needed. However, from the women's point of view, the care they wanted from the midwife or health care provider could be as simple as not to add pressure or stress or be harsh with the woman, but be friendly and calm and comfort the woman; support and encourage her during the course of childbirth; make her feel comfortable and safe; and help her to meet her plan for childbirth. Women were vulnerable during childbirth, and they relied a lot on the midwife or health care provider. In addition, a caring midwife should take care of women's physical and psychological well-being, as well as be alert to her social needs. The midwife should uphold the wishes of the women to avoid any regrets. Women are sensitive and vulnerable during the childbirth process. They are alert to the experience and knowledge of the midwife and how the midwife handles situations that arise during the course of childbirth can affect their emotional state. Hence, support from the midwife is significant as it affects their experience and their confidence in handling the challenge of childbirth.

- ***Reasons for the need for a caring midwife***

  "You are so incredibly vulnerable and I feel that you have such a need that someone is kind to you and shows you some interest." (A13)

"... I felt so vulnerable. All your energy goes into giving birth to this child and you simply don't have energy left to argue with someone or make a fuss about something. You almost have to take whatever your surroundings offer you." (A13)

"I feel it is important that you get close to them (the midwives). I don't know but this is something that you don't think about until you are there. It was very important for me that this was a human being that I could relate to and that I could show my feelings, whether I was happy, scared, or feeling bad, that I could just show her everything without having to be shy." (A13)

- ***Positive experiences with the midwife***

"The nurses were very good and they weren't so harsh on me and they didn't scare me, so I was happy." (A1)

"They were very personable with me. I did not feel like a number. I felt number one." (A12)

"She allowed me to express myself, how I perceived things, and therefore she could correct wrong ideas I was developing and thereby relieve my worries. I cannot tell you how much she relieved my worries. It was just wonderful...She was great, she looked straight into my eyes and came to me [and] touched me warmly, in a personal way...like she was saying 'I am with you'...you know, an empowering touch which makes you stronger because you can sense that someone is with you in this... The birth progressed very fast after she came, incredibly faster than before...and I did not suffer such torment as before she came." (A13)

"I felt that the care I received throughout a long labour was appropriate and I felt I was treated excellently by all I came in contact with. These were the factors that were most significant to my well-being throughout the birth rather than the protocols regarding clinical intervention." (A14).

- ***Negative experiences***

  "When I preregistered, they asked me who I wanted in the delivery room with me. I said my husband only! My mother came into the delivery room and never left. I felt that this experience was something to share with my husband only. After the birth of our son, I saw my husband's eyes start to tear!...When delivery time comes, I believe the nurse should remind those in the room to leave that were not preregistered. I didn't want to upset her, so I said nothing. But I regret that we lost part of a wonderful emotional experience." (A2).

  "I was very upset when I had my baby… I was very, very in PAIN, and the lady just kept on asking me, 'Are you going to have a (sic) babies again?'" (A3)

  "But the midwife seemed insecure in some way…I could hear it in her voice… she wasn't at all rude or anything but it…I could hear it at once."(A4)

I feel the difference

The midwives or health care providers might not be alert to the fact that women can feel the difference in the care they receive from different midwives or health care providers. If midwives work on a shift basis, the labour process might be longer than a single work shift and the women would be cared for by different midwives or health care providers. Women can sense the difference in the care provided by different midwives or health care providers. They sense it from their words and actions to help them. The women could feel who had the heart to help them and who just followed protocol and guidelines without addressing their actual needs. In addition, the behavior of the midwife is significant in the emotions of a

woman. When the midwife calmly handles an emergency situation, women can feel it and consider the midwife capable of handling the situation. However, if the midwife was panic, the woman would be scared as she could sense that something was wrong. Women rely on midwives to help them to fulfill their needs. Hence, they are quite alert to what a midwife is doing and if she has the confidence to handle a situation.

> *"It is unbelievable what a difference one human being can make. It is incredible at a time like this…this person, she changed everything for the better for me. Changed my perception totally. No question about it. I think about it with horror if the other midwife had been with me in the delivery."* (A13).

> *"The midwife who participated, and certainly had done this several times, was so calm, so it had great importance because… her calmness had great importance and her interpretation on where I was had great importance…this is my interpretation of it."*(A4)

> *"...I had been here for three midwife shifts with different characters. Certainly, it influences, I think…one calming, while another reducing my optimism, increasing stress, not-communicative. She might only explain if I ask. Yup, correct [attitude when childbirth] sometimes if the mother was spoiled, she is less able to fight with the condition to challenge."(*A8)

> *"Then suddenly this midwife [came], and somehow she helped me to work with ... you know to be on top of the wave instead of being in the middle of a huge surge. It was as if I was suddenly on a surfboard on top of the wave. All of a sudden, I just stood there and I could feel that I was in control, I managed to work with my body, instead of feeling overpowered by something I couldn't handle. It was truly amazing to see the difference in having a midwife who was task-oriented, who was mainly concerned with the pains and then to have a midwife who was woman-oriented. Her attention was first and*

foremost on me...It was as if she positioned herself by my side and tried to figure out how I perceived things." (A13)

Believe me

It is the midwives' duty to take care of the women and help them to walk through the childbirth process. Hence, they have encountered a lot of childbirth processes and deliveries. They probably have built up experience and beliefs related to care. However, childbirth is unique for the woman. Her feeling in receiving certain care or interventions would probably be different from other women. This might build a gap between the midwife's perception and the woman's feelings, as the midwife makes judgments with reference to her knowledge, experience and beliefs. The midwife might become too confident to make judgments without further verification, and the "take for granted" attitude may add stress.

"I wanted the nurse to believe me when I said that my epidural was wearing off and I can feel everything. She didn't believe me because she thought I was just reacting to a woman across the hall who was delivering and was screaming ... I also was upset with the anaesthesiologist because he believed the nurse (that I was just reacting to the woman across the hall) and he wouldn't give me any more epidural. After the delivery, he realized that I wasn't overreacting and came over and apologized. That was just a little too late." (A2)

"The nurse said she was like 3 hours left to have the baby, and the nurse said, 'Um, "it's not here. You can go home.' Then her husband talked to the nurse that… 'She was like this before when she had the other baby,' and then the nurse said, 'No, no, no, no, you can go.'…They didn't have a car, and her husband knows her, so they didn't go too far and they stay there, and then after 3 hours she had the baby."(A3)

Take care of my needs

During the childbirth process, women become vulnerable. They have various demands and needs during the childbirth process. These needs may not be a concern for a woman under normal circumstances. However, during the childbirth process, the woman relies on the midwife or other related personnel to help her fulfill needs. These needs include physical needs such as drinking and walking around; the need to be respected; and the need to know more related to her childbirth. The needs, if fulfilled, would likely help the woman go through the challenging childbirth process. If these kinds of needs are disregarded or not recognized by the midwife or the health care provider, their needs would not be attended to. In addition, even if the midwife or the health care provider recognized the woman's needs, the knowledge, beliefs or attitudes of the midwife or health care provider might be a hurdle to fulfill these needs. Hence, it could be said that there is a two –level process in meeting needs. When needs are satisfied, energy can be reserved for doing something important – to face the labour process positively. However, if needs are not fulfilled, the woman would be frustrated and her confidence would be weakened, which is not conducive to facing the labour process.

> *"I think the midwives ought to be more sensitive to the women's pain; it's like they don't listen and they don't care."* (A6).

> *"I got in and they hooked me up to a monitor. He wasn't in distress, but she said, 'Well, it doesn't look as good as we would like. So just stay where you are'. And an hour later, 'It still doesn't look as good as we would like, stay where you are.' It wasn't really back labour, but I had a horrible backache, and I just wanted to get up and walk around a little bit.*

I couldn't get up the whole night. They never once let me get up to go to the bathroom." (A7).

"I don't understand why I wasn't allowed ice chips or some water during my labour. I was in labor from 6:50 AM and didn't deliver until 4:45 PM…I hadn't had anything to drink since 11 PM the night before. From the breathing exercises, my throat was so dry by the time my daughter was born, it was sore. When I got to my room, I got water and other liquids, but even when I got home, 2 days later, my throat was still scratchy." (A2)

"I had back labor and the nurses would not let me lay on my side because of the monitor… when my doctor came in and found that I was having back labor, she put an internal monitor on so I could lay on my side. It should have been done earlier."(A2)

The need to be respected

The health care provider or midwife also needs to uphold the need for respect and the need for privacy. The woman's self-esteem is affected when she loses her privacy or is examined without obtaining her permission. This signifies that something basic for a human being may be taken for granted in a hospital setting. Things in this setting are not under the control of the woman. However, if the woman is asked before any intervention or procedures, she will have a feeling that she is being respected.

"It is embarrassing for different people to see you undressed, but what can you do?" (A6)

"You can have 3 or more people examining you. They never ask for your permission or tell you why they must all take a turn. They do not tell you what they are feeling for or what they have found. They take you for granted because you have come to them desperate for help." (A6)

"When I was not getting anywhere pushing, the doctor asked if I wanted help. I was pleased that I was asked and that it was not forced on me. I feel that it was my decision." (A14)

The need to know more

The need to know more is also significant for a woman in labour. No one childbirth is like another, as such, each childbirth process is different. This might create fear and worries if a woman does not know what will happen. However, she will be more settled psychologically if she knows what is going to happen as that can reduce fear of the unknown. Thus, she is better prepared and has some expectation about what will happen. When fear and anxiety are reduced, tolerance to pain increases. Hence, providing adequate explanations and information is significant.

"It is a really scary experience not to have someone who can explain." (A3)

"It is frightening when you don't know what to expect. You don't know what the next stage is like or when it will all end."(A6)

"Explaining about intervention possibly perform is also important, I think… important to explain comfortably, thus acceptable to patient. In this case, environment and care provider have a role in it. They should also be able make us confident in what we face."(A8)

"I think it is important that someone explains to you what is happening, you know, describes to you the course of events, tells you what is happening, what is being done to you and if something needs to be done to you." (A13)

"One has so much pain and one cannot communicate very well, therefore it is important that the midwife always tells you [what is happening]. It

is very important so that you don't need to ask constantly: 'Is it this way?' 'How is this?' Because you don't have energy to do it...because of the pain and other things."(A13)

"She was constantly telling me that everything was normal. Then I felt I could go with the flow because I didn't have to worry." (A13)

"They (midwives) explained everything that was happening which was great because when they explained things I felt a lot calmer." (A14)

4.6.1.2 The need for a supportive husband

The second synthesized metaphor was 'the need for a supportive husband'. There were 2 new themes for this synthesized metaphor, 'need the company of the husband' and 'rely on a supportive husband'. According to the new themes, it is noted that a woman needed the company of her husband or partner to walk through the childbirth process together. In addition, the husband's company provided a sense of safety as facing the challenging childbirth process in a strange environment is distressing. It was also noted that the woman relies on the husband to support her and communicate with the midwife or health care provider. In so doing, she can reserve energy and focus on handling the childbirth process. Thus, she relies on the husband during the whole process. Both themes are related to the company and support from the husband, hence, 'the need for a supportive husband' is the synthesized metaphor for these two new themes.

Need the company of the husband

Childbirth is a complicated issue as it not only results in physiological and psychological changes, it also involves another important element, i.e. the social element. Through the childbirth process, the woman becomes a

mother while the husband or partner becomes a father, and there is a transition into a family. The woman needs her husband or partner to accompany her during the childbirth process, as it enhances the psychological well-being of the woman and the presence of the husband provides a sense of security or safety. With the presence of the husband, the woman will not be alone as they walk through the childbirth process, which adds meaning and enhances the experience of childbirth.

> *"When I could hug my husband and feel… it was a security, then it felt easier to cope with the pain."*(A4)

> *"I wanted him to be there all the time. The staff only came in now and then to ask how I was. It would have been terrible to be all alone."* (A5)

> *"I would surely not have endured it if he had not been there. He was the only one there for me. If he had not been there, I would have had nobody. Above all, he was such good support that I would not have wanted to be without him for anything in the world."* (A5)

> *"It is important that he sees what it's like and what one goes through. It's a unique experience. The father sees that it's not so easy. There may be complications and they get another view of the child and life and everything."*(A5)

Rely on a supportive husband / partner

A supportive husband can further improve a woman's physical and psychological well-being. As indicated, the presence of the husband or partner was already good for the woman, however, if he could provide actions to support the woman, it would help her. With this support, the woman could endure the pain and the childbirth process more readily. The support can be in the form of encouragement, reminding the woman of her

need to endure, be the link person for the woman to the midwife or health care provider, help reduce her pain by massaging her back etc. The husband's support is mainly from the psychological perspective, which is significant to help the woman to face the challenges in childbirth.

"He [partner] was a verbal link to the nursing staff, and he also cared for me. When they came in and went out like that, I couldn't get up and grab them and say 'Stop, I've got something to tell you.' He had to do that. Otherwise, it would have been quite difficult to get into contact with them. He really was my link to them. You never really had the time. You just felt indignant and thought that was that moment and I should have reacted. That's why it's good to have the father there who follows the situation and knows what happens." (A5)

"My husband had been a great support. Each time I had a contraction, he squeezed my hand. I tried to relax then, and it felt better. He said, 'Now there will be another contraction.'" (A5)

"My husband massaged my back. The pain extended toward my back, toward the rectum. It was so painful. He massaged my back the whole night. My husband breathed with me the whole night, I would not have remembered how to do that." (A5)

"When it is very painful, I bit his clothes. I feel so calm when he stands aside me. In every delivery process; he is just enough. He massages and prays for me continuously. And it makes me strong." (A8)

4.6.1.3 The experience of childbirth pain

There are 4 new themes with one synthesized metaphor related to childbirth pain. The new themes are: pain is difficult to describe; the meaning of childbirth pain; face it or escape from it, and choice of pain relief methods. The synthesized finding is the experience of childbirth pain'. Childbirth pain is individualized, as pain is not only a physical condition. It incorporates

psychological, social and cultural components in its perception (Melzack, 1993; Melzack & Wall, 1982) before the woman responds to it. Choosing pain relief methods is related to a woman's beliefs about childbirth pain, especially about its usefulness. Among these four new themes, the meaning of childbirth pain is one of the significant components that affect the woman's pain tolerance and endurance (McMahon & Miller, 1978; Muir, 1980).

Pain is difficult to describe

Childbirth pain is considered to be the biggest challenge for women as no one knows what it feels like until they experience it. Some find that the pain is continuous, some find the pain is in the back, while others find it localized to the perineum. The extreme pain makes it difficult to describe. In addition, unless one had gone through the childbirth process, it is difficult to imagine or expect how painful it is. Hence, from a woman's s point of view, unless one experiences it, no one knows how it feels, especially when there are variations in the psychological, social and cultural backgrounds of each woman.

> *"The pain was continuous. That is when I actually shouted a little bit, when the baby was about to come."* (A1)

> *"The pain was localized to the perineum or back or was generalized. It ranged in intensity from a dull ache to "so bad I screamed"* (A2)

> *"…it's very hard to describe pain in words… it hurts so much that you rather want to get rid of it. But you will do anything to get a baby, what makes you stand the pain is that it is positive."* (A4)

"One has to go through labour to understand it." (A6)

"My back was on fire, it was difficult to reach it and scratch. I felt like the whole body was on fire."(A6)

"I can't explain about the extreme pain. It is difficult to give a true picture of." (A9)

"Everyone who has had a baby tells you that there is pain. I had no idea that it would be that intense."(A6)

"Like I said before I was a little bit frightened when the labour pains started because they were much worse than I had expected."(A13)

Meaning of childbirth pain

It is difficult to face high intensity pain in a normal situation, however, if meaning is being added to the pain, the tolerance can be increased and endured as the meaning greatly affects the degree and quality of pain (Melzack & Wall, 1982). In childbirth, women target the delivery of the baby and try their best to handle the pain. However, not all women are able to tolerate and endure it. It is noted that some women may think that pain is needed for delivery of the baby. They would put meaning on the pain to enhance their tolerance to endure it. When the baby is delivered, there is joy, and hence, some women consider that it is happy pain.

"I had a feeling that pain would be a shock… a new life comes to the world, that is no… it's really a very big and important event… and if it would be too easy just to sit down, and 'plup', out it came.. maybe you wouldn't appreciate it so much then… it helps you attach yourself to the baby… it was such a strong feeling."(A4)

"I think it is important that you see the whole that there is no delivery without pain… that is, I believe and escape… there is a difference having

pain when you are ill… here the pain is a part that takes you closer to the baby all the time."(A4)

"Birthing pain was the hurt that offered the most precious life of our baby. It had value and meaning."(A9)

"When I actually gave birth and my son came out, that replaced the pain because I felt enormous joy when I saw him be born. A lot of pain, but I said deep down, I was going to have a son so I felt happy." (A10)

"I think it's a happy pain, though it is a hell ... that's what it is, and a little more ... but just that it…It's very hard to explain, to define in words and so ... it's just a feeling that's there."(A4)

"Endure it because the pains come, but then they are gone and then comes the joy because you have your baby." (A10)

"One must sacrifice for her child." (A10)

Various responses to childbirth pain

There are wide variations in feelings and responses to pain. Some think that there is no need to cry when facing extreme pain, while some scream out in response. Some consider that childbirth pain is the most painful pain and some think that it seems like dying under this great pain. Some want to get rid of the pain via caesarean section. However, some women think that as long as it is good for the baby, they will tolerate the pain. Although women want to achieve the target to deliver a baby with meanings imposed on the pain, the painful feeling exists and it can be difficult to walk through the childbirth process smoothly. Hence, some women may consider escape from the pain.

- ***Facing the pain***

  "Whether you cry or not, it doesn't make it any easier, so there's no need for you to cry or shout. Whether you cry or not, you are going to give birth to the child so if there is pain or anything, you don't have to cry, you have to give birth to the child." (A1)

  "Because I think that if you are afraid of the pain you go against yourself very much during the delivery, you try to prevent pain and then it gets even worse instead of letting the pain heal up." (A4)

  "Yes, now you have to concentrate and relax, I said to myself, and then I did so and then it vanished… it was like pressing a button, you almost can't say this to people because they think you're crazy."(A9)

  "It doesn't matter as long as it was good for the baby." (A10)

- ***Wanting to escape from pain***

  "I wanted to have a caesarean section. I wanted to give birth very quickly so that I would be free from backache... I focused only on the pain. I wanted to give birth very quickly." (A9)

  "When I asked for knock-out medication, I was feeling the greatest pain. And I asked for cesarean birth or any kind of birth...It was the most terrible pain, awful suffering. I wanted to get away... It was the most awful suffering of my life and I wanted to get away from it." (A9)

Choice of pain relief methods

Pain relief is significant for women who cannot tolerate childbirth pain. However, there are different viewpoints from women related to the kind of pain relief they considered. Some considered using non-pharmacological pain relief methods, while others considered pharmacological methods, especially an epidural which takes away all the pain.

- ***Non-pharmacological pain relief***

  "Before in the countryside, from what she knows, and she is talking through experience, when you are in labour, then, um, instead you are given hot water, tea, hot tea, dry tea. We call it dry tea. You take that one and then you are relieving the pain… For the tablets, she can't take it because when she take, it will cool the pain and still the baby will remain. So, I just want the pain should (escalate), so that it comes out." (A3)

  "I enjoyed being in the pool. The warm water helped with the pain and helped me to be more mobile. The aromathempy was enjoyable. It helped build a more relaxed atmosphere and made me feel in control." (A14)

- ***Pharmacological pain relief***

  "I wish there was another way of having babies, a painless way."(A6)

  "If there is any advanced technology, why not … Because, it is very painful, incredible painful. During labour it's the most painful." (Feni) (A8)

  "The epidural was extremely effective. I would definitely recommend it to other women. Being pain- free meant I could sleep which meant my labour seemed shorter and I wasn't too tired to push the baby out." (A14)

All four new themes, i.e. pain is difficult to describe; meaning of childbirth pain; face it or escape from it, and choice of pain relief methods are actually related to the experience of a woman when she faces childbirth pain. As such, the synthesized metaphor for these four themes is "the experience of childbirth pain".

4.6.1.4 Self-actualization in childbirth

There are 2 new themes with one synthesized metaphor related to the childbirth experience. The new themes are: in control and success. According to the two new themes, it is noted that some women wanted to be in control and found success in achieving their target of not using medication for pain relief, or feeling the growth and maturing inside her. Hence, 'self-actualization in childbirth' is considered the synthesized metaphor for these 2 new themes.

In control

With a sense of control, anxiety decreases and consequently the pain threshold increases (Melzack & Wall, 1982; Elton, Stanley, & Burrows, 1983). It is important that a woman feels in control during childbirth, as it will increase her confidence towards childbirth and she can endure and tolerate the pain better. If a woman feels that she is in control of the situation and looks at the pain more positively, it may also lead to a feeling of success in giving birth to the baby. To help a woman be in control, explanations for what is going on during the labor process are important. When a woman feels that she is in control the whole time, she would not be afraid and can handle the labour positively. On the other hand, some women feel that they are not in control of their own childbirth process and feel upset, which affects their pain threshold and hence tolerance and endurance for childbirth pain.

- ***Feeling NOT in control***

  "I had the need to be in some control during the birth. That someone

wouldn't just burst in and say ... 'You are not supposed to do this and do it like that and breathe like that. You are supposed to sit like this and not like that'... [I wanted to] allow my body to tell me what position I should use and how I should breathe."(A13)

"With each contraction, I felt overpowered. I had no control. I was just completely overpowered."(A13)

"I realized that the reason why I didn't feel successful was because it hurt. It almost seemed as if I felt to blame because it hurt, that if I was in control it wouldn't hurt as much."(A13)

"The worst thing about the birth was that I had no control...I couldn't do anything. Nothing. I was just going mad... I think losing control was the worst."(A13)

"I did not feel in control – the hospital is in control. A lot of the time, probably due to pain relief I felt I did not know exactly what was going on. There seemed to be a lot of people milling around, but nobody actually explaining everything that was going on."(A14)

- ***Feeling in control***

"In the former [birth] I couldn't do anything. I just waited and I couldn't do anything. I just waited for something to happen... [In the latter birth] I was totally in control and I had the energy to do it. These birth experiences were worlds apart."(A13)

"I was pleased that I felt I had a lot of control during labour. If I had lost control I would have felt really embarrassed. I thought I might let myself down by screaming or swearing but I'm so glad to say I never did."(A14)

"The midwife explained what was going on as I was in labour and this meant I felt I was in control."(A14)

■ ***Success***

The childbirth experience is different from woman to woman, and even for the same woman with different deliveries, the experience will not be the same. Although women have the same targets in childbirth, i.e. to deliver the baby, the process and their experiences will not be the same. Some women may consider success in delivery when they don't use any drug for labour pain throughout the process, while others feel that they have internal growth and have become more mature and turned into a mother successfully. Hence, success as described was related to the growth of the woman and not using drugs for pain relief.

"You see things totally different afterwards, you have another way of understanding… you accept things differently, you become stronger, you can cope with things better than before… before petty details could ruin life, and now you just shake it off your shoulder, you don't become another personality… but you mature and become a stronger personality, when you've had a baby and have gone through that pain. I think that is the purpose of it, what the meaning of life is. I think it is to protect our children, to be stronger, a way of managing everyday life and become stronger, and that it is a life from your own flesh and blood and that too helps you to go through the delivery."(A4)

"I cannot tell you how glad I was that I was assertive and didn't get any medication. When the delivery was over, I was so triumphant. I went straight into a shower and I felt like a conqueror who had conquered in a tough battle...or like a mountain climber who has reached the top after a steep but enjoyable climb. This sense of victory is really indescribable and if I compare it with the last birth where I was intoxicated because of this drug I was given, I was really robbed of this wonderful feeling that is one of the most remarkable experiences of my life."(A13)

"What is most prominent in the birth experience as a whole is the sense of

victory, the feeling of ecstasy when the baby is born. That feeling is unique and in the last birth I was without all medication and therefore I could enjoy this feeling much better, well I enjoyed it completely."(A13)

The synthesized metaphor for these two new themes, 'in control', and 'success' provides the experience of the woman related to childbirth. The feeling of being in control helps the woman handle the painful situation as the sense of control is related to a reduction in her anxiety level. Reducing anxiety increases confidence to handle the situation, and thus increases tolerance to pain. This condition is related to the woman's desire "to become everything that one is capable of becoming" (Maslow, 1970; Goble, 1970), which involves the desire for self-fulfillment. Thus, the synthesized metaphor for these two new themes is "self-actualization in childbirth".

4.7 Discussion

The result of the findings focused on 4 main areas, i.e. four synthesized metaphors, namely: the need for support from the midwife, the need for a supportive husband, the experience with childbirth pain and self-actualization in childbirth. The need for support from midwife and the need for a supportive husband signify that women need support from these two groups of people with the aim to help them go through the childbirth process. The experience with childbirth pain provides information related to the views of women on childbirth pain, the meaning they put on this pain, and if they can endure the pain or if they want to get rid of it as they cannot tolerate it anymore. The pain relief methods they used or considered reflected if they were able to cope with the pain or not. Finally, self-actualization in childbirth provides information related to women's

feelings of being in control or not, which may have some effect towards the achievement of self-actualization.

4.7.1 Support helps women go through the childbirth process

The two synthesized metaphors, the need for support from the midwife and the need for a supportive husband describe the support that the midwife and husband can provide which can help a woman go through the childbirth process. The birthing process is unknown, so the woman may feel fear and anxiety during it. If she is left alone in a strange environment, as in the hospital, her fear and anxiety level would probably increase as unfamiliar things occur there which are not under her control. In addition, the fear of any abnormalities for herself and her baby demands the presence of a midwife to provide necessary action. Hence, it is important not to leave a woman alone as she is vulnerable during labour. A caring midwife can make a woman feel her concerns about her, support her, care for her, and help her go through the childbirth process. In addition, a woman is sensitive, she can feel the differences in care provided by different midwives. A supportive midwife can help a woman build up her confidence and may be able to increase her capacity to fulfill her needs or goals. In addition, the midwife should be alert to and uphold needs, such as basic needs, the need to be respected, and the need to have adequate explanations of procedures and progress in labour. All these are not difficult to achieve, but are easily overlooked or taken for granted. Based on the data in the metasynthesis, such support is likely to enhance a woman's experience in childbirth.

The husband is another significant person during the childbirth process.

The support that women need from their midwife and from their husband seems to be different. The need for a midwife seems to be as a guide in a strange environment and for the necessary care and intervention to handle emergency situations that might arise i.e. from the caregiver's perspective. For the need for support from the husband, the data reflect a sense of feeling safe in having him speak and act for the woman and to be a go-between linking the woman and the midwife when the woman is not able to make her wishes and needs known. The husband can know what is happening during the childbirth process and can walk through the journey with the woman together, so that both the woman and the husband can go through the transition period and become the mother and the father of their baby. This appears to enhance the relationship of the couple and adaption to their new roles.

4.7.2 Experience with childbirth pain

Pain is perceived differently by different people as it is affected by the physical, psychological, social, and cultural perspectives, as well as the past experience of the person. In addition, childbirth pain is different from other pain, no one knows what it is like until one experiences it. Some participants in the included studies indicated that the pain was beyond their expectations as they did not know about it in advance and did not know if they could tolerate it or not. When the women experienced the pain, they found it difficult to describe. Giving meaning to the pain and knowing the outcome of the pain seems to help women to face it. Happy pain, as described by one woman, helped her to endure, as she attributed the work of having a baby to this pain. When facing extreme pain, some women

continue to work with it while some women consider escaping from it and request epidural analgesia. In some extreme situations, the woman may request a caesarean section to terminate the pain. The same applies to use of pain relief methods. Some used non-pharmacological methods, such as hot tea, aromatherapy, immersion in a warm water bath etc. to help them face the pain, while others use epidural analgesia to stop any feeling of pain. All these signify that there are individual differences in relation to the experience of childbirth pain.

4.7.3 Self-actualization in childbirth

According to the findings, being in control is significant in helping women go through the childbirth process. The study respondents seemed to have more confidence in handling the challenging childbirth process when they felt that the situation was under their control. In addition, it was noted that some women may consider not using any pharmacological pain relief method in handling childbirth pain as a success. As such, one of the significant roles of the midwife seemed to be to build up the confidence of the woman, so that she could handle the pain well and feel success in childbirth. This appeared to help women have a positive experience with childbirth.

4.8 Conclusion

Metasynthesis is a way to pull findings together from qualitative studies and to come up with new themes. In this metasynthesis, 14 papers were obtained from the search. Through the analytic process, findings revealed the kind of support needed by women from their midwives and husbands.

In addition, various needs, such as the need to be respected, to know more about their condition and to be in control, were clearly reflected. To help women face pain, fulfilling such needs is probably significant. When all these are provided and women finally have success in handling childbirth pain without using any medication, they may have feelings of success because they have fulfilled the goals that they set for themselves.

The next five chapters provide the findings from the cohort study. These findings are then integrated with those above in the final synthesis and discussion of the study (chapter 10).

SECTION THREE: FINDINGS FROM THE QUALITATIVE STUDY

CHAPTER FIVE

INTRODUCTION OF THE FINDINGS

5.1 Introduction

The previous chapters set out the background, theoretical perspective, methodology and methods for the findings presented in the next section of the thesis. Chapter four described the line of argument arising from the metasynthesis of existing qualitative studies in all cultural settings and this framed the analysis of the findings from the longitudinal cohort study. Chapter six to nine will present the detailed findings of the cohort study at each time point. This chapter presents processes and reflections that are relevant to the interpretation of the findings across all time points.

5.2 Setting for the study

The study was conducted in a university- based local public hospital, which offers antenatal checkups and deliveries for women in Hong Kong. It is one of the major hospitals in Hong Kong and it is under the governance of the Hospital Authority which oversees all the public hospitals in Hong Kong. These hospitals are funded by the Hong Kong government and the Hospital Authority is responsible for allocating funding. Antenatal and postnatal check-up services are free of charge.

Under the Hospital Authority, the hospitals are divided into clusters and women usually select hospitals near their homes for antenatal check-ups and delivery, so the number of births in each hospital is related to the number of pregnant women within the cluster. There were 3367 births in the local

hospital where the study was conducted in 2013.

Usually, when pregnant women come for antenatal bookings, they are seen by the midwives, who arrange blood tests and obtain their medical and obstetric history. They meet the obstetrician during their first antenatal visit to screen their health condition. If they meet the criteria, they are referred to the local midwives' clinic or the Maternal and Child Health Center (MCHC) of the Department of Health for subsequent antenatal check-ups. The midwife provides antenatal checkups and education in the antenatal clinic, while the woman are seen by doctors in the MCHC. If the midwives or doctors in the MCHC identify health or obstetric problems, the woman is referred back to the obstetrician for further assessment and management. There is structured health education which includes information from antenatal to postnatal care and baby care. This information includes instruction on the signs of labour, a session on labour and labour pain relief methods to prepare the women to choose when they need pain relief during labour, and postnatal care and baby care. The women can attend the classes with their husbands, so that the husbands will be able to know what they can do to help their wives during the antenatal, labour and postnatnal periods.

According to demographic data from 2013, around 58.7% of women who delivered their babies in the hospital were primiparas, and 41.2% were multiparas. The average age of the primiparas was 31.5 years and the multiparas was 33.7 years. Among these women, 82.4% were Chinese, and 43.9% had attended secondary school while 53.5% had obtained tertiary

education (Table 8). Although there were no data related to the women's employment profile, according to my understanding from the midwives working in the department and reading some of the records, the majority of the women were working mothers.

Table 8: Demographic data of women who delivered in the hospital conducted the study

Year	2010	2011	2012	2013
Ethnic origin: (%)				
Chinese	84.7	87.5	86.4	82.1
Non-Chinese	15.3	12.5	13.6	17.9
Average age (Yr)				
Primiparous	30.7	30.4	31.0	31.5
Multiparous	33.1	33.1	33.2	33.7
Total	31.8	31.6	31.9	32.4
Education level (%)				
None	0.8	0.6	0.2	0.2
Primary	2.8	3.2	2.8	2.1
Secondary	53.6	53.5	48.1	43.9
Tertiary	42.0	42.2	48.1	53.5
Non-entitled person (%)	16.0	23.3	11.7	1.1

Non-entitled person = Not a Hong Kong resident

In the local hospital, the care provided to the pregnant women includes that provided by midwives registered under the Midwives Council of Hong Kong, which is a statutory body. The midwives are responsible for care of pregnant women during the antenatal, labour and postnatnal periods. All the women are under the care of an obstetrician, who assesses labour progress

and the maternal and fetal condition every 4 hours during the intrapartum period. However, if they are under the care of a midwife and are recruited in the midwives' clinic, the doctor sees the women when requested by the midwife. The antenatal and labour wards are equipped with birthballs and TENS for non-pharmacological pain relief during early labour and the women are encouraged to use them when needed. The husband can accompany the woman during the childbirth process to enhance the provision of psychological support. The women are encouraged to mobilize especially when they are in early labour in the antenatal ward. When they are in active labour, they are sent to the labour ward and will be closely monitored with fetal heart monitoring, which might affect their mobilization. However, the labour ward is equipped with wireless fetal heart monitoring devices and the women can be mobilized with this device if they want to. Nevertheless, if a woman is being induced, which includes intravenous drips and fetal monitoring, it really depends on the midwife putting in extra effort to help the woman to mobilize.

The rate of induced labour gradually increased from 29.9% in 2010 to around 31.7% in 2013 at the study hospital (Table 9). One of the main reasons was prelabour rupture of membranes, for which induction would be started 24 hours after rupture. The percentage of emergency Caesarean sections after induction was 25.5 in 2010 and it dropped to 21.5 % in 2013. During this time, more midwives working in the labour ward were trained in LK massage and there were increasing efforts to advocate mobilization and use of non-pharmacological pain relief methods. This might be one of the reasons for the reduction in emergency Caesarean sections related to

induction.

No specific information was recorded on the use of various non-pharmacological pain relief methods. The number of women who utilized pethidine for pain relief gradually decreased from 935 (30%) in 2010 to 488 (17%) in 2013. There was a reduction in the use of epidural analgesia as well, from 9.1% in 2010 to 8.7 % in 2013 (Table 9).

Table 9: Data related to obstetric services at the study hospital

Year	2010	2011	2012	2013
New antenatal cases	4921	5101	4722	4253
Antenatal follow- up cases	15948	11194	10200	10095
No. of births:				
Total (no.)	3951	4260	4390	3367
Primipara (%)	55.2	54.9	56.7	58.7
Multipara (%)	44.8	45.1	43.3	41.2
Induction of labour (%)	29.9	28.4	26.5	31.7
Primipara (%)	72.7	73.0	77.4	76.4
Multipara (%)	27.3	27.0	22.6	23.6
Epidural analgesia (%)	9.1	6.4	6.3	8.7
Primipara (%)	78.7	83.0	80.4	82.3
Multipara (%)	21.3	16.9	19.6	17.7
(use during intrapartum)				
Pethidine				
No. of women using	935	748	624	488
% (based on the total no. of in-labour cases)	30	21	17	17
Emergency Caesarean sections % of induction cases Caesarean sections % of total births	25.5 30.2	24.0 28.1	26.6 29.8	21.5 27.9

5.3 Undertaking the interviews

I was the head nurse in the Obstetric and Gyneacology department and the only person to conduct the interviews during the study. Although I used my own time to conduct the interviews, I was in uniform when I went to the clinic to recruit the women. I initially thought that it was more convenient for me to go inside the staff area to check the data while I was in uniform. I did not think that there would be any power effect between me and the women due to my position in the department. There was also a chance that when the participants were admitted for delivery, they would see me in my work role as I sometimes go to the obstetric and labour wards to monitor the workload and service provision. Hence, I felt that it was significant that the women know my position when I recruited them, so they wouldn't discover this when I did ward rounds, as this might create a feeling of deception.

Hence, I thought it was important to be honest with the participants and this was also a reason for being in uniform when I recruited the women in the clinic. I was also in uniform when I conducted the second interview in the postnatal ward before the women were discharged home. For subsequent interviews, since the venues the women chose were not inside the hospital compound, I was not in uniform. During the interviews, I did not feel a power effect on the women as I felt that they were free to tell me their views and feelings. In fact, I felt they trusted me and we had built up rapport as they told me more than what was required in the interview. In the interviews, a few of the women reflected their feelings of satisfaction and dissatisfaction about the care provided by the midwives without hesitation. Although I did not feel a power effect on the women because of my post in

the hospital, I do not know if they felt this way or not.

5.4 Timing of data collection and demographics of participants

Data collection started on 31 August 2010, and was completed by March 2012. There was a total of ten participants with ages ranging from 26 to 42 years with a median age of 35.5 and a mean age of 34.5 years. Six were still working at the time of the first interview. Three had already left their jobs to rest and prepare for the baby. One of these three participants planned to go back to work after delivery, while one had decided to leave her full- time job to find part-time work, and the third one had no plans to return to work. The remaining participant was a fulltime housewife. (Table 10) One of the participant's husbands (I010) was an American, while the rest were Chinese.

Table 10: Demographics of participants

Participant Code	Age	Gravidity / Parity	Working	Education	Religion
I001	35	1 / 0 (1^{st} baby)	Yes	Secondary	Protestant
I002	37	6 / 0 (1^{st} baby)	Yes	Tertiary	Nil
I003	36	1 / 0 (1^{st} baby)	Yes (Part time- work at home)	Tertiary	Catholic
I004	31	2 / 0 (1^{st} baby)	Plan to return to work soon after birth	Secondary	Nil
I005	30	1 / 0 (1^{st} baby)	Yes	Tertiary	Nil
I006	26	2 / 1 (2^{nd} baby)	No (Housewife)	Secondary	Nil
I008	35	3 / 1 (2^{nd} baby)	Yes	Secondary	Nil

I009	36	4 / 1 (2nd baby)	Plan to return to work when baby grows up	Secondary	Nil
I010	42	3 / 1 (2nd baby)	Yes	Tertiary	Catholic
I011	37	2 / 1 (2nd baby)	Yes	Tertiary	Nil

5.5 Issues with the focus of the antenatal interview questions (particularly the gender of the baby).

The original interview (see Appendix 9) started with a broad question asking the participants to talk about their current feelings about being pregnant. However, this question also included prompts about what it meant to carry on the family name, their feelings about the gender of the baby, and their thoughts about becoming a mother, housework and baby care.

The second question was also a broad query about participant's views on labour and birth, but, again, it included probes around assumptions about suffering and sacrifice.

The third focus was on their thoughts about pain in labour and what things might help them to cope with it, and the last focus was their views on support during labour and birth and who they thought would be supportive during childbirth.

As noted in chapter two, the probes reveal the set of assumptions I made at the beginning of the research. In fact, the data from the interviews

demonstrated that many of these assumptions were not borne out, probably because of the rapid social changes described in chapter two.

Given that the researcher is the instrument of measurement in qualitative research, these assumptions may have influenced the responses obtained in the interviews. The limitations of this are explored in more depth in chapter 11.

5.6 Interview length and the switch from phenomenological to thematic analysis

For the first interview, the data collection duration was very short, ranging from 8:43 minutes to 20:59 minutes. Seven interviews lasted from 11 minutes to 14 minutes. Participants tended to reply to some questions using 'yes' or 'no'. For example, in one case, when the participant was asked about her current feelings about her pregnancy, she just provided two sentences that were not related to feelings, including. "…my weight is increasing, sometimes … it's not convenient to do something like squatting, or picking up things. Actually… there's nothing special at all." It proved difficult to probe for emotional responses, although factual answers were given freely. This might have been due to the cultural effect, as Chinese seldom talk about their feelings and hence the women might have found it difficult to express their feelings or views. In addition, I was aware of the possible effect of perceived power differentials between me, as a head midwife in uniform, and the women, as noted above. This could also have been due to the way the interview schedule was structured, or my interview

technique, or all of these factors. In the second interview, the duration was much longer, ranging from 12 minutes to 34 minutes. This could partly be because, having been through labour, the women felt more able to talk about labour pain. It could also have been due to an improvement in my interview technique, or that, having met me before, the participants trusted me more with their thoughts. I observed that at the outset of the interviews, the participants were careful in their responses. Later, I felt that they were more relaxed and told me more about their problems related to pregnancy and birth. One participant cried when she told me her bad experiences. Others laughed or smiled. Some asked me questions related to the childbirth process or pain relief methods.

However, in the third interview, the duration reverted back to being very short (7.5 minutes to almost 24 mins, with an average duration of 13.5 minutes). The duration was similar to the first interview. I wonder if this was related to the interview approach, as the women tended to respond directly to the question asked. In addition, since the third interview was conducted at around 8 weeks postnatally in their residential home, the women seemed to focus on their baby during the interview, which might also have affected their concentration on more in-depth responses. After an extensive discussion with the supervisory team based on review of the interview transcripts, I changed my interview approach in the last interview. The changes included asking the women to give a full account of their views and feelings about their childbirth process like story telling without interruption until they were finished. The average duration was around 25 minutes, which was the longest average duration of all 4 interviews. There

were also intra participant patterns – those who gave short answers tended to do so at each time point (see Table 11 for the duration of the interviews).

Despite these improvements, however, the interviews did not have the richness and depth for phenomenological analysis. This was why the decision was made to change to a thematic analysis. The implications of this are discussed in chapter 11 (page 325), along with reference to and reflection on other qualitative studies with Chinese participants.

Table 11: Duration of interviews

Participant	1st interview	2nd interview	3rd interview	4th interview
I001	12:09	25:08	14:10	23:37
I002	12:43	12:36	9:23	31:03
I003	19:49	34:34	16:27	30:46
I004	8:43	19:26	7:32	18:51
I005	13:09	13:42	9:33	17:41
I006	13:22	19:14	8:52	29:49
I008	20:59	23:47	Dropped out	Dropped out
I009	14:38	16:57	11:20	15:35
I010	8:29	25:49	23:56	26:34
I011	13:37	28:16	20:26	37:37
Average	13:34	21:37	13:31	25:44
Median	12:57.5	21:36.5	11:20	26:34

Table 12: Length of interviews according to the timepoint

Interview timepoint	Shortest interview	Longest interview	Average interview length
Around 36 weeks of pregnancy	8:29	20:59	13:34
At 2-3 days postnatal	12:36	34:34	21:37
Around 6-8 weeks postnatal	7:32	23:56	13:31
Around 1 year	15:35	37:37	25:44

5.7 Transcription and translation

All the tape- recorded interviews were coded before being sent to the transcriber to ensure the confidentiality of the participant. The transcription of the recorded interviews was done by a paid assistant. I listened to the tapes repeatedly and counterchecked the transcription word by word to ensure all the data was included in the transcription. This also enabled me to have a good sense of the data. Thereafter, the paid assistant translated the interviews from Chinese to English. To check accuracy, a second person undertook translation of a subset of the first set of interviews. While there was not much difference in the overall sense of the two translations, the first set was more nuanced, as the translator had also done the original transcriptions, and so she had listened to the actual words and tone used by the participants in Chinese. Finally, I counterchecked the translations with the Chinese transcripts and the audio recordings of the interviews. In writing up the chapter, when I was in doubt about the translation, I checked the translation again by listening to the recorded interview to try to capture the nuances of what was said when this seemed to

imply more subtle meanings in the words used.

5.8 Analytic process

Appendix 3 gives an example of the process of analysis and how the themes were derived from the transcripts.

As noted in chapter three, having made the change to a thematic analytic approach, the analysis was undertaken according to Braun & Clarke (2006). There are 6 phases (Table 13) or steps for thematic analysis in this approach. These steps were used as a guide for data analysis and to obtain the themes from the data set.

To start the analysis, I listened to the tapes, and read and reread the data to obtain a picture of the content. I also marked the points which I thought were significant at that point, based on the themes of the metasynthesis. I obtained an initial list of ideas about what was framing the data across all the respondents and what was of interest in terms of the focus of the study. The second phase was generating the initial coding. Coding was performed manually using a computer to keep track of the emerging codes. This grouping not only provided a better view of the data from the participants related to the coding, it also helped me obtain information related to the adequacy of the example for a theme in the later stages. Since this was a longitudinal study, quotes from all 4 interviews were used in the synthesis chapter after analyzing all the interviews.

Table 13: Phases of the thematic analysis

Phases	Description of the process
1. Becoming familiar with the data	Transcribing (if necessary), reading and rereading the data, noting initial ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set and collating data relevant to each code.
3. Searching for themes	Collating codes into potential themes and gathering all data relevant to each potential theme.
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2) and generating a thematic 'map' of the analysis.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report	The final opportunity for analysis, selection of vivid, compelling extract examples, final analysis of selected extracts, relating the analysis back to the research question and literature, and producing a scholarly report of the analysis.

For easy referral to the original data set and before extracting the quotes to each coding, I allocated a code indicating which participant provided the data in the interview, e.g. 'I001' meant the quote or data were from one certain participant. Following this phase, the quotes from the translated

interviews were extracted one by one to a new file in table format. I reviewed the extracted data and the coding to assess their relevance to the research topic. Rearrangement was done to enhance the search for themes. This enhanced the generation of a thematic 'map' of the analysis. I reviewed and refined the themes to generate clearly defined categories and names. In the final analysis, the extracts of the themes were related back to the research question to ensure the work focused on the aims of the study.

In this study, I recruited 5 primiparas and 5 multiparas for a total sample size of 10. I understand that there is concern about theoretical saturation of data in qualitative research and that "data saturation is reached when there is enough information to replicate the study, when the ability to obtain additional new information has been attained, and when further coding is no longer feasible" (Fusch & Ness, 2015). However, it was difficult to ensure that the data provided enough information as this was a longitudinal study which lasted for more than 12 months. If it was found that the data were not saturated at later timepoints, it would take another year to complete 4 interviews with new participants. Hence, it was pragmatic to set the sample size before the interview. In general, the sample size for a qualitative study is small and usually it is around 10. Hence, I decided to set the sample size at 10 knowing that theoretical saturation may not be reached at each time point.

5.9 Presentation of the interview data in the findings chapters

Chapter six to nine present extensive quote material from the cohort study, in keeping with the theoretical perspective of interpretivism that frames this

study. Each chapter includes data and thematic analysis for one set of interviews. No external references are included in these chapters. They are intended to describe the initial thematic structure closely aligned to the actual data. The final synthesis and discussion chapter (chapter 11) brings together the themes and situates them in the pre-existing research and theory of relevance to the aims of the study, with links to appropriate references.

5.10 Summary themes by chapter

Table 14 below lists the time points of the interviews included each chapter, how many women took part at each time point, and the key themes that were explored in each case.

Table 14: Summary of key themes at each time point.

Chapter	Approximate timing of interviews	Number of participants	Key themes
6	36 weeks of pregnancy	10	➢ Cultural changes regarding continuing the family line ➢ Commitment to their babies ➢ Feelings about the pregnancy ➢ Concerns about childbirth and childbirth pain ➢ Expected ways of coping with pain
7	2-3 days postnatal	10	➢ Feelings about the childbirth process ➢ Responses to childbirth pain ➢ Need for support in the childbirth process ➢ Handling of childbirth pain ➢ Consequences of the childbirth experience

8	6-8 weeks postnatal	9	➢ Memories of the childbirth process ➢ Responses to childbirth pain ➢ The benefits of support during childbirth ➢ Consequences of the childbirth experience
9	12 months postnatal	9	➢ Memories of childbirth pain and of responses to it ➢ Caring support is crucial during labour ➢ Looking back and looking forward: context and consequences of childbirth pain

5.11 Conclusion

This chapter has set the scene for the findings. It has described the setting, the demographics of the participants, and the limitations of the interview schedule, data collection, and transcription process. The analytic process has been explained and the summary findings across all the findings chapters have been presented. Chapter six to nine provide rich and extensive quotation material to support that themes arising from the data. Chapter 10 synthesises these themes and provides in-depth discussion of the results of the study, supported by relevant references to other related studies and theories.

CHAPTER SIX

FINDINGS FROM ANTENATAL INTERVIEWS

6.1 Introduction

The previous chapter described the setting for the study, and the activities undertaken in setting up the interviews and collecting the data. It addressed some of the possible limitations of the data collection, translation, transcription and analytic process to enable the reader to understand the context in which the findings in chapter six to nine have been generated. Chapter five also presented the key themes for all the findings chapters.

This chapter will provide more detail of the subthemes that arose in the first interviews. It also presents detailed quotations to illustrate the analytic decisions made at this stage of the data analysis.

6.2 Overview of themes and subthemes

As noted in chapter five, the interview schedule for the antenatal data collection included four main areas of questioning. The first asked participants about their current feelings about being pregnant. It included what it meant (if anything) to carry on the family name, their feelings about the gender of the baby, and their thoughts about becoming a mother, housework and baby care. The second area was their views on and expectations about labour and birth, and any views related to suffering or sacrificing in childbirth. The third focus was on thoughts about pain in labour and what they thought might help them cope with it. The last focus was their views on support during labour and birth and who they thought

would be supportive during childbirth.

Again, as noted in chapter five, the interviews at this point were very short, ranging from around nine minutes to just over twenty minutes. Seven interviews lasted between 11 minutes and 14 minutes. Despite this, five core themes and 14 subthemes were generated (see Table 15).

Table 15: Themes and subthemes from the first interview

No	Themes and subthemes
1.	Cultural changes regarding continuing the family line a) Continuing the family line is not the reason for wanting a baby b) The gender of the baby is not a concern
2.	Commitment to their babies a) The responsibilities b) Planned support for housework and baby care c) The concern of a mother
3.	Feelings about the pregnancy a) This is special b) Feelings in pregnancy are stronger for those who had problems getting pregnant c) The sacrifice of pregnancy discomforts
4.	Concerns about childbirth and childbirth pain a) Fears and worries as childbirth approached b) Childbirth is a natural process, but women have choices to handle the pain c) Women's wishes for a short labour
5.	Expected ways of coping with pain a) Expectations of the husband b) Expectations of health care professionals c) Plan for pain relief

As might be expected, given the rather directive nature of the interview at this stage and the brevity of the interviews, these themes closely mirrored the questions that were asked, so much of the data at this stage was

responsive rather than generating completely new themes. Despite this, some of the findings at this stage do provide interesting insights into women's views and experiences in the domains that were under scrutiny. The next section discusses these themes in turn.

6.3 Detailed review of themes and subthemes

The subthemes are given in bold italics in the text below so that the narrative story of the themes can be more clearly identified.

6.3.1 Theme one: Cultural changes regarding continuing the family line

The interview data revealed alternative accounts related to continuing the family line, compared with the cultural norms described in chapter two of the thesis. The women were asked their reasons for wanting children to see if there was any family pressure. They were also asked their gender preference for the baby to countercheck if they preferred a boy to continue the family line. The participants' responses suggested that they did not have any pressure from the family and that most of them had no gender preference, or even that they preferred a girl.

The following quotes illustrate the point that ***Continuing the family line was not the reason for wanting a baby***. The responses were more about the joy and harmony a child could bring, than about a duty for the future of the family:

> *"I don't think about continuing the family line. When I was young, I saw my parents were very happy when they saw us. I heard people say that it is difficult to describe the joyful happy feeling, so I want to try to feel the*

joy as a parent, to see what it feels like." I011 (1E)

"I feel that if a family has children, it will provide a stronger feeling (linkage) to the members of the family, and it will be more harmonious." I008 (1E)

For other women, there was a degree of peer pressure to be doing the same as others of their age:

"Sometimes, I think I have a little bit …if there is peer pressure, I think I have it, and everybody may have it. When we meet, our friends talk about their children and it seems that you have nothing to share with them. I have some pressure, but I think it is not the main reason." I003 (1E)

"Because my friends of my age already have children, I admire them."…"That is a complete family" I002 (1E)

Other reasons included having a child to take care of them when they were old and to make the family healthy and complete.

"I just think, for example when you are old, at least you have a child, or you have your children, then you would… that means if one person (partner) passed away, the other would be lonely ... and having children, you may have someone to take care of you." I001 (1E)

"I thought that it would be healthy for a family to have offspring." I010 (1E)

In this context, when asked their gender preferences, most implied that ***The gender of the baby is not a concern***. One primipara and two multiparas preferred a girl. One multipara indicated that she wanted a boy and a girl in

their family, and since she had already had a boy, she preferred a girl in this pregnancy. Another multipara had a girl already and she preferred a boy this time to make up the Chinese word 'good' in the family. The word 'good' in Chinese is made up of the words 'girl' and 'boy'. Indeed, where there was a preference it tended to be for this kind of balance. One woman preferred a boy as she had already had a boy and thought having a brother would be better:

"My husband and I do not have any preference. We think it is already very lucky to have a baby and if the baby does not have any problems (health problems), then I will be very satisfied."..."No pressure from my family." I002 (1E)

"No special preference, just if it is a girl, I know how to get along with her because I am a female. It may be a great challenge to me if it is a boy." I003 (1E)

"Since my childhood, I wanted to have a family, and maybe have 1 or 2 kids." I005 (1E)

"Boy or girl, I think it does not matter for the first child, right."..."If my first child is a girl, then I would like to have a boy for my second child and vice versa, i.e. I want to have a boy and a girl. However, if both are of the same sex, it will also be fine. I005 (1E)

"If it is a boy, it will be good. (First baby was a girl) to make up the Chinese word "Good" I009 (1E)

"I'd like a girl, but since the first baby was a boy, I want to have 2 boys. I hope they (2 sons)... since my husband has a brother, and I hope my sons would be like their father and uncle and have a very good relationship, similar to them." I011 (1E)

6.3.2 Theme two: Commitment to their babies

Participants demonstrated a sense of a range of ***the responsibilities*** they now had for their babies, starting from when they knew they were pregnant. This was expressed in what they ate and how they behaved. One tried to eat at home as much as possible on the basis that homemade food would not have monosodium glutamate and would be fresh and hence healthier for the baby. They also used information obtained from antenatal classes to modify their lifestyle. Two of the women gave up full time work to ensure better rest and to help their bodies adjust to the pregnancy. All these actions imply a sense of responsibility towards the new member of the family. They constituted a whole package of changes, as expressed by one respondent:

> *"Yup, just try my best, doing all the things that I can do…for example, many people said we should not dine too much outside … while we are going out for dinner…So we try to cook (for dinner) when we're off duty, if we can't do that, that's ok we'll go out for our meal."…. "(I) will follow what I have learnt from those (AN) classes."…"My husband will. ...he will be on leave after my delivery. He applied for one week (leave)." I001 (1E)*

For respondent I003, this was more than just being healthy. She talks about these changes as a commitment to the future:

> *"I think I am quite lucky, actually I already quit my full-time job a short time before I became pregnant…For me it's completely... (I) completely feel that ...except various changes happened to my baby who is inside my body ...and I can have rest. Because it is really an adjustment for my whole body."…"I think being a mother actually…has a great commitment. During my pregnancy, I can see the two words 'carry forward' that is*

devoting yourself. Because actually, you have to share the nutrition and many things with your baby. That means when you eat something and many people say….people around you will advise you not to take this (food) which may affect your baby, or it is not good (about something), or it's not good to do something, which will affect your baby."…."Actually there are many things…as you said ….whether it is sacrifice or whatever, these are the processes that you need to go through one by one. If my baby has born, actually, there are a lot of such conditions that you need to devote yourself to. For example, I will also…I plan to breastfeed my baby. When you are breastfeeding, everyone will say, 'It is a very hard job, certainly very hard.' And you are willing to accept this challenge, to some extent…. It can show the participation and love to your child."

Given that most of the women planned to carry on working after their baby was born, ***planned support for housework and baby care*** featured in their accounts. Rather than just focusing on labour and birth, they were future-orientated, and already making plans for what would happen to them once they were mothers. According to information from the interviews, they had already ontacted their relatives (mainly mother and mothers-in-law) in anticipation of their support needs in the postnatal period. This planning also included paid domestic helpers for some women. They were the significant sources of help for the women. The responses from participant I001 shows that she had thought through a variety of scenarios:

"(I) will try to do the housework, if I cannot cope, then maybe I will hire a part-time helper."…"Oh, my mom will help me if I go to work, yeah."…"Actually we have a plan, for example, we will give our child to my mom to take care of if we go to work."

For some respondents, this included recognition that, if they did continue to work, they might not spend much time with their baby (participant I005):

"I am not good at doing housework. After my baby is born, my mother will take care of my baby."…"After maternity leave, I will return to work, so the baby will stay at my mother's house (taken care of by her mother)."…"When I need to work (weekdays), the baby will stay at my mother's house and during weekends, I will take the baby back to my house."…"If I can get off duty early, I will go to see my baby." I005 (1E)

A strong work-focus was also present in the data from participant I008:

"(Now we) have a maid in our home, and (the children's) granny. Our granny sometimes will come to our home. Therefore, when my husband and I go to work, they focus on baby care. Right. For me hahaha (laugh) I will be, I won't (put all effort) into baby care. I have a caring heart, but I only focus myself on baby care when I am not working, I may not accept this situation easily because I'm a person who prefers to work. Therefore, for child care, for me, (I will) prefer to go to work. I know I'm a working person. I don't want to become a very traditional Chinese woman. Every day do the same thing routinely. Ah! That means every morning I see my children and send them to school. Afterwards, I buy food from the market to prepare meals, I think…I'm not this type of mother." I008 (1E)

These two sets of responses suggest that the early assumptions that framed the research, in relation to the continued centrality of the baby to the mothers' status and role, were clearly not borne out for some women that took part in the study.

For others, there was evidence of anticipated tensions between the maternal role and the value of being financially independent. This tension seemed to be made worse by a sense that the domestic helper who looked after the baby if the mother returned to work might not actually be completely trustworthy, in addition to the responsibilities of a mother to take care of the

baby after work (I008):

> *"My maid will take care of my baby."…"The elder members of my family will monitor the work of the helper."…"I think my domestic helper will take care of my baby in the daytime. I will try to do this by myself at night, for example, bathing, I will take up this task by myself and will not refer ... that means, I do not want the responsibilities of baby care to go to the domestic helper. Actually, I think it should be our responsibility." I008 (1E)*

The degree to which the respondents expected help from their husbands varied, from minimal:

> *"…nope, not much….he (husband) just helps with laundry…he's just responsible for laundry only…hehe (laugh)." I001 (1E)*

> *"…housework....my mother and I are usually responsible, and we seldom ask him to do anything."…"Because he gets home very late every night after work, (we will) not ask him to do anything." I004 (1E)*

To more extensive (I003):

> *"Yes, he is. Yes, he (husband) has done (housework). For example he will do the dusting and wiping the floor."…. "We'll share the housework, we always share tasks, and he just accomplishes his parts." I003 (1E)*

Given this anticipated multitude of carers for their babies, some participants expressed the ***concerns of a mother.*** Although most participants indicated that they would return to work and that they had found a suitable person to take care of the child, they were concerned about differences in opinions and actions between different care-givers, and, especially, between their own views and intentions and those of others:

"(I) worry we (she and her mother) will have different perceptions and views in the future. That means we may have our own viewpoints. For example, I may think of cherishing (the child) while she (her mom) may think about how to teach him well."…. "But my mom …… took care of us since we were born. She probably has her own methods of child care. Maybe those methods are not the ones we use now, which would make me worry." I001 (1E)

This suggests that, regardless of changes in the status in the family and the financial independence of women in current Hong Kong society, most participants felt that the responsibility of raising a child was on their shoulders. Even though these women were still in their pregnancies, they were already thinking far into the future in terms of maternal worry:

"Actually, (I think) the responsibility is very great, as you need to raise a child (to be an adult), that is a great responsibility. In this aspect, I will notice whether there are some lessons about how to teach a child, such as the way to communicate (with our children), e.g. not to blame him all the time or how to be skilful in our communication." I008 (1E)

6.3.3 Theme three: Feelings about the pregnancy

Some responses at this stage were focused on issues that were more specifically about the sensations and emotions of being pregnant, rather than what it might mean in terms of birth or mothering. These themes identify the different aspects of this focus.

A few of the women (participants I003, I005, I011) provided responses that implied ***'this is special'***. They had a strong sense of the special physical, emotional and psychological bond between themselves and their babies. This could not be replaced by others as the baby was growing inside the

mother's body before delivery. Such feelings were cherished:

> *"I will treasure the feeling that my baby is inside the same body with me in these few months. Because....it is...I think there is no chance like this again. That means the baby is a unique individual…"… ".Before I go to sleep, I will talk to my baby even if she's moving, 'Oh, mum is getting tired now, it is time to sleep. If you want to play, you can play alone….."(I) can completely feel what pregnancy and life are, etc." I003 (1E)*

> *"(I will) sometimes talk to my baby when I have time. (Laughter) (I) have (done that)."…"... well, I think we are very...that means being one (baby inside her body)…other people can't join (with us), only my baby and I can share the feeling." I005 (1E)*

For one respondent, this was a reciprocal relationship, with equal responsibility for the pregnancy to go well, shared between mother and baby:

> *"I always talk to my baby, asking it to cooperate with me. Yes, cooperation between the baby and me. I thought the baby should make its effort. I can do nothing if it does not turn its head down." I011 (1E)*

Not every woman gets pregnant easily. Some have difficulties getting pregnant or carrying a pregnancy to term, while others have no problems. Some respondents seemed to suggest that ***feelings in pregnancy were stronger for those who had problems getting pregnant***:

> *"Actually I … had difficulty getting pregnant. This baby is an IVF baby. For us…for my husband and I, (we) will treasure this much more than*

everything we have." I001 (1E)

"…it is very lucky to have a baby with no problems. I will be very satisfied." I002 (1E)

"Actually, I feel very stressed about this whole pregnancy process. Because (I) had some bad experiences before... it is stable now after three months, everything is fine, and (I) feel relieved indeed, really relieved, now (I) actually expecting, right ?." I002 (1E)

The notion of ***the sacrifice of pregnancy discomforts*** did seem to resonate with participants when it was raised. Specifically, five participants felt that pregnancy was difficult because of increased abdominal weight during advanced pregnancy. A few of them vomited for a period of time in their pregnancy. They tolerated these discomforts because they were overruled by their desire to have the baby:

"At this moment (I want) my baby is come out soon. Because it's very hard……especially it is very……especially it is very hot (weather) now, (I) really want my baby to come out very soon. Also my maternity leave starts now, (I) have nothing to do at home….hahaha." I001 (1E)

"(My feeling like I am) carrying a watermelon. Yes, as my son wanted me to hug him at home. My upper part was holding a child, while my lower part has another one (baby). Wow! (I carried) two watermelons to walk differently and (I felt) very tired..."…"I felt very happy at the beginning of pregnancy, but … after the first month, the second month and the third month, until the fifth month, (still vomiting) I started to feel frustrated."…. "It (vomiting occurred in the previous pregnancy) was the same in this pregnancy…..Yes, now I was able to eat something after 5 months, and (I) didn't vomit after eating, wow!" I006 (1E)

6.3.4 Theme four: Concerns about childbirth and childbirth pain

The women had a lot of ***Fears and worries as childbirth approached***. They worried about when labour would commence, childbirth pain, and the baby's health, as well as baby care in the hospital after delivery. Participant I001 demonstrated a range of these concerns:

> *"Ah! I always have worries…they (the nurse) said we have to sleep with the baby (by the bedside) after delivery. What I mean is that…because I did not take care of a baby before, my husband actually has a little bit of worry about me."… "Now… I am a bit nervous. Because I always heard others say that it (childbirth) is very painful, but I think it is just a process, that means it might be fine after going through the process of feeling pain."…"The pain…the pain …I'm also scared, but I'm not worrying about the pain. I worry that it may be… whether something will happen during childbirth process…for example, some people say cord round neck…that problem…I think I will worry about this." I001 (1E)*

Participant I006 also worried about the need for induction as she did not know what it meant and what would happen to her during labour induction:

> *"I have a little bit of worry when after 39 weeks pregnancy... related to the delivery, that is, what is induction, (I) never tried it before."…"As he (doctor) said if the baby is still inside (my tummy) over 40 weeks…41 weeks, he can't breathe or other things might happen, I am very worried about this." I006 (1E)*

The participants demonstrated a general concern about the lack of knowledge about and control over almost every aspect of labour and birth, from the hospital organization to the actual physiological and psychological process of labour, and what might be done to them during childbirth:

"Actually, I am expecting (delivery), because I am 37 weeks already, that is near term and I can deliver the baby at any time…. I had problems in my lower back. I am afraid that I would not have enough energy to deliver the baby…or it may be very painful….I am afraid that it will be beyond my ability to do so, these are the issues that worry me." I003 (1E)

"There are many different challenges in front of me, could I overcome all of them? It is a worry (for me)."…" I really want to know if there are any particular symptoms or signs to let me know if labour has started or not."…"(I am) afraid if (the duration of the labour process is too long) it will be too hard for me, and I worry my baby may have complications or other problems. That means I want everything go smoothly."… "I do worry about it (childbirth pain). (I) don't know what it is exactly! Because only when you experience that feeling (you know what it is)." I003 (1E)

"…no special feeling, just worry that…later...that is…onset of labour would come suddenly, right."…"Maybe I worry that I am doing something somewhere I don't know. (I) always think…if I am in somewhere, how should I make the schedule, the planning, and arrangements, (related to admission to the hospital when labour commences)… for example, how to travel to the hospital, or how to arrange my luggage. Right, (I will) think about this." I005 (1E)

Despite this multitude of concerns, some women implied that ***Childbirth is a natural process but woman have choices to handle the pain.*** For some, the process was not considered as suffering or a sacrifice for the baby. They accepted the fact of pain as part of this process. However, some thought that woman should not suffer from such pain. Hence, there were different viewpoints about childbirth pain which implies different woman may choose different ways to handle the pain.

"Suffering…I don't think so."… "I think it is just a process, that means it might be fine after the painful process." I001 (1E)

"Some people said that it is a necessary process that a woman has to go through if she chooses to deliver the baby vaginally."…"There is a need to go through the painful process to push the head further down."…"Yes, because …in practical view, (I) think pain is necessary. This pain has its meaning, it doesn't mean ….painless or other issues. Then…. Ah! (I) feel comfort and close my eyes, then my baby can come out, it (the delivery of the baby) should not be like this (situation)."…. "I also think… sacrifice is neutral …. I think it is worth for my baby's benefit…" I003 (1E)

In fact, one participant saw her experience of labour pain in her previous birth as an essential part of childbirth:

"Labour...was painful, it was painful."... "I think it should be (the woman should go through childbirth pain before delivering a baby)."..."It seems to me that it (free from pain in delivery) may not be something good"…"I feel I should (walk through this process)." I009 (1E)

For others, pain had no significance beyond extreme discomfort, so they believed that the chance to obtain effective pain relief was one that should be fully taken up:

"I think (we) should not bear the pain…as the technology is well developed now, everything is more advanced. Actually you need to judge the medicine itself… which is more important, the effects or the side effects, and…..which one has more effect…. For example, if the advantages are more than the side effects, then I have to make a judgment. I think I will…I will bear a risk, that if not care about the side effects (and use the method)." I002 (1E)

"But this…especially Chinese would not express pain feelings well. They prefer to tolerate it, tolerate to the level she can't stand it anymore, then she will start to ask for any pain relief method. But I think health care professionals can provide non-pharmacological pain relief methods

or other aspects of pain relief earlier. It will be....much better. A little bit introverted, (they – women in the old days) would not voice (their opinion), actually I think they felt pain." I002 (1E)

"I don't think so (when asked if women should suffer labour pain before they give birth). Many women choose to have a caesarean section instead of a natural delivery. Every mother has affection for her baby even if she has not suffered labour pain, her baby is still precious. A mother will never say to her baby that she loves the baby more because she gave birth in a more difficult way. I think that is not necessary to suffer the pain." I011 (1E)

"I don't think it is a sacrifice for the baby. Why should we suffer great pain in the process of giving birth to a child?" I011 (1E)

Despite acceptance of labour pain by some of the respondents, where they expressed a view on the length of childbirth, ***their wishes were for a short labour***. Four out of five multiparas in the study indicated that they hoped that labour would be short, and the baby could be delivered quickly and smoothly. Only one primipara commented on this aspect, which suggests that it wasn't something most first time mothers thought about.

"...(I) hope the length of labour will not be too long! Yes, (I) hope the process will not be too long (time), that it can be shorter, because (I am) afraid it will be too hard for me." I003 (1E)

"...(I) hope this time I don't need to go through 15 hours of pain for childbirth." I008 (1E)

For one woman, this was an issue of the active part her baby might play in working with her during the labour process, as much as being due to any other external influence:

"I hope my baby can cooperate with me, same as his brother. The delivery will be easy as we work hard together smoothly."..."Maybe shorter (labour), (laugh) yes, yes." I011 (1E)

6.3.5 Theme five: Expected ways of coping with pain

This theme includes expectations about the role of the husband and the midwife in labour support and specific plans for pain relief during the labour process. The women expected their husbands to accompany and support them during childbirth. They also expected the midwives to support them to and provide care during their childbirth process and to help with childbirth pain relief. However, for some respondents, their previous experiences with husbands and midwives affected their decisions about and confidence in them.

In terms of ***Expectations of the husband***, there seemed to be a general view that support from a significant person during this difficult time was essential. Nine of ten participants wanted their husbands to accompany them. All of them suggested that their husbands might not do anything particular to support them, but that their presence would help with psychological wellbeing and with helping to remember useful information or with distraction techniques:

"My husband actually will accompany me during labour. Although he is very scared, he understands that this is his role, he can give more encouragement to me. To some extent, it is a comfort. For me..., yes, exactly."..."He.....I think I will request that he diligently study the notes (from antenatal classes), hahaha ... I will rely on him to some extent and I will depend on the situation, try to remember as much as I can..." I003 (1E)

"...he helped me to put on the mask and fixed it on my face when I was using the gas. As...I was in so much pain and I...lost my mind! (I) was always struggling with pain at that time. (in the last delivery)"..."He will (accompany me in this delivery)."..."He can give me some portable video games to play...I think it can divert my attention." I009 (1E)

A few of the participants indicated that labour and delivery was a couples' issue and that the woman should not face this difficult situation alone. They expected their husbands to accompany them to walk through the childbirth process, providing psychological support and comfort to them:

"I think it surely will (be reduced)... it should be...also you think it is like ....it's the issue of two persons...that is...right." ..."I think he should....give his wife (she) more encouragement...and support."..."I think that if my husband is on my side, he can...help me and encourage me....I think this is very important." I001 (1E)

"...my husband can accompany me."..."At least I think (my husband can) give me psychological support.....at least .... Not so ... I think this process (childbirth) we should....go through together..., that's not.... Just one person to strive with difficulty."..."Well, (he) just stands beside me and cheers me on, I think.... , yes... and...I think he actually ... he can't help me in my physical (condition), I think ... well... just psychological comfort."..."Actually I think...the most important is...more psychological support... that means when someone is chatting with you ... and drawing your attention away (from pain). I think not focusing on the pain itself is actually a good thing." I002 (1E)

However, the women's previous experiences could affect their expectations. One participant (I008) gave a detailed insight into the way her husband coped with her being in labour in a previous birth and this clearly affected her plans for and expectations of his role in the forthcoming one:

"Certainly (my husband accompanied me in the last childbirth)."... "It was much better, the feeling was good."... "My feeling was…supported by him, he stayed there .... To support me and give some relief from pain...I need someone's comfort, particularly from my family, a relative's comfort is greater than a midwife's. The support from a midwife could never compare to my own husband. In my last delivery, my husband kept watching the machine… monitoring the contractions, he saw the index and thought I might be pain, then he woke me up to breathe in the gas."..."This time…yes, I already told him that if I feel pain, I will be awakened by it! I really did not know how to use the gas last time. Ha Ha. ...Actually, if a man accompanies his wife in the labour ward, he is helpless about her condition."... "But I think his presence is good…"..."Yes, nothing he can do would help, but he touched my shoulder and kissed me which made me feel good, yes, he did so."..." I asked him, 'What were you doing while I was sleeping?' 'Just watching the machine'... (laughter)." I011 (1E)

In contrast to the observation about the role of relatives in relation to midwives in the quote above, many respondents did have specific ***Expectations of health care professionals***. Midwives (who were the health care professionals who were mentioned most frequently) were significant persons as they were responsible for the care provided to the women and monitored the well-being of the mother and the baby. The accounts covered expectations of clinical and physical care, but also of psychological support, and of a calm way of being:

"Oh! Of course, they (midwives) can (help), she'll remind you how to breathe, or do something to reduce the pain. As they are professionals, they'd know something… like which position or movement helps ease some of the discomfort." I004 (1E)

".....if (they) can recognize it, that is, the illness (condition of childbirth), that is…the pregnant woman is at which stage of labour, the feeling of

pain, and….give related….advice, or know what you need, or things that can help to relieve your pain, or something can relieve your pain, I think that would be helpful to a laboring woman." I005 (1E)

"(I think midwife)...actually it might (help). I don't know what I actually have to do at that moment. I think I will feel better if someone (midwife) encourages me when I feel lost, right." I008(1E)

"Of course (feel calmer when midwife was there with her)! Because … they can monitor the condition..." I009 (1E)

However, as in the case of husbands, for some women previous experience coloured their future expectations:

"…health care professionals…(I) don't have a great expectation that (they) can help me…"… "… you really hope that the health care professionals can help you and most of the time you need to do it yourself." (Based on her experience with midwife during the antenatal period) I003 (1E)

At the time of the first interviews, most participants, whatever their philosophy on childbirth pain, showed that they had a ***Plan for pain relief***. These plans were sometimes complex, and based on specific beliefs and goals, as for participant 1001:

"…basically that method is so-called inhaling gas and if my husband accompanies me during labour, she (the lecturer at an antenatal talk) taught me how to do massage and if possible, (I can) sit on a birthball which could make the labouring process go smoothly, that means in our plan, we hope that we do not need to use pethidine during delivery."…."I think (I) will try to relax which means I will always remind myself to be more relaxed, also remind myself…that the feeling of pain will go away

after passing through the process, and ask myself to tolerate this feeling."...."I think this is very important…and actually I am a Christian, I think for example, in my religion I pray or I listen to Christian songs. I think…it is an encouragement and a help to me." I001 (1E)

As for this participant, it was evident from many of the accounts that women were very knowledgeable about what was available, and what the pros and cons might be:

"Actually I have read many books."..."(I) think…whether (I will) use an epidural (for delivery).....but (I) heard many negative aspects, and side effects of using an epidural, that is why (I) haven't decided yet."..."I think so...that (epidural) is the last method I may use."..."…pethidine, Entonox, or a method called…diversional therapy, birthball, right."..."Actually I think the most important is…more psychological support…that means somebody is chatting and drawing away my attention, I think (I'll) not focus on the pain aspect, actually that will be good."… "I need to judge whether this method can help, that is...what effect there is on the baby...it may have. If it is not serious, nor very significant (effect), I...I think...I may try (this method) if I have to do this, yes." I002 (1E)

As with participant 1002, participant 1003 indicated that, after consideration of advice from a range of other sources, she would pray to God for she believed that her religious beliefs could help her go through the process.

"Yes, because (I) have learned already ...because I had a meeting with my friends, they're a doctor and midwife…. The couple strongly recommended, he said...'You should use painless delivery!' He thought pain is not necessary. But I think that I would like to have a try. Although I think I feel so weak physically, I would like to try and see my condition. Also, some friends who had delivered before told me that they tried every pain relief method. That is pethidine, or Entonox, and epidural anaesthesia. I think...I need to know how much I can tolerate at that moment…then 'step up' the method or use these pain relief

methods. I tend to think this way."…"Frankly speaking I am afraid of pain. I am even afraid of having a jab and pain during blood taking. I will not look at that. When all these moments come, I will pray in my heart. I think at that moment (labour) I'll try to pray as much as I can, and use this way to make myself relax."..."… because I have religious beliefs, I think religious power can help me. Because you will think there's a…power which is the backup at that moment. … I believe especially I tell you that, my current life is from him (God). At this moment, I believe this is a difficult moment, and he will help me much more, this is my belief that supports me to face an unknown and maybe a very painful situation. I003 (1E)

The following two statements express the extreme positions of a definite choice for minimum versus maximum pain relief, but, as is evident from the quotes above, most based their expectations on a more complex set of considerations:

"Actually (I) want to use epidural anaesthesia if possible." I010 (1E)

"I will attend the antenatal class and try to learn the breathing method. The same as the previous (childbirth), I will make every effort to endure it (the pain)." I011 (1E)

6.4 Summary of the key themes

This section summaries the key themes arising from the data emerging from the antenatal interviews. Chapter 10 will discuss the implications of these themes and of those arising from the other time points in the context of the current relevant literature.

6.4.1 Changes in traditional Chinese culture regarding continuing the family line

The responses from the study participants suggest that the effects of traditional Chinese culture related to continuing the family line, the role of women in housework and child care, and the man's role in the family have changed in Hong Kong over the last generation or two. The women indicated that the influence of continuing the family line on the need for children no longer existed. All of them reflected that this was not their concern. This extended to the gender of the baby. They indicated that having a son was not a particular issue. Even if they wanted to have a child, it was because of other reasons, such as peer pressure or wanting a complete family, and the gender concerns related more to balancing the family than to gender itself.

6.4.2 Commitment to their babies

The participants explicitly felt responsibility towards their baby soon after they got pregnant. They tried their best to do what was good for their babies, which included paying attention to their diet, and avoiding things that are taboo for pregnant women in Chinese culture. Most participants were working or planning to return to work after delivery. Before term, most had already planned or sought help or support for baby care and housework after maternity leave. Because of the close family circle, they usually sought support from their mothers or mothers-in-law in baby care. Some of them were planning to hire a domestic helper to help them with the housework and baby care. In addition, the women were concerned about raising their child. Their responsibilities would not be reduced because they went to

work. On the contrary, they needed to take care of the child and part of the housework after work, and to ensure that the quality of care for their child met their standards, beliefs and values even if they were not physically there to do the actual caring.

6.4.3 Feelings about the pregnancy

The respondents felt that pregnancy was a special time and that bonding with the baby continued throughout. The women treasured these feelings with the baby, as they were the only ones who could have them and no one could take their place. A few participants who had difficulty in getting pregnant and/or in carrying a baby to term felt that their experiences in pregnancy were intensified by the stress they had gone through to get to late pregnancy. The minor disorders of pregnancy and the growing gravida uterus affected the comfort of the women. For some, their tolerance of these discomforts reflected their sense of sacrifice towards their babies. All these feelings and thoughts related to the pregnancy could only be experienced by the pregnant women and no one could take their place. Whether their feelings were enjoyable or unwelcome, they belonged to the women themselves.

6.4.4 Concerns about childbirth and childbirth pain

Whatever their philosophy of the meaning of childbirth pain, most participants tended to be nervous, scared and worried when childbirth was approaching. They wanted to know when labour commenced as they wanted to be well prepared for it. Even when they did have experience, they acknowledged that no births were alike; for one participant, this led to her

being more nervous in this pregnancy than in her previous pregnancy. Their fears and worries were related to fear of the unknown, or, in this latter case, knowing from before but not knowing if this would be the same again.

Different people have different responses to labour pain. Some can tolerate the pain, while others have low pain tolerance. In the past, some respondents commented that Chinese woman accepted labour pain and might perceive such pain as a kind of sacrifice for their baby. For the women in this study, the situation was more diverse. Some participants thought that childbirth was a process that they needed to go through and that meant they would be fine after delivery of the baby. One of the women thought that the pain was necessary and the pain had meaning. She also thought that sacrifice was not something negative and that it was worthwhile for the benefit of her baby. Indeed, one indicated that labour should not be painless. However, others provided opposite views, believing that women should not have pain during childbirth. The final theme illustrates the consequences of these varying philosophies. In all cases where the women considered the length of labour, even where they saw pain as positive, they wanted labour to be over with as quickly as possible.

6.4.5 Expected ways of coping with pain

Almost all participants expected their husbands and the health care providers who cared for them during the childbirth process to provide psychosocial support. For some of them, support from the husband was a natural consequence of the fact that they should go through labour as a couple. Even though there may not be many specific things the husband

could do, his presence, his concern and encouragement produced comfort psychologically.

In traditional Chinese culture, the husband was not allowed to accompany his wife when she was in labour and he would not be able to watch the birth of his child. In the past 20 years or more, hospitals have gradually allowed husbands to accompany their wives during childbirth. This is likely to have led to a significant improvement in the psychological care provided to the women; indeed, as one of the participants indicated, she needed her husband's support as she did not expect to get it from her attending midwives.

In contrast to this view, others did expect to get this kind of help from health care providers in general, and midwives in particular. They also expected efficient and calm clinical care, as well as information related to their progress in labour and attention to their needs for pain relief.

The responses relating to formal plans for pain relief again reflected an interplay between beliefs, expectations, values, philosophies, and formal knowledge. Most women demonstrated knowledge (from formal classes, friends and other sources). Most of the women had attended antenatal classes and learned about various pain relief methods, including pharmacological and non-pharmacological methods. Most had thought about the pain relief methods that they would use. Eight out of ten indicated that they would try to tolerate the pain first and then seek pain relief when they could not tolerate it. The majority of participants then

considered trying non-pharmacological or low level pharmacological pain relief, i.e. entonox, if they could not tolerate the pain. However, some also planned to use distraction techniques and to rely on non-medical support, such as their religious beliefs. In one case, there was a clear focus on how much control the baby itself might have in labour and on how the mother and baby might interact during labour to bring about a good birth for both.

The interaction of spirituality, belief in the capacity of the woman and the baby to accomplish birth together (or lack of belief in this), knowledge about what kind of pharmacological and non-pharmacological support was available, and awareness of the power of loving support and distraction, revealed that these women had a sophisticated awareness of how labour and labour pain might play out for them.

6.5 Conclusion

In recognition that culture, meanings and expectations are likely to affect anticipation of and response to childbirth pain, it was important to find out if, and how far, traditional Chinese culture is still an important factor affecting Hong Kong Chinese women's thoughts and behaviour in relation to childbirth. This chapter has described the thematic analysis of the data arising from an exploration of these issues in the third trimester of pregnancy. Specifically, the data contradicts the initial belief that framed this study, that the importance of continuing the family line and gender preferences would influence childbirth choices. The results indicated that the need to continue the family line and preference for a boy were not

relevant to the women in this study. However, even though most of the women worked, housework and child care were still major responsibilities for them. The need to ensure good quality childcare was a concern for the participants, even in pregnancy and before the baby was born. The social network was thus significant for them.

Despite the brevity of the interviews, many of participants offered subtle and complex reflections on their thoughts about how they planned to deal with childbirth pain. Fear of the unknown and fears about childbirth pain were common, but most women acknowledged that the solutions to this were not simple. Some participants saw pain as an intrinsic and necessary part of the childbirth process. Others considered tolerating the pain first and then stepping up to methods for pain relief, while others wanted a painless childbirth. Overall, the women's accounts suggested that they needed supportive husbands and caring health care providers, and specifically midwives, to help them walk through the childbirth process.

The next chapter will explore the translation of these prior assumptions into practice through interviews with the participants a few days after the birth of their babies.

CHAPTER SEVEN

WOMEN'S VIEWS IN THE EARLY POSTNATAL PERIOD

7.1 Introduction

The previous chapter set out the findings from the first interview in the antenatal period. This chapter presents the data from the interviews held with the women between 2 and 5 days after their baby was born, before they had left the hospital. Nine interviews were conducted in a room in the postnatal ward before participants were discharged from hospital. Since one of the participants was discharged before the researcher could reach her, she was interviewed the fifth day after delivery when she and her baby returned to the hospital for assessment. The interview for this participant was conducted in the postnatal clinic.

The interview included three key areas (see Appendix 10 – the related questions for the interviews). The first was related to feelings about labour and birth. Prompting questions were asked related to feelings during labour pain, especially "peak pain"; and views on the need to suffer in childbirth. The second focus was related to memories about how pain was managed in labour. The participants were asked about their pain tolerance and the pain relief methods and support they had obtained. Prompting questions were related to the kind of help which enhanced coping with labour pain and the support they found most useful. The final area considered the impact of the experience of childbirth on notions of family, including the number of

children they might want to have in the future and a return of their thoughts about becoming a mother and handling housework and baby care, and continuing the family name, now that the baby was actually born.

7.2 Results

7.2.1 Labour outcomes and use of pain relief

All 5 primiparous participants had induction of labour for various reasons. One of the five multiparous women had induced labour. The overall induction rate for all participants was 60%, markedly higher than the 29.87% induction rate (39.34% for primiparas and 18.19% for multiparas) for the local hospital in the same year (Table 16). Only one out of six participants had a failed induction and eventually had an emergency caesarean section. The overall epidural analgesia rate was 30%, again, markedly higher than the 9.14% epidural rate at the local hospital in the same year (2010). This could have been due to the high rate of induction of labour, as induction is often perceived to be more painful than spontaneous onset of labour. Indeed, the rate of epidural use in the participant sample was the same as the rate for the wider population. Those with induced labour were also in labour far longer than those who had a spontaneous onset but this could be confounded with parity, as multiparous women tend to have a shorter duration of labour. The data related to the childbirth process and use of pain relief methods are shown in Table 17.

Table 16: Data related to induction

	Study Participants	Local Hospital 2010
Induction – Primiparas	100% (n=5)	39.34% (n=858)
Induction – Multiparas	20% (n=5)	18.19% (n=322)
Induction – Overall	60% (n=6)	29.87% (n=1180)
Overall failed induction rate	16.7% (n=1)	21.36% (n=252)
Epidural rate-all deliveries	30% (n=3)	9.14% (n=361)
Induction with use of epidural	50.0% (n=3)	20.85% (n=246)

Table 17: Labour characteristics for each participant

Code	Age	Parity/ this pregnancy	Induction of labour/ reason	Duration of labour	Pain relief method	Mode of birth / gender of the baby
I001	35	1+0 (1st baby)	Yes / PROM and MSL (39 week 5 days)	15hrs 13mins	TENS, Childbirth Massage, Entonox, Epidural	NSD/ boy
I002	37	6+0 (1st baby)	Yes / Past term (41 weeks)	19hrs 7mins	Childbirth Massage, Entonox, Pethidine, Epidural	Forceps Delivery/ girl
I003	36	1+0 (1st baby)	Yes / Past term (40 weeks 6 days)	14hrs 33mins Follow by C/S	Birth ball, TENS, Childbirth massage, Pethidine,	C/S / girl

I004	31	2+0 (1st baby)	Yes / Past term (41 weeks 1 day)	9hrs 49mins	Childbirth Massage (on leg), Entonox, Epidural	NSD / girl
I005	30	1+0 (1st baby)	Yes /PROM + Group B Streptococci (37 weeks 4 days)	5hrs 9mins	Entonox, TENS	NSD/ girl
I006	26	2+1 (2nd baby)	No (39 weeks 6 days)	1hr 29mins	Entonox	NSD / boy
I008	35	3+1 (2nd baby)	No (39 weeks 5 days)	9hrs 12mins	Entonox	Vacuum Extraction / girl
I009	36	4+1 (2nd baby)	No (38 weeks 2 days)	3hrs 7mins	Childbirth massage, Birthball, mobilization, Entonox	NSD / girl
I010	42	3+1 (2nd baby)	Yes / PROM > 24 hrs (39 weeks 6 days)	6hrs 23mins	Music, Breathing, Entonox, Pethidine	NSD / boy
I011	37	2+1 (2nd baby)	No (39 weeks 5 days)	1hr 11mins	Birth ball, Breathing, TENS, Entonox	NSD / boy

NSD = Normal spontaneous delivery

PROM = Premature rupture of membranes

MSL = Meconium stained liquor

TENS = Transcutaneous electrical nerve stimulation

C/S = Caesarean section

Although still relatively short, the length of the second interviews was at least doubled for many of the participants compared with the first interviews (Table 18). This may reflect a number of changes, including the fact that the women were interested in talking about their birth experiences, they were on the ward with none of their usual household or work activities, and the interview technique had been altered to try to allow more space for the participants to talk.

Table 18: Duration of first and second interviews

Participants	1st interview	2nd interview
I001	12:09	25:08
I002	12:43	12:36
I003	19:49	34:34
I004	8:43	19:26
I005	13:09	13:42
I006	13:22	19:14
I008	20:59	23:47
I009	14:38	16:57
I010	8:29	25:49
I011	13:37	28:16
Average	13:34.4	21:35.6
Median	12:57.5	21:36.5

7.3 Findings

Five core themes and sixteen subthemes were obtained from the analysis; they are listed in Table 19.

Table 19: Main themes and subthemes from the second interview

Item	Themes
1.	Feelings about the childbirth process a) Expectations and acceptance of pain b) Duration of the childbirth process c) Stress and worries related to the childbirth process d) Factors influencing feelings of satisfaction
2.	Response to childbirth pain a) Tolerance of pain b) Behavior in response to childbirth pain
3.	Need for support in the childbirth process a) Husband's support is important b) Need for support from a caring midwife
4.	Handling of childbirth pain a) Step- up approach in use of pain relief methods b) The struggle with the pain relief decision c) Lived experience of pain relief methods d) Induction and pain relief
5.	Consequences of the childbirth experience a) Sense of achievement b) The experience of labour pain and the planned number of children c) Continuing the family line d) The importance of a support network for a working mother.

As in chapter six, the relevant quotes for each theme are presented below, and then summarized. Relevant references to existing literature are included in chapter 10 when the synthesis of the whole thesis is discussed.

7.3.1 Theme one: Feelings about the childbirth process

This theme included both positive and negative childbirth experiences. They reflected on the actual experience of pain in relation to their expectations, the length of labour, unexpected stresses, and how far they

were supported and felt cared for. Many of these issues had been mentioned in the first interview at around 36 weeks of pregnancy.

In terms of ***Expectations and acceptance of pain***, some of the women having their first baby indicated that, despite knowing in theory that labour was painful when they were pregnant, they had not expected the intensity of the pain they actually felt. They thought they could tolerate the pain. However, they found that they were not able to cope with it. These comments should be understood in the context of labour induction, as experienced by all these women:

> *"…(I) really didn't…expect that it would be so painful…"…"Yes, I think I am a person who can tolerate pain very well……but actually I was not." I001(2E)*

> *"Actually, I thought the pain was not so painful before I experienced it." I004 (2E)*

For one woman, even though she had expected the pain to be worse than she could imagine, it was still even more intense than she had thought it would be:

> *"I am afraid of pain and I thought it would be more painful than I expected. When I experienced labour pain, I thought it was very harsh to bear." I003 (2E)*

Childbirth pain has been described as the highest level of pain that one ever experiences. This was echoed by some participants in this study. They thought that this was the most severe pain they had experienced in their

lifetimes. Despite this, for most, the pain was still worthwhile. This thinking might have helped the women face the pain:

> *"I thought it was worthwhile to experience this delivery process, right."... "Right, it was very painful, but it was worthwhile." I002 (2E)*

> *"At the peak (pain) period, the pain was so bad that you were not sensitive to it anymore. However, when I reviewed the experience again after I delivered my baby, I think it works. That means it was worthwhile to…(go through the childbirth process)." I003 (2E)*

> *"I think there is no way to avoid the pain. Maybe it is God's arrangement that a woman must pass the pain process to deliver her baby. If you want to have a baby, you must pass this pain process." I005 (2E)*

For one woman, the pain seemed to be even more than an unpleasant sensation – she seemed to see it as an essential part of the process:

> *"Oh, I think it should be. Yes, I think it is not good without the pain. I think (the woman) should have (such pain)." I008 (2E)*

This sense that labour pain has a purpose in life was echoed by another participant I009 (2E) who thought that a woman should experience it at least once in her lifetime. She thought that it was a challenge and that love for her baby was enhanced after going through the childbirth process and facing the pain.

> *"I think…one should experience childbirth pain at least once. You can then experience how great it is to be a mother. You have to bear the baby in your womb for ten months and then deliver your baby. At the last moment, you feel a lot of pain during delivery. It will make you treasure*

your baby more, right."…"As I had this labour pain and then delivered the baby, I know that I will love this baby very much." I009 (2E)

However, not all participants saw the process of going through pain as being essential for loving the baby. One of the participants who thought that it would be better not to have pain during childbirth considered that it was worthwhile to tolerate the pain at the time when she delivered her baby, but she felt less convinced by the necessity of experiencing pain when she reflected back on her experience:

"In this delivery, it was the most painful feeling in my life, really very painful…" "Before I was pregnant, I always talked about this. It would be better that I didn't have any pain during delivery. However, I experienced labour pain in delivery."… "… especially at the last stage of delivery, they said, 'The baby is coming! The head is out now! The baby is coming!' At that time, I thought it was worthwhile. I thought it was worthwhile to tolerate the pain and my baby was coming out soon."…"I still think that it would be better to avoid this pain!"…"I think it is a good thing if there is no labour pain when giving birth, it would be good. I also believe that every parent loves their children regardless of whether they had gone through this pain." I011 (2E)

For another participant, childbirth pain was worthwhile as it was functional; it provided signals that enhanced her responses to the process of giving birth to the baby and even of helping her and the baby to work cooperatively together. Despite this acceptance of the role of pain in labour, she did feel that the shorter this experience could be, the better:

"I think it is worthwhile (to have childbirth pain), haha!" "I think the labour pain can give me a signal. Let me know how to push my baby and how to cooperate with him. Therefore, he can come into this world."..."I

think it was like a natural reaction. It was very natural that I could cooperate well with my baby in this delivery. However, if there was no pain, you would not know (how to push).”...“If it is a second delivery, I think it will be better to have labour pain. Because the duration of pain was very short. If there are some advanced technologies or some advanced methods that could shorten the pain process and make the delivery process faster, I think I will accept the pain.” I010 (2E)

However, one participant had a different viewpoint. She thought that the woman need not experience childbirth pain at all:

“I don’t think so (don’t think that every mother needs to experience this process). As some women might choose a caesarean section at the very beginning, they don’t need to experience labour pain.” I004 (2E)

In response to the notion of sacrifice, there were mixed responses:

“Sacrifice, yes it was. I think it was a sacrifice (for the baby).” I002(2E)

I think it was a sacrifice.”…“It was worthwhile to do that…”I003(2E)

“No, I don’t think so (not suffering).”…“A sacrifice for my baby…I think it was.” I004 (2E)

“It was a sacrifice in this delivery.” I011 (2E)

For others, the notion of sacrifice or suffering did not particularly make sense. They talked about an experience, or a process:

“I don’t have such feelings (suffering). Oh! I don’t think so (sacrifice). I008 (2E)

"No, I don't think so. Sacrifice seems liked I have to lose something. I think it should be an experience." I010 (2E)

"No, I don't think it was a sacrifice for my baby."… "Yes (it is a process)" I009 (2E)

As noted in chapter six, the ***Duration of the childbirth process*** was an issue for some of the respondents when they were pregnant. The duration of the childbirth process was directly related to the duration of pain, so it was also of concern to the participants in the early postnatal period. A shorter childbirth process implies a shorter duration of pain and a higher capability to handle or tolerate the pain. The women had some expectations of the childbirth process related to past experience or general information they had received. They felt frustrated if the process was longer than they had expected, but lucky if the process was shorter than predicted. The doctors or midwives assessed the women to determine their progress and cervical dilatation was an indicator of the length of labour. The women were frustrated or depressed when labour was not progressing well or as expected.

"I thought I was sent to (the labour ward) at 9 am for induction, then at 1 pm... She (midwife/ doctor) said the cervix had not dilated to one finger yet,…suddenly! Yes, suddenly (I) felt a little bit frustrated, it did not even dilate to one finger."…"Actually I really thought the worst feeling was that, Aya! Why do I need to wait for 12 hours! It's better that you (the doctor) perform an operation (Caesarean section) for me, that is…." I001 (2E)

"Actually, I felt very depressed at that time. I felt it was labour pain and I thought it would be very painful and harsh. However, it was not labour pain. When I felt it was very harsh and I was worried, I was finally induced." I003 (2E)

"In this delivery, it was out of my expectation that it was similar to the first delivery in terms of duration. It took around seven to nine hours."…"It took around six to seven hours for the cervix to open to eight centimeters. The progress was a bit slow."…" I asked, 'People said the process of the second delivery would be faster, so why did my process last such a long time?'" I008 (2E)

However, if the progress was short, the women felt lucky. In this study, all the women who felt this way were multiparas, as they could compare their experience in previous deliveries with this delivery:

"I think I was lucky and it was my second delivery. The delivery process seemed to be faster."… "… the process lasted for only two hours." …"Like this delivery, I can push my baby out very fast. The part where it was really painful and I found it difficult to tolerate the pain lasted for only two hours." I010 (2E)

"Wow! It was lucky that the process lasted one hour only. I was so lucky that I didn't need to tolerate the pain for a long time." I011 (2E)

Childbirth is full of challenges. These challenges are not only related to the pain of the childbirth process, but also the possible risks for the woman and baby. The participants reflected on ***Stress and worries related to the childbirth process***. This included concerns about the health of their babies during the childbirth process as well as their experiences with childbirth interventions and their tolerance of the pain:

"Actually, I was worried in my heart. I heard other people say if the baby inhaled meconium, actually (it) was a danger. I thought (I) was an urgent case, (so I) didn't want to wait for so long." I001 (2E)

"Actually, I had never had a major operation before. This was the first time. Of course, I had used my religious beliefs to help calm down. I knew I was very nervous when I had my induction. Right, it was my experience in the delivery process." I003 (2E)

"When my baby's head came out, the midwives said the cord was around the neck. Although I was frightened, I knew they could manage it. When I knew this, I was a little bit surprised. I thought, ai! They asked me to stop pushing again. Did it work? Would my baby want to come out again? I didn't push, but my baby might want to come out at that time." I011 (2E)

Many ***Factors influenced feelings of satisfaction***. This included care received during the childbirth process. Satisfaction did not seem to be directly related to the degree of pain experienced, but to feelings of achievement, enhanced by the kind of care women experienced:

"Yes, I did (feel satisfied about this delivery process). I felt satisfied with the midwives. I think it was better than the last delivery. The midwife accompanied me for a very long time in this delivery." I009 (2E)

"At first, I was lying in the bed. The midwife told me, 'Please don't sleep now. If you lie in the bed, your baby can't descend well. How about you get out of bed and walk around? I will give you a massage or something liked that.' I followed what she said and got up. Then I delivered my baby within three to four hours' time."... "Yes (feel satisfied). She (midwife) massaged me during the whole delivery process." I009 (2E)

In some cases, this sense of satisfaction was related to how far the woman felt that she and/or her baby had actively engaged in the process of birth:

> *"I was very happy. I had great satisfaction when my baby came into this world. I think I put some effort into it." I010 (2E)*

> *"The most satisfying thing was that the delivery process was very fast."… "Yes, it (the childbirth process) was smooth."…"It was smooth, I think my baby cooperated with me very well, yes, I was very lucky to have good cooperation." I011 (2E)*

Unexpected interventions in labour affected participants' capacity to see the process positively. Participant I002 was not satisfied with the last stage of the childbirth process. She ended up with a forceps delivery after a failed vacuum extraction. This was a bit traumatizing and the baby had some problems, although these did resolve later. However, a slipped cup in the vacuum extraction to deliver her baby frightened her.

> *"I was not satisfied at the last stage of labour. Something happened, it was not an accident and no one would like that."…"They used vacuum, but it loosened up. Then they used forceps." I002 (2E)*

Participant I003 (2E) had an unexpected Caesarean section:

> *"I didn't have great satisfaction. However, I found I experienced many things while I was in hospital. I didn't expect my delivery process would be like that finally." I003 (2E)*

This sense of achievement could also be enhanced or diminished by the views and actions of those around the woman. For participant I001, the praise of the midwife was linked to a sense of success, but the reaction of

her mother then reduced this sense, as her mother critiqued her use of epidural analgesia, seeing it as a failure not to accept all the pain of labour. She thought her mother felt that she was not doing a good job and this affected her feelings about the outcome of the birth:

"…satisfied….seemed like a contradiction. At last (I had) spontaneous delivery and many people told me, the midwife told me, 'Wow! You are very great! You had a spontaneous delivery finally.' Then other people liked…told (my case) my mom, and my mom was very…very nervous and waited outside (the labour room). She said, 'Ha! (The cervix) was opened to two fingers and then you used epidural anesthesia? ' Then (she) thought, what is happening (You) can't tolerate such pain?" I001 (2E)

7.3.2 Theme two: Response to childbirth pain

There were various responses to childbirth pain. These responses were affected by feelings of control. Some women were able to control themselves while they were in great pain, while others could not, which was reflected by losing their tempers, screaming, and struggling.

In terms of ***Tolerance of Pain***, anticipation of how long the process was likely to take was a relevant factor.

"When I was in the peak of the pain...if I didn't use an epidural, I couldn't bear it. If there were ten points (on a pain scale), I think it was over ten points." I002 (2E)

"Feeling...at first I thought I can bear the pain. If you say when the cervix was only 2 fingers I could still tolerate it, I thought… Wow! 10 cm means magnified 5 times, how can I tolerate it?" I001 (2E)

"Maybe if the duration of the delivery process was short, I could tolerate the pain." I011(2E)

Some participants reflected that the pain was so bad that they wanted to avoid it in their next delivery, possibly by choosing an epidural or even an elective caesarean. One woman reported thinking at the peak of her labour that she would have no more children, to avoid the suffering of childbirth:

"I think I had a low tolerance level (towards labour pain)!"…"I couldn't bear the labour pain."…"After this experience, if I have second pregnancy, I may choose a caesarean section." I004 (2E)

However, after second thoughts in the interview, the woman said she would choose epidural analgesia in her next delivery*:*

"(In the next delivery) I will choose an epidural for delivery. If it is possible, I will choose epidural analgesia." I004 (2E)

"The labour pain…I heard people said the labour pain was like at a maximum level of pain. For me, it was not so exaggerated as at a maximum level of pain. But I don't want to experience the delivery process again after delivering this baby." I005 (2E)

"… At that time (when the pain was strong), I thought I would not have another pregnancy." I005 (2E)

Sometimes, the tolerance of pain was affected by expectations of pain relief that were not met. One multiparous woman who had a ventouse delivery and only used Entonox in the process had some regrets about not choosing a Caesarean section for this delivery:

"The delivery process was really harsh."…"I thought I could bear the pain."…"I had a little bit of feeling. I thought why didn't I choose to

have a caesarean section?" I008 (2E)

Behavior in response to childbirth pain was reported by a number of respondents. Some talked about loss of control and of their tempers, some screamed, some cried, while some reported that they showed little reaction. These differing responses might be due to a range of factors, including different beliefs about the meaning of pain, physiological differences, the effect of interventions like oxytocin for labour induction, or differences in support received and pain relief used.

"*I felt pain and cramps in my body. Then I…"…"… I shouted and told the midwives that I wanted to have epidural anesthesia. At that time, I really felt a lot of pain and Entonox gas did not help me much…I felt my body cramp and I cried when in pain.... After having epidural analgesia and stopping the induction medication, I calmed down." I004 (2E)*

"When I felt pain, I couldn't control myself. The midwives said, 'Ai! Please don't behave this way. Please don't behave in this way. You could slide off the bed and fall down.' At that time, I told the midwife that, 'You think I want to behave in this way, right? I also don't want to be like that!' At that time, I knew I…"…"Actually I could control myself. At that moment, I just thought, 'Please don't disturb me!'"… "Yes. Let me be alone and please don't disturb me." I008 (2E)

"When the pain was at peak level, it was like I became crazy. I didn't listen to the midwife. I felt it was very hard at that time."…."Yes (I could not listen to what the midwife said). I was struggling at that time. I inhaled the gas crazily...." I009 (2E)

Some of these responses were due to a mismatch between what bodily sensations of the woman and what the labour ward guidelines were, or what the woman had been promised. The former is illustrated in the case of a

woman whose body was ready to push, but who had been told she wasn't ready to do so:

> *"Actually, I think I had labour pain and I couldn't control myself to push my baby out." "When I had labour pain, I knew I was pushing. However, I couldn't control myself." I010 (2E)*

In the latter case, the promise of complete pain relief following an epidural wasn't fulfilled and this led the participant to feel out of control:

> *"(It) seemed like (I) was a little bit out of control. It seemed like...(I) couldn't think anything."..."(I) suddenly felt a lot of pain in the uterus, I already was a little bit out of control."..."I was a little bit out of control and I told my husband, 'Ha? (They) said it is painless after doing epidural. Why did (I) feel a lot of pain?" I001 (2E)*

According to some participants, screaming was not considered a good response towards pain.

> *"I think I had done well, hahaha! I didn't scream loudly, as I didn't want to waste the energy. If you were alone in the labour room, you might hear other pregnant women screaming in other rooms. I felt it was very scary. I didn't mean I would try to tolerate the pain, but I prefer not to waste my energy to scream." I002 (2E)*

> *"I remembered at that moment when I felt a lot of pain. I thought, 'Ah! Yes, it was very painful!' But I didn't scream and I didn't shout out." I003 (2E)*

For some, being silent was actually a sign of being in great pain; it was a defence mechanism to keep people away so that the woman could

concentrate all her resources on managing the pain:

> *"As I felt pain at that moment, if somebody touched me or talked to me, I thought it was very annoying, right."…"At that time, I just didn't want to hear anything. I didn't want to be disturbed. When I wanted to vomit, I didn't want someone disturbing me continuously, right." I005 (2E)*

For others, screaming was a positive response:

> *"Actually, it was very painful and the process was difficult to get through. I was screaming at that time!"…"(On a ten-point scale), I think I would give it seven to eight points. I could tolerate the pain, but I would scream. I would scream and it was a way for me to relieve my pain."…"Actually, I thought it couldn't help me to relieve the pain, but I just think it would be better to scream out, rather than keep it in." I011 (2E)*

7.3.3 Theme Three: Need for support during the childbirth process

As the women had anticipated in the antenatal interviews, there were two significant sources of support during the childbirth process, their husbands and the midwives who attended them. Support from the husband was perceived to be different than that from the midwife. The husband was the father of the baby and the participants felt that his involvement could enhance the couple's relationship and the transitions from husband to father and wife to mother. Care from the midwife was more directly related to the quality of the childbirth experience.

Participants felt that the ***Husband's support is important*** as he is a woman's closest partner and he has a stake in the outcome of the painful childbirth process. This enhanced his understanding of the childbirth process. His

presence was helpful even if there were not many practical things he could do or not much the woman wanted him to do. His presence, comforting words, encouragement, holding her hand and watching her silently when she experienced pain were the things that the women wanted from their husbands. The recent implementation of childbirth massage in the hospital provided a chance for the husband to help reduce pain:

"I think it's an encouragement and he was…next to me and could help… e.g. turn me to the other side. The midwife could not always stay in the labour room, for example (he could) help to turn me to the other side, massage me…(he) played an important role. I001 (2E)

"He massaged me. The midwives taught him how to massage and distract me. Then I started feeling more pain and I couldn't inhale the gas, I told him, 'Please don't do things for me. You just stand next to me and catch my hand.'" I004 (2E)

"Actually, he didn't do anything, what he could do was sit next to me. I think it was OK when somebody accompanied me there."…"He was like a messenger…as the midwife was not always there, I asked him to find the midwife to use TENS for pain relief." …"When it was time for delivery, he told me, 'Our baby is coming out now.' He said some encouraging words, it could help me push our baby out." I005 (2E)

"He was doing better than the last delivery… I knew what happened when I felt pain and he realized that. I told him, 'You don't need to remind me. I know when I am in pain.' He praised me continuously, 'You do it very well! Right. Have a deep breath now! Right! Inhale now! Right! Exhale now, exhale slowly, exhale now!' He reminded me at that time. He and the midwives talked to me together, 'Ai! You do it very well! You are a very smart girl!' That means he said some encouraging words to me, though I still felt a lot of pain." I011 (2E)

One of the participants gave a detailed and thoughtful account of her positive feelings about her husband's support and about how she thought he felt in this circumstance. She noted how his responsiveness had improved their relationship.

> *"I was very lucky that my husband was willing to accompany me. It was not an easy task for him as he was afraid to see me in a helpless situation and he couldn't help me but just watch me. Right, he knew I needed his encouragement and support, therefore he was there. He was very supportive in the whole childbirth process."..."I think as a man, he could prove his ability to solve some problems, and then he would be more satisfied. Therefore, he thought that he could really help me to relieve pain (by massage). He said when he knew I was in pain throughout the delivery process, he felt it was very touching. Because he thought I devoted my effort for our daughter. Also, it was hard for him as he couldn't give some help when I was in a lot of pain. However, he pretended to do very well as he didn't show me that he didn't know what to do. He tried to be supportive and I thought he was strong. As there were some things he might not dare to face or he was scared, he used his own way to manage his fear, the unknown, towards what would be happening or feelings of helplessness."..."I think he did more than I expected. Before delivery, I expected he would give me some support or encouragement. After I had undergone the induction process for more than 10 hours on Sunday, I think he was very important… I thanked him and I told him, 'If you were not there that day, I didn't know how I would have made it.' For me, it was very important that he was there."... "In these two days, we experienced many many things together. Although we didn't have a chance to talk, this experience was very important in our relationship. Definitely yes." I003 (2E)*

As noted above, the ***Need for support from a caring midwife*** was different from the need for support from the husband. Midwifery support was associated with enhanced feelings of safety and security, provision of guidance, provision of support and supplying adequate information.

Feeling safe and secure was an important basic need. According to the participants,'feelings of security and safety could be achieved when the midwife stayed with them all the time. When the women felt secure and safe, they had more courage to face labour pain.

"I think it was very important if there was a good midwife to accompany me during labour. Of course, my husband was very important. I think I was more comfortable when a midwife was there with me. When she was out of the room, I felt worried. I really wanted a midwife to accompany me during labour. It would be better when a midwife and my husband were there with me at the same time." I002 (2E)

"I know there was a midwife helping me...They didn't leave me to face the pain alone, they taught me how to deliver my baby, right, in this delivery." I008 (2E)

"I was afraid that I was alone and no one would take care of me when I was in the labour room. Luckily, the midwife stayed with me and massaged me. She always told me, 'If you feel pain, you have to breathe (breathing exercise). I will massage you. When you are breathing, I will follow your breathing and do massage." I009 (2E)

On the other hand, if the midwife did not stay with the woman as expected, she felt abandoned and concerned:

"… at that moment (I) was getting a little bit mad, haha! After the epidural anesthesia, (I) suddenly felt a lot of pain. After that (there was) nobody in the room." "I thought the midwife was not there about 45 minutes. Maybe there was another urgent case in the other rooms." I001 (2E)

The participants trusted that the midwives would give them professional guidance. The trust was built up during the course of the childbirth process:

"Especially when I delivered my baby, she told me how to place my feet and how to use my energy. She told me not to swing my body from side to side. That might not be good to deliver my baby. Also, it was not good for my backbone and my baby might feel discomfort."…"She was very professional and taught me delivery skills which were very useful. For example, I didn't know how to use force to deliver my baby. I didn't know how to adjust my force to a certain point. The midwife explained very clearly and I followed her instructions. She let me know if I did some steps correctly and had followed her instructions well. She would tell me how to push more vigorously. Her instructions let me know how to deliver my baby." I005 (2E)

"I think it was not a comfort, it was some guidance."…"I think if the person was my husband (who talks to me when I am in pain), I would lose my temper! Haha! I believe the midwife as she is a professional, right." I010 (2E)

"They said, 'Your baby is coming! Your baby will be born soon! The head is coming out now!' 'Can you use more energy now? This time you need to hold your energy for a longer time!' I also had this thought in the last delivery. The midwives taught me about breathing and using energy. I think they are very good. In this delivery, I knew when I should hold my energy as much as I could. Also, I knew I didn't use the energy in the right way. But they said, 'Right! You do it very well! You use the right energy now! You use it very well!' I thought, really? Was it right? Hehe! But they said, 'Right! The baby could come out now!" I011 (2E)

Care for basic needs from the midwives led to positive feelings. Feelings of being cared for and fulfillment of her needs could help a woman reserve energy to face the challenges of childbirth.

"They gave me some water and sometimes covered me with a blanket. They asked me whether I felt better and if I had any needs. If I felt cold, they give me some warm towels immediately." I006 (2E)

"The midwife asked me, 'Ah! Do you think it will be better to switch on the radio? When you feel pain, you may not listen clearly. But it can help you distract you.' Wow! They were very important! I thought they were very important in this delivery! Right." I008 (2E)

"I think the midwife's voice was very gentle. She repeatedly told me to breathe deeply. I followed her words and we did the breathing together. I think she could help me. In this delivery, I was very lucky to meet a midwife who could make me comfortable." I010 (2E)

The women wanted to know their labour progress so that they could estimate when labour would end. When they knew the final destination was near, they felt they could endure the pain more easily. In addition, the women also wanted to know other relevant information such as when there was something abnormal and the effects of drugs for pain relief.

"... that delivery process was quite long. It seemed there were three or four shifts of midwives. So far, they were very good, they also…told me something…what was going on at that moment…(they) also comforted me." I001 (2E)

"All things were well prepared. The midwives were very nice. When there was something wrong, she informed me immediately." I0062E)

"The midwife told me my condition in this delivery. I always asked her and she also talked to me. Because she stayed with me during the whole delivery process."…"I think the labour ward (service) was OK in this delivery."I009 (2E)

On the other hand, the women were unhappy when they were not given the required information.

"...sometimes it might be....for example (I) asked her about the dilatation of my cervix, they might really wait for the doctor, they didn't tell me about this, she (the midwife) just sat in the room, may be…(she) recorded….the notes, recorded the data. At first I expect that…for example (I) asked her about the condition of my cervix, she would check me and tell me (the condition). But (she) didn't' do that, the doctor might not come again for a few hours. In my case…, (the doctor) came back after six to seven hours. Actually, I could deliver (my baby) at the time I felt a lot of pain during those hours. That means when the doctor came, it was several hours later. That was what I mean…" I001 (2E)

"I was very agitated at that moment, haha! I thought the midwife should have a responsibility to explain the risks of having pethidine. However, I was in a lot of pain at that moment and the labour pain occurred very frequently. I think it occurred every minute." I010 (2E)

7.3.4 Theme four: Handling of childbirth pain

Pain brings unpleasant feelings that people tend to want to avoid. Childbirth pain was one of the main concerns for the women during the childbirth process. Although the participants accepted it as inevitable, this did not mean that they did not seek pain relief. A number of them used a step- up approach for pain relief, starting with non-pharmacological pain relief methods and proceeding to pharmacological pain relief when they could not tolerate the pain. Two participants struggled when deciding to use pharmacological pain relief. The non-pharmacological methods produced some pain relief, however, these were hard to use when the women had induction of labour as they were connected with fetal heart monitoring machines and intravenous infusion lines. Mobilizing with these lines and connections took great care, and the midwife tended not to

encourage the use of non-pharmacological pain relief methods under these conditions.

In terms of the ***Step- up approach in use of pain relief methods***, all participants started with methods that were least likely to affect labour progress or to be transmitted to the baby. This included use of the birthball or massage. Some women then needed pharmacological pain relief. They started with Entonox (inhaled nitrous oxide and oxygen), then proceeded to pethidine (injectable narcotic) if needed, and then epidural analgesia if the other methods were not effective.

"The pain relief methods I used were the step- up approach. I tried to use a birthball, then used the TENS machine. I had tried these two pain relief methods one week before having an induction. After that, I inhaled Entonox. Then, the obstetrician suggested an injection. It was something called "pethidine". I didn't remember the drug name." I003 (2E)

"I tolerated the pain about 5 hours."…"I tried not using any pain relief method. Actually I planned not using any method during the whole delivery process."… "Actually, I didn't use any pain relief method in the first two hours. When my cervix dilated to 7-8 centimeters, I started to inhale Entonox gas, right." I005 (2E)

"At that time, the midwife treated me very well. She taught me how to do my breathing. That means how to concentrate on my breathing. I just focused on inhaling and exhaling and she also gave us some light music."…"I tried to concentrate on my breathing but it didn't work. The midwife advised me to inhale Entonox gas. Actually, the gas could not relieve the pain. I had thought about using an epidural for pain relief and then the midwife advised me to use the TENS machine and gave me an injection (pethidine)." I010 (2E)

"Later…the pain became frequent. At that time, I didn't rest in bed and I sat on the birth ball."..."Yes, it was very good! I was holding the rail and sitting on the birth ball. The feeling was different from lying in bed."… "Later, she asked me whether I had back pain. I said I did and then she gave me the electronic massage machine (TENS). At first, it was useful when I had a little back pain. She asked how I felt after using this machine, I told her that the pain had decreased to half." I011 (2E)

The more detailed accounts of two of the multiparous women illustrate the complex process some women go through. This is termed ***The struggle with the pain relief decision***. In their first births, one had had an epidural and one was given pethidine, and they knew these methods could reduce pain. However, in this pregnancy, both participants considered not using these methods. One participant considered using pethidine first and then epidural analgesia if pethidine did not help. It seemed she used pethidine to buy time when considering whether to use epidural analgesia. She finally did not use an epidural and was happy as she felt she delivered the baby more easily. Another participant struggled when deciding whether to use pethidine. She finally considered the health of her baby and did not use it:

"I think it (the pain) occurred every minute. The pain was not over yet and then it started again. At that time, I thought, ah! I didn't care about anything and had an injection first. If it didn't work, I considered using epidural analgesia. After the injection, I needed to wait for the drug effect. At that time, I reconsidered my decision for a while."…"In this delivery, I think the labour pain made it easier to push my baby out. If I was under epidural analgesia, I didn't know when I needed to push my baby at all."…. "In the delivery process, if I could grasp the labour pain, it would be easier for me to push my baby out. Of course, if there were some methods to relieve the pain, it would be much better." I010 (2E)

"I knew there were three pain relief methods which didn't have any special problems. At that time, I thought, 'If there was no special problem, I would choose a Pethidine injection.' I told myself that I didn't choose epidural analgesia. When I requested the injection, the midwife reminded me, 'Please consider your option again. Your baby might be dull after you have injection.' Then I thought again. I delivered my first baby in three hours. Therefore, my baby was always sleeping the first two days after delivery. He didn't want to have milk. In this delivery, I thought, ah! Let's try not using Pethidine. When the cervix was dilated to five to six centimeters and I felt a lot of pain, I thought, ah! I should have an injection. Then I didn't need to suffer the pain. However, my baby would suffer. If I had an injection, I didn't need to tolerate the pain. However, if I didn't do that, I needed to tolerate it! As I knew the drug would transfer to my baby. I didn't want to have an injection. Therefore, I tolerated the pain. Actually, it was very painful and the process was difficult to go through. I was screaming at that time!"…"I really thought about the pethidine injection. It had a big difference in this delivery. Wow! It was totally different than the last delivery. He (the baby) wanted to have milk frequently. Yes, I think it was worthwhile (not having pethidine) in this delivery. If the bilirubin was excreted more, it was worth more in this delivery." I011 (2E)

Participants talked about their ***Lived experiences of pain relief methods***. Seven out of ten participants used non-pharmacological pain relief methods. These included childbirth massage, the birth ball, and TENS.

A few participants felt that massage was useful in pain relief. Participation from the husband in performing massage further improved the relationship of the couple.

"Actually, one method was quite good. That method is that the midwife taught my husband to do massage for me in the labour room. They used massage oil. If you asked me whether the method was useful for pain relief, I thought it was not so helpful. But it could distract me, I couldn't

just focus on the pain. Actually it was quite good that somebody did the massage."…"Yes, I thought so (the massage helped me relax). The muscles would not be so tense and the massage could help me a bit when I used energy to deliver my baby." I002 (2E)

"I appreciated the midwives arranging (childbirth) massage for me. The midwife massaged me and had a demonstration for my husband. Therefore, my husband could do something to help me. After that, we gave this pain relief method a high appraisal."…"If he (husband) could do the massage for me and I followed the rhythm to control breathing, it could really relieve the pain…Of course, he massaged me and gave me warmth. It was a comfort for me. Compared with those pain relief methods, I would give higher value to this massage method."…"It (the massage) was a bit more effective than those two injections (Pethidine)." I003 (2E)

One specific type of massage seemed to be appreciated more for relaxation than pain relief:

"Yes, because (I) was under epidural anesthesia, the midwife at last taught (him)…as my legs did not have energy, she taught him how to massage the legs, and then I could be more relaxed and sleep." I001 (2E)

"I used massage at the beginning of my delivery process. My husband massaged my foot and pressed upward and backward on my foot. Actually, I thought it didn't have a great effect on pain relief." I004 (2E)

Two participants commented on their experience with using the birthball: for one, this included sitting on it in early labour and having lunch:

"It was OK, actually the birthball was comfortable." I003 (2E)

"I didn't know why I didn't feel more pain after sitting on the birth ball."…"It was good that pregnant women could sit on the birth ball and

have some movement. Yesterday, I sat on the birth ball and had my lunch! I didn't want to leave, haha! I sat on the birth ball and didn't leave. When I felt pain, I put down the chopsticks and had some movement. I think that was good." I011 (2E)

Three of the four participants who used TENS felt that it did not help much. For one participant, it worked as a psychological distraction technique and for another, the combination of the TENS with the use of the birthball was felt to be highly effective:

"For the TENS machine, I think I didn't use it in the proper way… At first, I didn't always switch on the TENS machine.... at least it was a method for me. This method was more effective psychologically than the actual physical effect. It was OK in actual use as it has the frequency to adjust, that means…" I003 (2E)

"I think the massage pad (TENS) didn't have any effect on me, right."…"Actually,…I think that method was not suitable for me, right." I005 (2E)

"Also, there were some TENS machines. The midwife asked me whether I had back pain. If I had, she would give that machine to me for pain relief. Wow! After using it, my feeling was great!" I011 (2E)

"It (TENS) could give me some help. If I sat on the birth ball and used that machine, it was very useful. For example, the pain from severe uterine contractions was ten points (on a 10- point scale), if I used that machine, the pain decreased to half, to six or seven points. If I also sat on the birth ball, the level of pain decreased to five. (1011 2E)

Overall, women's accounts suggested that when they were found to be useful, non-pharmacological pain relief methods worked in a range of ways, including through distraction and psychological effects. Their accounts of

the use of pharmacological pain relief (Entonox, pethidine and epidural analgesia) were more focused on the actual sensations of pain.

Entonox was used by a number of the women. Some found it particularly helpful in the early stage of labour, but some felt that it was not useful. In general, most felt that Entonox made them dizzy and one felt that she could barely push her baby out under its effects.

"…inhaling that gas, it was not in my expectation that it could relieve the pain."…"I felt a lot of pain when I inhaled the (Entonox). Then…And (I) felt very dizzy". I001 (2E)

"Actually, the Entonox was also useful in the early stage of labour. But it was not effective later." I002 (2E)

"… the midwives told me it (Entonox) could relieve some pain then. Also, I thought it could distract me. Therefore, I inhaled the gas more frequently in this delivery. I inhaled the gas as deeply as possible. Actually, I didn't know whether it worked or not. When I inhaled the gas very frequently, I realized that I was sleepy. Ai! I thought I was … (tired)." "I think it (Entonox) had some effects (in pain relief)." I008 (2E)

"… I inhaled the gas crazily and… "Yes, I did (feel in a daze). I didn't have the energy to push my baby out. It was really painful." I009 (2E)

Similar to Entonox, pethidine had little effect in pain relief. It made the woman sleepy or dizzy, but the pain persisted.

"At first, the pain could be relieved after the first injection (pethidine). But the second injection was not effective in relieving pain." I002 (2E)

"I had higher expectations of pethidine. Actually, I felt dizzy after having an injection. But when the contractions came, they were still very painful!…"The effects of Entonox and the injection were similar. They were useful psychologically. I think they made me feel dizzier. For pain relief, they had a significant effect in my case. I preferred using massage as it could really relieve the pain." I003 (2E)

"I had a pethidine injection and inhaled the Entonox gas already. It seemed they didn't help with pain relief."…"Also, the injection made me relax…I felt dizzy at that time (after the injection). Yes, but I was not confused. Right. I felt a little bit of dizzy."…"Aside from feeling dizzy after having the injection, actually there was no reduction in pain." I010 (2E)

It is generally accepted that epidural analgesia is the most effective form of labour pain relief. This is supported by the statements of the participants who had an epidural:

"Later I tried epidural anesthesia that was…after it was done, I could be relaxed for a moment." I001 (2E)

"I shouted and told the midwives that I wanted epidural anesthesia... After having epidural anesthesia and stopping the induction drug, I calmed down."…"As I had epidural analgesia, I felt it was the most comfortable moment at that time."… "Then I felt very calm and I was in a normal and controllable situation."I004(2E)

As has been noted, all women in this study who were having their first baby had induction of labour, and in line with the average in the hospital in general for those with induced labour, these women were more likely to use epidural analgesia. Given that women tend to report this as a particularly painful process, the data on ***Induction and pain relief*** for these women was of particular interest. Induction and pain:

"After the induction started, I couldn't tolerate the pain."…"Even though I inhaled Entonox gas, I still felt a lot of pain."…"I really was in a lot of pain and the Entonox gas could not help me much."…"When I said I wanted to have epidural analgesia, the anesthetist came very soon. I felt my body cramp and I cried when in pain."…"After having epidural anesthesia and stopping the induction drug, I calmed down."..."When I was in the peak of the pain….if I hadn't used an epidural, I couldn't bear such pain. If there were ten points (on a pain scale), I think it was over ten points." I004 (2E)

Some women who underwent labour induction had intended to use non-pharmacological pain relief methods. However, during induction of labour, participants were confined to bed because of intravenous infusion lines and connections to the fetal heart monitoring machine and they could not use non-pharmacological pain relief methods such as childbirth massage and the birthball.

"I thought I had attended that birthball class…that would help me in the delivery process and help the baby's head turn to the best position. (I) thought it would be useful (in labour), but at last (those methods) couldn't be used. I couldn't get out of bed as the IV infusion was set under induction, then (I) stayed in bed." I001 (2E)

"Because I was connected to various types of equipment and continuous infusion of the induction drug. There were many things connected to me, therefore I couldn't move. Also, labour pains occurred every few minutes. That was different from what I heard from the antenatal talk. In the antenatal talk, the midwife told us that the pains would occur every 10-15 minutes." I005 (2E)

7.3.5 Theme five: Consequences of the childbirth experience

A few participants reported a ***Sense of achievement*** when they saw their babies immediately after delivery, having gone through the challenging process of labour and with the arrival of their baby. An extended quote from a multiparous woman described her very special feeling when the midwife put her baby onto her belly before delivery of the placenta. She felt the warmth, the weight, and the smell of the baby. This was entirely different from her first delivery when the midwife in Japan took her baby away to bathe him before returning him to her. The experience in this delivery made her feel that she had an achievement, had done something for the baby. This contributed to her great satisfaction in this childbirth.

"I think it was more real in this delivery. Because I used epidural analgesia in my first delivery. Compared with these deliveries, I think in my first delivery... If there was no comparison, I think, ah! Thank god! I delivered my eldest son smoothly. However, it was more real in this delivery. As I felt pain, I knew how to cooperate with my baby and let him come out. That means we were together to… (to go through this process). Right. Also, he was born and came into this world. When my baby was born, the midwife put him on…(my belly)."…"Right, he was very warm and it was real. In my first delivery, I didn't have any special feeling and…"… "Hence, I had more feeling in this delivery. My body was full of this feeling. I could experience his warmth, his smell and other things."… "...from my baby's body temperature, smell or other things, we could connect our bonding quickly. However, I didn't feel that in my first delivery. Oh, the baby was delivered…"…"....the pain! I didn't have much pain (since I had an epidural in the first delivery), even though I knew there was labour pain. However, that pain was not so strong as this delivery. Those made me think that I had not tried my best (in the first delivery) it seemed that I used a shortcut to finish this task."…"I was very happy. I had great satisfaction when my baby came to this world. I think I had put some effort on it."… "I didn't use too much energy in the last delivery. I really used lot of energy in this delivery,

right." I010 (2E)

One of the participants felt very touched when she saw the baby as she recalled the time when she had treatment for in-vitro fertilization.

"I think my first feeling was that it's definitely...very touching…It's very touching. Maybe I waited many years and didn't have a baby yet…even the doctor told me that my chance of having a baby was low, it seemed like…I remembered the time when I delivered my baby and saw him in front of me. It would remind me that, Ah! When I needed to be injected with those ovulation drug to increase the size of the follicles, suddenly I thought that, 'Ah! I saw the follicle through the ultrasound and then later it formed a shape (fetus).'"…"I did, (I) actually cried (at that moment), hahaha! It seemed like…Ah! A baby really appeared, ha! ....For me, I felt immense gratitude (for having a baby)." I001 (2E)

For some women, there was an association between ***The experience of labour pain and the planned number of children***. Some did report that, during the peak of the pain, they thought that one child was enough, while others still wanted to have another baby. However, two participants would consider using an epidural if they had another baby.

"I have thought about this during labour. Wa! One child was enough for me. As people say, after delivery you found that…you would forget (this painful experience) very soon. I think if it is possible, I want to have one more child."…"If I can choose (in next delivery)…I think I will also choose to have epidural anesthesia!" I001 (2E)

Two accounts demonstrate the complexity of thoughts and feelings in relation to labour pain. In one, another participant initially thought that she did not want to have another baby as she did not want to have the

experience of labour again. However, after second thoughts, she said she would chose a caesarean section if she had another baby. Even later in the interview, she indicated she would choose an epidural if she had another baby.

> *"I don't want to have this a second time (to experience the childbirth pain again)!"… "Yes. (Don't want to have another baby)."… "I think, actually I would like to have two children. If I have a second child, I may consider seriously whether I should choose a spontaneous vaginal delivery or a cesarean section."… "After this experience, if I have second pregnancy, I may choose a caesarean section. I know a caesarean section is not good for my baby. A spontaneous delivery will be better for the baby and my recovery. However, I actually couldn't accept the pain."…"(In the next delivery) I will choose an epidural for delivery. If it is possible, I will choose epidural analgesia." I004 (2E)*

For another participant, the recent experience of labour pain weighed strongly in the balance of her future decisions about the number of children she would have, at this point in the postnatal period:

> *"Actually, I planned on having only one to two children, right. After experiencing this delivery process, I realize what childbirth is! It would be better to avoid having this experience again, right."…"I just think now I want to have one child. If we really want to have one more baby, we will reconsider." I005 (2E)*

Issues beyond labour pain also played a significant role in this decision:

> *"I think I mentioned in the last interview that I would like to have one more baby."…"I want to have one more child, not for me but for my daughter actually… I think my husband and I will eventually leave her (pass away). Her sibling will be the only person who is genetically related to her, her closest family member." I003 (2E)*

Follow up on the original interest in the interaction between the family line and the experience of labour pain revealed that, for most, ***Continuing the family line*** was still not an issue.

"Continuing the family line for me, it seems, like...(I) don't know, (it's) not a very important thing, but…(I) didn't think giving birth is for continuing the family line."… "I also feel happy that I have a son, but my husband always said he would like to have a daughter." I001 (2E)

"Oh! I think it (continuing the family line) is a traditional Chinese thought."…"No, I don't have this thought. I don't agree about this thought and its influence."…"Oh! It doesn't matter (about the gender of the baby). The most important thing is that she is healthy. Health is the most important thing." I005 (2E)

"When I was a child, I thought I should have children in my family."…"When I was married, I asked my husband whether he wanted to have children. He said it doesn't matter to him. On the contrary, my parents-in-law want to have grandchildren. Their desires were stronger. But they aren't concerned about continuing the family line. As there are many boys in their families, there is no urge to have offspring to continue the family line. They just want to have a baby in our families and they will be happy. Maybe when they retired, they saw other people's grandchildren, and they also wanted to have one"…"However, it didn't mean that they wanted a grandchild to continue the family line." I011 (2E)

For some of the participants, this issue was not important because they have given birth to a boy. One participant who had not thought that continuing the family line was relevant in her antenatal interview reflected on this point:

"I think a little different in this delivery… I also think it is for continuing the family line." "Yes, I think this a little bit. If you said it is for

continuing the family line, I also have this thought in this delivery."…"If there is a need to continue the family line, I must have a son first. As my first child is a boy….." I008 (2E)

One respondent reinterpreted the meaning of continuing the family line, from a transgenerational duty to a transfer of love:

"It (the meaning of continuing family line) is a transfer of love, that is what I think. Because of dependence, I will not think that this is a way to prepare well for our future. I think when I am old, I have my offspring and we can be together. It is a very happy thing for me. I003 (2E)

At this stage, just before leaving hospital, most respondents were looking into the future at home with the baby, and to ***The importance of a support network for a working mother.*** Six of the participants in this study worked fulltime and needed to return to work after maternity leave, which is only ten weeks by law. As they had planned to do when they were still pregnant, most of them had already obtained support from their relatives, usually their mothers or mothers-in-law. Others planned to arrange for a domestic helper to help them with baby care and housework. Again, as in the antenatal interviews, although the participants had support from their family network and others, as a mother, they still wanted to take care of the baby as much as possible:

"…housework…actually I can find somebody to do the house work. For example, I can employ a part-time helper, or Filipino maid. There are different ways to find somebody to do housework. For baby care, I think I should do it by myself or my family members can help. I would not rely on the maid to help me."…"Yes, my mom lives with me (help me

take care of the baby).”….“Oh, yes! If I come home (after work), I will take care of my baby by myself.” I004 (2E)

“I live with my mother-in-law. Right. As my mother-in-law needs to work, I will live with my mom while ‘doing the month’ (the first month of the postnatal period). My mother doesn’t need to work and she can cook some food for me and help me bathe my baby.”… “After that, I will go back and live with my mother-in-law. She will also help me when she gets off work.”…“Yes. As she and my father-in-law do not need to work on weekends, they can help me look after the children.”…“Yes, he (husband) does housework and looks after the children).” I009 (2E)

7.4 Summary of the main findings

7.4.1 Feelings about the childbirth process

The significant aspects of this theme about the childbirth process include women’s expectations about and acceptance of pain, the duration of the childbirth process, their worries and stress, and factors influencing their sense of satisfaction.

The women expected that there would be pain that they needed to face during the childbirth process. They also expected that this would be intense, but they did not completely understand it until they had experienced it. In the actual situation, the pain was more severe than they had expected. However, they interpreted it as something meaningful, as it was part of the process of giving birth to their babies. They also considered that the pain was natural, essential and functional. All these were used to rationalize the challenge of childbirth and its pain. The duration of the process was significant in terms of their capacity for endurance.

Feeling safe physically, emotionally and psychologically was important, as the women worried about their own and their baby's health. There was evidence that a calm response from caregivers, and specifically midwives, helped to reduce this stress, and, thus, the experience of pain. Indeed, satisfaction with the childbirth process was not specifically related to the degree of childbirth pain, but more to the quality of care they received.

7.4.2 Response to childbirth pain

The women had a few significant responses to childbirth pain. Tolerance of pain was one of the significant responses. It was noted that most of the women tried to tolerate the pain, however, some were not able to do so and they needed pain relief. A few wanted to use epidural analgesia or even a caesarean section to escape the painful process. The tolerance of pain was affected by factors such as the meaning of pain, their past experience, and the progress of labour, which was related to the duration of labour. As indicated in the chapter on pain, those who found meaning in the pain seemed to feel it less intensely than those who felt the pain was meaningless. Also, practically, if the women had a short labour in a previous delivery, she might be more inclined to tolerate the sensations of labour, expecting that they would not last long.

The information provided by the midwife or health care professionals seemed to help the woman estimate the remaining duration of labour and therefore, of the pain she might have to endure. Conversely, without such information, women may feel that the sensation of pain will be endless, and so some of the accounts expressed feelings of being out of control, resulting

in anger and screaming.

7.4.3 The need for support in the childbirth process

The midwife and the husband were the significant support persons through the childbirth process, but, as in the metasynthesis findings, the kind of support the women wanted from each differed. The women understood that the support from their husbands was not so much about doing, but about being there and sharing in this process in which he had such a considerable stake. Some of the comments demonstrated significant insights into how their husbands felt about labour and about the role of men at this time. When the husbands were taught to perform massage, the women felt directly supported by this therapeutic touch. Some women reported that the behaviour of their husbands during labour helped to improve the relationship of the couple in the postnatal period.

The support required from the midwife was associated with the need to feel safe and secure and to have the benefit of professional guidance, support and comfort measures, and information. It was very important that the midwife stayed with the woman throughout the childbirth process.

7.4.4 Handling of childbirth pain

Different women have different considerations related to handling childbirth pain. However, almost all participants indicated that they would use a step- up approach for pain relief. They tried to tolerate the pain first and then tried non-pharmacological methods. If they still could not tolerate the

pain, they tried pharmacological methods such as Entonox, followed by pethidine if needed. Some women considered using epidural analgesia to relieve all the pain. The women gave complex and nuanced accounts of how they worked through their beliefs and values against their need to control the pain they were experiencing. This was particularly problematic for women who had induced labour, as they had to stay in bed because of intravenous infusions and fetal monitoring and could not use a birthball or massage.

The women had positive comments about non-pharmacological pain relief methods such as massage and the birthball. They felt childbirth massage may not necessarily reduce pain but it helped them to relax. When their husbands performed massage, they felt loved and cared for. Most felt Entonox and pethidine did not help much. Pethidine made some of the women feel drowsy, but they still had pain. When they used a lot of Entonox, they felt dizzy, and had no energy to push the baby out. Those who used epidurals did get significant relief from their pain and consequent distress and anxiety.

7.4.5 Consequences of the childbirth experience

A sense of achievement was very significant for many respondents. It was not related to relief of pain, but the sense of overcoming a very great challenge, and in the consequence, having the baby. A feeling of success could be generated mainly by the baby itself, especially if the woman had difficulties in conception and/or during the pregnancy. It could also be result of a sense of having conquered the pain without using an epidural or

with surviving a long and difficult labour.

There were no accounts in which the sense of success came from continuation of the family line through having a male child. For some, this may have been because they already had a boy previously, or because they had one in the current birth. However, generally, participants implied that there was minimal social pressure on them from their immediate and their wider family to have a son.

More broadly however, family ties and loyalties were essential in creating a good family network for support in the postnatal period and in the longer term, especially for working mothers, who had to return to work after maternity leave. This aspect and how the longer-term experiences of being a mother reflect back on accounts of labour pain are explored in more detail in the next chapter.

7.5 Conclusion

In this second interview which was conducted two to five days after birth, the women had a lot that they wanted to share about their childbirth experience. In theory, most of them considered pain as natural, essential and functional in the delivery process, but some of them did not want to face it, or in the event of the actual pain of labour, were not able to face it, especially when their labour was induced. Most women preferred to use methods that were least likely to affect their babies and their capacity to labour effectively, so they started with non-pharmacological methods.

Some progressed to epidural analgesia, which offered the most effective pain relief. However, this did not necessarily predict higher levels of satisfaction with the labour. Emotional, psychological and tangible support from their husbands, and empathic clinically competent support from attending midwives was highly relevant to the capacity for women to gain a sense of achievement from their labour. The valuation of different kinds of pain relief included the capacity of the methods to act as a distraction technique as well as to relive pain, and for it not to affect the sense of control of the mother or the wellbeing of the baby. Women felt that birth was not the end of challenges for them but the beginning of other challenges, such as baby care and breastfeeding. Support from the family in baby care and housework was thus significant in women's minds at this time.

The next chapter addresses women's reflections on these issues in the context of childbirth pain when they had experienced motherhood for about two months.

CHAPTER EIGHT

WOMEN'S VIEWS AT TWO TO THREE MONTHS AFTER BIRTH

8.1 Introduction

The previous chapter set out the key findings from the interviews conducted in the first few days after birth. This chapter describes the findings of interviews undertaken between two and three months after birth. After the second interview, one of the multiparous women decided to leave the study. Therefore, at this stage, nine participants were included, four multiparous and five nulliparous women. Seven of the women chose to undertake the interviews in their homes, one in the Maternity and Child Health Center when the participant had a postnatal checkup, and one in the researcher's office, as she had already resumed work.

There were three main foci in this interview, (1) the women's feelings about labour and birth when they looked back, (2) their memories about pain in labour, feelings about pain relief methods they had used, and the support they experienced during childbirth, and (3) their feelings about becoming a mother. The questions and prompts used are given in Appendix 10.

8.2 Results

There were some variations in the time of the interviews. Two took place at around seven weeks, four at eight to nine weeks, and the other two at around twelve to thirteen weeks. One participant was interviewed at around

16 weeks due to difficulties in arranging the interview after she had returned to work.

The third interviews were generally much shorter than those a few days after birth. The average duration was 13 minutes and the median duration was 11 minutes (Table 20). This could be because, over time, the participants could only remember the feelings and experiences that were most significant to them. In addition, the women's focus was now on issues related to the baby, and a lot of issues that were significant initially had become unimportant in comparison. Hence, less information was provided than in previous interviews.

Table 20: Duration of interviews

Participant	1st interview	2nd interview	3rd interview
I001	12:09	25:08	14:10
I002	12:43	12:36	9:23
I003	19:49	34:34	16:27
I004	8:43	19:26	7:32
I005	13:09	13:42	9:33
I006	13:22	19:14	8:52
I008	20:59	23:47	Dropped out
I009	14:38	16:57	11:20
I010	8:29	25:49	23:56
I011	13:37	28:16	20:26
Average	13:34.4	21:35.6	13:30.6

The analysis yielded four main themes and ten subthemes (Table 21). Some of the emerging themes echoed those generated in the second interview, partly because similar questions were asked and partly because some issues still mattered to the participants.

Table 21: Themes from the third interview

Item	Themes
1.	Memories of the childbirth process a) The memories of pain gradually fade b) The difficult pharmacological pain relief decisions
2.	Response to childbirth pain a) Childbirth pain is part of a process b) Preference for a short labour c) How specific pain relief methods helped
3.	The benefit of support during childbirth a) Impact of the husbands' presence b) Midwife as a supportive care provider
4.	Consequences of the childbirth experience a) Satisfaction and achievement b) Memories of pain do not affect the planned number of children c) Mothering as a sacrifice for the baby

8.2.1 Theme one: Memories of the childbirth process

By this stage of the postnatal period, the women still had memories of the childbirth process, but these were changing. Memories of pain and issues about pharmacological pain relief were thus subthemes under this main theme.

Seven of the women indicated that ***The memories of pain gradually faded*** away, and that pain was not a significant issue for them after the delivery:

> *"Yes, I should say it this way. The pain still exists in my memory If you ask me to review again, I can describe it which was very painful. However, the feeling is not so true as before."…"Yes. I just remembered that, ah! It was very painful in the middle part of the childbirth process. Now I think the feeling is fading out."…"I think it (the memory of pain) decreased to three (points on a ten point scale)." I001 (3E)*

> *"My impression (of labour pain) is not so deep now. But I still feel it was very painful."…"The pain is still very clear in my mind. But it was not, wow, over ten points, right."…"It (memory of pain) is lower than before. Decreased…I think about 20-30%."…"Yes, my memory of pain has faded a little bit." I002 (3E)*

One of the participants had not forgotten the severity of the pain of labour, but she set the fact it was short term against the long term and continual experience of mothering her baby. In comparison, she thought that the pain was not an important issue now.

> *"I still feel it was painful and I haven't forgotten the pain. Relatively speaking, I think it is not a very important issue. As I have a comparison (with baby care) now, I think this (baby care) is a long-lasting feeling. The pain (during childbirth) maybe lasted for few days, or just one day only." …"Yes it was. It (pain) was relatively decreased, the feeling on that…" I003 (3E)*

In contrast to the other participants, one woman still remembered her feelings during the childbirth process quite clearly and considered it an ordeal. If possible, she did not want to have this experience again.

"If I really need to bear labour pain, I will regard it as an ordeal, yup."…"It was an ordeal."…"I never had such a painful experience before. I hadn't delivered a baby and hadn't been pregnant before. Right."…"I really wanted to finish this process soon, right. I didn't think that it would be like that. I knew it would be very painful, but I didn't know how painful it was. When I had this experience, I knew what labour pain was."…"If there are choices, it will be better not to experience the pain. If there is no choice and I need to deliver my baby, then I will have a try."…"It is an important process that cannot be forgotten." I005 (3E)

Two participants still talked about ***The difficult pharmacological pain relief decisions***. Two participants struggled hard when considering whether to use pethidine and epidural analgesia. Although they decided against these drugs in the end, they still had strong memories of this part of their labour. Participant I010 (3E) was happy that she had not used epidural analgesia for pain relief in this delivery. She believed that her feelings for her baby were especially strong because she was not affected by epidural analgesia. She was still remembered this clearly although the interview was more than 8 weeks after her birth.

"In my first delivery, I used epidural analgesia for childbirth. After delivery, I needed a period of time to recover…"… "Compared to the first delivery, I think this time was very real. I didn't have a feeling that I really delivered my baby in the first delivery. In this delivery, it seemed that my baby and I went through this process together. Maybe I had a special feeling for him, therefore, I think this delivery was very real and I was very happy."…"Although I felt pain, I knew when I needed to push. Of course, the midwives gave me some guidance. I felt that it was easier to push him out." …"I also had the connection with my first baby. But it took time to build up. Maybe that was my first time to deliver a baby. After delivery, I think oh! This is my son. Also, the anesthesia may have had some effects. I felt a little bit dazed and didn't know what

happened. I just thought, oh! That was my baby. Then I didn't know how to face him. It seemed very strange for me. In my second delivery, the process went so fast. After my baby was born and he cried, the midwife gave him to me. At that time, I already had a feeling of connection with him." I010 (3E)

Participant I011 (3E) also remembered clearly her struggle whether to use pethidine for pain relief. She did not use the drug in the end and did not regret this decision, especially when she saw the difference in way her second baby fed compared with the first baby. This was despite the fact that she still clearly remembered the pain of labour.

"If you asked me whether I regretted choosing this option (not using pethidine for pain relief), I didn't regret it. As it occurred some time ago, my feeling about pain is not so strong now and I don't regret what I did. I don't remember whether I regretted my choice at that time. But…"…"Yes, I didn't have a pethidine injection. But I think I didn't regret what I did. I think I could tolerate such pain and I could do that. However, it was really painful."… "I didn't know whether it was related or not. In my first delivery, my baby really didn't want to have milk."…"In this delivery, I didn't give him too much as he was breastfeeding. I let him sleep. I would breastfeed him when he woke up. When I felt that there was no breast milk for him, I would feed him three oz., he could drink 2 oz. of milk. This baby drank milk better than his older brother." I011 (3E)

Both of the women had struggled in deciding whether to use pharmacological pain relief or not, and they were both happy that they did not, with no regrets. The fact that they still talked about this choice emphasized how important it was in their childbirth experience.

8.2.2 Theme two: Handling of childbirth pain

This issue was about how the participants managed their pain continued to feature in their accounts. In handling the pain, as indicated in the second interview, the women accepted childbirth pain as it was part of the childbirth process. In addition, knowing the labour was progressing well meant that the duration would be short, which helped them tolerate the pain. They also commented on their use of a step-up approach.

In noting that ***Childbirth pain is part of a process***, the participants felt there was great pain during labour, but it was part of the childbirth process, so they accepted it. Reflecting the variation in views of suffering and sacrifice that were expressed in the earlier interviews, some saw that the pain they went through was hard, but that the process was vital for the birth of their baby. This acceptance helped them to handle the childbirth process:

> *"At that moment, I had just delivered my baby, and I thought, 'Ah! It is very annoying to bear such pain!' Now when I review that moment again, I think it is like a process that one must pass through."I001 (3E)*

> *"I don't think it was suffering. I wanted to see my baby soon and I felt worried about her. I just wanted the process to be finished as soon as possible."..."Sacrifice for the baby…I think this is an essential part that one needs to go through, right."…"It is necessary (to have childbirth pain) but it (the pain) could be reduced." I002 (3E)*

> *"The pain will make me know how I should cooperate with my baby (to push in the delivery)."…"…actually…I remembered that it was very painful, yes, but this pain brings the delivery of the baby, so I may have this thought, I think this is worthwhile to do (to experience this pain), yes." I010 (3E)*

One of the participants considered that it would be strange to have a baby without having childbirth pain. Another woman thought that women should have this experience in the delivery of babies.

"This is a part of the delivery process. Is it a sacrifice? Of course, I didn't want to have such pain, but this is a natural thing. I am willing to face and bear the labour pain as it was a part of the delivery process."…"My friend told me that she did not feel pain during delivery. I felt it was very strange. I actually admire her to some extent, as she didn't feel pain, but then it seemed like something was lacking."…"I don't know. I still think that I need to experience the labour pain when I deliver my baby."…"Sacrifice, I think so. I still need to bear the labour pain so that my baby can come out." I003 (3E)

"Yes, I feel it is harsh (the childbirth process). But every woman must go through this process (for delivery of the baby)."…"If I need to deliver my baby, I have to experience this pain."…"I think we should have this experience, especially delivering babies." I009 (3E)

As in the previous interviews, although the women felt it was necessary to go through the process of childbirth, they still had a ***Preference for a short labour***. This allowed them to tolerate the (necessary) pain. Participants felt that they were 'lucky' if their labour was shorter, especially those who had experienced longer labours previously:

"I felt...some pain. Sometimes, it was quite difficult to tolerate."… "I wanted to deliver my baby as soon as possible."…. "The duration (of the labour process) was short and I didn't need to bear the pain for a long time. That means I could deliver my baby in a short time in this delivery." I009 (3E)

"Luckily, I felt pain for only two hours. When I review that moment again,

it was very painful at that time."…"Maybe the time was short in my second delivery. I think my process of feeling pain was shorter than other women." I010 (3E)

"The cervix opened to only five to six degrees. How long do I need to bear such pain?' Then I told myself, 'Tolerate the pain! It will be over soon! This should be similar to the last delivery.' I talked to myself, 'I hoped it was like my last delivery.' Luckily, the process was over very fast." I011 (3E)

Women also reflected back on ***How specific pain relief methods*** helped them to handle the pain they experienced. These views did not change substantially from those expressed in the immediate postnatal period. They remembered the relaxing effect of massage, especially when this was undertaken by their husband or their attending midwife. This was remembered not only for its physiological effect, but also for its emotional and psychological impact.

"Massaging my foot, since I had an epidural already before doing massage, I felt very comfortable when I was having massage. However, if I consider whether this method is useful or no… actually I didn't feel pain at that moment (as I already had an epidural), but I felt very relaxed."…"I asked my husband to massage my back when I felt a lot of pain. The massage was good for me."…"Massage can make me more relaxed. As my husband and the midwife massaged me together, I felt it was very real. It seemed like many people supported me at that time." I002 (3E)

"Actually it (massage on foot) couldn't help me much. But my husband was there with me, I felt calmer."…"I felt more relaxed. Actually, it was impossible to be relaxed at that moment. But someone was there. You knew he was doing something for you. He was doing something to relieve my pain." I004 (3E)

One of the participants who used TENS indicated it helped relieve some pain. This effect seemed to be partly about having control over the timing and degree of administration of the electrical stimulation.

> *"The TENS machine…can help to relieve the pain. Especially when I felt pain in my backbone, this could relieve some pain. Also, I can press the buttons by myself. The most important point is that it doesn't have any side effects." I001 (3E)*

One participant used the birth ball in the antenatal ward while she was in early labour and the view outside the window distracted her from concentrating on the pain. She remembered how useful and relaxing this was. This participant also used TENS and found the two methods together provided good results.

> *"This time I used the birth ball."… "I think the birth ball was good. I used it when I started feeling labour pain. I sat on the birth ball and looked around. As it was near the window, I could see some views. That could distract my concentration and I didn't feel much pain. To a certain extent, I think the birth ball was OK. Also, I could see some distant views. I could see the sea. I had a feeling of being free. When the pain became frequent and severe, I sat on the birth ball and it could decrease the pain one to two points (in the pain score). It could even decrease the pain to three points. Later, the midwife gave a machine to me. Right, the TENS machine… I felt much better after using it. As it was very painful at that time, the machine could help decrease the pain in half…Yes. That's right." I011 (3E)*

Entonox was commonly used, but, looking back, four of the eight participants who used it found it was not useful for pain relief.

> *"In my memory, I still remember that….Entonox? Right, I will not try that*

method again. Because I was very dizzy after inhaling the gas."…"For the Entonox, after I inhaled the gas, I felt……very dizzy and nauseated. There were bad feelings that came out." I001 (3E)

"I inhaled the Entonox gas by myself. I think I didn't inhale it well. Actually, the Entonox gas didn't help me with pain relief."…"I don't think the Entonox gas helped me in two deliveries." I011 (3E)

Unlike the women who gave accounts of resisting the use of pharmacological pain relief, others who did use it still remembered how helpful it was. Three participants used pethidine injections and one of them also stepped up to epidural analgesia. Two other participants also used epidurals. All who used epidural analgesia had induction of labour. Their comments about these two pharmacological methods were positive about their capacity to relieve pain, especially for epidural analgesia and they indicated that they did not feel any pain after administration.

"Then….later, I had epidural analgesia. I didn't feel pain after that." I001 (3E)

"The pethidine could help relieve pain. " I002 (3E)

"Actually, many pain relief methods could help me in the early stage of labour. But in the later part of labour, only an epidural can help to relieve pain."… "I think I would advise people to use an epidural as it really relieves the pain." I002 (3E)

"I think I will choose…. Painless childbirth. Because that method … can relieve the pain more efficiently, right. I004 (3E)

8.2.3 Theme three: The benefit of support during childbirth

As in the second interview, the women remembered how much supportive attention helped them. They also remembered that the kind of support they needed and got from their husbands was different than that from the midwives. They had needed their husbands to protect them and their babies, whereas the support from the midwives included monitoring their safety related to heatlh and the provision of necessary action to rectify problems, as well as being taken care of.

Many women remembered the ***Impact of the husbands' presence***. They did not expect their husbands to do anything except be there. However, if they could do something more to support their wives, such as encourage them or massage them, it made the women feel positive about the challenges and they felt this support made the childbirth process more memorable:

> *"I need his support and he is not just an assistant. We are like each other's partners…. Actually, he participated in the delivery process at the early stage of my labour."… "Actually, I think it's OK when he accompanied me in labour." I003(3E)*

If the husband had done something more than the woman expected, she had a strong memory of it, which made the childbirth memorable, in addition to improving the couple's relationship:

> *"Yes, I did, the feeling was very sweet (her husband massaged her when she was in pain), but to a certain extent, it was unbearable for me to see him do this (massage for her for such a long time). Actually, we had waited for a long time (for the delivery of my baby). Actually, he stayed in*

the labour room with me for more than ten hours. He told me to sleep when he massaged me. When I slept, he was still doing the massage. To a certain extent, I felt it was very hard for him." ..."I think it was a good experience for us. We could face this issue (childbirth) together, so I think it was very good and very touching." I001(3E)

One participant considered receiving encouragement was like being charged with power:

"He always said some encouraging words, 'That's right! I know you feel pain and it is very harsh!' Then he said something to comfort me and encourage me, 'Ah! You are doing well!' He gave encouragement to me continuously. I think if you praise the pregnant woman, it is a support for her. It seems you give her some power. Let her know that, 'Yes, I am doing well. I must tolerate this. I must try my best to deliver my baby.'..."I think body touch is OK, yes, such as holding the woman's hands, putting his hand around her shoulder or touching her forehead, gives her a sense of being care for." I011 (3E)

If the husband was very excited and happy and smiled, the woman would be influenced and feel better. If her husband was relaxed and talked to her, she would feel better. However, if her husband showed that he was worried, then she would be worried too. Two participants had a strong sense of love and belonging to their husbands. Hence, the responses of their husbands affected their emotions and hence, their pain endurance.

"He was great. He provided significant psychological support to me."..."Actually, there was no special thing he could do to help me. Maybe he could talk more with me and not just stand aside. If he felt worried, I would feel more worried. If he felt more relaxed and talked more with me, I think I felt better with diversion therapy (the presence of her husband attracted her attention)." I002 (3E)

However, some participants commented on things their husbands did that were not helpful, particularly when the labour pain became very challenging. These memories were about both the most recent births and previous ones:

"Sometimes he talked to me, actually I would have liked him to leave me alone. Ha! As I felt a lot of pain at some moments, I didn't want to talk to him." …"When I didn't feel pain, sometimes, I would like to have some rest. If possible, I preferred he didn't talk too much to me and let us be quiet for a while." I001 (3E)

"He (husband) was so smart in the last delivery. He just monitored that machine. I think it was not good! It was not necessary. I had attended antenatal exercise class before, and the physiotherapist said mother also had feelings when she felt pain. In the last delivery, I felt that, 'Hey, you tell me that I will have pain soon. I will be scared first before I really have pain.' Actually, husbands don't need to monitor…" "Also, the mother will know when she has pain! I don't need you reminding me! Once my husband reminded me about pain, I thought that, 'Ha? I will have pain, really?' I would be frightened before having the pain. This was not good for me." I011 (3E)

Although the women wanted their husbands to stay with them, not every husband was able to tolerate seeing what happened in childbirth. When the husband was not able to do stay, phone communication could help him support his wife.

"Because he accompanied me during my first delivery, he said he was frightened in my second delivery. I didn't want to force him and actually it didn't matter to me."…"Oh! But he (her husband) felt worried when he was outside the labour ward (waiting for the wife's delivery of the baby)."…"Yes, I did… Before I delivered my baby, I phoned him when I had labour pain." I009 (3E)

The participants remembered the ***Midwife as a supportive care provider***. They provided professional care and guidance. They were perceived as important health care providers. Some commented on the value of midwives who stayed with them during the whole course of labour. They were afraid of problems and wanted the midwives to be there for their safety and that of their babies.

> *"Oh! I think…as the midwives are comparatively professional they realize when any abnormal condition occurs. For example, if I had some discomfort or my baby had something wrong, the midwife could give me some advice or help us immediately. Therefore, I think the midwives play an important role in the delivery process." I004 (3E)*

> *"It would be better if the midwife can be here at any time."…"I think the midwives could support me, yup."…"Yes, it would be better. Because they are professional." I005(3E)*

> *"She did massage and always checked my condition. She did massage continuously. Also, she told me about my cervical dilatation and monitored some equipment, right."…"The midwives advised me to exercise and walk more. They also advised me to sit on the birth ball. That could help my delivery process be faster and smoother." I009 (3E)*

The women felt the midwives should assess them and let them know their labour progress (in terms of cervical dilation), so that they would know how far they were from their destination. In keeping with the desire for a short labour, the women felt that when they were informed that they were near to full dilatation of the cervix, they could take courage in coping with the pain. In addition, the care the midwives provided made the women feel cared for and provided psychological comfort.

"I just complained to the midwife, I told her that I felt a lot of pain. The midwife gave me some positive encouragement. She said, 'I understand that, I know you feel lots of pain now.' She also explained my condition and certain reactions. Actually, I think she was better than my husband." …"I think the midwife was very nice. She gave us some music in the early stage of labour. I think she was very professional, especially in my delivery. Also, I met two midwives and they were very nice. Especially the second one, she was very calm. When I felt pain, her voice was very gentle and she gave me some professional advice. I was frightened and I had a feeling like a bowel movement. She said it was normal and my baby would descend more. She said my feeling at that time was normal. That could give me comfort, right." I010 (3E)

"In this delivery, when I felt pain at that time. The midwives encouraged me, 'Right! We always said being a mother is very great! That's right! Aya! Very harsh, right? It doesn't matter. You will be very happy after your baby is born!' They continuously gave me encouragement. This was different from the last delivery."…"The midwives also encouraged me, 'That's right. Mother is very great. Therefore, we always say being a mother is very great.' After their encouragement, I felt more comfort psychologically." I011 (3E)

However, when the midwife could not provide what the woman needed, such as information about the progress of labour, the women were unhappy:

"The midwives could have (given) some help…I think when we didn't know the condition…ah! For example, we didn't know the progress of my delivery process. It would be better if she could tell us about that. I think maybe the midwives would not check the cervical dilatation. We need to wait for the doctor, right?"…"Yes. Sometimes I feel, ah! It likes…my baby's head descended more, I had the feeling that the baby's head was pressing down, then I told the midwives who said I needed to wait for the doctor. However, the doctor was busy and not available." I001 (3E)

"I needed to wait for the doctor for each check during my delivery process. If the midwives could do the checking, I didn't need to wait for the doctor to check my cervical dilatation. If the midwives could do this, she could give the message to me frequently. 'Your cervix is opened to three fingers, four fingers now.' It seemed like I was closer to the target." I002 (3E)

8.2.4 Theme four: Consequences of the childbirth experience

A lasting sense of ***Satisfaction and achievement*** related to their childbirth experience varied among individuals. Some felt a sense of achievement when they had given their best efforts in the childbirth process. This could be related to a range of factors, such as the care the midwife provided or the first time the woman saw her baby, which signified completion of the childbirth pain. None of the women indicated that painless childbirth made them satisfied. Indeed, pain or lack of pain seemed to have nothing to do with the women's satisfaction, at least at this stage in their postnatal process.

"I wanted to have a spontaneous delivery and I had tried my best to do things. Although I couldn't do it finally, I didn't have any regrets or feel sorry about this because I really tried my best and I knew I had devoted full effort in my delivery process."…"Yes (I am satisfied with myself), as I really tried to do something for this delivery." I003 (3E)

"Yes, I felt satisfied when I saw my baby coming out. Besides this, I just think it was harsh. Right."…"Oh, I felt satisfied with it (childbirth process)." I004 (3E)

"Ah….yes, I felt satisfied (with the delivery process) in the second pregnancy." …"The midwives treated me very well and my family members accompanied me during delivery. (so I feel satisfied)" I006(3E)

"Yes, I felt satisfied (with the childbirth process)."…"I was very happy when my baby was born." I009 (3E)

Another participant felt happy and satisfied with the childbirth process and the outcome because this baby was heavier than her first baby and the midwife competently handled a problem with the cord around the baby's neck.

"This baby was heavier than my first baby. He was one pound heavier than his brother. I felt satisfied with this."… "As this baby's size was larger than my first baby, I needed to tolerate the pain for a few more contractions before he could be delivered. Also, the cord was around the neck in this delivery. This was unexpected. Luckily, the midwife was very smart. She saw this problem and asked me to stop using energy to push. I was calm at that time. I knew it would be fine if they didn't call the doctors, haha! The midwives just asked me not to push and I followed their instructions. Also, when the baby's head came out, I didn't feel pain again. I didn't have labour pain at all. After the midwife cut the umbilical cord, she asked me to use energy to push again. Then she pulled my baby's shoulder out. At last, the baby was pulled out from my body. I felt very happy at that time and I was relieved." I011 (3E)

One participant had decided not to use epidural analgesia for pain relief, so she had a different experience in this delivery than in her first delivery. She was happy with this experience as she had a sense of achievement.

"Actually I feel happier than in my first delivery."… "I think it (the childbirth process) was very real. As I mentioned before, I cooperated with my baby during delivery. In my first delivery, maybe I used epidural analgesia for childbirth. After delivery, I needed a period of time to recover myself."…"Luckily, I felt pain for only two hours (in this delivery). When I review that moment again, it was very painful at that time. I felt very relieved after the delivery and didn't feel the pain again.

I paid full attention to my baby and felt very happy. It seemed that both of us had a connection at that time."…"In this delivery, it seemed that my baby and I went through this process together. Maybe I had a special feeling for him. Therefore, I think this delivery was very real and I was very happy." I010 (3E)

As well as the lack of association between pain and a sense of achievement in the accounts of the respondents at this stage, some also revealed that ***Memories of pain do not affect the planned number of children***. Those women who had just had their first baby and who had wanted two or more eventually indicated that they did not change their minds because of childbirth pain. However, some did feel that they would choose a more effective method of pain relief in the future. Most of the multiparous participants had only ever wanted two children, so they felt that they now had a complete family:

"I can describe the feeling at that moment and it was a feeling that I couldn't bear. But now I review that moment, I think I can accept this. If you ask me to think about having another baby, I think I want to have another baby."…"It was really painful and I felt I could not bear it. If you asked me whether I have the courage to have another baby, I think I have. However, I don't want to experience that pain again." I001 (3E)

"Of course, the labour pain was very intense. But it was different from what I think now. In these past two days, I think we are still hoping to have one more child. I saw the gynaecologist and he advised us on family planning and the time to have another baby." I003 (3E)

"I think I will choose….painless childbirth. Because that method … can relieve the pain more efficiently, right."…"I still want to have two children."…"I think that it will be in two years. (plan for another baby)." I004 (3E)

Where participants were thinking of limiting their family to one, this was for reasons other than their childbirth experience:

> *"One child, at this moment I want to have one child first."…"No, I will not (change my mind about having only one child). That depends on my financial situation in the future (when considering another baby)." I005 (3E)*

At this stage, the focus for many women had shifted away from thinking about the importance of the birth because they were very busy taking care of their babies. The sense of childbirth as sacrifice, which was more evident in the immediate postnatal period, was replaced with a sense of mothering as a sacrifice for the baby. The babies cried often because they were hungry, including during the night. Hence, the women felt exhausted. In addition, they devoted all their time to the baby. Two participants indicated that they had lost their "freedom" or "social life". However, when they saw their babies, they felt very happy, which made the sense of exhaustion and restriction worthwhile:

> *"I feel happy when I see my baby…no matter how hard it is, I feel very happy when I see my baby."…"Sometimes I think, ah! I prefer sleeping and don't want to breastfeed my baby. Later I think that, ah! Being a mother I should make some sacrifices. Therefore, I will get up at night and breastfeed my baby." I001 (3E)*

> *"My husband and my mother go to work. My mother comes in the afternoons as she works half days. Therefore, I feel very stressed in the morning. It is very stressful and busy at that time."…"My feeling…actually I feel quite happy. I can see my baby who is changing in different aspects and she is progressing." I002 (3E)*

"Busy, very busy. I just feel I am very busy, yup."...."When I see my baby, I feel happy. However, when she cries, she cries continuously, I feel very annoyed. Hahaha!" I004 (3E)

The women indicated that they had shifted from their own rhythms, schedules and choices to those of their baby. This was hard, entailing a loss of some of their older freedoms, but also included important new gains:

"After I delivered my baby, I was so busy and the time was out of my control. Now, I follow my baby's rest time, breastfeed, get some sleep and take care of her. I even steal time to go to the toilet or have a meal."..."I devote almost all my efforts to taking care of my baby."..."I think being a mother is very great."..."I think being a mother is hard."..."A friend asked me, 'Ah! What things do you miss so much?' I said, 'Freedom'. Now, I lost my freedom, hahaha! Because I really follow my baby's time schedule." I003 (3E)

"It is very difficult being a mother. There are many things I need to consider. Also, I realize I need to be concerned with so many things to take care of my baby."..."I need to wake up at night and feed my baby. Sometimes I feed my baby several times but it is not enough."..."After having a baby, there are lots of things to do. In time arrangement, I am busier now than I have returned to work. It seems that 24 hours is not enough for me. I think I don't have enough time now...Oh! It must affect my social activities and I reduced going out. For example, if I go out to eat with someone, I need to arrange the schedule so that I can feed my baby."..."Childbirth is not a sacrifice, it is a process. Now, I just sacrifice my time..."..."I need to sacrifice." I005 (3E)

Some women who had had a baby before seemed to move more swiftly into the new rhythms of being a mother with an older child, whereas others found that this added new challenges:

"Yes, I feel very tired. But I will finish the task as soon as possible. After I settle my children, I do the housework." I009 (3E)

"In this delivery, I feel it is OK. Maybe I already expected that I have to feed my baby at night. Also, he is well-behaved and doesn't have difficulty in eating. After one month, he was OK and I didn't need to feed him at night."..."I will call him (husband) for help. When I finish bathing my baby, my husband wipes his head. When I tidy up things, he will carry our baby."..."He will play with our eldest son. I think men may not know how to educate their children well, haha!"..."My older son is five years old. He goes to school, half days. I can find time to check his homework in the afternoon. Perhaps, all of us go out and walk for a while. Therefore, I think I can handle things easier in this delivery." I010 (3E)

"This delivery was totally different. I was continuously breastfeeding my baby in hospital."..."As I am exclusively breastfeeding this time, I need to wake up and feed my baby at night...I feed my baby every two hours at night and I don't have rest at all...I don't put too much effort into taking care of my older son. He goes to school in the morning. When he comes back, I accompany him in the afternoon."..."This time, I put much effort into breastfeeding my second baby. I feel very tired."..." Actually, I wake up every two hours at night. I don't sleep at all and I have dark circles under my eyes." I011 (3E)

8.3 Summary of the main findings

8.3.1 Memories of the childbirth processes

At this stage of their postnatal experience, memories of the intensity of childbirth pain had decreased for all participants as their memories of it were fading. However, most still remembered that childbirth was a painful process. Two multiparous women specifically remembered struggling when deciding whether to use epidural analgesia or pethidine. Both decided not to use these methods, and looking back, they were pleased with this decision,

and they felt they experienced different outcomes as a consequence compared to the first delivery. One felt that she had a much better connection with the baby than in her first delivery and that she and her baby went through the process together. The other woman noticed differences in the alertness and feeding of this baby because she did not use pethidine.

8.3.2 Response to childbirth pain

When the women accepted pain as an inevitable part of the childbirth process, it seemed that they found it easier to tolerate. However, even when they accepted pain as a necessary or even essential component of birth, they wanted labour to be as short as possible. To help them to cope as the pain intensified, they tended to use a step-up approach to pain relief, starting with non-pharmacological methods like massage and using the birth ball, and for some, ending with epidural analgesia. This need for and use of pharmacological pain relief needs to be set against the number of participants who experienced labour induction.

Three non-pharmacological pain relief methods helped to reduce some childbirth pain, LK massage, the birthball, and TENS. In contrast, Entonox was not useful for most participants. Some women remembered that it made them feel dizzy and reduced their energy levels at the time of pushing. Women who had pethidine found it helpful. Epidural analgesia takes away pain but also numbs the feeling of a need to push. One participant who had epidural analgesia for the first delivery chose not to use it in her second labour. She was therefore able to compare her experiences of both using and not using an epidural. She was very satisfied with her success in cooperation

with her baby for this most recent birth. She remembered her sense that the pain was functional this time, as it gave her a signal of when to push and how to push. In addition, she was given her baby immediately after birth and this helped them bond. She did not experience this in her first birth.

8.3.3 The benefit of support during childbirth

The presence of both the husband and midwife was significant. The women needed support from both, but the needs were different. The presence of the husband improved the psychological well-being of the woman. The woman felt that if something happened, her husband was there to handle it for her. The women reported that the fact their husbands were there was good enough for them and they didn't need to do anything else particular. However, if the husband encouraged the woman and let her know that she was doing her best for the baby, it helped increase her capacity to tolerate the pain. If the husband could do more than that, such as perform childbirth massage even when she was asleep, the woman was deeply impressed and feel touched. This became a memorable experience for her.

The women also needed the midwives, particularly if they could stay with them throughout the childbirth process. This was related to safety needs as well as caring needs, as problems might arise for them and their babies. The participants felt that the midwife could identify problems early and intervene to rectify them. In addition, caring midwives could see to the needs of the women and provide for them whenever necessary. Timely provision of information was also important, particularly in terms of encouraging the woman if examinations showed that she was nearing the

end of her labour.

8.3.4 Consequences of the childbirth experience

Although the participants indicated that the labour was really painful and some could not tolerate it and required epidural analgesia for pain relief, this was not a factor affecting their satisfaction with childbirth. Their sense of achievement and satisfaction was sometimes related to the husband's care and his participation in providing massage. For other participants, it was about the midwives' care and concern and their professional judgment and guidance. In addition, the women's feelings of success in cooperation with the baby in delivery, excitement as she felt the pain guided her actions, and contentment with her efforts in the delivery of the baby all contributed to feelings of self-esteem and satisfaction. This applied as much to a woman who had tried their best to tolerate the pain but who in the end needed pain relief, as to another who struggled with the decision whether to use epidural analgesia, and who finally decided not to do so. Both felt they were successful and they had a sense of achievement as they had stretched their capabilities and achieved their goals at the end. The more the woman felt a sense of achievement with her childbirth, the more memorable her birth experience.

All the women remembered that childbirth was really painful, even if the memory of its intensity was fading. However, when asked about their intention to have further children, those who planned to have another child indicated that their memories of labour pain would not affect their decision. Other factors, such as their financial situation, seemed to be more important.

In this third interview, the focus of the participants was on baby care. Caring for a newborn baby was so demanding that two women indicated they felt they had lost their social life or ‘freedom’ as their time was devoted to the baby. However, both primigravid and multigravid women demonstrated that they had altered their lives to fit with the rhythms of their babies. Some reported that the aspects of their lives that they had given up could be considered to be more of a sacrifice for the baby than enduring labour pain, as it is a long- term issue, while the experience of childbirth pain was over very quickly. Although the early weeks of motherhood were very hard, they reported that they were worth the effort.

8.4 Conclusion

This chapter has presented the findings of the third interview of the longitudinal study. While women still remembered the pain, the memory of pain intensity faded with time. Women needed their husbands to stay with them as they improved the women’s psychological wellbeing. The midwives were significant as professionals who the women expected to provide care, encouragement, information and instruction. The women expected updates on their labour progress, as they used the information to assess the duration of the process. The shorter the duration, the more courage they had to tolerate the pain, as the duration reflected the approximate time that the childbirth process would end. Some non-pharmacological pain relief methods helped the women, especially when used in combination with others. Among pharmacological pain relief methods, participants reported their memories that Entonox was not useful, but pethidine helped them.

Epidural analgesia relieved all the pain for those who used it. Most women considered pain an essential part of the childbirth process and they accepted the pain, although they felt that a shorter labour would be better. Despite this, having a painless labour did not predict memories of being satisfied with their childbirth experience. In contrast, satisfaction was related to feelings of achievement and the outcome of the childbirth process, such as a healthy baby. Reports of good care from the midwives and appropriate support from the husbands were associated with reports of satisfaction. In addition, the women's focus on baby care and their need to make life changes to come into harmony with the needs of their baby also lessened their memories of childbirth pain.

CHAPTER NINE

WOMEN'S VIEWS AT 12-15 MONTHS AFTER BIRTH

9.1 Introduction

The previous chapter set out the key findings from the interviews conducted in the first couple of months after birth. This chapter describes the findings of interviews undertaken between 12 months and 15 months postnatally. In this interview, there were more changes in the questioning technique to enhance the capacity of the participants to talk about their experiences. The participants were asked to talk about their memories of their childbirth story from the beginning of pregnancy to their transfer home.

The focus of the semistructured questions in the fourth interview was the same as for the third interview (see interview schedule, Appendix 9).

9.2 Results

Three participants were interviewed at around 12 months after their babies were born, one at 13 months, four at 14 months and one at 15 months. These were the same participants as for the third interviews. One selected her office for the interview. Six chose to have the interviews conducted in their homes. One selected a place outside the Central Library and the final one came to the researchers' office after work. Three main themes and eight sub-themes were generated from the analysis (Table 22).

Table 22: Themes from the fourth interview

No.	Themes
1.	Memories of children pain and of responses to it a) Memories of pain sensations b) Memories of their feelings about, and responses to, pain c) Reflections on pain relief choices
2.	Caring support is crucial during labour a) Reciprocal benefits from the presence of husband or family b) The need for a caring midwife c) Key components of satisfaction
3.	Looking back and looking forward: context and consequences of childbirth pain a) Meaning of childbirth pain is influenced by context b) Thoughts of future children and childbirth

9.2.1 Theme one: Memories of childbirth pain and of responses to it

The three sub-themes under this main theme captured pain memories and how women felt about those memories, and about the choices they made in response to their labour pain experience. The degree to which they remembered that labour was painful varied and did not seem to have changed much since the interviews undertaken at about eight weeks after their babies were born.

In terms of visceral sensation ***Memories of pain sensations***, some still remembered this clearly. A few gave a higher rating to the pain in this interview than they did in the third interview. This suggests that the process

of forgetting the pain did not occur steadily with time.

"I think it (the pain) was almost the same. I can recall that pain and feeling the urge to push. I can recall those feelings again."... "I don't think I feel, 'ah, it should…it should not be so painful', I don't have this feeling."... "I still think that the pain was strong." I002 (4E)

"When I think about the pain at that time, I don't have that feeling now, but I remembered that it was very painful."..."The pain was like tearing apart. Also, I had an urge feeling that my baby wanted to come out immediately." I011 (4E)

Some participants gave very specific accounts of their memories of the kind of pain that was most distressing for them to bear, even when their memories of the overall pain sensation were not strong:

"Besides the pain, I thought it was very uncomfortable when I felt a twitch in my spine. I couldn't sleep and I felt the twitch was severe. Also, I always had the feeling of defecation but actually I didn't have any." I001 (4E) (This participant had this feeling before she had epidural analgesia)

"Actually, I didn't think the labour pain was painful. However, I felt a lot of pain in my pubis bone because the fetus was pressing on that area"... "I didn't have much labour pain."... "It (the labour pain) didn't affect me." I006 (4E)

"The worst thing was that…how should I say? I had the feeling that I wanted to push. The midwife said, 'Oh! Your cervix is not fully opened yet.' The harshest thing was that she didn't allow me to use my energy to push out." I005 (4E)

"Yes. When I felt pain at that time, I had a feeling that I wanted to push. It seemed like having a bowel movement. When I felt pain, I would like to push. Actually, I had a little push when I feel the pain."… "I didn't have such thoughts. I knew it was a process. There was pain in delivery, after the pain, the baby was born. I didn't think that it was a kind of burden or something like that."…"I think I give ten points (for the peak pain)."… "For me, I still think it is ten points. "… "I still think it was painful." I010 (4E)

The issue of pain memories being associated with an urge to push that is denied by caregivers has been noted by previous authors. This is discussed further in the discussion chapter (page 330).

Other participants indicated that they remembered the pain, but the visceral sensations had diminished:

"My memory actually is very blurred for that pain, as it happened a long time ago." I003 (4E)

"I think…my impression of that pain is not so strong now. That was one year ago, but I just remembered it was very painful, right."…"I just wanted my baby delivered soon (at the peak of pain), yes." I004 (4E)

As well as recalling the actual sensation of pain, some participants still had ***Memories of their feelings*** about, and response to pain. One woman remembered that she lost her temper when she felt pain that she could not tolerate after she had been promised a pain- free labour following the administration of an epidural. She remembered that she felt out of control at the peak of pain.

"Later I felt more and more pain, I felt that I started to lose my temper. I felt, why was it like that? They said there should be pain every several minutes, but now the pain came every minute, what can I do? I know I lost temper with my husband who stood there to accompany me."…"I remembered it was about 12 am when my baby was about to be delivered. I lost my temper and I told my husband, 'What's going on? They said it was painless after using epidural. Why do I feel the pain again?'" I001 (4E)

As noted above, participant 1001 still had strong visceral memories of her labour pain. She was also one of the three participants who had an epidural. The issue of memory of labour pain in women who have had an epidural is discussed further in the chapter 11 (page 327).

"I think people have different views of pain. I was not very afraid of pain, but always heard other people say that childbirth pain was very painful, at level ten. However, I think if I was afraid I couldn't deliver my baby, and then forced myself to tolerate the pain, this is really not what a normal person can tolerate. If there is no drug for pain relief, then I can't bear such pain. I think the epidural could completely help me in delivery process."…"My feeling when I was in pain, I thought, why it was so painful? However, I didn't have any regret, but was pain essential? I don't think so. Actually, I think there are methods to relieve the pain, this is my concept, yes." I002 (4E)

This apparently paradoxical notion that such pain cannot and should not be borne and that the process should be as short as possible, but that it is essential and worthwhile is reflected in another account:

"…at that period (painful period), of course, I hoped it would be finished soon when I felt the pain. But… I thought it was worthwhile, right." I003 (4E)

The multigravida respondents continued to contrast their feelings about and responses to the pain of labour in their different labour experiences. Although they had had the experience the first time, still they remembered how hard it was to tolerate the pain the second time.

"Yes. I felt it was very hard and very painful. At that moment, I just hoped that it (the childbirth process) could be finished as soon as possible."…"My feeling was as usual. I just hoped that it was not so painful and I could deliver my baby very soon."…"It was more painful in my first delivery while it was better in my second delivery. That means I didn't feel it was very hard but still I felt the pain."…"I felt it was very difficult to tolerate the pain when the pain occurred. However, I couldn't struggle with this pain."…"If you have a spontaneous delivery, you must go through this painful process. Right, I think it (labour process) must have this pain." I009 (4E)

"…I think, oh, the pain was not so severe in my first delivery, why it was so painful in this delivery? When I attended antenatal talks, the midwife said the pain would occur every five minutes. I looked at the clock, why had the pain stopped for a short while, less than one minute and it came again. I actually said 'Oh! Why such a short time?' … I thought I could rest for some time, inhale the Entonox gas, however, I was not able to rest for one minute, when the next pain came. The signal of feeling pain was coming. I thought, 'Ha! Why does it come so fast? I had to bear the pain again.' 'Oh my god! Why it is so painful?' 'Why did it happen like that?' People said they had pain every five minutes, why did I have the pain so frequently."…"I still think that if there is no such need, it is not necessary to have the pain. I believe many parents who haven't gone through this painful process, such as the father didn't experience this pain, he didn't have the hard feeling of being pregnant and bearing labour pain, he still loves his children and puts more effort to take care of them. Therefore, I don't think labour pain has meaning for giving birth. I don't think it is necessary to have this pain, if possible." I011 (4E)

It is interesting that this woman experienced the shortest labour of all the participants. The issue about the intensity of short labours in the context of the expressed wish of women for shorter labours is discussed in the discussion chapter. Another woman indicated that her response to pain was consciously not to scream. From a cultural perspective, Chinese woman are socialized not to make noise (related to politeness), and especially during labour, this is believed that it help the woman to reserve energy for the delivery. This concept still seems to be present in some respondents:

> *"Actually, I can tolerate the pain. I didn't like the women in TV programs (when the actress played like a woman in labour) they used to scream in pain. For me, I didn't say much about it, I just said I felt very painful, haha!" I010 (4E)*

Pain relief choices and reflections were discussed by the women. In terms of massage and the use of TENS, some experienced direct relief from pain, others found it relaxing but not particularly pain relieving, and some remembered that these methods were not useful for them:

> *".... The midwife told him if I felt a lot of pain, he could massage me. He could massage my backbone or my leg. My husband had done all these things."... "I felt relaxed."I001 (4E)*

> *"The midwife taught my husband to do massage and they also did this for me together. I think the hospital should advocate more of this pain relief method. Although this method seemed to relieve the pain, it was in the early stage of the labour which was not so painful. However, it could really relieve the stress more than the pain." I002 (4E)*

"…my husband did it (massage) for me. I thought it was most effective, no matter whether physically or psychologically, it was an effective method to help relieve pain…" 1003 (4E)

"I think the massage was not very useful for me."…"The midwives taught my husband at that time. She taught him step by step."… "I think the effect from the massage method was not so good, right."…"My feeling…I preferred to grasp my husband, rather than have him massage me. I preferred to grab hold of him." I004 (4E)

"The midwife gave me a TENS machine for pain relief. She put the pads on my back and gave me the machine. I think the pain was relieved more after using this machine and birth ball together. It could decrease my pain feeling to 50%. At that time, I really felt a lot of pain." I011 (4E)

"(I) tried to use a birthball, and later used that…machine I forgot, now I forgot the machine name (TENS), that is electric. Right, (I have) tried that machine (TENS), and (it) was not very useful, but it could be used to kill time for me" I003 (4E)

Where women commented on the use of the birthball, their accounts were positive in terms of its capacity to act as a distraction, especially in combination with other methods:

"I think it was good to use the birthball. Although it might not relieve the pain, it could distract my attention. When I did something else, it could relieve some pain, right." I004 (4E)

"As I attended antenatal exercise classes, I knew how to use the birth ball to relieve my pain. I always sat on the birth ball at that time. When I was in antenatal ward, I sat on the birth ball once I felt pain. Later, I didn't want to leave the birth ball and there were no other pregnant women using the ball…I really sat on the birth ball from day to night. Haha! Even when it was lunch time, I still sat on the birth ball. I think it was very useful."…"At 3 pm, I sat on birth ball but I think the pain could not

be relieved. The midwife checked me and she said my cervix was not opened to one degree. But the cervix had started to dilate. Wow! I felt very painful at that time. The midwife gave me a TENS machine for pain relief. She put the pads on my back and gave me the machine. I think the pain was relieved more after using this machine and birth ball together. It could decrease my pain to 50%. At that time, I really felt a lot of pain." I011 (4E)

The picture was more mixed in terms of pharmacological methods at this stage of the interviews. As in the early months after the birth, women remembered how dizzy they felt with Entonox, which, generally, they remembered as not being very helpful, although some did find that the effort of inhaling the gas made them concentrate on deep breathing, which helped them to maintain some control:

"Ah! I felt very dizzy after inhaling Entonox. I thought I would like to vomit when I felt dizzy. It was harder for me as I needed to bear one more discomfort." I001 (4E)

"In this delivery, the midwives always encouraged me. She said, 'You can inhale the gas. That's right. You can do it. You will not feel pain after inhaling the gas.' Then I said, 'I think it didn't work.'" I011 (4E)

"They said there were several pain relief methods. The midwives were very thoughtful and very patient. I followed the standard procedures. I inhaled Entonox gas at first. When I really felt a lot of pain, it was around 1 pm."... "When I started feeling pain, I inhaled Entonox gas and kept control of my breathing. When there was pain, I would follow it through my breathing. At 2 pm, I felt a lot of pain. I didn't know whether it was the effect from the induction drug, labour was very painful." I010 (4E)

Unlike in the earlier interviews, where the two women who had used pethidine reported that it was effective, at this time, reflecting back, they seemed to have different memories:

"After the induction was done, actually (I) tried all the methods already, and it had…, I remembered I had a pethidine injection, and still used the TENS machine at the same time."... "... maybe ...when the medicine (pethidine) started to function, it might not relieve much pain, as (I) still felt a lot of pain, however, after a while you start to feel drowsy. However, when the pain came and you still felt the pain; actually, you still feel that it was very painful. Basically, it (pethidine) would not make you feel completely pain-free, it didn't, right." I003 (4E)

"At 2 pm, I felt a lot of pain. I didn't know whether it was the effect from induction drug, I had a lot of pain. Then I couldn't tolerate the pain and asked the midwife for the injection (pethidine)."..."Actually, every woman has her own response after having an injection. I was so 'lucky' that I didn't feel the pain was relieved."..."No. It (pethidine) didn't relieve the pain at all."... "The pethidine injection was not useful for me, haha!" I010 (4E)

As noted previously, all the women who used epidural analgesia experienced induction of labour and they were all having their first babies. The impact of labour induction on the physiology of labour and of endorphin production is discussed further in the discussion chapter. As is evident in the comments above relating to the use of pethidine, many women who did undergo labour induction attributed their sensation of extreme pain to the experience of induction.

"I didn't know whether it was due to induction, that afternoon, I felt the pain almost every minute and that condition continued for several hours. I thought there was no break in the whole process. The feeling was that

the pain came every 1.5 minutes and I felt it was very harsh."…"It was painful since then. At 6 pm, a nurse advised me about doing painless childbirth. After the injection, I felt relief for a few hours. Then, I felt a lot of pain at 12 am. The midwife said the effect of the pain relief drug was over, so I would feel pain again. Actually, it was time for my baby to be delivered soon. (The time to decide if a C/S was needed)." I001 (4E)

"I didn't especially plan to have painless childbirth (epidural), but I think ah, if I couldn't tolerate the pain, I would request an epidural."…"I felt a lot of pain and I requested epidural analgesia. The doctors and midwives were very nice. As I signed all consent forms, they administered epidural analgesia immediately. The doctor immediately injected some drugs into my spine and the pain was relieved. I was having epidural analgesia and inhaling Entonox gas at the same time. At that moment, I didn't feel pain or harsh feelings. When the cervix was opened to the level that my baby could come out, the doctor said he couldn't give drugs to relieve the pain, otherwise, I wouldn't know how to push to deliver my baby. When the drug was stopped, I felt a lot of pain, even though I was inhaling Entonox gas. The pain lasted for about more than one hour before the baby was delivered." I004 (4E)

The practice of letting the epidural wear off for the birth is not actually recommended by Cochrane, as women who have been anasethesised with epidural analgesia have not built up natural endorphins and the return of pain is therefore felt to be very intense and sometimes inhibiting in terms of pushing, rather than being helpful. This is discussed more in the context of the relevant literature in the final chapter. Indeed, for one woman in the study, the great relief obtained from using the epidural was balanced by a sense that this prevented her from pushing adequately, especially as this resulted in multiple attempts at an instrumental birth using both vacuum extraction and, finally, forceps. At this stage, she was weighing her memory of the pain relief benefits of epidural analgesia against the unwanted

consequences:

"At the later stage of delivery, I chose an epidural for pain relief. After that it seemed like I was in a wonderland. I didn't feel any pain at all, even for the Foley insertion, I had no feeling at all. Therefore, I think the epidural could help me a lot in pain relief…If there is no drug for pain relief, then I can't bear such pain. I think the epidural could completely help me in the delivery process. However, when I reviewed the situation, is it true that after the epidural, I cannot deliver my baby, that is, I really cannot use energy to deliver my baby." I002 (4E)

Indeed, on reflection at this point, another participant felt that she would make different decisions if she was to have another baby:

"If you asked me a few months ago, I still said I would choose an epidural (in next childbirth). It was so relaxing. But now I will think that, I will try again to see whether I can deliver my baby (without an epidural)."…."Yes, I will try other pain relief methods. Also, some people say it's easier to deliver the second baby, haha!"… "Right, I would like to know whether it (the pain) will be better next time." …"I don't know, maybe I had the concept that it was really hard to deliver my first baby. It might be faster to deliver my second baby, the time might be shorter. And I may not need to tolerate the pain for 10 hours more. Let's see whether I can bear it, haha!" I001 (4E)

9.2.2 Theme two: Caring support is crucial during labour

The women still remembered how important it was to obtain care and support from their husbands and from the midwives. Again, as in previous interviews, they reflected on the fact that both the husband and midwife provided support to them from different perspectives. The support the husband provided was part of their past and future relationship as a couple and as parents. Midwives provided a sense of security when they were

present, and they were attentive, caring and skilled.

A sense of ***Reciprocal benefit from the presence of husband and family*** was apparent at this stage of the study, as the women could reflect on the long-lasting mutual gains of being accompanied in labour. All of the participants indicated that it was still significant to them that their husbands accompanied them through the whole process of childbirth unless he could not do so. Most remembered that they had thought, in pregnancy, that there was not much their husbands could do practically during labour, so their expectations were only that they should be companions. When the husbands actually did something concrete, like offering verbal encouragement, or massage, the women appreciated it a great deal, and this gave their husbands extra credit in their eyes, as reported in the earlier interviews, and now looking back. In some cases, the women saw this as reciprocal, in that they believed their husbands also benefitted from this process:

> *"The best feeling in my delivery process was that my husband accompanied me from day to night." ..."He slept for a while, hahah! I saw he was sleeping."..."He could help me, because…. The midwife told him if I felt very painful, he could help to do massage on me. He could massage my backbone or my foot. My husband had done all these things."... "I felt relaxed. (when he massaged me)" ..."Oh! I thought he encouraged me at that time. As I stayed in the labour room for such a long time, I didn't feel alone. If the machine showed something wrong, he could take a glance, and he could call the nurse." I001 (4E)*

> *"My husband accompanied me in the whole process. If you asked whether he could help me in the delivery process, distract my attention or relieve my pain, actually he couldn't help me. When he massaged me, I think he*

might have some feelings. However, I didn't have any special feeling. He might think at least he could do something to help his wife. He thought it was good. Actually, he was my support. I think every woman wants her husband to stay with her. Although he couldn't do anything, I think he was my psychological support."…"Yes, hahaha! He couldn't do anything, but I can see that he was there with me, he is my dearest."…"I felt satisfied: no matter what things happened, we walked through it together." I002 (4E)

"The best one? It was ….my husband could accompany me. Right, they allowed him to accompany me, and he was really good…(he) made me feel comfort. Yes. Also (he) could do that massage. I think it's very good to have that massage."…."…his attendance was actually important (to me), as he accompanied me, I really think that my husband was doing a great job as he was very afraid of this situation. He would feel helpless as his wife was there feeling the pain and he could do nothing to help out. He …he…but my husband was so brave that he came and accompanied me." I003 (4E)

"That someone (husband) accompanied me in labour was the best thing."…"I was happy that somebody could accompany me.....When I delivered my baby, I was also very happy, as my husband was there with me and cared about me, and sometimes gave me some help."…"Something like caring. Caring and someone beside me gave me support and I felt happier. I was not so nervous as in the first delivery."…"No, he didn't need to do anything for me." I006 (4E)

The core element in these memories seems to be having someone who the women could absolutely trust – for whom the wellbeing of her and her baby was the most important factor in their attention, and who knew well how their wives might behave under certain conditions and what certain behavioral signals might mean. This also meant that sometimes the women actively depended on their husbands not to do practical tasks (like massage) when they could see that it was not the best thing for their wives at that

time:

"I think if there was a family member with me, especially the one who was so dear to me, my feeling would be better. I could rely on him (her husband) or I could cry at any time. I need someone to stay with me and this should be someone I absolutely 100% can trust."..."I felt comfort psychologically. I would not feel alone facing the pain and the childbirth process. It was not like, ah! I was alone to bear the pain. I wanted him to know that I tried my best at that time. I put more effort for our baby at that time."... "... he could pat on my shoulders, touch my hair or give more care to me…When there was an interval in between the labour pain, he could say something to comfort me, he said 'Wow! You put much effort on this! You are great!' With these encouraging words, it made me feel more powerful to face the pain. When he patted my shoulders and said, 'Ah! You put much effort on this! Our baby will be born soon. You don't need to bear the pain for too long.' With these encouraging words and close contact, the pregnant woman would feel more comfort. Although the physical pain could not be relieved, I think it could give some help psychologically and help me to feel better."..."...he could pat on my shoulders, touch my hair or give more care to me. However, all these things should be avoided when I felt the pain. (He shouldn't) touch me when I was in pain. I had told him to leave me alone when I was in pain. When I was in pain, I could not control myself." I011 (4E)

"Actually, the couples have their own privacy. There is something that your parents, brothers or sisters may not know. I think only my husband accompanying me during labour is enough, right." I002 (4E)

"I didn't need to have more people accompanying me. Maybe sometimes you felt…how should I say? When I delivered my baby…I felt pain and I didn't want other people to see me at that time." I005 (4E)

One of the participants had considered asking her mother to accompany her in case her husband was not available. However, on second thought, she still thought that her husband was the only suitable person to stay with her

during the childbirth process, both to spare her mother the pain of seeing her in distress and to help her husband to realize the effort it took to give birth to their baby:

> *"… it would be better that my husband experienced this childbirth process and knew my pain. Because my mother loved me and she didn't want me to suffer, she didn't want to see that I was hurt. When she saw I was in great pain, the feeling in her heart would be more painful than my pain."…"I think it depends on different people's views. Some people might think the mother would be better. In my view, I think my husband would be better. Because my husband was strong. When I was pregnant, he didn't think I needed to be cared for. He thought I could take care of myself. Therefore, I wanted to let him know that giving childbirth was very harsh. It was a painful process. I grasped his hand in the second delivery. Later, he talked to our friends, 'Wow! This is my first time I know that my wife is more powerful than me.'" I011 (4E)*

For one woman, however, the alternative of her mother or sister was acceptable. In this case, the need was just for support from those who knew her, rather than for reasons of reinforcing the longer term relationship, as in the quote above in relation to the impact of labour on the husband:

> *"(I) can make this arrangement, maybe (I) will ask my sister (to accompany me during the labour process), or…right, my mother will also be OK. That is, (I) can make this arrangement. If (I) ask my sister (to accompany me), (she) will be young and have energy to…(help me), it's actually OK."…"It will be better, it will be better if my sister is allowed (to accompany me). Yes, if there is a relative, a very close family member there, I think it's very important." I003 (4E)*

The need for a caring midwife was noted by a number of the participants as they looked back on their labour experience. It was noted that the attitude

and response of the midwife could still affect how the women remembered their experience of childbirth. According to the participants, midwives were important to them. Where the midwives demonstrated expert knowledge and skill as well as caring attitudes, the women felt that they could be trusted, so they would then listen to advice about pain relief and about what to do during labour and birth.

Where midwives stayed with the women throughout the childbirth process, a sense of safety and of feeling secure was reported by woman. This was both because of a sense of general comfort and of feeling cared for (in simple actions, like, for one woman, being given a blanket when the midwife thought she might be cold) as in being confident that if there were any problems with the labour or birth, the midwife would identify them rapidly and take early action.

> *"Besides teaching massage, they can teach us other non-pharmacological pain relief methods…Overall, I think the midwives were very nice, right."…"The midwife taught my husband to do massage and they also did this for me together."…"In the labour ward, although I had waited for a very long time, and the pain was escalating, the support from the midwives was very good." I002 (4E)*

> *"The midwife was in my room from morning to afternoon. I thought she just stayed in my room before lunch time, therefore I felt safe. Because I knew someone was there with me, if I suddenly felt discomfort, I could call her immediately. Later, there was another woman next to my room after lunch time. The midwife needed to monitor two rooms at the same time. So far, I think it was OK. When my baby's heartbeat suddenly slowed down in the afternoon, they realized my condition immediately. If I felt discomfort, I told my husband, he just went out and he could immediately find somebody for help." I004 (4E)*

"I think…the midwives' experience could help me to deliver my baby. Also, she…maybe what she said, I thought she was knowledgeable therefore I would follow her instructions. The midwives' advice was very important to the pregnant women. They know how to assist the pregnant women and what things they should say to the pregnant women. This is very important, right." I005 (4E)

"When I felt a little bit of pain, the midwife would chat with me and comfort me. Then it could distract me. They also asked me whether I felt warm enough, needed water or needed an electric warm blanket." I006 (4E)

One of the participants remembered the help she got from the midwives, both in terms of comfort and of feeling safe and encouraged, in some detail, even a year after the birth. She was able to contrast this with a different experience from her previous labour and birth:

"There were three midwives who helped me in this delivery. They were very nice and better than the midwives in my first delivery."…"In this delivery, the midwives always encouraged me. She said, 'You can inhale the gas. That's right. You can do it. You will not feel pain after inhaling the gas.' Then I said, 'Ha? I think it didn't work.' So, they also said some encouraging words. They said, 'Ah! Being a mother is very great.' They encouraged me to put much effort at that time. They reminded me how to breathe, how to use energy and pressed my head down. Also, they were very calm. When my baby had the cord round the neck, I wasn't frightened at all because they were very calm at that time. If they were panicking, 'Aya! Aya!', I would be frightened. It is usual that a mother will be worried about her baby. If I heard 'Aya!', this would affect the mother's emotion. When the midwives were very calm, I was very calm too. I thought, ah! I wasn't afraid of this. They could manage it well."..."The midwife knew I was in great pain. She encouraged me continuously. She said, 'Right, being a mother is very great. The mother gives her full effort to deliver the baby. Your baby will love you very much.' These encouraging words made me relax psychologically." I011 (4E)

In this case, the caring attitude from the midwife together with the application of professional knowledge and skill in taking care of the women built the trusting relationship and appreciation from the women that fulfilled their needs of feeling safe and secure.

However, there were some accounts of less positive memories from women looking back on their experiences a year after the event. One participant had the feeling of not being accepted by the midwife. She remembered that the midwife seemed to be annoyed by her husband asking her questions. She considered that this was the worst part of her labour:

> *"I thought if the manpower was sufficient, i.e. if the midwife was with me, I would feel secure, and I could ask her if I had questions."…"The worst feeling… I remembered I met a nurse at that night. She just walked around. My husband and I had attended antenatal talks before, I remembered my husband asked the nurse some questions, the nurse seemed like 'Ah! You know so little and have so many questions.' It seemed like she felt annoyed when we asked her. Then we saw this nurse talked to another nurse, they seemed to have a discussion about us."… "Yes, I thought it seemed she did not like us." I001 (4E)*

Others indicated that what might appear to be trivial matters to busy staff were remembered as being important and negative a year or more after their births:

> *"Some midwives were quite rude, one of them indicated my toes were tense and I might not maximize my energy to push when I deliver the baby. However, I think I could use my own way and that midwife forced me to straighten my toes. I really couldn't do this in that way, haha! The knowledge that midwife provided may be the best and the easiest way in delivery. However, I think they needed to have some adjustment.*

Different people had different practices and people have their own habits. Maybe a particular woman does need to tense all of her toes so she can use all energy to deliver the baby. Actually, I had lost my temper a bit as I laboured for a long time and I still couldn't deliver my baby." I002 (4E)

"The worst thing…I think the worst thing may be…after delivery, after suturing the wound, I didn't know why. As my position was still in a stand position (lithotomy position), right, my feet were raised up all the time. I thought something could be done a little bit better when I was in that position. Maybe I should keep warm after delivery. Yes, I felt cold at that time (when she was being sutured)." I005 (4E)

"My husband said the midwife didn't remind me, 'Ah! Now you should use a high level of breathing.'"…"I didn't know. I remember I asked the midwife in my second delivery. When she did suturing, I asked her whether I had episiotomy. She didn't answer me at that time, haha!"…" After my baby was born (in the second delivery), I was alone in labour room for a period of time. I felt a little bit lonely at that time. Also, I felt discomfort and vomited. I vomited on the floor. I thought that, ah! I felt discomfort and vomited, but nobody noticed that. I think this part should have some improvements, right." I011 (4E)

To sum up, the women still remembered the need for a caring midwife to stay with them, so that they could feel secure and safe as the midwife had the professional knowledge and could identify abnormalities early. In addition, they felt that the midwife should demonstrate her concern to the woman, take note of the woman's needs and answer the woman's questions (and those of her husband) patiently. Small acts of kindness and caring (or of not being kind and caring and attentive) were remembered long after the memory of childbirth pain had diminished. There is a growing body of research on the impact of respectful (or disrespectful) care during childbirth and this is addressed in the discussion chapter. The notion that the small

things matter in helping women cope with pain at the time and in ensuring good memories of childbirth is also explored further.

The ***Key components of satisfaction*** when the women reflected on their memories of childbirth a year earlier are partly evident in some of the quotes above. When they were asked directly about satisfaction, it was evident that the major concern they had expressed during pregnancy, the pain of labour and the duration of labour, were not key elements in their reports of satisfaction (or dissatisfaction) at this point in time. As they were used to being asked to score pain and other factors on a ten- point scale, this is how they framed their responses to questions about satisfaction:

"I feel satisfied (with the childbirth process). If I give points, I will give at least 7.5 points ."... "Yes. Ten points is full mark, I will give it at least 7.5 marks."..."Feel satisfied? I think the support and facilities. For example, my baby's birth weight was rather low when she was delivered. They (health care providers) could give much support to me, such as when...she was in the incubator or she was under special care. Also, my baby had some problems after delivery, like, she had a distended tummy and the hospital followed her condition closely. Right." I005 (4E)

"Ah! I felt more satisfied than the last delivery."..."Nine points. ."..."The second (this) delivery was better."..."I delivered my baby smoothly."..."I delivered my first baby very fast. But it was not as good as my second delivery. Yes. The labour ward environment and staff in my first delivery were not as good as my second delivery." I006 (4E)

"It was nine points (satisfaction score)."..."Actually, I felt satisfied with many aspects. I was lucky that I delivered my baby in Queen Mary Hospital. It's true. The midwives are very nice. The midwife checked my old record. She said the record shown that the labour process was

very fast and I could deliver my baby very soon. Therefore, she checked me frequently. The checks were every 15 minutes. Before I was sent to the labour ward, she said my cervix was not opened to three degrees. But she would try to make arrangements for me. I didn't expect that I would deliver my baby within one hour's time. The midwives were very nice and cared for me very much. Their attitudes were very good and they were very caring. When I was sent to the labour ward, I delivered my baby very soon. I think I was very lucky. My baby was born and he is very healthy. Therefore, I feel satisfied in various aspects." I011 (4E)

The issues that made the women feel dissatisfied did not usually relate to the degree of pain they experienced:

"I think I will give myself 7 points (for satisfaction about her own performance). I felt I had a little bit of bad temper which was not good, ha!" I001 (4E)

"I felt dissatisfied as there were some complications in the delivery process."…"Yes, it was not a smooth delivery. That was not as I imagined, it was not smooth." I002 (4E)

"I think it (the points not given) was about the intern doctors. But there is no choice as they were inexperienced. However, if the intern sometimes can…I felt there is… would there be a senior doctor who can have more time to supervise them and he (senior doctor) could help them do something, such as communicate with pregnant women, or perhaps guide them to understand more about the cases and the situation." I005 (4E)

These data suggest that memories of labour pain are not a strong feature in women's accounts of their overall labour experience a year or so after the birth of their babies. Although satisfaction is widely used as a measure of service user appraisal of health care, it has been criticized as a highly

non-specific measure of the quality of an experience, especially in maternity care. The data from this study indicated that memories of the experience are still clear a year after the birth, but that they are much more complex than the simple notion of 'satisfaction'.

9.2.3 Theme three: Looking back and looking forward: the context and consequences of childbirth pain

Three extended sets of quotes from three women, looking back from around a year after the births of their babies, demonstrated how ***Memory of childbirth pain is influenced by context***. For the first participant (I001), the struggles she had to get pregnant and the loss of her husband's job in the early postnatal period were more relevant to her than her memories of the childbirth pain she experienced. For the second participant (I011), seeing her second birth in the context of the first one revealed a number of features that made a positive difference. For the third one (I002), her experience of pain and the consequences of her choices for pain relief were still playing on her mind.

The story of participant I001

This participant told the story of her labour and birth in the context of the difficulty she had in getting pregnant. She recounted the happiness she felt once she was pregnant and at the time of the birth of her baby:

"It was like a dream, as it was not easy for me to get pregnant. I feel very thankful about this. Actually, that was my first time to do IUI(intrauterine insemination) and it was successful."…"The happiest thing was a life was really inside my body!"…"I felt very touched (when

my baby was born) at that moment. I thought, 'Ah! It was so amazing.' Baby was born."

However, getting pregnant was not easy. The woman needed to go to the hospital early in the morning almost daily in the winter for a certain period to receive treatment before she got pregnant, and looking back, she found this harder than facing the childbirth pain.

"When you asked me to review the previous period (during IUI treatment) I remembered it was winter at that time. It was very cold and I was always complaining, 'Why do I need to wake up so early and then go to the hospital?' Now I review that moment, it seems like a past event. If you asked me to compare the pain between childbirth and having IUI treatment, I think the feeling was harder when I had IUI. I needed to cope with that stress and I woke up very early in winter time. I had the treatment in QMH, so I needed to go there at 7 am."

The joy of the birth of her baby was also reduced somewhat when her husband lost his job – however, retrospectively, as he was able to get another job after a few months, she could also see the positive side of this:

"I just had a little problem when my baby was born last September. My husband had worked in this company over 10 years and the company suddenly closed down. He was unemployed after our baby was born. I looked at this issue from both sides (good and bad). I might worry that, aiya! My husband was unemployed when our baby was born. Another side was that he could help me in my recovery period. He could help me to take care of our baby when he didn't need to work. We could do the baby care together. Two months later, he had another job and was back to work. It seemed not good when he was unemployed, but we could take care of our baby together during my recovery period."

The story of participant I011

In her third interview a few months after her birth, this participant indicated that she had struggled to decide whether to use pethidine for pain relief. She had used it in the birth of her first baby, but this time she finally did not use it because the midwife alerted her to the possible side effects for her baby.

"I think, oh, the pain was not so severe in my first delivery, why was it so painful in this delivery? When I attended antenatal talks, the midwife said the pain would come every five minutes. I looked at the clock, why had the pain stopped for a short while, less than one minute and then come back again. I actually said 'Oh! Why did it come in such a short time?'" ..." (I thought) it (pethidine injection) could help relieve the pain! (In the first birth) after the injection, I slept and I didn't feel pain at all."... "In this delivery, I didn't have the pethidine injection. As I expected that I would deliver my baby within several hours, I didn't want to use any drug that affected my baby. He (the baby) might become dull and might not eat well. Because I had the pethidine injection in my first delivery, my baby didn't drink much milk in the first few days after delivery…. Therefore, I decided not to use pethidine injections in this delivery. It was very painful at that time."

"No, I didn't regret (not having the injection) at that time. I thought (if I make this decision) I couldn't regret it at that time. If I (allowed myself to) regret it, I would then request for pethidine injection, however, I didn't do that. I think, since I had chosen that option, I wouldn't give up when I was halfway through. As I chose not to have the pethidine injection for my baby and I had already borne the pain for a period of time, there was no reason for me to have the injection. I didn't regret this, right."

"I felt very happy (when he was born). The feeling was different from my first delivery. I didn't have this experience in my first delivery. I didn't know the process was so fast. When my baby's head was born, I pushed one more time, ah, the midwife could pull my baby out at that time. The

midwife was very skillful. She pulled my baby out and put him on my belly immediately. My baby was crying and urinating at the same time. The scene was very funny. I felt relaxed. I delivered my baby. As I had experience in my first delivery, I knew the condition in my second delivery. However, the first baby didn't cry when he was born (in my first delivery). I was afraid at that time. The midwife patted his buttock and he started crying. I felt relieved. There were different experiences in the two deliveries."

"Yes, I held him and breastfed him immediately. I tried to breastfeed my baby. I hoped I could give breast milk to him immediately."…"I had a warm feeling. Yes, a very warm feeling. As I didn't have pethidine injection, I wondered if it had made some differences. My second baby sucked milk very well. He was better than his older brother. He sucked milk hard. Actually, I didn't have breast milk yet. But he tried to suck the milk at that time. When I saw him sucking milk, I thought, he is a healthy baby."

"I don't think it was a sacrifice (not asking for the pethidine injection). From my viewpoint, sacrifice should be more than this. I think I just bore some pain."

This very positive experience led this participant to consider the unusual choice (for Hong Kong Chinese society) of a third child:

"When I saw my baby, he is so lovely that I may consider having another baby when my baby grows up, hehe! Having one more baby and taking care of him, it is lovely, I think the happiness from them is really special."

The story of participant I002

This woman had a very difficult obstetric history as she and her husband had thalassemia and she had had abortions due to fetal abnormalities. This was her sixth pregnancy, the only pregnancy that she could carry until term.

She remembered being happy when she knew she would be induced and when she was given an epidural. However, the relief she felt from the epidural was tempered by experiences afterwards and she was left with difficult memories relating to the birth and the consequences of it in the longer term.

> *"The happiest moment was that the doctor finished assessing my condition and I could go to the labour room. Hahaha! When I was in the labour room, I felt…I felt very happy because I had waited for a very long time in the hospital. When I was in the labour room, the happiest thing was the moment after they gave me the epidural. Also, I could sleep two hours more."*

The woman used epidural analgesia for pain relief after she had tried other pain relief methods as she could not tolerate the pain. However, she found that she was unable to push the baby out due to the epidural block, and the baby ended up with complications related to the instrument delivery that was then required. She was worried about the health of her baby and felt bad as she was separated from her baby because she needed to be admitted to the Special Baby Care Unit.

> *"I think the epidural could completely help me in the delivery process. However, when I review the situation, is it true that after epidural, I could not deliver my baby, that is, I really could not use energy to deliver my baby."… "I didn't know why I couldn't deliver my baby by myself. The doctor needed to use vacuum extraction and then forceps to pull her out. When the doctor performed vacuum extraction, there was a slipped cup and my baby had a subdural haematoma. The doctor then used the forceps and pulled my baby out. When she was pulled out, I saw there was forceps marks on her face. I felt a little bit guilty for her. When she came out I felt very scared, she didn't cry at that time. I felt very*

worried and she was in the Special Baby Care Unit for almost a week. Actually, at the later stage of labour, I had a high fever and my heart beat very fast, which also made my baby's heart beat fast. The midwives called the paediatricians to stand by at that time. I also felt worried about that."

"My feeling…when my baby was delivered, I felt very relieved immediately. Later, I was very worried as my baby had some problems. For the pain, there was no more pain, no pain at all."…"Yes, maybe, the baby's condition diverted my feeling of pain."…"I felt very worried when I didn't hear her crying."…"I was relieved, but her crying was very soft, haha! I felt relaxed but I was a little bit worried about her." "I didn't feel happy (when the baby was delivered)."…"Yes. I just felt worried, right."

"After delivery, I felt very lonely and sad. My baby and I were separated in different wards. When I heard baby's voice from the next room, I felt pity for myself. Also, my wound was very painful and I felt it was difficult to walk."… "If the baby was not with me after delivery, it was very harsh."… "The separation lasted for one week."

This participant made an interesting observation about the differences between the care she took in pregnancy to protect her baby and, to her eyes, the lack of care towards her baby during the birth on the part of the staff:

"The worst thing…when the doctor performed vacuum extraction, I heard the sound "Bon". As the vacuum cup slipped, the doctor fell backward and hit the wall. Then the doctor told me she needed to use forceps. I really lost temper at that time, I hit the bed side rail. Why did this thing happen to me?"…"Yes, this was the worst worst moment."…"Compared with that issue, separation from my baby was not the worst thing."

"Right. Every day I went to see her and found that she was getting better, she was progressing and actually the feeling was not so bad. As my health condition was bad, and…I felt it was very harsh for me to go to visit her. However, the worst thing was that the area (on the baby) for the vacuum extraction and the forceps delivery made me so frustrated. For me, I

was very careful in whole pregnancy process. I was very very careful in the last step, I didn't want to have any mistakes, it's just like … was there any mistake at the last step (the delivery of the baby), will the problem affect my baby in the future…that was the worst thing."…"Besides this, my daughter had many problems after delivery, such as her problem with her head, and she had many appointments. We needed to go to the hospital frequently. I think, ah! Why did these things happen to us?"

The delivery was a traumatic one for the woman as her baby had a lot of follow- up appointments. She felt she did not have an adequate explanation of the incident related to the slipped cup and she was unhappy when she saw the doctor who performed vacuum extraction on her baby. The psychological care of the woman after the traumatic experience seemed inadequate.

"I think there was some manpower problem for the doctors, for the manpower and experience of the doctors, I still think will it… actually I still doubt that the experience of the doctor was inadequate, so that it caused…. I don't plan to have any complaint. Sometimes my husband and I reviewed it, we wondered was that doctor inexperienced? Why did the vacuum cup slip?...Later they called a senior doctor to do forceps for my baby. I had brought my baby for follow-up appointments, I still… I can still remember that doctor's face. When I took my baby for an appointment and I met that doctor, I didn't have hostile feelings for her, but I had bad impression of her, right. Actually, I think the most important thing needed to improve is the doctors' technique. I think they don't focus on psychological care. I think most doctors working in public hospitals don't care about patient's psychological needs, unless they are psychiatrists. They do not care for the psychological needs of pregnant woman. They may say, 'You should do this. You should do that.' 'There is no choice for us…'"

As a consequence of these experiences and of those of her friends, this participant was either considering never having another baby, or if she did,

of defaulting to a cesarean section:

> *"Yes. It's enough (to have one child)."…"I think…actually I don't think I will have another baby as I am getting old."*

> *"I will request a caesarean section as my first priority (in case of another pregnancy)."… "As I had my first delivery experience, I will make my decision based on my experience. I don't want the mistakes repeated again that will hurt my baby."…"I will choose a caesarean section. I think actually there are some risks in delivery, although many studies showed that spontaneous delivery is good for the mother and baby. However, this delivery experience made me scared. Therefore, I will choose a caesarean section. Also, the percentage of my friends choosing caesarean sections is very high. Their babies don't have any problems at all."*

The incident was an unforgettable one especially when the woman's psychological state was going up and down during the childbirth process. She was happy to prepare for the newborn baby, however, she felt very bad when she experienced the slipped cup in the attempted vacuum extraction, followed by a forceps delivery. She felt traumatised when she saw the haematoma on her baby's head and the forceps marks on the face. She felt she was not provided with appropriate explanations about the failure of the vacuum extraction and that she did not received appropriate psychological care after the incident occurred. The whole incident was a negative experience for her.

These three stories illustrate that childbirth pain, which is such a big feature of women's accounts and concerns in the antenatal period, can, for some, be significantly overshadowed by other events in the women's lives by the time

a year has passed. For others, the birth was seen as traumatic and the memories contributed to on-going distress; however, even in these cases, the strongest element in those negative memories was not the experience of pain, but of lack of care and support, and of a sense that the labour and birth could have been managed better. The final subtheme in this chapter relates to future plans for the women in this study.

As is evident for two of the participants in the subtheme above, some of the women were beginning to have ***Thoughts of future children and childbirth*** at this point in their postnatal journey. In contrast to the views expressed in earlier interviews, some did suggest that the possibility of having more children at some point in the future was at least partly influenced by gender issues:

> *"I had an ultrasound scan when I was three months' pregnant. When I knew the result, I was unhappy for one day. No, it was just a half day. Then, I didn't feel unhappy."…"I was unhappy and disappointed. I thought if my baby was a girl, I could dress her up and play with her. We could go shopping together. After that day, I think it doesn't matter. I think I will consider having one more baby."…"He said if there was sufficient money, we could consider having one more baby."I006 (4E)*

> *"When I knew the baby was a girl, I was a little bit disappointed because I have a daughter already. Later, I thought about it thoroughly and I think it didn't matter."…"I had a little bit of unhappiness, but it was not a strong feeling. I thought it would be better to have a son."…"No. Now, I will not consider this (having one more baby) at the moment."…"May be we will consider this later (have another baby), I am not sure. But at this moment I will not think about this." I009 (4E)*

Those who had just had their first baby considered the pain relief methods that they would use in the next childbirth process.

"…for the next pregnancy, I think actually (I) will choose the methods I used before… Right, the massage can be used in the early period. Actually, I believe it can be used in the antenatal wards." I003 (4E)

"Oh! No, it (the pain) didn't affect my consideration about having another baby. I think the feeling has faded as time goes by. If I have another baby, I may prefer spontaneous delivery." I004 (4E)

"I will choose similar pain relief methods (in my next delivery), but I will not choose the massage pad (TENS), it is not necessary, right." I005 (4E)

Overall, at this stage in the interviews, childbirth pain was not a particular concern to the women when they considered the possibility of future pregnancies.

9.3 Summary of the main findings

9.3.1 Memories of childbirth pain and of responses to it

Although the time point for the interviews reported in this chapter was between 12 months and 15 months, the participants could still remember quite clearly what had happened during their childbirth process. They could still describe how they felt about labour pain. However, for most, this was less of a visceral memory than a descriptive one. At this point, the respondents were more likely to talk about specific details of pain, even when they had used epidural analgesia. It was striking that a number of them noted that having a strong urge to push but being told not to, was one

of the most painful memories. The issue of the so-called ‘early pushing urge’ is discussed further in Chapter 11 (page 328). The other notable feature of these accounts is that the woman with the shortest labour remembered this as being an intensely painful experience. The notion of short labours as being better in principle but more painful in practice is discussed further in Chapter 11 (page 328).

The participants remembered what forms of pain relief they had chosen to use and why. Pain relief methods were discussed in terms of their capacity to distract and relax as well as in terms of their direct effect on noxious pain sensations. The issue of pain in the context of induction of labour was evident and this is discussed in Chapter 11 (page 326) in the light of the current evidence on induction and the consequent effects on the physiology of labour and of the production of endorphins. This is also relevant in terms of the practice of letting the epidural wear off to allow women to feel the need to push, as expressed by the participants. As these accounts show, this practice did not necessarily help the women push better and the literature relating to this is explored in the discussion chapter.

9.3.2 Caring support is crucial during labour

All the participants indicated that they need support and encouragement from the husband and the midwife. As at previous timepoints, this was different in kind. The support of the husband was valued as it was a consequence of past mutual knowledge and relationship, and it could resonate into the future of their lives with the baby. For some, their comments also suggested that their husbands gained something from this

interchange and that the impact on the couple's relationship was still evident. The input from the midwife needed to be based on kindness and caring and support for the woman in managing the physiological labour progress, but it was also about continuous attention as a basis of a sense of trust that their midwives were knowledgeable and skillful in managing problems if they arose. The issue of continuous support and companionship in labour and how much it impacts the creation of positive relationships and outcomes is very prevalent in the current literature and this is discussed further in Chapter 11 (page 329-330).

Negative attitudes and behaviors and the trivializing of matters that were important to the women, even in their reflections a year after the birth, were associated with strong memories of distress. The issues of respectful (or disrespectful) care during childbirth are addressed in the discussion chapter. This includes a discussion of the 'small things' that mattered to the women but could get lost in protocol-driven organizational institutions where care tends to be standardized rather than personalized.

The key components of satisfaction with labour and birth, looking back a year afterwards, were not in general, associated with the degree of pain experienced by the women. When asked about this, participants tended to talk more about the care they experienced or the care provided to their babies. Indeed, 'satisfaction' is acknowledged to be a very blunt instrument for measuring how people feel about health care in general and about maternity care in particular. This issue is explored in depth in chapter 11 and is further illustrated by the final theme in chapter 10.

9.3.3 Looking back and looking forward: the context and consequences of childbirth pain

In this fourth interview, which was conducted a year after delivery, participants had forgotten some of the intensity of their birth experience but they clearly remembered specific practices and experiences that were relevant to them. The meaning they attributed to this (and to the pain they experienced) was highly influenced by context, both in terms of the labour itself and in terms of what happened before and after. For some, the birth represented joy and fulfilment. Others were left with feelings of trauma and guilt. These experiences had a bearing on future childbearing intentions. There was little evidence in the longer stories presented under this theme that this variation in consequences was mostly driven by their pain experiences. This finding forms the key basis for an exploration of the applicability of Maslow's hierarchy of needs to women's childbirth experiences, which is presented in the next chapter and is further explored as the basis of a new framework for labour pain relief in the discussion chapter.

9.4 Conclusion

This was the final interview and the participants provided fascinating reflective accounts of their birth stories as they remembered them one year or so after the event. A number of key issues emerged at this point, most significantly, that the experience of labour pain did not seem to feature particularly in accounts of being satisfied or dissatisfied at this point in the postnatal period. The next chapter synthesizes the key insights across all

four interviews. The final chapter places these key insights in the context of the current relevant literature and theories in the context of Maslow's hierarchy of needs.

CHAPTER TEN: LABOUR PAIN AND THE UNFORGETTABLE EXPERIENCE: A SYNTHESIS

10.1 Introduction

Chapter four presented the findings of the metasynthesis that was undertaken as the cohort study was on-going and the methods and findings for the cohort study itself. This chapter brings together the findings from the metasynthesis and those from all the interviews at each of the four timepoints and discusses the five resulting meta-themes. Key aspects of the meta-themes are linked to the current relevant literature. Chapter eleven brings all the findings together under the theoretical framework of Maslow's hierarchy of needs, situating the findings and synthesis of the thesis in the current research literature. I then propose a framework for supporting women in facing and managing labour pain.

10.2 Summary of participants and demographics

A total of eleven participants were recruited for the study. One (I007) dropped out after the first interview, hence the data obtained from this participant (I007) was excluded. A new participant (I011) was recruited to replace participant (I007) to keep the number of participants at ten. However, another participant (I008) could not be contacted for the third interview. Since there would be a time lag of around 4 months if another new participant was recruited at that point (from recruitment at 36 weeks' gestation to around 6-8 weeks after delivery), it was decided not to recruit a

woman to replace participant I008. Thus, there were only nine participants from the third interview onwards, i.e. five primiparous women and four multiparous women participated in the third and fourth interviews.

Six participants experienced induction of labour, which included all five primiparas and one multipara. Three of the five primiparas were induced because their pregnancies had continued beyond term gestation and the other two had ruptured membranes with no signs of labour onset. One multigravida woman also had induction of labour due to prelabour rupture of the membranes. Three out of five primiparous women and all the multiparous woman had normal spontaneous deliveries. One primipara had a forceps delivery and one had a Caesarean section. Two of the three multiparous women who did not have induction of labour had normal spontaneous deliveries and the other one had a vacuum extraction. (See table 16-17 on page 190-191 for full labour and birth details for the participants.)

10.3 Synthesising the themes

The initial step was to extract the quotes from the main themes and subthemes from the four interview chapters and the metasynthesis. These quotes were then reviewed and grouped together to synthesize the meta-themes. Finally, the data yielded five meta-themes as set out in table 23. These themes are discussed in the light of the broader literature in this area in the rest of the chapter.

Table 23 : Synthesised themes from the four interviews and the meta-synthesis

Summary themes	36 weeks gestation	2-5 days postnatal	Two months postnatal	One year postnatal	Metasynthesis themes
1 The social and cultural context of labour and labour pain	*Commitment to their babies* The responsibilities Planned support for housework and baby care The concern of a mother *Cultural changes regarding continuing the family line* Continuing the family line is not the reason for wanting a baby The gender of the baby is not a concern	*Consequences of the childbirth experience* Experience of labour pain and planned number of children Continuing the family line Importance of support network for a working mother	*Consequences of the childbirth experience* Mothering: a sacrifice for baby	*Looking back and looking forward: context and consequences of childbirth pain* Thoughts of future children and childbirth	
2 The trajectory of pain sensation: anticipated, 'actual', and memories	*Feelings about the pregnancy* The sacrifice of pregnancy discomforts *Concerns about childbirth and childbirth pain* Fears and worries as childbirth approached Childbirth is a natural process, women have choices to handle pain Women's wishes for a short labour	Feelings about the childbirth process Expectations and acceptance of pain Duration of the childbirth process Stress and worries related to the childbirth process Response to childbirth pain Tolerance of pain Behavior in response to childbirth pain	*Consequences of the childbirth experience* Memories of pain do not affect the planned number of children *Memories of the childbirth process* The memories of pain gradually fade *Response to childbirth pain* Childbirth pain is part of a process Preference for a short labour	*Memories of childbirth pain and of responses to it* Memories of pain sensations Memories of their feelings about and responses to pain *Looking back and looking forward: context and consequences of childbirth pain* Meaning of childbirth pain is influenced by context	**The experience of childbirth pain (a)** Pain is difficult to describe Making sense of childbirth pain

Summary themes	36 weeks gestation	2-5 days postnatal	Two months postnatal	One year postnatal	Metasynthesis themes
3 Facing or escaping the pain: choices and consequences	*Expected ways of coping with pain* Plan for pain relief	*Handling of childbirth pain* Step- up approach in use of pain relief methods The struggle with the pain relief decision Lived experience of pain relief methods Induction and pain relief *Consequences of the childbirth experience* Experience of labour pain & planned children	*Memories of the childbirth process* The difficult pharmacological pain relief decisions *Response to childbirth pain* How specific pain relief methods helped	*Memories of childbirth pain and of responses to it* Reflections on pain relief choices	**The experience of childbirth pain (b)** Facing/ escaping pain Choice of pain relief methods
4 Someone to be with me: trust and care	*Expected ways of coping with pain* Expectations of the husband Expectations of the health care professionals	*Need for support in the childbirth process* Husband's support is important Need for support from a caring midwife	*The benefits of support during childbirth* Impact of the husbands' presence. Midwife as a supportive care provider	*Caring support is crucial during labour* Reciprocal benefits from the presence of husband The need for a caring midwife	**The need for support from the partner/husband** Need the company of my husband/partner Rely on a supportive husband/partner **.. and midwife/ care provider** Be with me; In need of a caring midwife; I feel the difference; Believe me; Take care of my needs; The need to be respected; The need to know more
5 Achievement and growth through the unforgettable experience	*Feelings about the pregnancy* This is special Feelings in pregnancy are stronger for those who had problems getting pregnant	*Feelings about the childbirth process* Factors influencing feelings of satisfaction *Consequences of the childbirth experience* Sense of achievement	*Consequences of the childbirth experience* Satisfaction and achievement	*Caring support is crucial during labour* Key components of satisfaction	**Self-actualization as a result of childbirth** In control Success!

10.4 Discussion of the meta-themes

10.4.1 *Meta-theme one: The social and cultural context of labour and labour pain*

"Cultures comprise systems of shared ideas, systems of concepts and rules and meanings that underlie and are expressed in the ways that humans live." Helman (1990).

Cultural norms frame how people view the world, how to experience it emotionally, and how to behave via socialization (Helman, 1990). Cultural norms guide the behavior and the beliefs, customs, ideas, values, behavior and traditions of a particular society and are passed from one generation to the other via socialization. However, culture and hence, cultural norms can be changed in relation to the evolving external environment. Traditional Chinese culture which emphasized continuing the family line by having a son(s) in the family was the basis of meaning of childbirth and childbirth pain for women historically. However, with technological advancements and economic development there has been a gradual change in Hong Kong Chinese society and hence there appears to have been a change in cultural norms related to childbirth. The need for continuing the family line did not seem to be particularly significant in the accounts of the participants in this study. Where gender preference was evident, it seemed to be more about balancing the gender of the children in the family or about personal preference rather than societal pressure. Reasons for wanting children in general seemed to be more about social needs, such as a completed family, having someone to take care of parents when they were old, or peer influence.

With the change in the external environment as related to the economic situation of Hong Kong, and hence, an increase in the education and working opportunities for women, there has been a gradual change in gender roles. Most notably, women have gradually shared an increasing part of the responsibility in contributing to the family income. This has changed gender role norms and expectations, and decreased the cultural focus on

motherhood and childbearing as the fundamental female role. The pressure to continue the family line by producing a male heir has also reduced. Such changes are likely to have a significant impact on women in term of the social and cultural value and meaning of having a child. The Hong Kong Chinese women in general now has her first baby in her thirties, after she has ensured that, between them, she and her husband (the very large majority of childbearing Hong Kong Chinese women are married) have a stable income for the family (Table 8 on p145 provides the average age of women in their first labour in the local hospital). In addition, because of the need to go back to work, the supporting network for baby care was important. Unlike Mainland China with the one child policy (and, more recently, the two child policy) the decision to have more than one child in Hong Kong depends on the wishes of the couple. The availability of a supporting network for baby care in the family and the income of the family are therefore issues that couples consider when planning to have another baby, rather than political considerations. In recent years, concerns about the capacity to afford good quality schooling and education for the children are also an important consideration in the decision about having more children, especially when the woman is a working mother.

In addition to the changing status of women as childbearers and mothers, that was evident in some of the transcripts, there was evidence of both persistence of, and changes in, some traditional cultural norms. Women's reflexive response to their own experience of, and reaction to, childbirth pain was an example of this. Participant I001 and I004 indicated that they 'lost their temper' when they could not bear the pain, and participant I001 also reported that she 'became very demanding 'during the childbirth process. In the traditional Chinese culture, women were socialized to face the childbirth pain as a sacrifice toward their baby and the family. In this context, women were supposed to bear childbirth pain stoically, and not to demand support and pain relief, or to express negative emotion. Anecdotally, in discussions I had with senior midwives before starting data collection, they reported that they had seldom seen women scream out loud when they

felt the labor pain, instead, they accepted the pain, keeping calm and kept quiet when labour contractions occured. However, while the accounts of some of the women in this study indicated that they still experienced the social pressure not to respond emotionally to labour, or to demand personal comfort, their actual actions did not always reflect these felt social norms. This engendered feelings of guilt and regret in some. Others resisted these social norms, and did not did accept that they needed to tolerate the pain as a kind of sacrifice for the baby, or, therefore, to suppress their response to the pain.

The sense of sacrifice for the baby was still present in many of the accounts, however. Hence, most of the participants indicated that they would try their best to face the difficulties of labour, and to tolerate the pain. Such concepts were still there for most when they were interviewed around one year after the birth, and when they were asked about labour pain relief in next pregnancy. “Try my best” or “try one’s best” was the most common theme in the responses to direct questions on this topic.

One social and cultural aspect that had clearly changed over time, however, was the acceptability of the presence of the husband during labour. Until the last generation or so, it was a taboo for the man to see the women in labour. With the changes in power relations and the shift in gender roles in society in general, the women in this study had all normalized the need to have someone whom they trusted to protect them and the baby. Most commonly, they wanted this to be their husband.

10.4.2. *Meta-theme two: The trajectory of the pain sensation: anticipated, ‘actual’, and memories*

In late pregnancy, many of the participants and especially those having their first babies had feelings of fear of the unknown when they thought about labour and birth. They wondered if they would be able to cope with the pain of childbirth. However, many of them intended to tolerate the pain, as they

rationalized that it was an essential, functional part of the childbirth process. In the first few days after the birth, most of the women reported that their experience of pain was unexpectedly severe. This memory of the visceral sensation of pain signals faded for most women by a couple of months after the birth, although the facts of the labour process and their pain experience were still clear even at a year after the birth. This reflects findings of other authors that women's memories of what happened during childbirth were usually accurate but that their sense of the degree of distress caused by labour pain tended to fade (Waldenströom & Schytt, 2009). The only variation to this was in a study done in the early postnatal period reporting that women who used epidural analgesia for pain relief tended to remember the affective distress of their labour pain more strongly and more persistently over the longer term than those who did not have an epidural, despite similar pain scores for these two groups. (Waldenström & Schytt, 2009). In my study, two (I001, I004) of the three women who had epidural analgesia for pain relief did not report more painful Sensation. However, these two participants had considered escaping from the pain in a future pregnancy by using epidural analgesia. Nevertheless, with time and together with the positive information related to the subsequent childbirth process, they had changed their decision when they were interviewed 12 months later, and indicated that they would not use epidural for pain relief in the first place but would apply the 'step up approach'. In the use of pain relief methods. This demonstrates that a woman's decision in handling childbirth pain in a subsequent pregnancy can be affected by positive information they obtain.

Each childbirth is different and each woman has her own experience during labour and birth, including the experience of pain. It is impossible to really know how painful it will be until it has been experienced. Hence, the primiparous women had more worries about the unknown nature of childbirth pain than the multiparous women (Waldenstrom & Schytt, 2009; Waldenstrom & Irestedt, 2006), who had already had the experience. Nevertheless, as the process of childbirth varies with each women, as well as between them, some of the multiparous women were surprised at the

nature of the pain they experienced (both positively and negatively).

Despite the intensity of their pain sensations, acceptance of the necessity and even the value of the pain helped many of the participants maximize their coping ability, so that they could better tolerate it (Van der Gucht & Lewis, 2015). Indeed, although some did not accept the suggestion that labour pain was a sacrifice women made for their babies, others did see this as a reasonable way to understand and manage both the anticipation and the actual sensations of labour pain. For a few, this process of sacrifice through a suffering body began in the experience of the discomforts of pregnancy.

Pain tolerance was generally (although not always) related to the duration of the process. In principle, before the birth, the women felt that the pain could be borne as long as the labour was short. Although this was generally the case after the event, some women with memories of severe pain had relatively short labours. The issue seemed to be more about having a sense of progression and of moving towards the end than of the absolute length of the labour. If women were informed by caregivers that their labour was progressing well, that they were managing well, and how long it was likely to be until they had their babies, they felt that they would have the 'energy' to continue. This explained why they were very concerned about being kept up to date with their labour progress as it helped them psychologically to have the end in sight. This supports other findings that withholding or giving information can contribute to an empowering or disempowering birth experience (Larkin, Begley & Devane, 2012).

The women's views on the difficulty of coping with a long labour could have been confounded by the fact that many of them experienced induction of labour, which is associated with longer labour (Harper et al., 2012) and patterns of labour progression that are not physiological (Romano & Lothian, 2008). This hinders the production of endorphins, meaning that women experiencing labour induction do not gradually build up the same level of endogenous pain relief as those experiencing physiological labour and birth (Dixon, Skinner & Foureur, 2013). Thus, women with induction

may have had an increased need for analgesia and epidural aesthesia (Romano & Lothian, 2008).

Some women reported on specific pain sensations that were distressing (and that they still remembered up to a year postnatally). This was most striking in the accounts of women who felt a strong urge to push but were told should not to, as their cervical os was not sufficiently dilated. This phenomenon has been noted before and other qualitative studies have observed that women remember this as the most painful part of their labour (Bergstrom et al, 1997; Borelli et al, 2013). The evidence base behind both the so-called 'early pushing urge' and the way it is managed in childbirth is discussed further in chapter 11 on page 327.

Other reports of specific kinds of pain included sensations related to backache and to painful second stage labours where the epidural block was allowed to wear off. Although the women who had an epidural reported that it gave them total pain relief for most of their labour, they found the return of sensation in the second stage of labour hard to cope with. This has been observed in other studies (Phillips & Thomas, 1983). The evidence base relating to this is also discussed further in chapter 11, page 303.

Some women reported that they felt out of control when the pain was intense and the duration of labour was long or when the time remaining until the birth was uncertain. Two of the women lost their tempers or reported that they became very demanding when the pain was severe and they could not see an end in sight. However, most participants looked beyond pain as just a distressing sensation. One woman reflected on how the pain she experienced guided her in the delivery of her baby and helped her and her baby cooperate together. Another considered that it made her treasure her baby. This seemed to give a particular meaning to childbirth.

The term "in control" has the implication that the person could or felt she was able to master something via action. The interviews suggested that as women's sense of control over the events of childbirth increased, feelings of

anxiety in relation to birth were reduced. This sense of control over events has been associated with higher pain thresholds (Melzack & Wall, 1982; Elton et al., 1983). Thus, a feeling of being in control was a significant contributing factor to the woman's birth experience in this study as in other research (Green & Baston, 2003). According to Green & Baston (2003), there are three main outcomes that are related to control during childbirth, i.e. "feeling in control of what staff do to you, feeling in control of your own behavior, and feeling in control during contractions". These three control outcomes can be categorized into internal and external control. In this study, a sense of being out of control due to intense pain led to one woman reporting that she 'lost her temper'. This suggests that her loss of internal control led to her expressing emotions that she would have preferred to keep to herself. In contrast, feeling in control of (having choices about) what staff did to the women in the study indicated external control. Interpersonal variables were of particular concern for these women, as positive relationships enabled them to feel that they had some control of/say in what was done to them by midwives or other health care providers. This control was reflected by feeling treated as an individual or with respect, as well as perceiving staff as considerate. In addition, being able to get comfortable during the childbirth process was also one of the significant factors related to the feeling of being in control, both of oneself and of staff actions and activities. Such factors are also noted by Green & Baston (2003).

In terms of internal control, the way women reported their assessment of their own behavior during birth was directly related to pain and pain relief. It was noted that when they felt the pain was intolerable, despite pain relief, they felt they were out of control and they reported various behaviors which would not occur under normal situations. For some women, this situation resolved once they received epidural pain relief (participants I001 and I004):

> "(It) seemed like ……(I) was a little bit out of control. It seemed like …..(I) couldn't think anything." I001(2E)

> "I felt my body cramped and I cried when in pain." "As I had received epidural anesthesia, I felt it was the most comfortable moment at that time." " .. Then I felt very calm and I was in a normal and controllable situation." I004(2E)

In relation to external control, a sense of being treated as an individual with respect or when the health care provider was considerate, was significant. In the study, participants I009 and I010 illustrated that they obtained comfort from the midwives and they felt relaxed and could concentrate on breathing for pain relief. All these provided a positive impact on the woman's psychological state:

> "…I felt pain. When the midwife was massaging me, I felt relaxed and the pain became less." I009(2E)

> "At that time, the midwife treated me very well. She taught me how to do my breathing. That means how to concentrate on my breathing. I just focused on inhaling and exhaling and she also gave us some light music." I010(2E)

Health care professionals should be alert to the woman's need to be "in control" or "not out of control". However, this does not mean that women want to be constantly making decisions in labour: sometimes it is sufficient to trust the care provider enough to hand over decisions to them (Green & Baston, 2003). This can be particularly true in emergency situations. In the study, participant I011 gave up the control to the midwife when her baby had the cord around its neck. She was calm as she trusted that the experienced midwife could handle the situation well. The outcome showed that the woman felt justified in giving up control to the midwife at this point:

> "After my baby head was delivered, the midwife said the cord was around the neck. They asked me to stop pushing and she used scissors to cut the umbilical cord immediately. Then she taught me

to use energy to push my baby out. Luckily, the process was very smooth. Some people think it is dangerous when the cord is around the neck. However, I wasn't frightened at that time. As the midwife was very calm, I thought it was not a serious matter. They always meet these situations and they can manage them. There was no problem and they could manage it well. Therefore, I was very calm. The midwife cut the cord immediately and asked me to use energy again. Later, my baby's shoulder came out and she pulled my baby out. Then, I delivered my baby smoothly." I011(4)

Feeling in control during labour has been associated with positive psychological outcomes and hence, a more positive childbirth experience (Green & Baston, 2003). Health care professionals should therefore enable the woman to obtain a sense of control during childbirth. This can be done through engaging the woman in decision making related to the care provided to her. Since pain and pain relief were significant to the woman's feelings of control of her behavior and the contractions in this study, the health care provider should continually support and assess the needs of the woman in terms of handling childbirth pain and be aware of her needs for social support, comfort measures, and pharmacological pain relief when she indicates that this is what she needs. This includes attention to the dynamic nature of control needs during labour, when sometimes 'giving up control to gain control' is the optimum route, bearing in mind that women may need to take back control at a later point. Hence, it is vital for the care givers to understand the woman's needs for being "in control", engage the woman as appropriate, respect the woman and provided individualized care to the woman to suit her needs and the particular progress and condition of her and her baby. Special attention should be given to the provision of updated information and necessary explanations related to procedures and the progress of labour, as this would also enhance the woman's feelings of being respected, treated with consideration, and supported in terms of her individual needs and those of her baby. It is likely that such an approach will benefit the woman's psychological state in

handling the pain and the various other challenges during the childbirth process.

Overall, the perception from most of the respondents at all time points was that the sensation of pain during labour was simultaneously functional, significant and meaningful. This could be interpreted as a response to physiological labour pain. However, for a few respondents, the pain became completely unbearable, especially while waiting for decisions from the doctor during very long labours. These accounts seem to be of a different kind of pain that could be characterized as pathological. These women saw no point in suffering such pain and if they became pregnant again, they would consider an epidural early on or even an elective cesarean to avoid exposure to such unbearable sensations again.

The concepts of physiological and pathological pain are used both in relation to physical sensations that are the result of either normal labour processes or some underlying abnormality or external intervention, and to the degree to which women feel able to cope with the pain they are experiencing.

'Physiological pain' is used to refer to women's accounts of pain resulting from regular uterine contractions which bring about cervical dilatation as a result of the normal birthing process. It is used when women talk about the intensifying and sometimes hard to manage pain they experience as labour progresses but where they are able to adapt to and to cope with these sensations especially when they are well supported by a knowledgeable and supportive midwife (Darra & Murphy, 2016; Van der Gucht, & Lewis, 2015 'Pathological pain' is used when labour is slow or more difficult than usual and when women cannot find a way of coping as labour intensifies. This could be a result of abnormal conditions arising during the labour process, such as hypersensitivity to the syntocinon infusion for induction of labour resulting in tonic uterine contractions or malpresentation and malposition of the fetus which increases the fetal diameter during descent into the birth

canal for the delivery, and is linked to very intense backpain. Women with abnormally painful uterine contractions become rapidly exhausted and anxious. They often feel that something is wrong with their birth process, especially when labour doesn't progress as rapidly as expected, and so there is a sense that the end of the pain can't be predicted. The sense of suffering (as opposed to achievement) that can result from experiencing this kind of pain can be associated with psychological pathology in the postnatal period.

The literature does include cases where a pathological experience of pain has led women to consider not having more children despite an original intention to do so (Larkin et al, 2012). The decision on not to have another baby during intense pain might be impaired. Weber (1996) indicated that experiencing intense pain can impair one's ability to think clearly and make decisions. However, such a decision could be a transient one as in my study, two participants who decided not to have another baby when experiencing peak pain changed their decision in later interviews. The women still wanted to have another baby as planned. Hence, the experience of childbirth pain did not seem to affect the decision on having more babies among the current (admittedly small) sample of women, at least a year after the birth of the babies. Two-child families are common in Hong Kong and have been promoted since the 1970s. If the multiparas in this study wanted a third baby, it was for reasons unrelated to childbirth pain, such as wanting to have a child of a different gender if they had two boys or two girls or because they loved children. In the early days after birth, some of the primigravid participants were more tentative about wanting another baby. This is unsurprising as they were still coming to terms with being mothers. By a year postnatal (when the possibility of another pregnancy might have become more real) decisions about having another baby were driven more by social concerns, as noted under meta-theme one, than about the anticipated experience of pain in another labour.

The complex nature of pain anticipation, memory and consequences is best illustrated by interview data from each timepoint from two different

participants as follows:

- **Participant I001**

Second interview:

"I have thought about this during labour. Wa! One child was enough for me. As people say, after delivery you found that….you would forget (this painful experience) very soon. I think if it is possible, I want to have one more child." "If I can choose (in next delivery)….I think I will also choose to have epidural anesthesia!"

Third interview*:*

"I can describe the feeling at that moment and it was a feeling that I couldn't bear. But now that I review that moment, I think I can accept this. If you ask me to think about having another baby, I think I want to have another baby."…"It was really painful and I felt I could not bear it. If you asked me whether I have the courage to have another baby, I think I have. However, I don't want to experience that pain again."

Fourth interview*:*

"If you asked me a few months ago, I still would have said I would choose an epidural (for the next childbirth). It was so relaxing. But now I think that I will try again to see whether I can deliver my baby (without an epidural)."…"Yes, I will try another pain relief method. Also, some people say it's easier to deliver the second baby, haha!"… "Yes, I would like to know whether it (pain) will be better the next time." "I don't know, maybe I had the concept that it was really hard to deliver my first baby. It might be faster to deliver my second baby, the time might be shorter. And I may not need to tolerate the pain for 10 hours more. Let's see whether I can bear it, haha!"

- **Participant I004**

Second interview:

"I don't want to have this a second time (to experience the childbirth pain again)!"…"I think, actually I would like to have two children. If I have a second child, I may consider seriously whether I should choose a spontaneous vaginal delivery or a Cesarean section."…"After this experience, if I have a second pregnancy, I may choose a Caesarean section. I know a Caesarean section is not good for my baby. A spontaneous delivery will be better for the baby and my recovery. However, I actually couldn't accept the pain."…"(In

the next delivery) I will choose an epidural for delivery. If it is possible, I will choose epidural analgesia."

Third interview:

"I think I will choose….painless childbirth. Because that method… can relieve the pain more efficiently, right."…"I still want to have two children."…"I think that it will be in two years. (plan for another baby)."

Fourth interview*:*

"Oh! No, it (the pain) didn't affect my consideration about having another baby. I think the feeling (on pain) faded as time went by. If I have another baby, I prefer a normal spontaneous delivery."

This information shows that the experience and memory of pain did not affect the women's decisions to have another baby, but it did affect their decisions about their preferred mode of birth and future use of pain relief methods. However, these effects were not static. They not only shifted over time, but even in the course of the dialogue at specific timepoints. This suggests that making decisions about the ideal provision of pain relief in labour cannot be based on simple linear calculations of how much pain a woman is experiencing. Any programme to help women with labour pain needs to take into consideration the notions of both facing and escaping labour pain and the longer-term consequences of whatever decision is made. The next meta-theme addresses this issue.

10.4.3 *Meta-theme three: Facing or escaping the pain: choices and consequences*

Although this meta-theme is anchored with two extremes ('facing' or 'escaping') most women moved along this continuum to a greater or lesser degree. As childbirth approached, most participants had considered which methods of pain relief they would use. Most preferred to labour with as little pain relief as possible. If they needed help, they considered using non-pharmacological pain relief first and then stepping up to pharmacological methods, such as Entonox, and pethidine, with an epidural

as their last method. The preference to not use pethidine and epidurals if possible was partly linked to the knowledge that they could both have effects on the baby (for the multiparous women, this was reinforced by their experiences in their first labours and births) and partly because they knew from childbirth classes that these methods could affect their capacity to labour effectively. In the end, most were able to face the pain without using pethidine or epidurals. All participants used low- level pain relief methods first, such as the birthball, massage, or other non-pharmacological methods (refer to table 17 on the data related to childbirth). However, for some, the experience of severe pain led them to a need to escape through epidural analgesia. The desire to labour without pain relief but eventually using strong analgesics is well documented in the literature (Machin & Scamell, 1997; Lally et al, 2008).

As Machin and Scamell (1997) note, this difference between intention and actuality might have more to do with the institutional norms in modern labour wards than with women's actual capacity to cope with labour pain. The fact that so many women in this study experienced labour induction is relevant in this regard.

In reflecting back on their experience of different pain relief methods, women tended to be consistent in their reports of all the methods except epidurals. There was a general appreciation of the relaxing and distracting effects of the birth ball, TENS, and massage. As in other studies about childbirth massage specifically and therapeutic massage in general (Field et al, 1997), the effect of the massage was also tied up with a sense of safety or security as it reduced the level of anxiety and offered comfort through the use of therapeutic touch – the feeling that someone was caring directly for and about themThis was particularly so when their husband did the massage, although this was of no benefit when the woman actively did not want to be touched at certain stages in her labour.

Women were much less enthusiastic about the effects of Entonox and

pethidine at all time points. They reported some temporary relief but this was more than counter-balanced by dizziness, nausea, and a loss of energy. The loss of energy was seen as being particularly relevant. It seemed to equate to a loss of psychological and emotional energy to engage with the labour as much as to a physical sense of fatigue. The effect of pethidine on the baby was also noted, both by women using it in this labour and by multigravida women reflecting back on previous labours. It has been known for some time that pethidine is not a very satisfactory solution to childbirth pain and that health care providers tend to overestimate how effective women think it is (Rajan, 1993; Ullman et al, 2010). Ullman et al (2010) suggest that women's satisfaction with the use of Entonox is higher than that of pethidine, but in the current study, both methods did not seem to meet women's needs and their views on this did not change with time.

Memories of the use of epidural analgesia did however shift over time. Three primiparous participants (all with induced labours) used epidural analgesia. All of them indicated that it could relieve the noxious sensations of pain and they felt better and could rest. However, one of the women (I002) did not have an urge to push as a consequence and she (and her baby) then had a failed vacuum extraction followed by a forceps delivery. As illustrated above in the long quote section on page 270, Participant (1001) said she would have an epidural again for her next delivery when she was asked about this immediately after and then at two months or so after the birth of her baby. However, in the last interview, a year after the birth, she changed her mind as she had heard that it would be easier to deliver the next baby. She indicated that she would try to tolerate the pain first before deciding on other pain relief methods.

For participant 1001, also quoted in the same section above, the intention not to have an epidural in any future labour might also have been due to social pressures. As discussed in chapter seven, she was criticized by her mother for not being strong enough to tolerate the pain of labour and this featured in her interview data at that point.

As this meta-theme illustrates, decisions about the use of pain relief in labour are predicted as much by local maternity care practices and care provision as they are about the precise physiological nature of stimuli and counter-stimuli generated by particular laboring bodies. The framing and memory of these decisions is then also reinterpreted through the lens of social norms and of the consequences of the decisions that were made, as well as by the overriding experiences of being a mother and by changing expectations on how a future labour may play out. All of these aspects need to be taken into account in understanding what women want and need in the moment when they are facing or escaping labour pain.

10.4.4 *Meta-theme four: Someone to be with me: trust and care*

Based on the data from the four interviews, all participants were very concerned with the support provided to them during the childbirth process. The need for support from their husbands and their care providers (mainly their midwives) was strongly evident at all timepoints. This was expressed as a need for a constant, trusted, and caring presence during labour, based on positive and respectful relationships. These findings echo existing evidence on companionship in labour (Banda et al, 2010) and on continuity of care (Sandall et al, 2016; Leap et al, 2010). However, the notion of positive supportive relationships as an essential part of helping women to face and integrate pain in labour into a positive longer term benefit has been less well explored. The finding of mutual reciprocal benefits for the women and their husbands that resonated forward into the first year of parenting is also an important outcome that has been revealed by the longitudinal design.

10.4.4.1 Support from the husband

Beyond the need for mutually respectful relationships and 'being there', the kinds of support women needed from their husbands and midwives were different. What the participants wanted from their husbands was mainly related to a desire for a shared experience of pregnancy, labour, birth and parenting, as well as to reassurance that they would not be alone in labour

(Melender, 2002). The encouragement of husbands helped their wives when they were trying to cope with labour (Gibbins & Thomson, 2001). The presence of the husband thus provided a sense of companionship. When the husband stayed with the woman, she did not feel lonely. This need was the same in all four interviews.

All of the first- time mothers-to-be wanted their husband to accompany them. The multiparous women also wanted their husbands to stay with them, but one did not insist on this as her husband could not tolerate being present at her first delivery. She did not say much about it in the second interview, i.e. around two days postnatally. However, the data from her subsequent interviews showed that she felt lonely at times without him being there. This feeling persisted in her accounts a year after the birth. It was not so much a loss of someone to do a range of activities – most of the women did not have many prior expectations that this would happen. Some indicated that when they felt pain they did not want their husbands to talk to them but just quietly stay beside them. However, when their husbands did more than they expected, they felt cherished and warm. Encouragement, praise and action from the husbands made women feel loved and cared for, and, as for other helpful events noted above, this resulted in a feeling of being charged with power to face the pain. Some participants reported that their husbands felt engaged and helpful if they provided appropriate support when their wives were facing this challenging life event. There were therefore, mutual benefits in both the short and long term.

10.4.4.2 Support from the midwife

Support from the midwife was more about unconditional positive regard and professional attention. Both the women and their husbands were facing the unknown in labour (even if they had been through it before) and they longed for the midwife to accompany them in this uncertain journey, to reassure them when something happened that they did not understand or expect, and to recognize and manage or refer any problems that might arise with themselves and their unborn babies (Melender, 2002; Renfrew et al 2014). Keeping them informed of events throughout labour and, importantly, of

how they were progressing and how close they were to the end, contributed to feelings of satisfaction about their birth experience (Gibbins & Thomson, 2001). Withholding information had a strong disempowering effect (Larkin et al., 2012). The need for good midwifery care was consistent and was reflected in the interviews at different points of time after the childbirth process. Importantly, and in line with the continuity of care literature (Sandall et al, 2016; Leap et al, 2010; Van der Gucht & Lewis, 2015), the participants felt safe and secure when the midwife stayed with them throughout the childbirth process.

When the midwife did not fulfill their expectations, the women expressed their dissatisfaction in the interviews. They felt particularly let down when the midwives did not provide the information they needed, such as how they were progressing in labour or what procedures were likely to take place. Lack of response led to women feeling ignored and not respected by the midwives. This affected their psychological wellbeing and created negative feelings about the childbirth experience. It may also have had a physical effect in increasing their stress response and, thus, the perception of pain.

In contrast, if the midwives showed concern, were gentle and patient, talked to them, helped reduce labour pain by performing massage, and took care of them with encouragement and support, the women expressed gratitude and appreciation. In this way, the midwife was seen as significant in helping the women achieve a positive birth experience or in hindering this process, and this view was expressed at all time points. These findings also resonate with current literature in this area from a range of cultural settings (el-Nemer et al 2006; Larkin et al., 2012; Borrelli et al 2016).

A midwife who took care of women's needs and encouraged them could also enhance their confidence to face the challenging childbirth process. Demonstration through words and deeds that the midwives valued and respected the women and the efforts they were making could empower the women as well as maintain their dignity during childbirth (Matthews & Callister, 2004). Current interest in the crucial concepts of respect and

dignity in labour demonstrates that these features are essential for women around the world (Bowser and Hill, 2010); Bohren et al 2014; Miller and Lalonde 2015)

10.4.5 *Meta-theme five:* Achievement and growth through the unforgettable experience

One of the most striking elements of the accounts of the women over time was the sense that the childbirth experience and particularly the way they coped with it were important to them, even up to a year after the event. The women were asked about satisfaction levels although there has been some critique of satisfaction as a measure of health care quality (Van Teijlingenm et al., 2003). Indeed, in general, if a population of people are asked about their satisfaction with anything, about 80% will say that they are satisfied and this is true of surveys of postnatal women in a range of settings. Qualitative data, however, tend to reveal far more complex responses. It was noted that when satisfaction was measured in relation to health care in general, it was usually high, however, when the satisfaction measures particular aspects of the health care experience the results tended to be lower with more variable (Hodnett, 2002), and this was the case in the current study.

Satisfaction or dissatisfaction with the childbirth process did not seem to be related to pain severity for most women in this study, but was related to the quality of the care they received, the efforts they made for the birth of the baby, and the outcome of the childbirth process. As such, their focus on pain was transient. No matter how severe it was, once the childbirth process was finished, the pain was gone. However, the feelings about the care provided were different, as it could be touching and memorable or distressing, particularly if women's needs were not met or if they had the feeling of being misunderstood, ignored, or not respected by health care providers.

A few participants had struggled in this pregnancy or childbirth process for various reasons. One had to get up in the cold winter every day for fertility

treatment, one struggled with the pain, while two other participants struggled about not using epidural analgesia or pethidine. After the delivery, they all had a sense of achievement, as they had undergone difficult and testing times and had come through triumphantly. The following extended quotes illustrate this:

- **Participant I001 (fourth interview)**

  "When you asked me to review the previous period (during IUI treatment) I remembered it was winter at that time. It was very cold and I always complained, 'Why do I need to wake up so early and then go to the hospital?' Now when I review that moment, it seems like a past event. If you asked me to compare the pain between childbirth and having IUI, I think the feeling was harder when I had IUI. I needed to cope with that stress and I woke up very early in the winter. I had the treatment at Queen Mary Hospital, so I needed to go there at 7 am."

  "It was like a dream, as it was not easy for me to get pregnant. I feel very thankful about this. Actually, it was my first IUI and it was successful."

  "I think my first feeling was that it's definitely ....very touching....It's very touching. Maybe I waited many years and didn't have a baby yet…even the doctor told me that my chance of having a baby was low, it seemed like…I remembered the time when I delivered my baby and saw him in front of me. It would remind me that, 'Ah! When I needed to be injected with those ovulation drugs to increase the size of the follicles.' Suddenly I thought that, 'Ah! I saw the follicle through the ultrasound and then later it formed a shape (fetus).'"

  "I feel very touched (when my baby was born) at that moment. I thought, 'Ah! It was so amazing.' The baby was born."

- **Participant I003 (third interview)**

  "I wanted to have a spontaneous delivery and I had tried my best to do things. Although I couldn't do it finally, I didn't have any regrets or feel sorry about this because I really tried my best and I knew I had devoted full effort in my delivery process."…"Yes (I am satisfied with myself), as I really tried to do something for this delivery."

This woman had gone through the childbirth process and had tolerated a lot of pain. She tried her best to face the pain and would have liked to have a

spontaneous delivery but she needed a Caesarean section. However, she did not regret it because she felt she had tried her best for the baby. She was satisfied with herself.

- **Participant I010 (second interview)**

  "I think it (the pain) occurred every minute. The pain was not over yet and then it started again. At that time, I thought, ah! I didn't care about anything and had an injection first. If it didn't work, I considered using epidural analgesia. After the injection, I needed to wait for the drug effect. At that time, I reconsidered my decision for a while."

  "In this delivery, I think the labour pain made it easier to push my baby out. If I was under epidural analgesia, I didn't know when I needed to push my baby at all."

  "....the pain! I didn't have much pain (in the first labour – she had an epidural), *even though I knew there was labour pain. However, that pain was not so strong as in this delivery. This made me think that I had not tried my best* (in the first delivery), *it seemed that I used a shortcut to finish this task."*

  "I was very happy. I had great satisfaction when my baby came into this world. I think I had put some effort into it."..."I didn't use too much energy in the last delivery. I really used a lot of energy in this delivery, right."

Before delivery and during the childbirth process, pain was the main issue of concern for the women. However, reduction in pain, being pain free, or severe pain was not related to satisfaction or dissatisfaction with the childbirth process. The care they received, the efforts they made, and related outcomes had more importance.

In the end, whether pharmacological pain relief was used or not, the important aspect for these women was that they had gone as far as they possibly could in facing the pain and the process of labour. It seemed to be important to them to be supported in doing this and to gain this sense of achievement and self-fulfillment, in many cases going further than they ever believed might be possible.

10.5. Conclusion

In this study, the women considered pain essential and functional, and they accepted it as an essential part of the childbirth process. This concept maximized their capability to cope with pain. Knowing where they were in the labour process and having a sense that the end was in sight could also help. This was more often achieved with short labours but short labours were not necessarily the least painful. Husbands and midwives were identified as sources of support during childbirth. The women's satisfaction with their childbirth experience a few days postnatal was not related to the pain but to the care they received from their husbands and midwives and to their own sense of achievement. Over time though, they clearly remembered the fact of their pain and the specific kinds of pain they felt. The affective noxious memories decreased for most of them as they put their birth experience into the perspective of their mothering and parenting experiences. The final chapter interprets these meta-themes in the light of Maslows hierarchy of needs and I propose a model for helping women face or escape pain.

SECTION FOUR: BRINGING ALL THE DATA TOGETHER

CHAPTER ELEVEN: BRINGING IT ALL TOGETHER

11.1 Introduction

A range of factors emerged from the metasynthesis and the longitudinal interviews, including social and cultural influences on expectations and experiences of labour, such as the gender of the baby and the number of children in the family; practical issues, such as baby care, and the health of the baby and the mother; and issues specific to childbirth pain, including pain relief and the nature of support from husbands and midwives or health care providers. Beyond these concerns were unexpected experiences, which were memorable to the women. The results indicated that needs were created during the childbirth process and that fulfilling these needs could enhance the growth of the woman and enable her to have a meaningful childbirth experience. Specific needs during the childbirth process included feeling safe and secure, reducing the impact of the pain by having both the husband and the midwife stay with the woman throughout the childbirth process, receiving care that was specific for her, receiving psychological support, being respected, being treated as an individual, receiving information related to labour progress, and being able to choose from a range of pain relief methods. The experience of some women was enhanced if the midwife or health care professional could support them in handling pain without using pharmacological pain relief, which was associated with their sense of achievement in the childbirth process, with memories of an unforgettable experience. The various needs and experiences expressed by the women could be explained by Maslow's hierarchy of needs. Using this hierarchy to interpret the data enabled the development of a new care model for the woman during childbirth with the aim of enhancing the opportunity for future childbearing women to reach their optimal capacity to face the challenging childbirth process and to experience this as a positive transformatory event as a consequence.

In this chapter, I address the strengths and limitations of the study and examine the current evidence for some of the practices that might have influenced women's experiences and memories of pain and for the notion of 'satisfaction' as an outcome. I then propose a theoretical integration of the results of the meta-themes described in chapter ten with Maslow's Hierarchy of Needs to further interpret the findings. Finally, I present a potential new model of care for women during childbirth based on the findings of the study and on the theoretical interpretation. The ultimate intention of this is to enhance the ability of women to achieve their goals for delivery and to have a meaningful and memorable childbirth.

11.2 Strengths and limitations of the study

11.2.1 Strengths

There are three main strengths of this study. This is the only study to examine this phenomenon longitudinally up to one year postnatally. I bring insider knowledge to the analysis and the cohort study provided rich data despite the relatively short interviews.

11.2.1.1 The only study to examine this phenomenon longitudinally up to one year postnatally

In Hong Kong, the service of midwifery care was developed with reference to that in the United Kingdom. Although midwives in Hong Kong have started to develop non-pharmacological pain relief in recent years, the development is mainly from the professional point of view. The views of women on childbirth and childbirth pain have not been obtained as a reference for service development, as no study has reported on the relevant phenomena. In order to further develop a midwifery service which suits the needs of women in Hong Kong, I conducted this study longitudinally. As far as I am aware, this is the first time this has been done in any context.

11.2.1.2 Insider knowledge

I am a registered nurse and a registered midwife with a few years of teaching experience in one of the midwifery schools in Hong Kong. In

addition, I have experience in the development and monitoring of midwifery services as the Department Operations Manager of the Obstetrics and Gynaecology Department of the study hospital. Hence, I am quite familiar with the midwifery service in the study hospital. With this background knowledge and a full understanding of the midwifery service provided in Hong Kong, I know clearly what is provided in the service and what I can do to facilitate the recruitment of participants and the interviews. In addition, I could grasp what the women tried to tell during the interview as I have been involved in the midwifery service for more than 15 years and know what happens during the childbirth process. Hence, I had advantages when conducting the study as an insider.

11.2.1.3 Rich data despite short interviews

I noted that the duration of the interviews was relatively short, especially in the first and third interviews, i.e. around 36 weeks of pregnancy and around 6-8 weeks postnatal. Despite this, the data linked well across the interviews, providing a rich sense of the story of each participant over time.

11.2.2 *Limitations*

There were three significant limitations related to my study. These included prior assumptions about the family line and gender preference, the effect of conducting interviews while I was in uniform, and the length of the interviews and the consequent change from phenomenology to qualitative interviews.

11.2.2.1 *Prior assumptions about the family line and gender preference*

Due to past experience, I had a strong set of beliefs about gender preference in relation to continuing the family line. Hence, in the initial design of the study, I considered that gender preference and the subordinate position of women were significant factors influencing the women in relation to childbirth pain. After the initial data were collected, I realized that my initial focus was not relevant, that the cultural effect on continuing the family line was markedly reduced, and that the gender of the baby was no longer a

concern of childbearing women. As such, I amended the focus of the study from a cultural perspective to the women's feelings on and views about childbirth and childbirth pain.

11.2.2.2 *The effect of conducting interviews in uniform*

For reasons noted previously, in the initial recruitment and the first and second interviews, I was in uniform when the interviews were conducted within the hospital compound. Although I felt I obtained their trust and rapport as the study continued, I cannot be sure that if there were no perceived power differences during the interview.

11.2.2.3 The length of the interviews and the consequent change from phenomenology to qualitative interviews

As discussed above, initially, I was a bit surprised by the shortness of the interviews. I wondered if it was due to my lack of interview skills. In the second interviews, the women seemed to have a lot to tell or to share about their birth experiences. However, in the third interview, the duration surprised me again. I wonder if this was due to their concentration on the baby rather than on the interview, as all the interviews except one were conducted in the women's homes and they had their babies with them. As noted previously, I had a detailed discussion with my supervisor on this issue and finally considered changing the interview style by asking the women to respond to me with stories rather than just factual answers.

11.3 *Evidence relating to some of the clinical practices described by the participants in relation to pain experience*

In Hong Kong, formal evidence has only recently begun to gain acceptance as the basis for clinical practice. Hence, some of the practices reported by the participants were evidenced- based while others were not. This could have had an influence on their capacity to labour as well as on their experience of labour pain.

11.3.1 Induction of labour for post term or prelabour rupture of membranes within 24 hours

It is a standard protocol in the study hospital that women are instructed to go to the hospital when they have signs of labour onset, including show, regular uterine contractions, and leaking of liquor. If the membranes are ruptured, the woman is provided with the option to wait up to 24 hours for spontaneous onset of labour or to have an induction right away. It is noted that the pain induced by the drug for induction of labour tends to be associated with more pain for the woman as it disturbs the capacity to produce endorphins (Romano & Lothian, 2008), which tends to result in more requests for pharmacological pain relief, especially epidural analgesia. The use of epidural analgesia, is associated with a higher chance of instrumental delivery. There is evidence that induction can be delayed for up to 96 hours after prelabour rupture of membranes in term gestations and many units around the world wait for at least 48 hours without increasing the risk of infection for mother or baby. This suggests that it could be better to delay induction.

11.3.2 Mobilization in late labour/ second stage

In the local practice, woman in their early first stage of labour are encouraged to mobilize and to use the birthball. To facilitate this, the antenatal ward is equipped with a birthball for the women to use whenever they felt like. This encourages mobilization, as it helps the woman choose a variety of movements to cope with labour (Simkin & O'Hara, 2002). However, when they are in active labour, they would be transferred to the labour ward where they are connected to a fetal monitor. This might affect their mobilization and as the labour pain becomes more intense, the women tend to stay in bed. In the second stage, the women tend to sit up in bed. Use of more upright and forward leaning positions could improve women's capacity to tolerate pain in late first stage and second stage labour.

11.3.3 Fluid and nutrition

During the labour process, women are allowed fluid and food, as there is good evidence that this improves labour progress. However, due to pain and the use of oxytocin when undergoing induction of labour, women tend to have a reduced appetite. During induction, women are not allowed food or drink to avoid the risk of aspiration if they need general anaesthesia for a caesarean section. However, midwives have obtained support from anesthetists to allow the woman to have ice chips to avoid a dry mouth and to provide comfort. Intravenous infusion is given to prevent dehydration. In fact, the current evidence base suggests that since general anasthesia is very rarely needed and any risk of aspiration can be countered with antacids and other drugs, food and fluid should not be restricted in most cases.

11.3.4 Letting the epidural block wear off for the second stage

Some authorities feel that epidural analgesia should be stopped in the second stage of labour to enhance the feeling of the urge to push and to reduce the chance of instrumental delivery. However, the current evidence base suggests that women who have been using epidural analgesia tend to experience the return of sensation as unbearabley painful, as the epidural agent blocks the transmission of painful stimuli to the brain, and the brain does not as a consequence, sense the need to produce endorphins, the hormone used to handle the stress or pain (Wall & Melzack, 1982; Dixon et al, 2013). Under normal physiological conditions, when there is pain, the brain produces endorphins and the endorphin level inside the body increases gradually, which helps to reduce pain. However, the sudden cessation of epidural analgesia during labour occurs without the benefit of endorphin production (Romano & Lothian, 2008). Hence, another school of thought is to continue the extradural analgesia during the second stage of labour, as the woman could then still be pain free. There is no evidence that the woman with extradural analgesia continued into the second stage has a higher chance of instrumental delivery or a longer second stage (Phillips & Thomas, 1983).

11.3.5 Early pushing urge

The early pushing urge is the maternal urge to bear down before the official confirmation of full dilatation of the cervix (Downe, Young & Moran, 2008 in Downe 2008). A number of the participants commented on how much it hurt when they felt the urge to push but were told not to because they had not reached official full dilation of the cervical os. This phenomenon has been reported in a number of studies and in many settings midwives no longer restrict women from active pushing if they feel an urge to do so and progress occurs without maternal or fetal distress. There is a need for further study in this area.

11.3.6 Views on a short labour

It was noted that some women in the study wanted to have a short labour as this implied that the period they needed to face the pain would be short. However, in a recent study, when women were asked post-delivery for their preference between a short labour with increased pain intensity and a long labour with reduced pain intensity, more women preferred lower pain intensity at the cost of a longer pain duration (Carvalho et al, 2014). Thus, pain intensity appeared to be the woman's primary concern. Some women might prefer a long labour with reduced intensity so that they could tolerate the pain. Hence, pain relief methods that helped reduce the pain intensity might be of greater value than the duration of pain (Carvalho et al, 2014). Indeed, in this study, having a short labour was not necessarily linked to a sensation of less pain. Further study on this aspect would be beneficial.

11.3.7 The notion of 'satisfaction'

It was obvious that pain was a significant issue related to childbirth fears (Melender, 2002) as it was something unknown to the woman and she would not be able to know if she could handle it until she experienced it. However, it was noted that the women in this study who had more pain were not necessarily less satisfied. Rather, there were other factors that caused the feeling of satisfaction. The most significant factor that affect the

women's feelings of satisfaction was the care they received during the course of their childbirth process. According to Nilsson & Lundgren (2009), the experience of a good birth was related to a positive encounter between the woman and the midwife as it could be seen as a way to restore the woman's trust in herself in relation to childbirth. Enhancing the woman to increase their personal control during childbirth might increase women's satisfaction towards childbirth (Goodman, Mackey & Tavakoli, 2004).

Employing evidence- based practice can improve women's satisfaction or reduce disrespect during childbirth. Evidence- based practice as described by Romano & Lothian (2008) is related to six evidence- based care practices employed to promote physiological birth. These steps are not difficult to achieve. They are: "avoiding medically unnecessary induction of labour, allowing freedom of movement for the laboring woman, providing continuous labour support, avoiding routine interventions and restrictions, encouraging spontaneous pushing in non-supine positions, and keeping mothers and babies together after birth without restrictions on breastfeeding" (Romano & Lothian, 2008). These points are fundamental to normal childbirth. With adequate support and reduction in unnecessary restrictions, it is possible to enhance the capacity of the woman to face the pain and to have good memories about her childbirth experience.

11.3.8 The significance of continuous support and companionship in labour

The issue of continuous support and companionship in labour had significant impact for the woman. The support reduced maternal anxiety as well as a relative decrease in stress hormones (Romano & Lothian, 2008). These enhance the creation of positive outcome for the woman, such as reducing the use of analgesia and had a higher chance of spontaneous vaginal birth (Romano & Lothian, 2008). To facilitate continuous support and companionship, the midwife should stay with the woman throughout the childbirth process as this creates positive relationships and outcomes. It was noted from the study that when midwives stayed with the women, they felt

safe and secure from the perspectives of the health of the baby and of the woman herself. The husband could also be a good companion. When the husband was there, the women felt safe as she had someone to rely on and she would not be facing the challenge alone. Hence, it was good practice to provide continuous support and enhance companionship for the woman during the childbirth process.

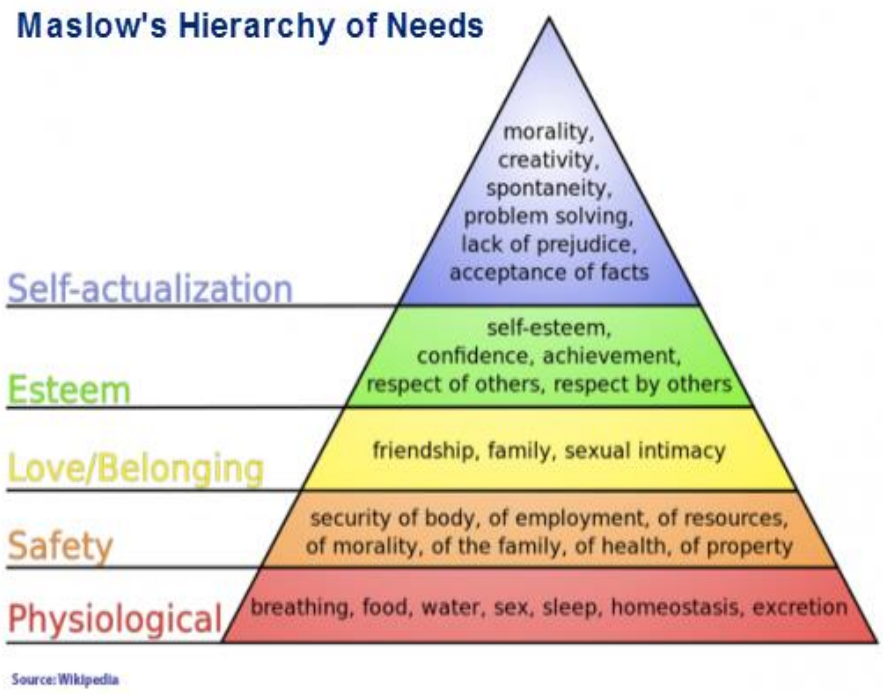
11.3.9 Memories of labour pain

There are studies indicating that the worse the labour pain women remembered the more pain relief they had used (Waldenstrom & Irestedt, 2006). It seemed that women remembered pain when it was at its peak, i.e. when they felt it was most severe (Waldenstrom & Schytt, 2009). This memory was significant as it had the potential to affect future behavior and emotional well-being and thus the outcome of childbirth (Waldenstrom & Irestedt, 2006). It is significant for health care professionals to improve the outcome of childbirth by providing necessary support to help women reduce pain. This does not mean that midwives should advocate pharmacological pain relief. As discussed above, woman's satisfaction towards childbirth was not related to pain free or reduced pain (page 279-281), but rather the meaning of childbirth pain and the pain relief methods that the midwives provided. With reference to my study, LK massage was one of the non-pharmacological pain relief method that gained positive comments from the women in this study. Massage helps relax the woman and reduce stress (Chang et al., 2002) as it requires another person to perform and when it is applied, it means that someone is with her. In addition, massage involves body contact, which might be considered a kind of therapeutic touch. Hence, continuous support with the provision of appropriate non-pharmacological pain relief methods can contribute to a memorable childbirth experience.

11.4 Rationale for choosing Maslow's hierarchy of needs as a theoretical framework for the findings

According to Maslow, the behavior of humans is influenced by their needs. He indicated that human needs could be understood in terms of a hierarchy (Petri, 1996). His motivation theory states that there are basic needs that people strive to achieve before needs from a higher level are triggered. However, Maslow suggested that needs are easily ignored or suppressed (Maslow, 1943). The idea that lower needs must be satisfied before the next level of needs becomes active is not totally rigid (Petri, 1996). However, in ideal form in the hierarchy, physiological needs are at the lowest level. When these needs are satisfied, the needs in the next highest level in the hierarchy are triggered and behavior is thus controlled and directed by this dominant force (Petri, 1996). The next levels in the hierarchy in ascending order are the needs for safety, love or belongingness, esteem, and finally the need for self-actualization at the highest level of the hierarchy (see Figure 1).

Figure 1



11.4.1 Level one: Physiological needs

These needs involve the need for food, water, shelter, sex, sleep and oxygen, the basic needs for the survival of a human (Maslow, 1943). Such needs are fundamental and until these needs are satisfied, the person will ignore or push all other needs into the background. However, human needs are interrelated. A person might attempt to satisfy needs by other activities, for example, a hungry person might smoke or drink water in an attempt to satisfy the need for food. When the need is satisfied, other needs emerge (Goble, 1970). According to Maslow, it is not necessary to fully fulfill the needs at one level before going on to fulfill other needs, as when one desire is satisfied, another emerges to take its place (Maslow, 1943).

11.4.2 Level two: Safety needs

According to Maslow (1970), safety needs are related to security; stability; dependency; protection; freedom from fear, anxiety and chaos; the need for structure, order, law, and limits; and strength in the protector. Hence, people tend to seek safety and stability, and they have a preference for familiar rather than unfamiliar things, or for the known rather than the unknown (Maslow, 1970). This explains why fear and anxiety are induced by the unknown. When people feel unsafe, their safety needs are expressed through searching for a protector or a stronger person on whom they might depend (Maslow, 1970). In other words, when people feel unsafe, they find ways to achieve safety needs so as to revert to a safe environment where things are in order and stability is achieved (Goble, 1970).

11.4.3 Level three: Need for love and belonging

Such needs relate to the needs for love, affection, and belonging. Carl Rogers defined love as “being deeply understood and deeply accepted”; this definition is closely in tune with the thinking of Maslow (Goble, 1970). To Maslow, love involves a healthy, loving relationship between two people, which includes mutual trust and no fear or defenses. In addition, Maslow

indicated that “the love needs involve both giving and receiving love.” (Maslow, 1970). The needs for love and belonging become clearly evident when one has the feeling of loneliness, ostracism, rejection, friendlessness, or rootlessness (Maslow, 1970).

11.4.4 Level four: Esteem needs

According to Maslow, esteem needs can be divided into two categories, self-respect (self-esteem) and esteem from other people (Maslow, 1943). Self-esteem includes the needs for strength, for achievement, for adequacy, for confidence, for independence and freedom. Esteem from others is related to respect from others which includes the desire for reputation or prestige, status, recognition, attention, importance, and appreciation. (Maslow, 1970). With self-esteem, the person feels confident, worthy, strong, and capable; and hence, would be more productive (Goble, 1970). Hence, building up self-esteem is significant in helping a person be capable and productive. Without self-esteem, there are feelings of inferiority, weakness, and helplessness which result in discouragement (Maslow, 1970). That is to say without self-esteem, the capability of a person is reduced and the person feels weak and helpless. Maslow considered that the healthiest self-esteem was based on “deserved respect from others” (Maslow, 1970). Hence, respect from others is significant to the esteem needs of a person.

11.4.5 Level five: Need for self-actualization

Maslow described this need as “the desire to become more and more what one is, to become everything that one is capable of becoming”, or, “what a man can be, he must be” (Maslow, 1970; Goble, 1970). One must be true to one’s own nature and this involves the desire for self-fulfillment, to become actualized in what one is potentially. (Maslow, 1943)

11.5 Application of Maslow’s hierarchy of needs.

As described in the above (pages 331-333), there are five levels in Maslow’s hierarchy of needs. It should be noted that levels are not completely

independent. For example, a woman might feel anxious due to severe pain, and hence have physiological needs in relation to pain reduction. At the same time, she may also need support and care from the midwife to comfort her psychologically to increase her capability to cope with the pain. Hence she has love and belonging needs at the same time. This illustrates that the levels are not completely independent. This was reflected in different phases of the study or even at different points in their labour accounts. Women expressed more or fewer elements in the model. Each level will be discussed separately below to illustrate agreement between the model and the data from the study.

Physiological needs are the first level of needs in the hierarchy. In the study data, the main physiological need related to childbirth was the imperative to reduce the intensity of the sensation of labour pain, or in severe situations, to remove it altogether. Provision of care that made the woman feel comfortable and cared for enhanced her capacity to tolerate the pain.

In terms of the second level, the safety needs in this study concerned the health of the baby and of the woman herself, especially in relation to complications that could occur during childbirth. For some respondents, having their husband with them helped with this need, as they felt that he had the role to protect his wife and children. For others, having the continuous presence of the midwife enabled them to feel safe.

The need for love and belonging is the third level in the hierarchy. The feeling of being loved and of belonging to a supportive social network was significant for most of the respondents and this sense was also instrumental in helping them to cope with the pain of labour. Feeling loved by the husband was crucial for most participants; the women did not need the husband to do anything but stay with them. In addition, the little things that he did, like holding her hands and doing massage, helped the women to feel warm and loved. This enhanced their psychological well-being and for some, generated more energy to face the challenging childbirth process.

The midwife's reaction or behavior towards the women was also significant in this level of needs, as it affected their feeling of belonging, of being accepted, understood and "loved" (in the sense of being cared for empathically according to their individual needs) by the midwife. This enhanced the building of trust.

At the fourth level of the hierarchy, esteem needs were related to a sense of achievement (self-esteem), and of being respected and worthy of recognition and attention (esteem from others). For some women, achieving a sense of self-esteem was related to the degree to which they overcame intense obstacles in labour. This was the case, for example for the participant who finally decided not to use pharmacological pain relief despite intense labour pain as it would make the baby sleepy and might affect infant feeding. The longitudinal nature of this study revealed the dynamic shift in self-esteem in relation to labour pain, through antenatal intention, labour experience, and postnatal reflection. Having a sense of being esteemed by care-givers (professional and family) seemed to be influential in the emergence of esteem over time for the respondents. In particular, a caring midwife was important for many in enhancing their capability to tolerate pain, face the challenges and feel "in control".

The sense of self-actualization is the highest level in the hierarchy. Maslow describes this as *'the desire to accomplish everything that one can, to become the most that one can be*' (Maslow, 1954). For Maslow, people who are fully self-actualized people are unusual, with a wide range of positive attributes. However, he does suggest the concept of 'peak experiences' – brief moments of self-actualization. While he attributes these to self-fulfilled individuals, others have noted the presence of 'peak experience' in narratives of childbirth (Crowther et al, 2014). For many women in this study, in the context of pregnancy, birth, and the first year postnatally, their focus was on being a 'good mother'. For many, this included antenatal intentions to labour without the use of drugs that could affect the wellbeing of their babies. For most, this intention was fulfilled, even though they

experienced labour induction, which is often reported as being more painful than spontaneous labour. Their capacity to endure the intense sensations of labour pain generated a positive sense of self-achievement. Some did use pain relief, but still reported a positive sense of achievement and of mothering capacity. A few expressed disappointment in themselves: this was evident in two very different cases; one woman who had an epidural when she had planned not to do so, and one who wished she had done so. The role of labour pain in experiencing birth as a 'peak experience therefore seemed to be linked to stretching or expanding a sense of capacity in relation to events in labour where this was achieved

11.6 The hierarchy of needs and the experience of pain

This hierarchy of needs is one of the motivation theories which explain the actions or motives of a person. The needs of people drive them to take action to achieve their needs. I considered that needs are created in relation to the desire to achieve the goals of the person. In relation to childbirth, the needs of a woman during childbirth might be interrelated and might occur at the same time instead of going from one level to another.

In Chapter Two, a detailed description of various pain theories was presented. One of these is the gate control theory. According to Melzack and Wall (1984), the neural mechanism in the dorsal horns of the spinal cord acts like a gate. The increase or decrease of flow of nerve impulses from peripheral nerve fibres into the central nervous system is controlled by this gate- like mechanism. The modulating influence of the gate thus affects the somatic input before it evokes a pain perception and response. In addition, the descending efferent fibres bring sensory input from cognitive or higher central nervous system processes, such as attention, anxiety, anticipation, and past experiences, which exert a powerful influence on the pain process (Melzack and Wall, 1984). Hence, psychological and cognitive variables play a part in pain perception and response. Factors such as attention to pain, anxiety and a feeling of control are significant in feelings of pain. Attention

to pain increases feelings of pain, whereas diverting attention reduces the pain experience (Elton et al., 1983). Anxiety is an important factor in the pain experience and is related to cognition. An increase in anxiety potentiates pain (Elton et al., 1983). It is noted that people tolerate pain better if they know that it is coming, if time allows them to prepare themselves for it, and if they are given a reasonable amount of information about what will happen (Elton et al., 1983). Feelings and responses to pain are thus a complex phenomenon. "It is never the sole creation of our anatomy and physiology. It emerges only at the intersection of bodies, minds and cultures" (Morris, 1991). Thus, aside from psychological factors, cultural effects also influence feelings and responses to pain. According to Helman (1990), one's cultural background might significantly affect how one perceives and responds to pain. Cultural beliefs and values might serve to 'normalise' experiences of pain for one cultural group and might appear to be problematic in another group with a different cultural background (Bendelow & Williams, 1995). Thus, keeping pain private or expressing it publicly might be related to the belief and value systems within the context of a particular social group. Hence, "how and whether people communicate their pain to health professionals and to others could be influenced by cultural factors" (Helman, 1990). To sum up, feelings of pain are not only influenced by physiological and psychological factors, but also the belief and value systems of the social group, i.e. culture has a place in it.

Pain thresholds and tolerances are affected by distraction of attention, evaluation of the meaning of the situation and a feeling of control over potential injury (Elton et al., 1983). Bendelow and Williams (1995) used a phenomenological approach to explain pain as a lived and embodied physical, emotional and existential experience. Pain is a matter of "being in the world", and "at the hermeneutical level, pain and suffering gave rise to the quest for interpretation, understanding and meaning". Pain thresholds and tolerance to pain are affected by the interpretation of the situation together with the meaning applied to the situation. If people feel that pain has a positive meaning, they will probably sustain the pain better than those without positive meaning. According to Illich (1976), in traditional culture,

"pain is recognized as an inevitable part of the subjective reality of one's own body" and "is made tolerable by integrating it into a meaningful setting." Hence, the meaning of pain as given by the person, together with cultural effects, shapes the feeling of pain. However, the growth of industrial society and the high value placed on anaesthesia has resulted in a loss of awareness of self and pain is detached from any subjective or intersubjective context in order to annihilate it (Illich, 1976). To judge which pain is authentic, which has a physical and which has a psychic base, which is imagined, and which is stimulated by stimuli, is thus in the hands of the medical profession. The person in pain is left with less and less social context to give meaning to the experience of pain and increasing use of painkillers has thus turned people into unfeeling spectators (Illich, 1976). Hence, medicalized views neglect important insights into pain (Morris, 1991).

This framing of pain as a multifaceted experience within the childbirth process forms the basis of the integration of the findings from this study with Maslow's hierarchy of needs.

11.7 Applying Maslow's hierarchy of needs to the study metathemes

There are overlaps and integrations between all of the metathemes in terms of the hierarchy but all the metathemes are explained by the components of the hierarchy.

11.7.1 Metatheme one: The cultural norms – social and cultural context of labour and labour pain

As indicated in the meta-theme on cultural norms, the women had ***esteem needs***, i.e. the sense of achievement. Although the environment changes and a woman's status also changes, the cultural norms passed from one generation to another still exert some effect on the woman. For example, one participant was doubtful about her handling of the childbirth pain as her mother challenged her about her use of epidural analgesia when her cervix was dilated to two centimetres only. In other words, the woman was

doubtful about her achievement in childbirth as she felt, reflected in the views of her mother, that she could not tolerate the pain well as she used an epidural too early. Thus, this woman's need for esteem was not fulfilled.

In order to obtain esteem needs to be a great mother, the woman (I001) had changed her mind about wanting to escape from the pain in the next pregnancy i.e. have epidural analgesia, to a decision to tolerate the pain first and use a step- up approach if she needs pain relief. All these were reflected in the subsequent interviews. It seems that she wanted to regain her sense of achievement in her next pregnancy via tolerating the pain as much as she could.

11.7.2 Metathemes two and three: The trajectory of the pain sensation-anticipated, 'actual', and memories; and facing or escaping the pain-choices and consequences

At the very basic level, the sensation of pain is a **physiological** one. It is influenced by sensations of thirst, hunger, and exhaustion, as much as by the actual stimulation of nerves. Fulfilment of basic physiological needs for fluids and nutrition, and supporting the women to feel, in their words, 'energetic,' works at the level of these fundamental physiological needs as much as they do at the psychological level. Escaping a sensation of extreme and unbearable pain via epidural analgesia is the ultimate physiological remedy. However, as this study and others have shown, the experience of pain and the use of pain relief are not solely related to the physiological needs of women for pain relief. They might also be influenced by cultural effects, their expectations, the way childbirth is managed, the woman's need for **self-actualization**, and the meaning of childbirth pain for each individual. Some women think that labour pain is natural and try their best to face and tolerate it. This is important for their **sense of self-esteem**. However, when they cannot tolerate it further, they seek pain relief to address their **physiological** distress and to fulfil their need to feel **safe**. As in Maslow's hierarchy, the physiological need overrides and precedes other needs.

11.7.3 Metatheme four: Someone to be with me - trust and care

This metatheme encompasses the needs for **safety, love and belonging**, and esteem. The need for love involves a hunger for affectionate relations with people. Love needs require both receiving and giving of love, love from another and someone to love. The need for belonging is a need to feel part of a group or a feeling that we 'belong'. (Petri, 1996; Goodwin, 2010). Childbirth is an issue for couples not only the woman. When facing the challenges of childbirth, the need for love thus becomes significant, for it increases a woman's strength to face the challenging childbirth process. In this study, the engagement of the husband together with the support he provided reflected his love and concern and where the woman appreciated his attention, mutually reinforced this sense between the couple in the long term. In the broader literature, this effect is seen for parents in various kinds of formal and informal relationships where the woman is accompanied by her partner in labour. The central effect is that she is not alone to face labour pain and the challenging process. In being with her, her partner co-creates the future family with her.

The negative impact of loneliness has been noted in people with a range of medical conditions (Lynch, 1977). The evidence in this study is that when left alone in labour, women may find their capacity to face the challenge of labour, and maybe of future parenting, reduced.

The presence of the husband/partner or other trusted friends or relations might also generate feelings of **safety**. This is evident in the wider companionship in labour studies (Mosunmola et al., 2014). Feeling unsafe or insecure might create a feeling of anxiety which potentiates pain (Elton et al., 1983). Reducing feelings of being unsafe and insecure might reduce the anxiety level and hence, the pain. As indicated by Maslow (1970), when one feels unsafe, it is often expressed through a search for a protector. This is the same for women during labour and it could partly explain why women in studies in the metasynthesis and in my study indicated that they wanted their husband or partner to stay with them during childbirth.

Across the studies in the meta-synthesis and the data from the current study, there appeared to be a consistent need for supportive care that could fulfill their needs for love and belonging in facing the challenging childbirth process. If the needs were satisfied, it seemed that the women had more strength to face the childbirth process. The support from the midwife that is also captured in metatheme four seemed to relate to a number of levels on the hierarchy of needs, including the fulfilment of **physiological** needs, **safety** needs, and **esteem** needs.

Food and drink and the ability to move around when needed are basic needs for survival in humans. People want to eat when they feel hungry, drink when they feel thirsty, and move when they want to or are in danger. In most parts of the world, food and drink are easily obtained and a physically fit woman of childbearing age can move with ease anywhere she wants. However, this scenario changes when she is in labour. Depending on local practice related to the care of a woman during labour, she might not be allowed to eat or drink as she wants. She might need to stay in bed if she is connected to a monitor. As noted above, these practices can influence women's experience of labour pain at the physiological level. It is therefore incumbent on health care staff to ensure that women are only exposed to evidence- based practice that might better address their needs and ensure that labour pain is more likely to be physiological than pathological. They also need to be creative in addressing women's needs if certain procedures and interventions do become necessary for the safety of the woman.

Safety needs refer to feeling safe or secure in an environment. Such needs dominate human behavior in times of emergency (Petri, 1996). The process of childbirth could affect the safety of the baby and the woman. Mortality and morbidity for both mother and baby are high in countries where societies are not functioning well and where health care is not well developed. The role of the midwife and other health care professionals in promoting maternal and newborn safety in these countries was evident in some papers in the metasynthesis. In high- income countries where society is well functioning and health care is generally available, fear of death

related to childbirth is less prevalent. However, women can still feel unsafe as the childbirth process is unknown to them and their safety and that of the baby are not known until after delivery. In addition, childbirth pain occurs within the childbirth process and is associated with various procedures and interventions such as taking blood, vaginal examinations, intravenous infusions, and uncomfortable or painful conditions which might cause women to feel frightened and insecure. During the childbirth process, midwives and health care professionals are important to women as their actions and responses to urgent situations could save the life of a woman and baby.

In this aspect, the kind of support wanted from midwives and other health professionals was different from that from their husbands. The calmness of the midwife had a positive effect on the psychological state of the woman. The woman would feel calm if the midwife was calm. However, if the midwife panicked, the woman would become scared, as this implied something was going wrong, which would induce worry and anxiety. The woman needs the midwife to provide professional care with appropriate actions if abnormalities are identified during the childbirth process.

The women also sought a sense of both **love and belonging** and **esteem** from the midwives in particular and the health care providers in general. As described in Maslow's hierarchy of needs above, love could refer to being deeply understood and deeply accepted and also includes mutual trust and no fear or defenses between two people (Maslow, 1970). It was noted that such needs were required from the midwife during the childbirth process. In a strange environment, midwives with their professional knowledge and experience can provide needed care. A concerned and caring attitude shows acceptance and understanding and the responses from the midwife could make women feel warmly welcomed and "loved" and give her a sense of belonging. The needs for love and belonging are thus be fulfilled. Such needs encourage women to face challenges during the childbirth process. On the contrary, if women feel that they are not welcomed by the midwife, unhappy feelings are created which affect their

psychological state. This is not supportive for women facing childbirth pain and the challenges which occur during the childbirth process.

The interaction between women and midwives is an emotional and a psychosocial one. Understanding, acceptance, care and concern from the midwife can help a woman have a satisfactory and memorable childbirth process. However, if she feels she is not accepted, is ignored, or feels embarrassed because of the response of the midwife to her physical condition, it creates negative feelings, which in turn affect her tolerance to pain. This was reflected in the metasynthesis and in the current study, implying that it has universal resonance. Indeed, the recent increase in studies on the prevalence and impact of disrespect and abuse in institutional settings for labour and the consequences for maternal mortality, illustrates how important it is to get this right (Bowser and Hill, 2010).

Esteem needs are needs for a positive, high evaluation of self. The core of the need for self-esteem is to have the feeling that one is worthwhile. According to Goble (1970), self-esteem involves feelings of achievement. It affects confidence and capability and thus the productivity of a person. A person with adequate self-esteem is more confident and capable and thus more productive. On the country, when self-esteem is inadequate, a person has feelings of inferiority and helplessness, which might result in discouragement. Hence, esteem needs involve the feeling of achievement and being respected and valued. Without self-esteem, there are feelings of helplessness, inferiority and discouragement. Hence, the feeling of deserved respect from others, especially from the midwife, is significant to the woman as it could help strengthen her capability to handle labour pain and face the challenges of the childbirth process, which in turn encourages a woman's sense of achievement.

Women need lots of encouragement, respect, recognition and attention from midwives when facing the challenging labour process. Recognition, attention and appreciation can help strengthen a woman's confidence and thus her capability to handle labour pain and the challenges of the childbirth

process. Appropriate advice and explanations of procedures, acceptance of the woman's feelings and updating her on her labour progress imply a kind of respect for her. Answering questions and responding positively enhance her feelings of being valued and thus feelings of self-worth, which is significant for her esteem needs. Lack of esteem leads an individual to feel inconsequential and have little self-worth (Petri, 1996,). This could explain why some women were dissatisfied or even unhappy with the midwife if she did not answer their questions or address their needs, as they felt ignored and not valued. These kinds of needs were reflected in the quotes from the papers selected for the metasynthesis as well as from my study. This shows that these kinds of needs during the childbirth process are similar for women in different countries with different cultural backgrounds.

11.7.4 Metatheme five: Achievement and growth through the unforgettable experience

The need for self-actualization is the highest level in the hierarchy of needs. In this level, the person's behavior is motivated by different conditions than at the lower levels in the hierarchy (Petri, 1996). It stimulates people to test their abilities and expand their horizons. Not all people proceed to this level. According to Maslow, at this level, people are no longer motivated by deficiencies; they are, instead motivated to grow and expand their capabilities (Petri, 1996). In relation to childbirth, this could be interpreted as the capacity to become the best mother one is able to be in the long run, as well as during the process of childbirth itself, i.e. "to become everything that one is capable of becoming" (Maslow, 1970). Here, being a great mother might imply both direct relationships with the baby and also wider relationships within and outside the family and a positive sense of achievement and well-being for oneself. For some women in this study, this was reached by facing the process of labour and labour pain without the use of pharmacological pain relief. For others, when they reflected back, their sense of success came from going as far as they could with facing the pain, and then escaping it successfully with pain relief. For all of them, at a year postnatal these achievements in labour and birth were seen through the lens

of their mothering experience, with or without family or paid support, and whether or not they had gone back to work.

In self-actualized individuals, “means and ends” relate to their interest in the goals toward which they are working and in many instances, “the way in which the goals are pursued is itself a goal” (Petri, 1996). It is significant to note that self-actualized people take satisfaction in both the doing and the product of that doing (Petri, 1996). In other words, women can find achievement during the childbirth process when they face labour pain without using any pain relief and deliver the baby spontaneously or if they attempt to do this, even if the attempt fails. For a few of the women, though, the actual process of labour and whatever kind of pain relief was used, were not relevant to the capacity to bond with and to love their baby.

Most women expected and experienced joy after the birth of their babies. Hence, there was a kind of beauty in tolerating the pain for the sake of their babies and some women highly valued themselves for this sacrifice. Some women also found that they had grown and become more mature psychologically and emotionally after going through the childbirth process. According to Maslow, growth requires taking chances and stepping away from the secure and comfortable (Petri, 1996). It is not easy to take that step when facing great pain during the childbirth process. However, there was evidence of this process in the range of countries and cultures included in the metasynthesis and in more recent studies published since the review was done, as well as in the accounts of women in the current study. When the woman felt in control of the situation, she would be prouder of herself (McLachlan et al, 2016) as she had stretched herself for control, which created a sense of fulfilment as an ideal mother (Maslow, 194:3).

11.8 From data and theory to future practice

Maslow used the hierarchy of needs to explain people’s motives. As I have shown above, it can be applied to the data from this study and to the wider literature in this area to explain women’s views, feelings and experiences

about childbirth in general, and childbirth pain in particular. Maternity service provision, health care providers in general, and midwives in particular, all play significant roles in helping women achieve the goals of childbirth so they can have a memorable and meaningful childbirth experience that has long-term positive effects for them and their families. They can also have the opposite effect. The way that women experience labour pain is intrinsic to either a positive or a negative childbirth outcome in the short and long term. The final section of this chapter describes a possible model of care for women during childbirth that could optimize their capacity to face rather than to seek escape from, childbirth pain, if this is their intention, and therefore, to become 'everything they are capable of being' as mothers, partners, and individuals.

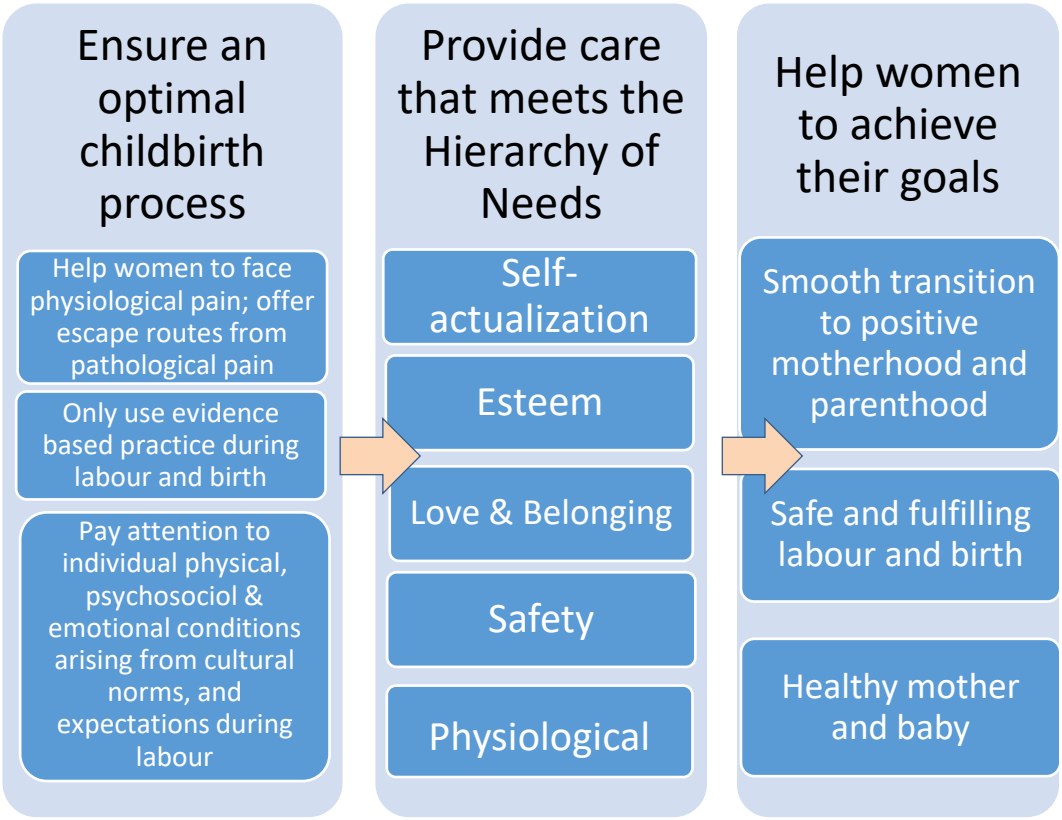
11.8.1 A proposed new model of care for women during childbirth

As a result of the dominance of the biomedical approach to childbirth, there is an overemphasis on the clinical, rather than the psychosocial and emotional aspects of pregnancy and birth. Hence, the meanings that women give to childbirth experiences are ignored and birth is seen as a technical problem (Helman, 1990). Although health care professionals know that they need to provide holistic care to patients, including women during childbirth, psychological care tends to be seen as of secondary importance to clinical risk-avoidance and technical activities (Davis-Floyd, 2001). Although the recent Lancet Series of Midwifery has proposed a Quality Maternity and Newborn Framework for the overall provision of maternity care (Renfrew et al 2014), there is still a need for a labour and birth-specific care model. Based on the data from this study (including the findings from the meta-synthesis), interpreted through Maslow's hierarchy of needs, the following model is proposed (see Figure 2).

This model contains three main blocks, the childbirth process, the hierarchy of needs, and the woman's goals. Needs are created when going through the childbirth process. The needs are created by pain, sociocultural, physical and psychosocial factors, and by emotional conditions arising in the childbirth process. These conditions or needs can be categorized into the

needs of the hierarchy. When the needs are met, it is hypothesized that women will achieve their goals for childbirth and for longer-term wellbeing. However, if the needs are unmet, it is hypothesized that the pathway towards the goals is affected and women might express dissatisfaction with their childbirth experience. To enhance the fulfillment of needs, midwives should assess the sociocultural norms, psychological and emotional state, and childbirth hopes, intentions, and expectations of each individual woman with the use of the model. Appropriate measures can thus be provided.

Figure 2: Model of care for women during the childbirth process



11.8.2 Ensure physiological needs are fulfilled

When a woman is in labour, she becomes vulnerable and physiological needs which were so common and easily obtained must now be provided by midwives and her husband or partner. Hence, the midwife should assess a woman's need for food, drink and mobilization, as well as the need for pain relief.

Use of evidence-based practices for labour is also essential here. Addressing the physiological needs for fluids, nutrition, mobilization and for a spontaneous response to bodily sensations is likely to minimize the sensations of pain as toxic and to maximize the capacity of women to both cope with labour pain and to respond dynamically and effectively to the sensations of labour that are generated by physiological mechanical processes (like the descent and rotation of the fetus).

11.8.3 Help the woman meet her safety needs

A woman should be kept from feeling lonely as it might reduce her confidence to face the challenges. This could be done by encouraging the husband or partner to accompany her during the childbirth process. Preparatory classes for 'fathers-to-be' should be provided to prepare the husband or partner psychologically for what they might encounter. The class should also provide information on what they can do to help his wife. In addition, the midwife should also assess if the husband or partner is able to stay with his wife during the childbirth process. The midwife should also stay with the woman and avoid leaving her alone during the process of childbirth. This will enhance feelings of safety and security and is likely to increase her capacity to face labour pain at the biochemical level, as well as at the psychological and emotional level. Practically, it also means that the midwife can respond rapidly if a problem arises and this is reassuring for both the woman and her birth companion(s), which in turn leads to a reduction in the production of stress hormones and consequently, in the sensation of pain.

11.8.4 Enhance the sense of being loved and belonging

The husband/birth companion should be encouraged and supported to be attentive to the woman when he/ she stays with her. The care, touch and comfort provided by her birth companion can help her feel loved and have a sense of belonging. Since love could also be defined as "being deeply understood and deeply accepted" (Goble, 1970), the midwife's caring attitude and her concern can reflect her understanding and acceptance of the woman. As such, there should be no fear or defenses between the woman

and the midwife, but instead mutual trust and a kind of loving relationship. This would reduce a woman's feeling of loneliness or rejection especially when the husband/ partner is not able to stay with her.

11.8.5 Enhance esteem

Giving appropriate support and praising the woman for her achievement in the childbirth process enhances her feeling of worth. In relation to respect from others, the midwife is a significant person during the childbirth process, and her respect for the woman is important. To help in fulfilling esteem needs, the midwife should show her respect to the woman by only doing procedures that are needed for this particular woman/ baby (therefore seeing her as an individual and not just another person in a production line), providing appropriate explanations for procedures, and only doing them if explicit consent is gained. In addition, providing the woman with information related to the progress of labour, accepting the woman as she is regardless of her cultural and religious background, praising her for what she has achieved, and responding to her questions all help her esteem needs. When esteem needs are met, she has increased confidence to handle childbirth pain and the challenges of childbirth. Hence, to help a person be capable and productive, building up self-esteem is significant. Thus, the midwife should work to help a woman obtain esteem needs.

11.8.6 Needs for self-actualization

The midwife should help the woman achieve self-actualization, whether they have formally set this as a goal or not. To do this, the midwife should assess the goals the woman has and help her to work towards them. The evidence would suggest that for most women around the world, this goal includes facing the process of childbirth with the minimum number of interventions possible, including minimum pharmacological pain relief, to keep the birth normal (Downe, 2008). Hence, it is important that the midwife supports women in this goal through the approaches set out in the model, including the offer of non-pharmacological pain relief methods.

11.9 The emergance of new model of care

The model of care that is presented in figure two above (p347) consists of three main parts. The first is about ensuring an optimal childbirth process. This is closely aligned to the Quality Maternal and Newborn Care (QMNC) model described by Renfrew et al (2014). The second is about providing care that meets the elements of the Hierarchy of needs. The third is about helping women to achieve their specific goals. To ensure an optimal childbirth process, the midwife must assess the needs of the woman taking into consideration psychosocial, emotional and cultural contexts for each woman, as well as the need to base the care that is offered on evidence based practice. Meeting the elements of the Hierarchy of Needs demands that care givers continually assess the physical requirements of women and baby, as well as their values, aspirations, and choices. This includes paying attention to optimizing the health of mothers and babies in their own terms, as well as being sensitive to the occurrence of possible abnormal conditions and pathological pain, to ensure that necessary support (from the midwife, doctor, or others) can be obtained when abnormal conditions are identified. This approach demands that the care giver recognizes that a need that is met at one point in labour may become unmet at another point, and vice versa. For example, as labour intensifies, pain may become hard to handle, and a change in approach might be required. This includes the offer and provision of pharmacological pain relief if the woman is experiencing pain that is more intense than normal, for example, as a result of induction of labour, or due to fetal malposition. For the third element, it is essential that both the first and second elements of the model are applied with sensitivity to the specific childbirth goals of each individual woman. This then forms the framework to guide the midwife to help the woman to achieve their goals for having a safe and meaningful labour and birth, and to emerge as a healthy mother and baby, with a smooth transition to positive motherhood and parenthood.

The study was longitudinal. This design enabled a nuanced understanding of participants' changing accounts of the impact of their labour experience over time, up to a year postnatal. This was particularly helpful in revealing longer

term impacts, such as growing esteem and self-actualization in relation to motherhood. I believe this is the first time that Maslow's Hierarchy of Needs has been applied to longer-term impacts of childbirth. This included the changing emotions that were attached to the memory of the participants towards their experience of labour pain, and consequent decisions for or against pharmacological pain relief for subsequent childbirth. For example, early in the postnatal period, one participant reported that, if she had a birth in future, she would use epidural analgesia again, as she had in the index labour in this study. However, in later interviews, she changed her mind. A year after her birth, she reconsidered her decision, and thought that she would go through the childbirth process with the intention of tolerating the pain. Her account suggests that she saw this as a possible route to increased self-esteem and even self-actualization. This particular account illustrates that the meaning of childbirth changes over time for women, and that studies that do not take a longitudinal approach might misinterpret the long-term implications of childbirth experience. In the case of this study, the changes in women's accounts about the use and meaning of labour pain and pain relief permitted the development of a nuanced model of care that could enhance the psychosocial growth of women, and their experience of motherhood in the longer term. This model remains to be tested for efficacy in future larger studies, both in Hong Kong Chinese women, and in other contexts.

The development of the new 'model of care'

Given that the hierarchy of needs can capture some of the key characteristics of the data, it can also be used to frame a model for practice in the future. This encompasses the need to fulfill the physiological needs of laboring women, such as to provide food and drink, ambulation which enhances the comfort to the woman, as well as pharmacological and non-pharmacological pain relief. In terms of safety needs, the husband should be encouraged to stay with the woman during the childbirth process to provide psychological support. In addition, the midwife, the one who took care of the woman during the childbirth process, should also stay with the woman at all times until completion of delivery of the baby, to allay

fears about the health of the baby and herself, both in terms of actual and potentially emerging complications during childbirth. In relation to the needs for love and belonging, both the birth companion (husband) and the midwife have roles. To enhance the fulfillment of the needs for love and belonging, the midwife should be considerate of the woman's needs and wishes and provide appropriate care accordingly. All these would make the woman felt accepted and it would also enhance her capacity to build up a trusting relationship with the midwife. For esteem needs, the midwife should support the woman to fulfill the targets that she wants to achieve, respect her, be alert to the dynamic psychological, emotional and clinical changes that occur as birth progresses, and adapt to these from the perspective of the woman as an individual. This could also enhance the capacity of the woman to feel capable, confident and productive. Finally, for self-actualization needs and to maximize the potential for women to experience labour as a peak experience with a positive impact on their future sense of wellbeing, capacity, and competence, midwives and health care professionals should be alert to any goals they have. Specifically, if this is the intent of the women, care givers should be able to use a range of supportive and therapeutic techniques to help them cope effectively (in their own eyes) with the pain of labour. Where the way labour occurs overwhelms the capacity of a woman to cope, even with these supportive measures, or where her *a priori* intention is for pharmacological pain relief, this should be offered. These elements, as characterized by Maslow's hierarchy, can support the woman and help her achieve her own labour intentions to the best of her ability. The data in the study suggest that this will also enable women to experience a positive labour and a meaningful childbirth experience, although this hypothesis will need to be tested in future studies.

The implications for policy and practice using the new 'model of care' particularly in the Hong Kong setting

The proposed new model of care has the potential to enhance awareness of these needs among midwives (and other health care professionals who

attend women in labour). However, as discussed on page 49-51, the existing care model at the study site puts a lot of emphasis on the woman's clinical condition and little on psychosocial and emotional aspects. There is limited concern about a woman's experience and the meaning of childbirth. In this setting, which is not atypical for Hong Kong, it is difficult for midwives to understand that fulfillment of psychosocial and emotional needs is crucial for women during childbirth. The study hospital is university- based, and there is an acceptance of the value of evidence- based practice. Given that the model is derived from empirical research, there is therefore a good chance of implementation locally. However, the implementation of such a model is unlikely to be easy, as it demands a shift in conceptual awareness and willingness to implement behavioural changes among midwives and others, including the medical staff who have power in this setting. In a culture of measuring and counting to assess quality of care, it is easy to judge success in terms of clinical outcomes. However, it will be difficult to measure the outcome of the woman's experience or the meaning of childbirth, other than through a satisfaction survey, which is acknowledged to be a very poor measure of a positive childbirth experience. Hence, future studies are needed to design outcomes using this new model of care. If these outcomes are assessed alongside the new model and if the early reviews are favorable, the model will have an increased chance of being embedded into standard practice, both at the study site and other sites in Hong Kong.

As illustrated on page 338-345, Maslow's hierarchy of needs effectively maps to most of the findings. However, the hierarchy is not a perfect fit, as it was developed to explain people's motivations and not to assess a life experience such as pregnancy, labour and birth. There are two main challenges to using the hierarchy in this context. Women do not experience needs linearly or progressively. The same needs could recur during the childbirth process even if they had been fulfilled earlier and women could experience needs at higher levels of the hierarchy (eg esteem needs) even if the needs at the lower end (eg safety needs) were not fulfilled. In its original construction, Maslow suggested that higher levels are not experienced

unless lower levels of need are completely or mostly met. However, this is not the case in childbirth. Take the example of labour pain in a normal situation. Labour pain occurs, progresses and becomes increasingly severe. In the early stages, a woman can tolerate it using her own resources. However, her physical need for pain relief is likely to increase over time. If the woman receives supportive comfort measures, and/or pharmacological pain relief, and if it is effective, she will be able to tolerate the pain again. Then, physical needs for pain relief will be reduced. However, as labour continues, the pain will become more severe and the physical need for pain relief returns. Progressive pain and pain relief create a cycle (of less-more-less-more pain) during the childbirth process. In addition, other needs can occur at the same time. This includes the need to feel safe, need for love and belonging, and the desire to fulfill esteem and 'peak experience' aspirations. This is a limitation on using the model as a hierarchy. However, conceptualizing it as dynamic process offers the potential to use it in practice and to test its effects in women and staff.

11.10 Conclusion

Childbirth brings pain, which is natural and essential in order to give birth to a baby. However, to go through the childbirth process, women need support and care. Maslow's hierarchy of needs could help explain a woman's needs during childbirth. I have proposed a new model of care to help health care providers understand the needs created from the childbirth process and the goals that women have in relation to childbirth. This could help midwives and other health care providers have a better understanding of women's needs and consider ways to help fulfill these needs and achieve their goals in childbirth. It is hoped that with the new model of care, midwives are more able to help women fulfill their needs and have a memorable and meaningful childbirth experience. Future studies should assess the effectiveness of the model in practice.

CHAPTER TWELVE: REFLEXIVE ACCOUNT

When I started to plan the study, I was influenced by ideas about the cultural effects of the meaning of childbirth on Hong Kong Chinese women. Before the 1970s, most women were housewives, with responsibilities to give birth to the next generation, especially a boy, who would take care of the children and the family. Senior midwives have told me that they saw women cry after giving birth to a girl who could not continue the family name. Hence, I believed that the culture might have some effects on women's views of the meaning of childbirth. Because of this preconception, I considered conducting a study with a focus on the cultural influence on women's views and experiences in childbirth in the 21st century. However, I soon found this preconception was not relevant as drastic changes in the economy had changed the culture of Hong Kong Chinese. The cultural effect in relation to having a son in the family had gradually diminished. In view of this, I changed the focus of my study.

12.1 The influence of traditional Chinese culture

My thinking about childbirth and childbirth pain in Hong Kong Chinese women was affected by two factors, having a son in the family and tolerance of labour pain as a sacrifice by the woman for the baby and the family.

As a Hong Kong Chinese woman, I could see that traditional Chinese culture highly values continuity of the family line. A son is needed to carry forward the family line, as girls are addressed by their husband's family name after they marry. These cultural values still created pressures on women in the 1960s to early 1970s. I had witnessed how women were pressured to have a boy. Due to socialization with these cultural values, women put pressure on other women when they became senior members in the family. The mother-in-law would ask her daughter-in law when she would have a baby indicating that there was a need to continue the family line. As such, women would continue to have babies until they had a son.

Otherwise, they would be devalued socially. This demonstrated the inequality between genders in traditional Chinese culture. The value of having a son gradually decreased when women's financial independence increased. This cultural value further decreased in the 1970s when the Family Planning Association of Hong Kong strongly advocated good family planning. Their campaign 'Two is enough', which encouraged couples to have only two children, was successful. This implied that even if the family had two girls, a woman need not have a subsequent pregnancy to have a boy. The number of births gradually decreased. Although there have been lots of changes for women in Hong Kong, especially in educational and job opportunities, I still thought there was a cultural influence to have a son.

In the formerly male-dominant culture, Chinese girls were taught and socialized to be submissive and to sacrifice for the benefit of the family. For example, if families had limited opportunities for children's education, usually girls would give up their chance so boys could be educated. It was thought that boys had more need for education as they were going to be breadwinners. Girls were praised when they sacrificed for the family. Positive reinforcement was used in addition to socialization. Having children was an important role for traditional Chinese women. I wondered if women thought that giving birth was a kind of sacrifice for the baby and the family. In addition, the happiness of the women after delivering the baby, especially a baby boy, might override feelings of pain. Women would think it was worthwhile and so they seldom asked for pain relief. That might be why there are few records about pain relief. In the late 1980s, when I began to practice midwifery, Entonox was commonly used and pethidine use gradually increased in the 90s. Epidural analgesia was rarely available as it depended on the availability of anaesthetists, whose priorities were surgical patients. At that time, I noted that the majority of the Chinese women did not ask for pain relief. They just tolerated the pain silently. Although I noted that there has been an increase in the use of pethidine for pain relief, I wondered if women nowadays considered tolerating childbirth pain as a kind of sacrifice for the baby and the benefit of the family.

With this background, I was focused on whether traditional Chinese culture might still affect Hong Kong Chinese women in childbirth and their responses to childbirth pain. Hence, my initial hypothesis for the study was 'to explore the cultural meaning of labour pain for Hong Kong Chinese pregnant women and their expectations and experiences related to the use of different methods of dealing with labour pain'. This initial idea was refined over the first few months of the study through conceptualization, based on thinking, reading, rethinking, and reviewing the available supportive data. During this process, I found that my original assumptions about cultural effects were inaccurate. Cultural values had changed more than I expected. The traditional cultural need to continue the family name had markedly decreased as the value of continuing the family line had decreased. Thus, I reframed the focus of the research project.

12.2 My thinking on childbirth pain and women's experiences with pain relief methods

With the changes in women's status, the need for pain relief during childbirth gradually caught the attention of health care professionals. In the late 20th century, non-pharmacological pain relief methods mainly included breathing and relaxation exercises. There was no birthball, massage, or TENS, etc. for pain relief. Health care professionals could do little to provide pain relief in childbirth and could only advise women to use pharmacological pain relief methods, i.e. Entonox, pethidine and epidural analgesia. Women in labour tended to stay in bed because of the pain. Health care professionals focused on delivery of a normal, healthy baby. However, with the evolvement in their status in the 21st century, more women became financially independent and obtained higher education and job advancement. Their status in the family markedly improved and they started to have the courage to speak up for their needs. Their attitude towards labour pain changed. More women asked for labour pain relief. In the past two decades, epidural analgesia has become readily available in local hospitals with designated anaesthetists to provide obstetric services.

Epidural analgesia can be provided when the anaesthetist has no obstetrical emergencies such as a Caesarean section. However, the epidural rate remained around 11-12% at that time and did not markedly increase. Around 2008, more non-pharmacological pain relief methods were developed and introduced by midwives in local hospitals. These included the birthball, TENS, childbirth massage, music, and aroma therapy. In addition, husbands were encouraged to accompany their wives during the childbirth process. Midwives advocated more support for women. The epidural rate in study hospital decreased since 2008 (Table 24). It seemed that most women would try to tolerate labour pain and then ask for pain relief when they could not tolerate it. This applied to both primiparas and multiparas. In addition, it seemed that the women used non-pharmacological pain relief methods and had reservations about epidural analgesia. I wondered if they still had the concept of sacrifice for their babies as something they thought was worthwhile to do. I thought it would be worthwhile to explore the meaning of childbirth pain for Hong Kong Chinese women in the 21st century. In addition, I also wanted to know their responses to pain and the pain relief methods that they had used. This would have significant implications for midwives and health care providers when considering how to help Hong Kong Chinese women face labour pain and make their deliveries meaningful in their lived experience. As such, the topic was changed to 'To undertake an exploration of the meaning underpin Hong Kong Chinese women's views and the embodied experience of childirth, and of pain in labour, & from the third trimester of pregnancy to one year after birth". I started to consider that the meaning of childbirth might be a significant issue that influences women's decisions on the use of pain relief methods. In addition, the ways they interpret childbirth pain might play a role in the use of pain relief methods.

Table 24: Rates of epidural analgesia for labour *in Hong Kong public hospitals

Year	2000	2001	2002	2003	2004	2005	2006
Epidural Rate (%)	13.4	11.3	11.5	12	10.4	11.6	11.28
Year	2007	2008	2009	2010	2011	2012	2013
Epidural Rate (%)	11.6	9.4	10.09	9.14	6.36	6.29	8.73

In the Chinese culture, people seldom talk about meaning and feelings and I was not alert to these effects in relation to childbirth and childbirth pain. Although epidural analgesia was available for childbirth pain relief, the utilization rate had remained around 11-13% but started to decrease thereafter with the implementation of various non-pharmacological pain relief methods since 2008. I started to consider that the meaning of childbirth might be a significant issue influencing women's decisions about pain relief methods and the way they interpret childbirth pain might play a role in the use of these methods. This is an area that has not been explored in Hong Kong. Hence, I was aware that my preconceptions about Chinese women's responses to pain and childbirth from my past experience as a midwife should no longer influence me when I conducted interviews and interpreted the information that I obtained. I tried as much as possible to avoid being judgmental or use leading questions during the interviews, and I intended to listen to the quotes from the interview rather than to my own prior viewpoint.

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Appendices

Appendix 1 - Search for metasynthesis

	1-100	101-200	201-300	301-400	401-500	501-600	601-700	701-800	801-900	901-1000	1001-1100	1101-1200	1201-1300	1301-1400	1401-1485
1	xA1	xA2	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
2	xA2	xA2	xA1	XC3	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
3	xC2	D56	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
4	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xC2	xA1	xA1	xA1
5	xB1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
6	D4	xA1	xA1	xA1	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1
7	xA2	xA2	xA1	D151	xA1	Selected	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
8	xA2	D107	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
9	xA1	xA1	xA1	xA1	D408	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
10	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	Selected	xA1	xA1
11	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	XA2	XA2	xA1	xA1
12	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
13	xC2	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
14	xC2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
15	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
16	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
17	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
18	xC2	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	XA2	xA1	xA1	xA1	xA1	xA1
19	xA2	xA2	xA1	xA1	xA1	xB2	D618	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
20	D10	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	XA1	xA1	xA1
21	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
22	xC2	xA2	xA2	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
23	xC2	xA1	xA1	xA1	xA1	xA1	D536	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1

24	xC2	xA1	xA1	xA1	xA1	XA3	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
25	xA2	xA1	xA1	xA1	xA1	xA1	D624	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
26	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
27	xA2	xA1	xA1	xA1	xC2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
28	xA1	xA1	xA1	xA1	D296	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
29	xA2	xA1	xA1	xA1	xA1	D175, 375	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
30	xA2	xA1	xA1	D317	xA1	xA1	xA1	xA1	xA1	xA1	XA3	xA1	xA1	xA1	xA1
31	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
32	xC2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
33	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	XA3	xA1	xA1	xA1	xA1	xA1	xA1
34	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xC2	xA1	xA1
35	xA1	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
36	Selected	xA1	xA1	xA1	xA1	D623	xA1	xA1	xA1	xA1	xA1	xA1	D1216	xA1	xA1
37	XA3	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
38	xA1	Selected	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
39	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
40	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	D939	xA1	xA1	xA1	xA1	xA1
41	xA2	xA1	D138	xA1	xA1	xA1	xA1	xA1	XA2	xA1	xA1	xA1	xA1	xA1	xA1
42	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
43	xA2	xA1	xA2	D67	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
44	xC2	xA1	Selected	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA2	xA1
45	xA2	xB1	xA1	xA1	xA2	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
46	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
47	xC2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
48	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
49	xA2	xA1	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
50	xC1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1

51	xC2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
52	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
53	xA1	xA1	xA1	xA1	xA1	xA1	xA1	XA3	xA1	xA1	xA1	xA1	xA1	D62, 536	xA1
54	xA1	xA1	xA1	xA2	xA1	Selected	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
55	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
56	xA2	xA1	xA1	xA1	xA1	Selected	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
57	XA3	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
58	xA2	xA1	xA1	XA1	xA2	xA1	D347 D479	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
59	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xC2	xA1	xA1	xA1	xA1	xA1	xA1	xA1
60	xA2	xA1	D259	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
61	XZ	xA1	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
62	xA2	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
63	xC2	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
64	xA1	xC2	xA1	xA1	D431	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
65	xC1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
66	xA1	xC2	xA1	xA1	D465	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
67	Selected	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
68	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1
69	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
70	xA1	D43	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
71	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
72	xA2	xA1	xA2	xA2	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1
73	xA1	xA1	xA2	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
74	xC2	xA1	xA1	xA2	xA1	xA1	xA1	xA1	D347,479,658	xA1	xA1	xA1	xA1	xA1	xA1
75	xC2	xA1	xA1	D175	xA1	xA1	xA1	XC3	xA1	xA1	xA1	xA1	xA1	xA1	xA1
76	xA1	xA1	D255	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
77	XA3	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1

78	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
79	xA1	xA1	xA1	xA1	D347	xA1	xB1	xA1	XA3	xA1	xA1	xA1	xA1	xA1	xA1
80	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xC2	xA1
81	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
82	xA2	xA1	xA1	xA1	D451	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
83	xA2	xA1	xA1	D43, 170	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1
84	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	XC2	xA1	xA1	xA1	xA1	xA1	xA1
85	D83	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	D480	xA1	xA1	xA1	xA1
86	Selected	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	
87	xA1	xA1	xA1	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
88	xA1	xA1	xA1	xA1	xA1	xA1	D687	xA1	xA1	xA1	xA1	D890	xA1	xA1	
89	xA1	xA1	xA1	xA1	xA1	D568	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
90	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	D1180	xA1	xA1	xA1	xA1	xA1	
91	xA1	xA1	D201	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
92	xC2	xA1	D272	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
93	xA2	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
94	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
95	xC2	xA1	xA1	xA1	xA1	D95, D199	xA1	xA1	Selected	xA1	xA1	xA1	xA1	xA1	
96	xA1	xA1	xA1	xA2	D470, 497	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
97	xA1	xA1	xA1	xA1	D470,296	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
98	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
99	xA2	D95	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	
100	D92	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	xA1	

Note:
D = duplicate
A = exclusion criteria related to type of study, aim or focus of the study
B = exclusion criteria related to participants
C = exclusion criteria related to method of study
Z = language problem
1 = exclude after screening of topic of the paper according to exclusion criteria
2 = exclude after the reading of abstract

Pending = pending for full text paper to assess if the paper is to be included or
excluded
? = doubtful paper not sure if it should be included or excluded
(both papers that marked 'pending' or '?' will be discussed with supervisors for confirmation)

Selected = 5 papers selected (according to the first search)
Pending for full text and doubtful paper = 23 papers

Appendix 2 - Selected and pending for selection

Item	No. (search)	Selected in last exercise
1	67	Murry, L.; Windsor, C.; Parker, E.; Tewfik, O. (2010). **The experiences of African women giving birth in Brisbane, Australia.** Health care for women international. 31(5): 458-472.
2	86	Fowles, E. (1998). **Labour concerns of women two months after delivery.** Birth: Issues in Perinatal care, 25(4): 235-240.
3	138	Wilkinson, S.E.; Callister, L. C. (2010). **Giving Birth: The voices of Ghanaian women.** Health care for women International, 31(3): 201-220.
4	244	Lundgren, I; Dahlberg, K. (1998). **Women's experience of pain during childbirth.** Midwifery, 14(2): 105-110.
5	556	Bondas-salonen, T. (1998). **How women experience the presence of their partners at the births of their babies**. Qualitative Health research, 8(6): 784-800.

Item	No. (Search)	Pending for review by supervisor (Full Text Available)	Remarks	Select (Yes/No)
6	36	Imami Nur Rachmawati, (2012). **Maternal reflection on labour pain management and influencing factors**. Brtish Journal of Midwifery, 20(4): 263-270.		Yes
7	37	Sabitri Sapkota; Toshio Kobayashi; Miyuki Takase (2011)**. Women's experience of giving birth with their husband's support in Nepal**. British Journal of Midwifery, 19(7):426-432.	Not focus on pain	No
8	57	d'Ambruoso, Lucia; Abbey, Mercy' Hussein, Julia (2005). **Please understand when I cry out in pain: women's accounts of maternity services during labour and delivery in Ghana.** BMC Public Health, 5: 140-11.	On attitude, not on pain	No
9	77	Cook, Kate; Loomis, Collen (2012). **The impact of choice and control on women's childbirth experience.** Journal of Perinatal Education, 21(3): 158-68.		No
10	198	Hidaka, Ryoko; Callister, Lynn Clark (2012); **Giving birth with Epidural analgesia: the experience of first-time mothers.** Journal of Perinatal Education, 21(1):24-35.		No
11	302	Safadi, Reema (2005). **Jordanian women: Perceptions and practices of first-time pregnancy.** International Journal of Nursing Practice. 11(6):269-276.	Purpose of study is irrelevant	No
12	841	Callister LC (2006). **The meaning of giving birth and mastery of the experience.** International journal of Childbirth Education, 21(3): 7-8.	Not a research paper	No
13	884	Norr, Kathleen L; et al (1977). **Explaining pain and enjoyment in childbirth.** Journal of Home and Social behavior, 18(3): 260-275.	Quantitative study	No

Item	No. (Search)	Pending for full text for review by supervisor	Remarks	Select (Yes/No)
14	61	Almeida, Nilza Alves Marques; Medeiros, Marcelo; de Souza, Marta Rovery, (2012). **Meaning of pain in a normal delivery in the perspective and experience of a group of women treated at the unified health system** [Portuguese]. Revista Mineira de Enfermagem, 16(2): 241-50.	Language problem	No
15	358	Hodnett, E. D., (2002).Pain and women's satisfaction with the experience of childbirth: A systematic review. American Journal Obstet Gynecol, 186: s160-72.	No quote, combine qualitative and quantitative	No
16	507	Chuahorm U; Sripichyakam K; Tungpunkom P; Klunklin A' Kennedy P (2007). **Fear and suffering during childbirth among Thai women.** The Journal of Nursing Research, 11(1):49-61.		**Yes**
17	524	Mackey, Marlene C., (1995). **Women's evaluation of their childbirth performance.** Maternal-child Nursing Journal, 23(2): 57-72.	Focus on evaluation of their own performance	No
18	554	Callister, Lynn Clark Corbett, Cheryl Reed, Shelly Tomao, Cassidy Thomton, Katie G, (2010). **Giving birth: The voices of Ecuadorian women.** The Journal of Perinatal & Neonatal Nursing, 24(2):146-154.		**Yes**
19	753	Callister, Lynn Clark Vehvilainen-Julkunen, Katri Lauri, Sirkka, (2001). **Giving birth: Perceptions of Finnish childbearing women.** MCN: The American Journal of Maternal/ Child Nursing, 26(1):28-32.		No

20	775	Mehl, Lewis E. (1993). **The role of the mother's own experience of being born in giving birth.** Journal of Prenatal & Perinatal Psychology & Health, 7(3): 243-259.	No quote, not suitable	No
21	833	Niven, C. A. Brodie, E.E. (1996) **Memory for labour pain: context and quality.** Pain, 64(2): 387-392.	Questionnaire only	No
22	879	Lundgren I. (2005). **Swedish women's experience of childbirth 2 years after birth.** Midwifery, 21(4):346-54.	Design not focus on pain	No
23	890	Waldenström U; Borg IM; Olsson B; Skold M; Wall S. (1996). **The childbirth experience: a study of 295 new mothers.** Birth, 23(3): 44-53	Questionnaire, quantitative	No
24	895	Murira N., Ashford R & Sparrow J. (2010). **Primiparous women's experiences of labour in Harare, Zimbabwe.** African Journal of Midwifery & women's Health, 4(2): 75-79.		**Yes**
25	918	Brookes H.B. (1991). **Experiences of childbirth in Natal Indian women**. Curationis, 14(4): 4-9.	15 case studies only	No
26	1030	Cheung N.F. (2002). The cultural and social meanings of childbearing for Chinese and Scottish women in Scotland.; Midwifery, 2002 Dec.18(4): 279-95	On cultural difference	No
27	1210	DiMatteo M.R.; Kahn K.L.; Berry S.H. (1993). **Narratives of birth and the postpartum: analysis of the focus group responses of new mothers**. Birth: Issues in Perinatal care, 20(4): 204-11		**Yes**

28	1211	Slade, P.; MacPherson, S. A.; Hume, A.; Maresh, M. (1993**). Expectations, experiences and satisfaction with labour.** British Journal of clinical psychology, 32(4):469-83.	Quantitative study	No

Full text available
No full text for review

Appendix 3 - Extract quotes from the searched papers (1 example)

A1) Giving Birth: The voice of Ghanaian women Aim: To determine the perception of Ghanaian childbearing women • Centering on motherhood; • accessing health care: using biomedicine, ethnomedicine, and spiritual cures; • Viewing childbirth as a dangerous passage; • experiencing the pain of childbirth; and • fearing the influence of witchcraft on birth outcomes	(Providing culturally competent care)
Centering on motherhood Motherhood is a primary role for Ghanaian women. Proven fertility is essential. If a wife fails to bring her husband posterity, the mother-in-law may encourage her son to find another wife. Marriages may be severed and low social status assigned when women cannot have children.	"If you are not married, and you don't give birth, nobody cares. But if you are married and you don't give birth, the family of the man will not compromise with you." **(A1)** "If you don't have a child, it becomes a pity. You may feel sorry for that. You will not be happy for not having a child." **(A1)** The midwife said, "when somebody doesn't have a child like she's supposed to, they will try every means. Some will be going to pray in their homes. Some will be going to fetish priests. Some will be going to gynaecologists." (Not from participant) **(A1)**
Religious teachings also influence women's desire to have children.	A mother of 5 who had given birth on the path to the clinic said, "if they [women] really have the capacity to give birth, they should give birth because giving birth to children is good. [It is] what God loves." **(A1)** Mothers gain a sense of self-confidence through having given birth successfully: "[Because] I have been able to give birth to twins, I know that I can take good care of life-make sure I take proper care of them so that they will

	grow up and become greater persons in life." **(A1)**
Infertility, commonly referred to as "barrenness", is viewed as a social tragedy. People in the Ashanti Region assume that a woman's barrenness is the result of illegal abortions during adolescence. Infertile women usually are viewed as being wicked. Barrenness also may be caused by "destiny". According to Ghanaian law, abortions are illegal, but it is estimated that 20% of pregnancies in Ghana are aborted (Lithur, 2004). Abortion-related deaths are the most frequent cause of maternal mortality…	"most [women] … it's not like God created them to be barren, but at times, when they are young they do abortions and other things. That is why, when they are old, they can't give birth to children." **(A1)** One informant said that infertile women, "are born to be barren. God will never make anyone barren, so the devil causes." **(A1)**
Many study participants said they would not consider having an abortion and reported that family members and friends also discouraged them. A 15-year-old girl who gave birth at the clinic said she knew of "uncountable" girls from school who had died from having abortion. Her fear that she too could die deterred her from seeking to abort her unwanted pregnancy.	
Another woman who had given birth in her hamlet home expressed the reasons why women hesitate to consider abortions. Mothers also believe their unborn child may be able to break through poverty and look forward to their children helping them financially when they are older, so abortion may be a critical mistake.	"It is murder, one, and so it's sin, and second, if you go and abort a baby, you don't know what the baby will do in the future, so they [the community] don't respect you and say bad things about you." **(A1)**
Another concern about abortions is complications.	"the mother will attempt to abort the baby. The medicine she takes to abort the baby, maybe it will not work and it will deform the child." **(A1)**
Compelling reasons, however, may prompt a woman to abort her	One informant shared her story of how her boyfriend encouraged her to abort

pregnancy.	her first pregnancy: "He feared that when the family members heard about this they would have beaten or caused him harm … When you go and take someone's daughter which you haven't married and you impregnate her, the family members will take you [to] the law-they will send you to prison or something. That is why he was afraid." **(A1)**
There are social expectations for women to have children at the right time, in the right situation, to have an appropriate number of children, and to rear their children in the right way. Economics play a large role in determining the number of children a woman should have. If a woman has more children than she can provide for, she will be considered by the community to be irresponsible, foolishly getting pregnant due to lack of self-control. Conversely, if a woman has only one or a few children when she has the means to provide for more, she may be viewed as selfish.	One young mother shared how she felt when she found out she was pregnant: "I was a little bit afraid,… because I was schooling…[I was afraid of] my father…He had spent a lot of money on me. He was angry." **(A1)** "If you don't give birth, they will say you are barren. If you give birth to 5, people will say that, "Oh, you are not having money and you have given birth to 5 children. How can you look after them?" But as for the 2, it's okay. Nobody will talk about it." **(A1)**
The Ashanti culture, rich in tribal heritage, has a long tradition of having large families. Women frequently expressed a sense of satisfaction by increasing the size of their families and continuing the generations.	"If I had money, I would have given birth to about 10. Our ancestors used to give birth too many children. You have to also give birth to many people so that they will be in the family." **(A1)**
Women are motivated, because of their fears, to have many children.	"One is not enough. I don't know what will happen later on. Maybe the child will die. So if you give birth to only one child, you will suffer later on. Maybe the child will die. So if you give birth to only one child, you will suffer later on." **(A1)**
Another incentive for women to bear children is to have someone who will care for them in their old age.	Another mother explained: "I made up my mind not to give birth [to another child], but since 2 died, I needed to replace them. That is why I continued to have this baby." **(A1)** "Here in the Asbanti Region, if you give

	birth, people respect you a lot and after all the child will come and look after you when you are old." **(A1)** Another informant felt that , "the reward [for giving birth] is the time the child will grow and be too-in time he will take care of you." **(A1)**
Economic considerations also were discussed. Clark (2000) identified the economic responsibilities of Ghanaian mothers. The Asante gender framework still sets up tensions between work and motherhood, but these focus on the financial demands of motherhood rather than on the labor demands of child care. Asante ideals and practices underline the importance of economic support in enacting motherhood, as a continuation of childbirth itself. The ideal division of financial responsibilities between mothers and fathers makes mothers responsible for daily sustenance. (more about the situation related to the financial condition)	"giving birth to this baby has made us go through a lot of hardship My husband and I are going through financial problems." **(A1)**
Accessing Health care: Biomedicine, Ethnomedicine, and Spiritual "Cures" Health care options include biomedicine, ethnomedicine, and the use of spiritual "cures"….. Spiritual sicknesses are physical symptoms that may be a punishment for a spiritual offense or a curse placed upon a person by a witch or evil spirit (Wilson, 2006)… …It is believed that through strict obedience to the okomfos words, spiritual disease may be healed. Herbalists bridge the gap between spiritual healing of diseases and Western medicine, and most childbearing women do not rely wholly on Western or traditional medicine, but they take an integrated approach….	One woman explained: "Those who have this kind of disease go to [herbalists] because it is a traditional disease so you cannot go to the hospital and get the medicine. You can go to the herbalists, then you get the medicine for that kind of disease." **(A1)** Most women took advantage of health care services and recommendations: "when I was pregnant I visited the hospital regularly; I made sure that I ate good, nutritious food; and also I took all the drugs [vitamins] that were given to me at the clinic." **(A1)** Pharmaceuticals often were supplemented with traditional mediation prescribed by an okomfo or herbalist: "I made sure that I took all the drugs they gave me at the clinic…At times, too, I prepared herbs which I knew myself

	and added it to the drugs that they would give me at the hospital." **(A1)**
Childbearing women who do not give birth in a clinical setting rely upon TBAs who may have received formal training or have gained experience by assisting neighbors, friends, and family members to give birth. Many of these women have helped with the births of nearly entire generations in the villages, and they are often highly respected. Informants who gave birth at home expressed that obtaining transportation to a clinic to give birth was financially or logistically impossible and they often lacked the financial means to pay for health care expenses.	"When I went to the clinic, I made sure that I left everything to them [the attending staff] because I knew they had learned more about childbirth and that they would be able to help me give birth safely." **(A1)** Mothers never verbally disagreed with any decision made by the staff; however, the mothers expected providers to be gentle and patient. **(A1)** A first time mother shared her positive experience: "the nurses were very good and they weren't so harsh on me and they didn't scare me, so I was happy." **(A1)**
Viewing childbirth as a dangerous passage Every informant knew a woman who had suffered a perinatal or neonatal loss or who had died from childbirth complications.	The midwife said "Normally, what makes people to be afraid when they are pregnant. [is] when they hear that when somebody had their child and died, maternal death or any child death. They will be thinking otherwise, "Is it going to happen to me as well?" **(A1)** Another participant echoed this sentiment: "when I visited the clinic, someone came, delivered, and she lost her life, so I was afraid something like that would happen to me." **(A1)** Another mother said, "I have seen some women who died after … giving birth." **(A1)**
The "junction of life and death" as one woman described birth, is potentially dangerous for both mother and child. One of the informants experienced prolonged labor, and she was told that she would lose her child if the birth took much longer.	Another mother stated, "some people go [to the clinic to give birth] and they won't come back again. They will die [or] the child will die" **(A1)** She later said, "[When the nurse said that], I thought I had toiled in vain and all the difficulties I had passed through had been a waste." **(A1)** Fear of death is a reality for Ghanian

	women giving birth: "When I feared about childbirth I have heard from my mother and grand-mother. Some women, when they go to give birth, after the baby had come, the placenta may not come, which can kill the woman. [For] others, everything will be okay during childbirth, but after 2 or 3 days, the mother of the child may die. Some will bleed after childbirth, which also can kill them." **(A1)**
There is also a fear of having a child with a disability.	"I was afraid maybe the child would be paralyzed, blind, or dumb. ..I thought that maybe the child would die after I had delivered or hat the child would be deformed." **(A1)** One informant said, "You can die, you can bleed during delivery. And then, even, the child may come out with the leg first. That is why they normally tell us to go for the scan. Sometimes, some of them don't go for the scan. So, during delivery, that is he time the nurse will realize the baby is coming with the leg. That is where it may sometimes kill the baby, the mother, both." **(A1)**
Another major concern for mothers is the fear of a Caesarean birth.	A mother shared, "when they do [an] operation, it is very painful and sometimes after operation, some people, they get some stomach problems." **(A1)** Another woman said, "you can die during the childbirth or, at times, some people when they go and there's [an] operation, after the operation they will not be able to get up again." **(A1)**
Women rely on both their religious devotions and health care at the clinic, often in conjunction with traditional healers and the use of herbs. Women exercise faith that God will bless them and their children with a successful birth.	One mother define successful birth as "having my own life and the life of my child" **(A1)** One mother who had given birth at home said, "my main goal when I was going to give birth was that God should help me give birth successfully without any problems." **(A1)** An informant who gave birth to twins after losing a child previously said, "I

	was not afraid. I left everything to God. As for me, I was not afraid because I knew God was in control." **(A1)** A mother of 12 who had lost 2 children said, "when I found out that I was pregnant, … I thanked God for my pregnancy and prayed that He would protect me through my pregnancy and childbirth." **(A1)** Personal devotions continue during pregnancy and while giving birth: "You have to pray so that you leave everything to God, so that God will take control … During that time, everything is in prayer. You will be praying … every time. From the time that you knew that you were almost ready to deliver, you start praying and you make your mind set that you are going to give birth to the child." **(A1)**
	One mother recounted, "When I went to the clinic, I climbed [into] the hospital bed and all my thoughts at that place were that God should help me, 'God have mercy on me! Oh, help me to deliver safely!" **(A1)** "they prayed so that there would not be any problems during delivery and then they prayed so that … you will go and come back with your child." **(A1)** One women who had postpartum haemorrhage following her first birth related, "they prayed for me that God would not let me go through that experience again when I was giving birth to the second born." **(A1)** On the other hand, one mother said, "because I didn't go to the prayer meeting very often, I had bad dreams that I may be walking a he cemetery; someone may die in my dreams." **(A1)** Another mother said, "If you are pregnant and do not go to prayer meetings, you can even die as you are giving birth." **(A1)**
While the family and friends are not	The midwife reported, "we pray against

permitted in the birthing room, there is a waiting area provided nearby where supporters pray for the mother. Even the clinic staff clinic incorporate prayer.	it [maternal and newborn death]. By God's grace, everything has gone well." **(A1)**
Many women who gave birth at home said that they would give birth at the clinic. Women who had given birth at the clinic said they would advise their friends to do the same.	"Because that is where they will take good care of you. At times in the house, normally the women help you when you are about to deliver. They will say, "Do this. Do this." At the end, you may lose even the child or you, the mother, may die. So it is better to go to the clinic so that they will give you the medicine." **(A1)** Occasionally, despite the mother's best efforts and faith, a child may still die, which was considered as Divine Will, "I think God actually called that baby home. It was God who called that baby." **(A1)** Another mother explained, "God gives and at the same time He takes." **(A1)**
Experiencing the pain of childbirth Pain was a memorable part of giving birth, with the women saying that there is nothing more painful than childbirth, even death. The belief was expressed that women suffer the pains of childbirth because it is God's Will, a punishment for disobedience rooted in the Christian-Islamic teachings about the fall of Adam and Eve. The midwife at the clinic said pain medication is rarely administered because childbirth is a natural albeit painful process.	An informant who gave birth to her first child at 32 weeks said, "Because it has come to the time for you to deliver, it is your own cup of tea to try hard so that you can be able to give birth. I didn't cry. The child is in your womb, so you will try your best. No one can do it for you. You are the only one who will do it." **(A1)** Women were encouraged to stay quiet during birth. "You can cry," the midwife tells women who are giving birth, "but you may not shout." **(A1)** One study participant said, "Whether you cry or not, it doesn't make it any easier, so there's no need for you to cry or shout. Whether you cry or not, you are going to give birth to the child so it there is pain or anything, you don't have to cry you have to give birth to the child." **(A1)**
Traditional birth attendants (TBAs) also encouraged women in labor to be quiet.	Reported by a woman who give birth at home: [The TBA] said I should just be quiet and strengthen myself. The baby

Generations of women encourage this practice of quietly enduring childbirth.	would soon come out." **(A1)** A first time mother said, "my mother told me it is very painful, so when it comes I should harden myself and strengthen myself." **(A1)**
Even mothers who gave birth alone reported being silent. Women often refer to those who do cry out or scream in pain as having been raised being "pampered." There is a belief among some women that crying out delays the birth and may result in the mother being referred to a hospital, so stoicism may prevent the physical and financial consequences of such a referral. On the other hand, some women explained why they believe screaming is appropriate at times:	"maybe those [women who cry out] are afraid that when they are giving birth to the baby, the baby or she will die." **(A1)** Another women explain why she shouted during the birth of her fourth child: "the pain was continuous. That is when I actually shouted a little bit, when the baby was about to come." **(A1)**
Because childbirth pain is seen as natural, there are unique view of pain medication.	One woman who gave birth at home said, "I believe if you take any drug at this time it will not work, because it is time for me to give birth so he pain has to come." **(A1)** A woman who gave birth with the support of her mother-in-law said, "even if you drink some medicine [the pain] will not go. It will still be there." **(A1)**
The most common belief is divine intervention, which helps mothers endure childbirth pain.	"Whether I cried or shouted, I was going to give birth to the baby, so there's no need for us to cry or shout. All that I needed to do was to keep calm and being praying in my mind to God so that He could help me to have a safe delivery." **(A1)**
	Another mother explained, "the time that you deliver, the pain is so severe that if God hasn't intervened, you will die at the spot." **(A1)** One woman who walked back home after giving birth on a path that weaves uphill through the forest to the clinic said, "after you have been able to bring forth the child, you will become

	free-you may not get some pains again." **(A1)** The midwife related her personal experience: "when you carry your baby in your arms, then all the things you know: the pains, the problems, you will have to see the child and you will forget about those things. "**(A1)** Another informant explained that women endure the pains of childbirth "because they need the children." **(A1)**
Fearing the effects of Witchcraft on Birth outcomes …"in every house, in every extended family, there is a witch." Witches are infertile women who do the work of the adversary in making families miserable by destroying those things they have the most joy in, hence he increased belief in witchcraft during childbearing. There is a fear of offending one's family members. Witches may curse the mother, the unborn child, or both. One mother said that there is a women who visits the clinic.	"if you insult people who are witches, they can plot against you during your [pregnancy] and they can fight at your birth." **(A1)** Jealousy specifically may be an issue: "if somebody is your enemy or somebody envies you and that person is not spiritually good, she or he can give it [a spiritual disease] to you." **(A1)** "[She] is also a witch, so when she sees your child she can transfer some of the disease to you. And sometimes even if you are pregnant… if there is some of your nakedness or you eat outside, the person can transfer [a spiritual disease to your child.]" **(A1)**
Curses are believed to cause spontaneous abortions as well as many congenital diseases and disabilities. The fear of witchcraft escalates at the time of the birth and contributes to health care decisions. Some informants said that it is safer to give birth at the clinic because witches are unable to reach you in this protected environment. One woman expressed her view that it is safer to give birth at home because no one sees you traveling to the clinic and no one know when you are facing this dangerous period of time. The fear of being cursed also plays a role in mother being quiet during the birth, so as not to draw attention to themselves. ….The death was attributed to the	"When you are pregnant, you should remove these things from your mind, like witchcrafts and other people who will harm you. [If] you have faith in the Lord, [k] everything you are doing, God will help you so that you will come

practice of witchcraft. This experience set the precedent for not allowing family members or friends in the birthing room during the birth and strict visiting rules in the recovery house. While the fear of witches in ominous, there is protection available. Women rely on their religious devotions to grant them divine intervention and safety from curses.	out successful." **(A1)** Another woman said, "I believe that witches exist, but I am not afraid of them because I have God." **(A1)**

Appendix 4 - The initial 10 papers included for the metasynthesis

No.	Title	Author
1 (138)	Giving Birth: the voices of Ghanaian women	Wilkinson SE, Callister LC, (2010)
2 (86)	Labour concerns of women two months after delivery	Fowles EF (1998)
3 (67)	The experiences of African women giving birth in Brisbane, Australia	Murray L, Windsor C, Parker E (2010)
4 (244)	Women's experience of pain during childbirth	Lundgren I, Dahlberg K (1998)
5 (556)	How women experience the presence of their partners at the birth of their babies	Bondas-Salonen T (1998)
6 (895)	Primiparous women's experience of labour in Harare, Zimbabwe	Murira N, Ashford R & Sparrow J (2010)
7 (1210)	Narratives of birth and the postpartum: analysis of the focus group responses of new mothers	DiMatteo M R, Kahn K L & Berry S H (1993)
8 (36)	Maternal reflection on labour pain management and influencing factors	Imami N R (2012)
9 (507)	Fear and suffering during childbirth among Thai women	Chuahorm U, Sripichyakarn K, Tungpunkom P, Klunklin A, & Kennedy H P (2007)
10 (554)	Giving birth: The voices of Ecuadorian women	Callister L C, Corbett C, Reed S, Tomao C, & Thornton K G (2010)

Appendix 5 – The papers included for the systematic review "More in hope than expectation: a systematic review of women's expectations and experience of pain relief in labour"

The original papers used in the systematic review with the title: More in hope than expectation: a systematic review of women's expectations and experience of pain relief in labour.

No.	Title	Author
B1	Childbirth expectations: a qualitative analysis.	Beaton J, Gupton A
B2	Decision Making in Laboring women: Ethical Issues for Perinatal Nurses.	Carlton T, Callister L C, Stoneman E
B3	The technocratic body: American childbirth as cultural expression.	Davis-Floyd RE
B4	The childbirth expectations of self-selected cohort Western Australian women.	Fenwick J, Hauck Y, Downie J, Butt J
B5	Women's expectations and experiences of childbirth.	Gibbins J, Thomson AM
B6	Journeying through labour and delivery: perceptions of women who have given birth.	Halldorsdottir S, Karlsdottir S I
B7	Pain and women's satisfaction with the experience of childbirth: A systematic review.	Hodnett ED
B8	Women's experiences of maternity care: satisfaction of passivity?	Kabakian-Khasholian T, Campbell O, Shediac-Rizkallah M, Ghorayeb F
B9	A prospective study of women's views of factors contributing to positive birth experience.	Lavender T, Walkinshaw SA, Walton I
B10	Women's experience of pain during childbirth.	Lundgren I, Dahlberg K
B11	Releasing and relieving encounters: experiences of pregnancy and childbirth.	Lundgren I
B12	Changing practice. Using ethnographic research to examine effects of 'informed choice'.	Machin D, Scamell A
B13	The experience of labour: using ethnography to explore the irresistible nature of the bio-medical metaphor during labour.	Machin D, Scamell M

Appendix 6a - The characteristics of the included studies and findings

Code	Author	Title	Aim(s)	Theoretical perspective / Methodology
A1	Wilkinson S E, Callister L C, (2010)	Giving Birth: the voices of Ghanaian women	Describe the perceptions of childbirth among Ghanaian women	Theoretical perspective: No stated in the paper (believe to be Symbolic interactionism) Methodology: Ethnography, a focused ethnographic approach was used, with intensive participant observation of Ghanaian childbearing women in the clinic and villages, plus interviews.
A2	Fowles E F (1998)	Labour concerns of women two months after delivery	To determine if women experienced any discrepancies between the expectations and realities of their births	Theoretical perspective: Not mentioned. Methodology: A description longitudinal qualitative study via questionnaire (This part of the study was the additional one to the large quantitative study.)
A3	Murray L et al (2010)	The experiences of African women giving birth in Brisbane, Australia	Uncover first-person descriptions of birth experiences of African refugee women in Brisbane, Australia, and to explore the	Theoretical perspective: Not mentioned in the paper (but it should be phenomenology) Methodology: Husserlian phenomenological

			common themes that emerge from their experience.	description
A4	Lundgren I & Dahlberg K (1998)	Women's experience of pain during childbirth	Describe women's experience of pain during childbirth in Sweden	Theoretical perspective: Not mentioned (thought to be phenomenology) Methodology: Phenomenological approach
A5	Bondas-Salonen T (1998)	How women experience the presence of their partners at the birth of their babies	2 purposes of the study: • Describe and explore Finnish women's experiences of their partners' presence at the births of their babies • To discover the essential characteristics that are meaningful to women experiencing childbirth in these circumstances.	Theoretical perspective: Not mentioned (but stated in the paper that Eriksson's caritative theory of caring was the theoretical perspective of the study) Methodology: Colaizzi's Phenomenological approach
A6	Murira N, Ashford R & Sparrow J (2010)	Primiparous women's experiences of labour in Harare, Zimbabwe	To assess women's knowledge about the process of labour and to ascertain whether communication with health professionals	Theoretical perspective: Not stated (but should be phenomenological approach as it explore the lived experience) Methodology: Unclear (only stated

			increased women's knowledge and whether they understood the risks of certain behaviour in labour.	that it was a retrospective qualitative study)
A7	DiMatteo M R, Kahn K L & Berry S H (1993)	Narratives of birth and the postpartum: analysis of the focus group responses of new mothers	To learn about the effects of childbirth routines and obstetric technology on new mothers.	Theoretical perspective: Not stated (but should be phenomenological approach as it explore the lived experience) Methodology: Not stated
A8	Rachmawati I N (2012)	Maternal reflection on labour pain management and influencing factors	To describe the mothers' reflection on the labour pain management experienced in the Indonesian setting, and any influencing factors on their perception of pain and care provided	Theoretical perspective: Hermeneutic phenomenology Methodology: phenomenological approach
A9	Chuahorm I, Sripichyakarn K, Tungpunkom P' Klunklin A, Kennedy H (2007)	Fear and suffering during childbirth among Thai women	To describe fear and suffering during childbirth among Thai women who gave birth for the first time.	Theoretical perspective: Constructive Methodology: Constructive grounded theory approach
A10	Callister K C, Corbett C, Reed S, Tomao C & Thornton K G (2010)	Giving Birth – the voices of Ecuadorian women	To describe the perceptions of Ecuadorian childbearing women	Theoretical perspective: Not stated Methodology: A focused ethnographic approach

A11	Beaton J & Gupton A (1990)	Childbirth expectations: a qualitative analysis	To investigate maternal childbirth expectations	Theoretical perspective: Not stated Methodology: Not Stated
A12	Carlton T, Callister L C & Stoneman E (2005)	Decision Making in Laboring women: Ethical issues for perinatal nurses	To gain understanding of factors influence women to change their birth preferences during labour.	Theoretical perspective: Not state Methodology: descriptive qualitative study
A13	Sigridur Halldorsdottir & Sigfridur Inga Karisdottir	Journeying through labour and delivery: perceptions of women who have given birth	To explore the essential structure of the lived experience of giving birth, in order to add to the knowledge & understanding of this human phenomenon.	Theoretical perspective: Not stated Methodology: Phenomenological approach
A14	Lavender T, Walkinshaw S A & Walton I	A prospective study of women's views of factors contributing to a positive birth experience	To explore the aspects of a woman's childbirth experience which she perceived as being important	Theoretical perspective: Not stated Methodology: A postpositivist approach was adopted

Appendix 6b - The characteristics of the included studies and findings

Code	Setting	Sample selection method	Sample size and characteristics	Method of data collection	Method of data analysis
A1	Primarily in the Salvation Army Clinic (SAC) in Wiamoase and surrounding villages in the Afigya Sekyer District of the Ashanti Region in south-central Ghana	Snowball sampling to recruit Ghana women attended the SAC prenatal clinic	24 Ghanaian childbearing women with age ranged from 18-42 and who had the number of living children ranged from 1-10. All of them indicated that the pregnancies were unintended. Among 24, 10 give birth at SAC, 11 at home and 3 on the way to the clinic. They were interviewed between 2 weeks to 14 months after delivery.	Intensive participant observation of Ghanaian childbearing women in the clinic and villages, plus interviews. Interviews were conducted by translators with the principal investigator, audiotapes were transcribed and translated. Field notes were used to record observations, impressions, and insights.	Data analysis and verification of categories or themes proceeded concurrently with data collection as appropriate for ethnographic inquiry. Analyses of the transcriptions were performed separately by members of the research team. And then in collaboration to identify analytic codes.
A2	The data was collected for 2 times, the first time was in the venue where the prenatal classes were held. The second packet of questionnaire was sent to them via mail	Convenience sampling recruited from prenatal classes sponsored by 3 geographically diverse hospitals in the Midwest from September 1992 t June 1993. Inclusion criteria: English speaking primiparous women aged 18-35, in the last 3 months of an	168 women were recruited during prenatal classes, however, only 157 completed all questionnaires at the second data collection point. Out of 157, only **77**	Self- administered questionnaire (together with the demographic sheet and instrument assessing prenatal attachment for the quantitative study) which included a single	Content analysis using constant comparative method

	between 9 and 14 weeks after delivery. A self-addressed, stamped envelope was provided inside the packet.	uncomplicated pregnancy, and living with the baby's father	women recruited from September 1992 to June 1993 had responded to the second questionnaire had answered the single one-ended question for this longitudinal qualitative study.	open-ended item, "Is there anything about your labour and delivery that is still bothering you?" The participants attended the prenatal classes were asked to fill in the questionnaire during the class break and returned immediately to the researcher who waited outside the classroom. They second packet with the questionnaire for the qualitative study would be sent to the participants again via mail at around 9 to 14 weeks after birth. (A written responses)	
A3	Either in a room at FPQ or in their own homes to accommodate for those who may not have easy access to transport	Purposeful sampling with snowball strategy through peer education sessions run by Family Planning Queensland (FPQ)	10 African refugees who had given birth in Brisbane	Semi-structured interviews recorded onto MP3 files on a laptop computer with the help of bilingual workers to provide interpretation and social support in the interviews.	Eidetic reduction or distilling experiences to their 'essences' Adopt the method outlined by Amedo Giorgi (1997) – 5 steps in analysis • Collection of verbal data & reading of the entire

				Simultaneous interpreting was used.	description in order to get a sense of the whole • rereading of the data • breaking the data into parts • synthesis of meaning units into statements (essences) regarding the subject's experience; • organization and expression of the data from a disciplinary perspective
A4	In a private setting in the Alternative Birth in Sweden	Women who had experienced a normal delivery and had a good knowledge of the Swedish language were invited to participate in the month of September 1995 Exclusion criteria include: those who had cared for by the researcher or had been discharged from the center less than 2 days after delivery	9 women, 4 primiparous and 5 multiparous (3 had their second baby and 2 had their third baby) who were 2-4 days after delivery	Tape-recorded interviews with the initial question: "Can you tell me about the experience of pain during childbirth?"	Had not mention the kind of approach used for analyzing the data. However, had indicated the steps for analysis. • first read to bring out a sense of the whole; • meaning units were marked • the meaning of the text was organized into different themes • relating the meaning units to each other • transformation occurred

					and a description meaningful for midwifery was developed.
A5	In the health care centers, hospitals, and their homes, depending on the participants' wishes	Purposive sampling women were first approached by public health nurse or midwife who gave them the researcher's short paper related to the study. The researcher then met the women after their approval. (Selection criteria not mentioned, and the site where the women were recruited was also not mentioned.)	40 Finnish women who had given birth to 1 – 6 children in different Finnish hospitals. Interviews were conducted before, during, and after delivery. A total of 80 interviews were conducted. (Had not stated which period of time the interviews were conducted.)	Interview and observation of lived events. The researcher recorded most of the interviews, transcribed them, and wrote down the rest directly, during, or after the observed occasions. (Not all the interviews were recorded.) (The researcher followed 9 of the participants until 2.5 years after without stating the reasons.)	Colaizzi
A6	In the women's home	Purposive sample of primiparous women in Harare, Zimbabwe one week after delivery of their first babies until data was saturated.	10 women in Harare, Zimbabwe who were at one week after delivery of their first baby.	Interview (inadequate information related to the way the interview was conducted, such as semi-structured questions, open-ended questions etc.)	Modify Grounded theory and constant comparison of data collected form each woman
A7	In the waiting rooms of physicians' office (when the offices were	Convenience sampling method. The participants were invited by their obstetricians, by friends, or	A total of 41 women in 6 groups of postpartum women at 15 – 22 weeks	Focus group interview (with tape- record) + questionnaire for	Thematic analysis by 2 authors after transcribed of the focus group interview

	closed) and in a conference room at RAND (a research institution)	by a notice at a breastfeeding center.	after delivery	demographic characteristics and their pregnancies and deliveries. Group 1, 4, 5 and 6 were asked to fill in the questionnaire immediately after birth, and at one week, and one month postpartum, women briefly described their feelings and their babies on the questionnaire. (group 2 and 3 had not filled in the questionnaire)	
A8	In a maternal and child hospital in West Jakarta, Indonesia, which was a public referral hospital	Purposive sampling method from a maternity hospital. The researcher build up the rapport with the participants first before invite them to participate in the study. No one reject the researcher.	A total of 7 women who had recently experienced childbirth	In-depth interviews following an interview protocol with field notes and participant observations. The questions began with general questions on the women's experiences in childbirth. Open-ended questions were chosen to give the participants the opportunity to explain. Observation was also	The interviews were transcribed and analyzed using the Van Manen method (6 steps)

				conducted for 2 weeks in delivery room. It included space, object, action, activity, event, time, actor, goal and emotional atmosphere, as developed by Spradley (180). These observational data were added to the data from the participant interview transcripts.	
A9	In a public hospital in a province that was allocated the policy of service and health care management by the Ministry of Public Health. The policy of the hospital during study (august 2003 to July 2004) was natural birth focused under obstetrician's supervision without family presence during both labor and birth. The interview was	Target: healthy first-time parturient Thai women who had been expecting vaginal birth. Initially 2 participants were recruited purposively from the postpartum unit. Subsequently, the participants were theoretically sampled according to emerging questions from data analysis.	A total of 20 participants were recruited. The number of participants in grounded theory depends on saturation of all categories. In this study no new category emerged after the analysis of the 18th participant. Another 2 participants confirmed theoretical saturation.	Majority of data were collected through in-depth interviews with audiotape recording. Participant observation was performed when gathering data about women's reaction to labor pain and their interactions with other persons and the environment. Field notes and reflexive journals were written during the process of data collection and analysis.	Include coding, memo writing, reflexive journal writing, storyline writing and diagramming. Asking questions and making comparisons were done throughout the process of data collection and analysis in this study. Coding was rearranged by grouping the same meaning of data into the same code. Asia coding and central category were employed in the analysis. The data in each subcategory were than grouped by comparison and

	conducted in a private room or private area in the postpartum unit. The subsequent interview was conducted mostly in their homes. Only 2 had the 2nd interview in hospital by their preference.			There were interview guides which included 5 questions. The subsequent interview with each woman was conducted within one month after childbirth.	subcategories in the diagram filled by asking questions of women's perception. Memoing for researcher's thoughts about the data when comparing incoming data was commonly written
A10	In the maternity hospital managed by the Junta de Beneficencia of Guayaquil, a private nonprofit organization founded 120 years ago. This hospital provides healthcare to the poorest of the population of Guayaquil and surrounding areas.	Not stated but believed to be convenience sampling method. Ecuadorian women who had given birth to healthy-term infants were approached on the postpartum unit in a large public maternity hospital in Guayaquil, Ecuador, or in the community are invited to participate in the study. (Not information was provided related to the "community")	32 Ecuadorian women were interviewed from 12 hours after giving birth to 6 months postpartum (The high variation for the period of interview among the participants may have affecting the information provided especially when it is related to the memory)	Intensive participant observation with field notes and interview with audio-tape. Audiotaped interviews were transcribed and translated into English verbatim by Spanish-speaking members of the research team.	Members of the research team analyzed the data independently to identify preliminary themes, engaging in reflection and extracting significant data bits. Themes were generated by the research team to finalize the results and identify definitive themes based on rich narrative data. Demographic data were analysis using descriptive statistics. Trustworthiness of the data was ensured by prolonged engagement in the study site by the investigators as participant observers, field

					notes kept documenting insights gained during the interviews, and consultation with an experienced qualitative nurse researcher.
A11	In the participants' home	Women who were in their third trimester of pregnancy attending private and hospital-based childbirth preparation classes in western Canadian city were recruited. They were volunteers recruited at the beginning of a childbirth class by one of the authors who explained the purpose of the study to the classes and obtained from each volunteer a signed consent to be interviewed. It had not mentioned about the method of selection but believed to be of convenience sampling	11 white middle-class women were recruited	The participants were interviewed with audio-tape. Audiotaped interviews were then transcribed.	The transcripts were analysed by the investigators for thematic content relative to the major interview topics.
A12	The setting was not stated but believed to be within the 3 different hospitals with birthing units in the western United States	A purposive convenience sampling from the 3 different birthing units in the western United states. The paper did not indicated when the women were recruited, it only indicated that 33 women including primparious and multiparous women who gave birth	33 primiparous and multiparous women who gave birth vaginally to healthy term infants	The women were interviewed and audiotaped. The data of the interview were then transcribed. Field noted was used to record the insights were kept	The transcribed data was put into Ethnograph V.5 format for analysis

		vaginally to healthy term infants participated in audiotaped interviews			
A13	The setting was not stated, but believed to be occurred in the hospitals of Akureyri and Reykjavik, the 2 most inhabited places in Iceland	A purposive sampling The women were former recipients of labour and delivery care in a hospital. No special problems cane up during pregnancy, labour and delivery or postpartum.	A total of 14 mothers in Akureyri and the Reykjavik area, the 2 most inhabited places in Iceland were recruited.	The women were interviewed and tape-recorded and transcribed verbatim for each participant. The first author interviewed 7 participants, the second author interviewed 5 in an attempt to gain investigation triangulation. The last 2 were interviewed were interviewed by 2 fourth year nursing students	Those interviewed were analysed by 16 fourth-year nursing students for 'referential adequacy' which is a strategy where some portion of the raw data is stored in archives for later recall and comparison, which provides a rare opportunity for demonstrating the credibility of qualitative data. The researchers also kept a 'reflexive journal' in an effort to make the 'decision-trail' more evident.
A14	The setting was in a regional teaching hospital in the north west of England	It is part of a large randomized trial. The women who were primigravida presented with spontaneous labour with a longitudinal lie, cephalic presentation and live singleton fetus. All had consented to participate in the Partogram Action Study. The actual procedure involved informing the women	615 Postnatal questionnaires were administered to all women randomized over a 12 month period on their second postnatal day with an additional of 2 sheets of A4 paper. There were 519 women returned the	In the questionnaire, the women were asked to comment on both positive and negative aspects of their experience, and to discuss what they believed were the most important aspects of their labour. The	It is analyzed using a qualitative method proposed by Norris (1981), whereby the data were systematically indexed to facilitate the development of themes and conceptual frameworks from the most frequently recurring topics. The data were viewed by 2 researchers who

		about the study through written information and a discussion with the research midwife in the antenatal period. Women were randomized using the sealed opaque envelope method to one of three trial arms when established labour was confirmed.	questionnaire.	questionnaires were returned by a method of their choice. This included postal boxes, hospital reception, members of staff of through the post.	independently generated categories from the responses. One of the researchers was not involved in the project. The categories were then collated and individually discussed until a consensus was reached.

Table 6c: Themes in the included studies

Code	Main Theme	Comments
1	• Centering on motherhood; • accessing health care: using biomedicine, ethnomedicine, and spiritual cures; • Viewing childbirth as a dangerous passage; • experiencing the pain of childbirth; and • fearing the influence of witchcraft on birth outcomes	• The researcher had used interview and participant observation to learn about cultural effect of Ghana on labour and childbirth, hearing from the women (via interview) and seeing it directly (via observation) enhances the understanding on the cultural effect towards the Ghanaian women. • The interview was conducted from 2 weeks to 14 months on 24 women. There was a high variation on the time the women were interviewed. It is well know that after a period of time, the memory of the women related to labour pain will be affected in times with various issues, hence, the information provided by the informants might have variation when data was collected at 2 weeks from that of 14 months post delivery, especially related to labour pain and their experience during labour. • It is noted that the participants were given some gift. If this was known to the participant before the interview or observation, the data may be biased. • Rich quotes from the participants were presented in the paper which echo the aims of the study
2	Main themes were not stated but provided the categories of maternal concerns • Positive experience related to support during labour especially provided by the care giver; • Frustration related to pain; lack of control; lack of knowledge; and negative perceptions of health caregivers during labour and childbirth	• The aim of the study is To determine if women experienced any discrepancies between the expectations and realities of their births. The only question asked in the questionnaire was ”Is there anything about your labour and delivery that is still bothering you?” The only question asked could not reflect any discrepancies between expectations and realities of their births because the women had not been asked for their expectations towards their labour and delivery. Hence, the data provided by the participants only reflected their feelings towards areas like pain, the helpfulness of the health care provider, the use of medication for pain relief and the concern towards their mode of delivery, etc. • Since the data is obtained from a self-administered questionnaire, it is not possible to probing into the aspects to clarify the information by the participant. • It had indicated the limitation of the study in

		the paper that the question asked in the questionnaire might had lead the women to provide negative response as the question had a negative connotation "still bothering you" Hence, the study might obtain the information which might underrepresent the women's concern. • There was very little quote (only a few words or phrases) from the women's written reply related to the cateorigy on positive experience. • Although this paper had such limitations, the quotes provided in the paper were useful to my metasynthesis
3	• You don't know, you feel alone, and you feel different • They are very kind nurses, but still they don't have much time • We are used to a natural type of giving birth	• Rich quotes from the participants were presented in the paper which echo the aims of the study
4	• Pain is hard to describe and is contradictory; • Trust in oneself and one's body; • Trust in the midwife and husband; and • Transition to motherhood	• Rich quotes from the participants were presented in the paper which echo the aims of the study
5	There were 14 themes grouped under the 3 categories: **Communion**: • Expressing concern and showing love • Sharing worries and joy • Participation in preparation • Participation in preparation • the importance of the partner's presence • The partner's ability to see to the woman and the baby in the bet possible way • Participation in different ways	• It indicated that it is purposive sampling, but had not stated how the women were recruited and from which area they were recruited. The inclusive and exclusive criteria for recruiting the participants were also not stated. • Not clear about when the interviews were conducted, as within the paper it only stated that interviews and observations took place before, during and after delivery. • The researcher also indicated that she had followed up 9 of the participants (out of 40) until 2.5 years after delivery without giving any reasons on it. The purpose of follow up the participants was not explained, and there was nothing mentioned that the survey was a longitudinal one. And because of the differences in the time for the interview, the quality of the data in relation to the participants' memories towards various issues

	• the presence of the partner is different • Creating a family **Strength** • Alleviating loneliness, pain, fear, and anxiety • Caring as a source of strength **Two worlds** • Needing care • Lacking a place in the health care culture • Understanding the different views • Giving another view of life	might be affected. • The methods for data collection for the interviews were not standardized. Some had tape recorded, while some just recorded by direct writing on paper. It was doubtful that the researcher could be able to write in the speed when the participant was talking providing information. Hence, the quality of the interview which had not been recorded was doubtful. • The participants were asked to validate the findings through the follow-up interviews and through reading their transcribed interview. This is a good way to ensure there was no mis-interpretation on the information provided by the participants. • There was no quote for some of the themes
6	Three main themes: • Shock related to lack of information, respect and privacy • Pain related to inadequate information about the labour process and the feeling that the midwives are unsupportive • Communication related to the conflicting information between the older women in the society and the midwives.	• Rich quotes from the participants are presented in the paper • The information related to sampling and method to obtain data was inadequate. For example, the age of he women (in the paper it had stated that the research is for teenage primiparous women, however, it was not described in the paper. The information related to how the research selected these samples and recruited them was not provided in the paper. In addition, the detail related to the method of interview was not provided in the paper.
7	Five themes: • Loss of autonomy and control • Unexpected physical pain • Unexpected emotional reactions • Financial pressures • Support during labor and birth	• The reasons why the 2 groups of participants were not given the questionnaire was not explained • The method of analysis was not provided • The limitation of focus group interview lacks of privacy which may hinder the women to provide more information related to their feelings
8	Six themes: • Negative experience of labour pain • Prior knowledge to alleviate pain • Anxious but pain must be faced • Desire to handle labour pain • Desire to be accompanied	• Rich quotes from the participants are presented in the paper • The steps for data analysis were clearly described

	• Awareness of the mother's needs	
9	One main theme: Childbirth as a fearful event and a suffering event. Sub-themes: • Fear about baby's health • Fear of pain and difficult birth • Perceived childbirth as suffering • Characteristics of pain • Reaction to labour pain	• Rich quotes from the participants are presented in the paper • Attempt to take care of the issue on trustworthiness • Had not specified the method for analysis only indicate using coding and categorizing to find the theme
10	Four themes: • Caring for self and accessing prenatal care to have a healthy newborn • Relying on God to ensure positive maternal / newborn outcomes • Submission of self to healthcare providers because of fear, pain, and lack of education, and • Valuing motherhood	• Rich quotes from the participants are presented in the paper • Had not specified what the "community" was as some of the participants were recruited from the community. • Attempt to take care of the issue on trustworthiness by prolonged engagement in the study site by the investigators as participant observers, field notes kept documenting insights gained during the interviews, and consultation with an experienced qualitative nurse researcher. • Variation in the period of interview (from 12 hours to 6 months after delivery) which may affect the information provided by the participants as the feelings and memories towards the process may change over a period of time.
11	Six main themes: • Childbirth concerns • Pain and coping • Role of support person • Role of health professionals • Intervention - they need to be consulted • Childbirth environment	• Not much quotes in some areas role of support person, intervention and childbirth environment. Only description by the researcher. • Not clearly state the sampling method • Not mention about the trustworthiness of the data • Only indicated that the analysis was by the investigator for thematic content.
12	Four Themes • Wanting an unmedicated birth; • marking a change in pain management; • Changing birth preferences; and	• Three study participants were contacted to verify the preliminary analysis reflected their experience and to discuss and clarify findings • Very small amount of quotes.

	• Reconciling feelings about making that change	
13	Four main themes: 1) Before the journey's commencement • The influence of circumstances • The influence of expectations 2)Sense of self during the journey • Sense of being in a private world • Perceived needs during the journey 3)The journey itself • Travelling through labour • Travelling through delivery 4)At the journey's end • The first sensitive hours of motherhood • The uniqueness of birth as a life experience	• Rich quotes from the participants were presented in the paper which echo the aims of the study • Only indicated that it was a purposive sampling without any explanation or if there was any criteria for it or in which occasion the participants were recruited
14	Six main themes: • Support • Information • Intervention • Decision making • Control • Pain relief • Trial participation	• Rich quotes from the participants although it was provided in form of questionnaire • Questionnaire was good as it is simple to use and not time consuming as in interview, as there is no need for transcribe • The disadvantage was that clarification would not be available • There was no explanation about the three arms in the sampling, however, within the paper, there was something related to it. • One of the main theme "trial participation" did not seem to be related to the objective of the study which was related to the women's childbirth experience.

Appendix 7 - Information sheet

Title of the study: : A longitudinal qualitative study of Hong Kong Chinese women's views and experience of childbirth pain relief and the meaning of childbirth from the third trimester to 1 year after delivery

About the study

I am a PhD student registered at the University of Central Lancashire in England, and working as the Department Operations Manager in the O&G department of Queen Mary Hospital. I would like to explore the meaning of childbirth and the views and experiences of childbirth pain from the point of view of Hong Kong Chinese women. It is hoped that, through this study, recommendations can be provided to the hospital for the development of a working model for supporting women through childbirth pain.

I sincerely invite you to participate into this research study. Before you decide to participate or not, it is important for you to understand the reasons for conducting this research and the part you will be involved in the study. Please take time to read the following information carefully and discuss it with your friends, relatives and your family members if you wish. Please ask us if there is anything that is not clear to your or you would like to have more information related to the study. Take time to decide whether or not you wish to take part.

What will happen to me if I take part?

The study will involve a series of face to face interviews before your baby is born, and after the birth. There will be four interviews in total. Each interview will be tape-recorded to make sure that all that is said is taken into account. The first interview will be at or after 36 weeks of pregnancy; the second phase is on postnatal day 3 before discharge from hospital; the third phase will be 6-7 weeks after delivery (before returning to work); and the last phase will be at 10-12months after delivery. The summary of the main themes of the interviews will be given to you for confirmation either via phone within 8 weeks after the interview or at the time for subsequent interviews. The interview will be conducted in a room in the hospital with privacy; however, the interview can also be conducted in the place of your choice. It is expected that the interview will take about 45 minutes to 1 hour. A summary of the main themes will be provided to you for confirmation that this describes your experience. This will be discussed with you at second interview, and then by phone within 8 weeks of your third and fourth interview.

Confidentiality and use of results

All information collected during the course of the study will be kept strictly confidential. It will be locked in a safe place in my office. Your personal particulars will not be released to anyone else, and coding will be used to represent anything you say that is recorded in any public outputs from the study. The data, without your identity on it, will be used for research and

educational purposes. It will be kept for three years and destroyed afterwards.

This study has been reviewed by the Institutional Review Board of Research Ethnics Committee of the hospital, and the Ethics committee of the University of Central Lancashire in the UK. You have the right to quit the study at any time you like without affecting the medical service provided to you.

Emotional support
Although it is a rare condition that you may feel upset as a result of reviewing your birth experience, in case it occurs, you will be referred to the Obstetric Emotional Assessment and Counseling clinic run by experienced midwives who are well trained by clinical psychologist in counseling and emotional support. This clinic is also well supported by clinical psychologist.

How do I take part in the study?
Your participation in the study is mainly telling your feelings about labour, and labour pain; as well as the pain relief method(s) and support that you obtained or needed during labour.

If you would like to have more time to think about whether you want to take part, please let me have your contact phone number or email, and I will contact you in 1-2 days to see if you would like to participate in the research or not.

If you have any questions, please feel free to contact me, Ms Irene Lee via phone at 2255 5590 or via e-mail on leely@ha.org.hk

You can also contact my academic supervisor, Professor Soo Downe, on sdowne@uclan.ac.uk or +441772 893815

Ms. Irene Lee DOM(O&G) Rm:13-40, 13/F., Block K Queen Mary Hospital 102 Pokfulam road Hong Kong	Professor Soo Downe ReaCH Research Unit Room 116 Brook Building University of Central Lancaster Preston PR3 2LE Lancashire United Kingdom

Appendix 8 - Consent form

Study Number: _____

Title: **A longitudinal qualitative study of Hong Kong Chinese women's views and experience of childbirth pain relief and the meaning of childbirth from the third trimester to 1 year after delivery**

Consent Form

- □ I confirm that I have read and understood the information for the longitudinal qualitative study with the aim to explore the meaning of childbirth and childbirth pain, and have had the opportunity to ask questions.
- □ I understand that my participation is voluntary and that I am free to withdraw at any time, without affecting the health services provided to me.
- □ I understand that my medical notes may be looked at by the researcher or her research assistant where it is relevant to my taking part in the research. I give permission for the researcher to have access to my records.
- □ I agree to take part in the above study.
- □ I agree to the use of quotes from my interview (without any means of identifying me) for published reports, papers, and presentations from the study.
- □ I can get a copy of this consent form if I wish.

Signature of participant	Signature of witness	Signature of researcher
Name of participant	Name of witness	Name of researcher
Date	Date	Date

Thank you for participation in this study!

Appendix 9 - Interview schedule and semi structure questions with prompts at different points of time

Interview schedule

Interview	Schedule of interview
First	Around 36 weeks of pregnancy
Second	At 2-3 days postnatal
Third	Around 6-8 weeks postnatal
Fourth	Around 12 months after delivery

Semi-structured questions with prompts for the 4 interviews

Interview schedule: 1st interview at 36 weeks gestation

1. How are you feeling now about being pregnant?

   PROMPT: what does it mean to carry on the family name?
   PROMPT: what are your feelings about the gender of the baby?
   PROMPT:what are your thoughts about becoming mother, housework, baby care?

2. What do you think labour and birth will be like?

   PROMPT:views on the need to suffer in childbirth?

3. Can you tell me your thoughts about pain in labour …

   PROMPT: what do you think might help you to cope with pain in labour?
   PROMPT: why do you think this will help?

4. Can you tell me about who will be supporting you during labour and birth?

   PROMPT: what about the role/activities of your husband/partner?

Memo: at all relevant points, ask 'why do you think this/feel like this' if women don't give this information spontaneously

Interview schedule: 2nd interview around 3 days postnatal

1. Tell me about your labour and birth…

   PROMPT:what are your feelings during labour pain, especially "peak pain"?
   PROMPT: What are your feelings (satisfaction) towards the labour?
   PROMPT:what are your views on the need to suffer in childbirth?
2. Tell me your memory about pain in labour

   PROMPT: Level of pain, tolerance
   PROMPT: What pain relief method(s) and support you have obtained?
   PROMPT: What had helped you to cope with the pain in labour?
   PROMPT: what about the role/activities of your husband/partner?
   PROMPT: What support or help might have helped you better?
   PROMPT: What is your view towards the number of children in the family?

3. Can you tell me your thoughts about childbirth …

   PROMPT:what are your feelings about becoming mother, housework, baby care?
   PROMPT: what does it mean to carry on the family name?
   PROMPT: what are your feelings about the gender of the baby?

Memo: at all relevant points, ask 'why do you think this/feel like this' if women don't give this information spontaneously

Interview schedule: 3rd interview around 6-8 weeks postnatal

1. Looking back now, how do you feel about your labour and birth?

   PROMPT:what are your feelings during labour pain, especially "peak pain"?
   PROMPT:what are your views on the need to suffer in childbirth?
   PROMPT: What is your feelings (satisfaction) towards the labour process?

2. Tell me your memory about pain in labour / pain relief method / support in labour

   PROMPT: Level of pain, tolerance
   PROMPT: What pain relief method(s) and support you find useful?
   PROMPT: What had helped you to cope with the pain in labour?
   PROMPT: what about the role/activities of your husband/partner?
   PROMPT: What support or help might have helped you better?
   PROMPT: What is the your view towards the number of children in the family?

3. What is your feeling towards giving birth to a baby?

PROMPT:what are your feelings about becoming mother, housework, baby care?
PROMPT: what does it mean to carry on the family name?
PROMPT: what are your feelings about the gender of the baby?

Memo: at all relevant points, ask 'why do you think this/feel like this' if women don't give this information spontaneously

Interview schedule: 4th interview 10-12 months postnatal

1. Looking back now, how do you feel about your labour and birth?

PROMPT:what are your feelings during labour pain, especially "peak pain"?
PROMPT: What is your feelings (satisfaction) towards the labour process?
PROMPT:what are your views on the need to suffer / sacrifice in childbirth?

2. Tell me your memory about pain in labour / pain relief method / support in labour

PROMPT: Level of pain, tolerance
PROMPT: What pain relief method(s) and support you find useful?
PROMPT: What had helped you to cope with the pain in labour?
PROMPT: what about the role/activities of your husband/partner?
PROMPT: What support or help might have helped you better?
PROMPT: What pain relief method(s) / support you will consider if you face the labour again?

3. What is your feeling towards giving birth to a baby

PROMPT:what are your feelings about being a mother, housework, baby care?
PROMPT: what does it mean to carry on the family name?
PROMPT: what are your feelings about the gender of the baby?
PROMPT: What is your view towards the number of children in the family? Does it affected by labour pain?

Memo: at all relevant points, ask 'why do you think this/feel like this' if women don't give this information spontaneously

Appendix 10 – Examples of the summary of interviews provided to the participants

- Two examples for participant I002(summary of first interview), and I005 (sumnmary of third interview) were provided in this appendix.
- All the summaries were provided in Chinese and in point form. The examples here were the translated versions.

Participant I002 - Summary of 1st interview

1) Did not considered having children was for continuing the family line. However, having children would create a completed family.
   I was influenced by the peer group as most of them had children.

2) I did not have any preference on the gender of the baby. I felt that having baby was already lucky and I felt satisfied.

3) Felt the responsibilities to take care and nurture the baby, I felt the pressure.
   After the maternity leave, I would resume my work, however, would try my best to take care of the baby after work.

4) I had worries on the childbirth pain. Had considered using epidural for pain relief, however, I worried about its adverse effect. Hence, epidural should be the last resort for pain relief.

5) I did not attend antenatal talk, since all the classes were full, hence, I search for the information related to labour pain relief.

6) My husband would stay with me during labour could help me and support me. The explanation from the health care professionals and their support were also important. From the psychological point of view, husband stayed with me could provide psychological support to me and comfort me. I would not feel alone to face the battle.

7) I did not feel the need to tolerate the pain, especially when there was technology advancement. I would balance the methods of pain relief (the side effect and the effect) before I chose the method.

8) I felt that health care professional could provide various pain relief methods to the women earlier.

Participant I005 - Summary of 3rd interview

1) I did not feel that the pain had reached level 10 (the highest level), however, I did not want to have such experience again (did not want to have another baby).

2) I tried my best not to use any pharmacological pain relief methods during labour. For the initial 2 hours, I did not have any problems on it, however, when the cervix reached 7-8cm, I think this was the most difficult time.

3) When there was pain, I used Entonox and TENS for pain relief. Entonox had some soothing, while there was no effect on TENS.

4) When I experience the peak pain, I wanted the baby to come out as soon as possible. I had the feeling that I did not want to have another baby at that time.

5) I did not feel facing the pain was suffering, there was nothing we could do to face the pain as it was the arrangement from the above (God). However, having such experience would make people more treasure their children. The experience in childbirth was "pain", I did not feel any satisfaction or dissatisfaction, however, I did not want to have such experience again.

6) Husband's stay with me during labour was good. I only need my husband to sit beside me and he needed not do anything, as I did not want to be disturb when I felt the pain. Other than this, my husband was like a messenger and he delivered the message that I want to tell the midwives.

7) I feel the midwives taught me well in deliver the baby, they could help you.

8) To be a mother, on the first day after delivery, my baby was admitted to special baby care unit, I did not need to take care of the baby, so I have time to rest. (Feeling a bit lucky)

9) My husband would continue to participate in doing the household work just like what we had planned. When I return to work, my mother would help to take care of my baby, and I would bring my baby home during holidays until it was time for schooling (thereafter, would take care of the baby all by herself).

10) I did not feel continuing the family line had any effect on me. I did not have any preference on the gender of my baby. I felt happy at this stage.

Appendix 11 - Example of extracted quotes and its grouping under the theme from first interview

Theme 1 : Support is crucial to enhance the women in having a positive experience on childbirth process

From Husband
Sub-theme 1 : The need of the husband to accompany the woman during the childbirth process

Related themes from the four interviews	Participant / Demographics (parity, induced or not, labour length, final type of pain relief used)	Interview one	Interview two	Interview three	Interview four
Grouping: ***The pain relief properties of support during labour*****;**					
The women's expectation on the support during childbirth (1) Husband support is important to the woman (2) This is the support that I want (3) • Husband provides good support to the woman	1 **(Cheung)** P, yes, 15hrs 13min, epidural	"I think it surely will (be reduced) … it should be … also you think it likes….it's the issue of two persons that is...right." "I think he should ... give his wife more encouragement and support." "I think that if my husband is on my side, he can.....help me and encourage me.....I think this is very important."	I think it's an encouragement and he was…next to me and could help… e.g. turned me to another side. The midwife could not always stay in the labour room, for example (he could) help to turn me to another side, to do massage for me……(he) played an important role. I001(2E)	"My husband could help me during delivery process …, we had to wait for ten hours more in my delivery process. He sometimes fell asleep, I think it didn't matter at all…." I001(3E) "Actually he stayed in the labour room with me for more than ten hours. He asked me to sleep when he did massage for me. When I slept, he was still doing the massage. In certain extent, I felt it was very hard for him." I001(3E) I think it was a good experience for us. We could face this issue	"The best feeling in my delivery process was that my husband accompanied me from day to night." I001(4E) "Oh! Yes, I think it was better when somebody was next to me." "No he should not do nothing there, hahaha! Initially, he brought a newspaper and read it in labour room. Then I thought, 'You shouldn't just read the newspaper here, right?' Hahaha!" I001(4E) "He slept for a while, hahah! I saw he was sleeping." I001(4E) "He could help me, because…. the

	The power of (un)caring supports (4) • Reciprocal benefits: the presence of husband or family		I001(1E)		together, so I think it was very good and very touching. I001(3E) "Sometimes he talked to me, actually I would like him to leave me alone. Ha! As I felt very painful at some moments, I didn't want to talk to him." I001(3E) "When I didn't feel very painful at some time, I would like to have some rest. If possible, I preferred he didn't talk too much to me and let us be quiet for a while." I001(3E)	midwife told him if I felt very painful, he could help to do massage on me. He could massage my backbone or my foot. My husband had done all these things." I001(4E) "I felt relaxed. (when he massage me)" I001(4E) "Oh! I thought he encouraged me at that time. As I stayed in the labour room for such a long time, I didn't feel alone. If the machine showed something wrong, he could help to take a glance, and he could help me to call the nurse." I001(4E) "No. Sometimes I wanted him to keep quiet, haha! When I felt very painful, I just wanted he to let me alone." I001(4E) "Yes, he should not talk to me when it was not the time." I001(4E)
		2 **(Leung)** P, yes, 19hrs 7mins, epidural	"…my husband can accompany me." "At least I think (her husband can) give me psychological support…..at least …. not so … I think this process (childbirth) we should….go through together…, that's not….	"er.. (he) was provided me with psychological support. Besides this, he was very attentive to listen to the midwife's instructions. The midwife taught him how to do massage for me, and he tried to do it very well." I002(2E) "I think he did it well already." I002(2E)	"He was great. He provided significant psychological support to me." I002(3E) "Actually, there was no special thing he could help me. Maybe he could talk more with me and not just stand aside. If he felt worried, I would feel more worried. If he felt more relaxed and talked more with me, I think I felt better with diversion	"He accompanied me in whole process. I002(4E) "Right. My husband accompanied me in the whole process. If you asked whether he could help me in the delivery process, distracted my attention or relieved my pain, actually he couldn't help me. When he helped me to do massage,

			just one person to strive hardly." "Well, (he) just stands beside me and cheers me up, I think….. , yes… and…I think he actually … he can't help me in my physical (condition), I think … well... just psychological comfort. "Actually I think … the most important is … more psychological support… that means when someone is chatting with you … and draw your attention away (from pain). I think (I'll) not to focus on pain itself is actually a good thing."(I002(1E)		therapy." I002(3E) "If I felt very painful and somebody touched me at that time, I felt the pain feeling would be exacerbated. That was my personal view, right." I002(3E)	I think he might have some feelings. However, I didn't have any special feeling. He might think at least he could do something to help his wife. He thought it was good. Actually, he was my support. I think every woman wanted her husband stayed with her. Although he couldn't do anything, I think he was my psychological support." I002(4E) "Yes, hahaha! He couldn't do anything, but I can see that he was there with me, he is my dearest." I002(4E) "No, he doesn't talked abut his feelings. I remembered what he said after delivery, 'Wow! You are very great. You don't scream at all.' Yup, haha!" "I said, 'Of course!' hahaha!"I002(4E) "I felt satisfy, no matter what things happen, we used to walk through it together." I002(4E)
		3 **(Lee)** P, yes, 14hrs 33mins, Pethidine	My husband actually he will accompany me during labour. Although he is very scared, he understands that this is his role, he can give more	"I was very lucky that my husband was willing to accompany me (for the childbirth process). It was not an easy task for him as he was afraid to see me in a helpless	"At first, I thought he just accompanied me during delivery. Now I reviewed that moment again, after delivered my baby I think we are really a partnership. I need his support and he is not just an	"The best one? It was eee….my husband could accompany me. Right, they allow he to accompany me, and he was really good …..right, … (he) made me feel comfort. Yes. Also (he) could do that massage. Right, I

			encouragement to me. To some extent, it is a comfort. For me.., yes, exactly." I003(1E))	situation and he couldn't help me but just watching me. Right, he knew I needed his encouragement and support, therefore he was there. He was very supportive in the whole childbirth process." "I think he did more than I expected. Before delivery, I expected he would give me some support or encouragement. After I experienced the induction process more than 10 hours on Sunday, I think he was very important. ….. I thanked him and I told him, 'If you were not there that day, I didn't know how to make it.' For me, he was very important to be there." "In these two days, we experienced many many things together. But we didn't have chance to talk, this experience is very important in our relationship. … Definitely yes." I003(2E) "…I think as a man, he could prove his ability to solve some problems, then he would be more satisfied. Therefore, he thought that he could really help	assistant. We like the partners of each other. Especially now I care my baby, I really need his help and I understand sometimes he feels tired. Actually, he had participated in the delivery process at the early stage of my labour." "Actually, I think it's OK when he accompanied me in labour." I003(3E) **Suggestion:** "May be to strengthen the massage that my husband performed on me. The massage, he knew the method already and he could do a bit more at that time." I003(3E)	think it's very good to have that massage." I003(4E) "…his attendance was actually important (to me), as he accompanied me, eee…right, I really think that for my husband, he was doing a great job as he was very afraid of such situation. He would feel helpless as his wife was there feeling the pain and he could do nothing to help out. He …he.. but my husband was so brave that he came and accompanied me." I003(4E) "Ah! Actually I think eee…..I have thought about this before. If I really have another baby eee… I may not…though I really want him (husband) to accompany me, I may not ask him to do so. He needs to look after our daughter, so…" I003(4E) "Yes, yes, yes! Because actually….. the situation will be different…yes, well understand that, he eee…….practically speaking, if I soon get pregnant again, I think my husband probably will not accompany me for the delivery. Our daughter didn't like other people to take care of her. Right, many a time when she feels very sleepy, naughty, she just wants to find me. In such situation, eee… right he may be…my

				me to relief pain (by massage). He said when he knew I was in pain throughout the delivery process, he felt it was very touching. Because he thought I devoted my effort for our daughter. Also, it was a hard feeling for him as he couldn't give some help when I was very pain. However, he pretended to be very well as he didn't show me that he didn't know what to do. He tried to be supportive and I thought he was strong. As there were something he might not dare to face or he was scare, he used his own way to manage his fear, maze or feelings of helplessness." I003(2E)		husband will be better to be there with her. It will be better that he takes care of her." I003(4E) "hmm….if he can't come…..that will be eee……let me listen those CD songs, listen to the music, and also eee…maybe I do not have what my husband had helped me to do (massage), but ..(I) still want to have that massage.(I003(4E))