

CHAPTER 2

Literature review

2.1 INTRODUCTION

This chapter discusses the literature review on the research topic. The purpose of reviewing literature was to gain a broad background of available and related information. This background enabled the researcher to build on the work of others, which is essential since discoveries in a field are always related to previous work. The literature review also promotes the identification of feasible research purposes and sub-problems, that direct the development of methodologically sound studies (Burns & Grove 1998:127). The purpose of a literature review in a qualitative study is to place the findings in the context of what is already known. It tells the reader how the findings fit into what is already known about the topic (Streubert & Carpenter 1999:20).

In phenomenological studies, the review of literature follows data analysis (Streubert & Carpenter 1999:60). The rationale for postponing the literature review is related to the goal of achieving a pure description of the phenomenon under investigation. The fewer ideas or preconceived notions researchers have about the phenomenon under investigation, the less likely their biases are to influence the research. Once data analysis is complete, researchers review the literature to place the findings in the context of what is already known about the topic. Researchers may do a cursory review of the literature before fully developing the study (Streubert & Carpenter 1999:61). In the present study though, the researcher undertook the literature review first in order to sensitise herself to the phenomenon under study, develop an inventory of vocabulary to use throughout the study, and gain insight into the meaning of the phenomenon (Van der Wal 1999:128). Doing this led to the awareness imperative to bracketing.

The result of the literature review is presented under the following headings:

- Pain in general
- Pain during labour
- Perception of pain during labour
- Transcultural nursing
- Cultural aspects of pain and labour pain
- The research findings on pain in general, labour pain, and cultural aspects of general pain and labour pain

2.2 THE PHENOMENON OF PAIN

Pain is a major feature of everyday life and is often related to injury and disease as a signal to indicate that something is wrong (Yerby & Page 2000:6). Beyer and Wells (1989:837) stress that pain is essentially a subjective experience therefore this study focuses on the perception of the experience of pain.

2.2.1 Pain in general

2.2.1.1 Definition of pain

The word "pain" is derived from the Latin *poena* punishment, grief, from Greek *poine* penalty and means "the sensation of acute physical hurt or discomfort caused by injury, illness, etc.; emotional suffering or mental distress" (*Collins English Dictionary* 1991:1121). This definition recalls the ancient concept of divine causation, the belief that all pain and suffering are the direct results of God's will (Jimenez 1996:53). Shipton (1999:1) describes pain as an unpleasant sensory or emotional experience associated with actual or potential tissue damage, or in terms of such damage. Pain is a symptom of physical hurt or mental or emotional distress. Pain may serve as a warning sign or indicator of disease (Freenay & Mahoney 1991:380).

There are different views on pain. Some patients in pain view pain as a challenge, a punishment, an enemy. Others feel that to be in pain is God's will. If a disease is present, pain means that the disease is progressing (Ferrell & Schneider 1988: 87). As far back as 1664, Descartes stated that pain is like a bell ringing, which means that its purpose is to alert the sufferer that something is wrong (Melzack 1984:323).

According to Morris (1995:51), pain "in an immeasurable order of magnitude is very likely to defeat or cancel thought". Pain should always be regarded as a reminder that the body is being damaged, and it should be treated with respect and not ignored, since to be in pain is often to be in a state of crisis (Morris 1995:31). Procacci and Meresca (1987:12) maintain that pain is seen as an emotion rather than a sensation and is experienced by the heart not the brain.

Pain can be generated by different mechanisms, including tissue ischaemia, muscle contraction, and direct tissue damage from trauma (Kendall, Spence & Murphy 1996:427).

Over the centuries, the knowledge and theories of pain have evolved through six general stages: (1) pain as punishment, (2) pain as a necessary warning, (3) pain as an emotion, (4) pain as a nerve transmission,

(5) pain as a challenge to science, and (6) pain as a complex interaction. Beliefs and practices related to pain from each of these stages continue to influence contemporary attitudes and practices regarding pain. Optimal pain control demands the integration of all that is known about pain into a holistic approach that benefits the patient experiencing pain (Donovan 1989:258). Pain is a sensation with physiological, psychological, emotional and behavioural dimensions (Kendall et al 1996:430). Pain is thus described in terms of physiology, psychology, and perception.

2.2.1.2 Physiology of pain

Physiologically, pain is seen as a nerve transmission. There are specific receptors responsible for the sensation of pain. Pain in this instance is defined as a transmission of an impulse from a nerve to another along a complex pathway from the peripheral receptors to the brain (Gleitman 1992:30). The physiology of pain is described in terms of a sensory component, perceptual component and pain responses (Kendall et al 1996:428).

2.2.1.2.1 Sensory component of pain

Pain is initiated by conditions such as trauma, ischaemia, hypoxia, and acidosis, which cause the release of endogenous pain substances located in the vesicles or granules of peripheral nerve endings (Fuller & Schaller-Ayers 1990:286). The release of these endogenous pain substances stimulates the nociceptors or pain receptors. The lowest-intensity stimulus that initiates the pain impulse transmission along afferent pathways is called the pain threshold. Repeated stimulation of nociceptors may result in sensitisation to pain. Once sensitised, nociceptors continue to respond to painful stimuli and eventually the pain may be perceived as more intense (Gleitman 1992:13).

Pain sensations are transmitted to the brain primarily by the ascending lateral spinothalamic tracts, where two types of sensory nerve fibres are found. Myelinated A-delta fibres transmit sharp, highly localised types of pain that occur immediately with injury. Unmyelinated C fibres transmit pain sensations that are more diffuse and aching (Fuller & Schaller-Ayers 1990:286; Shipton 1999:1).

Pain fibres enter the spinal cord through the dorsal roots. The pain impulse then reaches a synapse in the substantia gelatinosa and crosses the cord by way of several short interneurons. Impulse transmission then proceeds along the lateral spinothalamic tract to the brain (Freenay & Mahoney 1991:49).

2.2.1.2.2 *Perceptual component of pain*

Fuller and Schaller-Ayers (1990:286) point out that pain perception involves the thalamus and cortical association areas of the brain. Pain may be perceived in the thalamus, or the pain impulse may be projected along diffuse pathways to the cerebral cortex. Several factors, such as loss of consciousness and inhibition of pain impulse transmission by endogenous opiates (endorphins) or exogenous opiates (morphine), may alter the perception of pain (Fuller & Schaller-Ayers 1990:286; Shipton 1999:1). Pain experience, or a person's response to pain, is influenced by memories, personality, culture, and values (Jimenez 1996:53).

Pain tolerance, a learned and socially considered human response, is a cortical phenomenon and varies among individual people (Fuller & Schaller-Ayers 1990:286; Jimenez 1996:52). The present study focuses on the aspect of culturally learned perception of pain in labour.

2.2.1.2.3 *Pain responses*

Pain responses, both psychological and physiological, are initiated at the cortical level. Psychological responses to pain include fear, anxiety, depression, or anger (Barker, Ferguson, Roach & Dawson 2001:172). Neural impulses, conducted along descending pathways, initiate physiological responses, including cardiovascular responses (increased heart rate and blood pressure), gastrointestinal responses (decreased gut motility and decreased saliva), and muscular skeletal responses (increased muscle tension) (Kendall et al 1996:429). Pain responses are probably modulated by signals transmitted from the cerebral cortex (Fuller & Schaller-Ayers 1990:287).

Patients in pain often reduce their activity, resulting in increased venous stasis and platelet aggregation and, ultimately, increased risk of deep vein thrombosis. Nausea and vomiting, and abdominal cramps are considered gastrointestinal concomitants of pain. General hypo motility of the urinary tract and difficulty in urination are likely mediated by the same autonomic stimulation (Kendall et al 1996:430).

Individuals may respond to pain with behaviours like vocalization, facial expressions, body movements and social interactions as depicted in table 2.1 on page 21.

TABLE 2.1 BEHAVIOURAL INDICATORS OF PAIN

VOCALISATION	FACIAL EXPRESSION
Moaning	Grimace
Gasping	Clenched teeth
Crying	Wrinkled forehead
Grunting	Lip biting
	Tightly closed eyes or wide open eyes
BODY MOVEMENTS	SOCIAL INTERACTION
Restlessness	Avoidance of conversation
Immobilisation	Focus only on activities for pain relief
Muscle tension	Avoidance of social contact
Increased hand and finger movements	Reduced attention span
Pacing activities	
Rhythmic or rubbing movements	
Protective movements of body parts	

(Source: Potter & Perry 1997:1169)

2.2.1.3 Psychology of pain

Influences such as anxiety, anticipation, fear, depression or anger have a powerful effect on the pain process (Fuller & Schaller-Ayers 1990:287; Sweet 1995:217). It is exactly these issues that play a major role in labour. Such factors make it inherently difficult for care providers to accurately assess and effectively manage pain (Carr 1997:59). For this reason, the researcher anticipated these aspects during data collection and was thus aware of their cultural manifestations during labour and its relation to pain.

2.2.1.4 Pain perception

Pain perception is the conscious awareness of pain. Perceived pain can be differently experienced by certain individuals and different cultural groups. Culture is one variable that influences the perception and toleration of pain (Andrews & Boyle 1995:304). Both the experience and perception of pain are regarded as subjective and thus remain difficult for an investigator to measure objectively (Barker et al 2001:172). Labour pain and its associated behaviours are highly variable between individuals (McCaffrey 1979:69).

Pain perception depends on cultural learning, the meaning of the situation, and other factors unique to the individual (Andrews & Boyle 1995:302). The perception of labour pain may be altered if the woman has experienced a previous painful labour (Bennett & Brown 1998:21; Pillitteri 1992:39; Odent 1984:47).

Individuals usually perceive at least four aspects of pain: *intensity, character, location* and *duration* (Jimenez 1996:57; Sheiner & Sheiner 1999:301). These aspects are described in more detail below.

2.2.1.5 Measurement of dimensions of pain

Different instruments are employed to assess or measure dimensions of pain experience, such as intensity, character, duration and location.

Intensity. According to Bradley (1993:178), pain intensity refers to the severity of the pain experience. Barker et al (2001:172) refer to Beecher (1956), who suggested that the intensity of pain is directly dependent on the meaning and significance of the event causing the pain and the desire to attain specific goals.

A useful pain rating tool for patients with limited cognitive skills and ones with language barriers is the Wong/Baker Faces Rating Scale, which shows drawings of six faces expressing sequential levels of pain and discomfort, beginning with a happy, smiling face and ending with a crying and frowning one (Wong & Whaley 1996:98).

One of the simplest ways to measure pain is to ask the patient to rate pain on a scale of 1 to 10, with 10 representing the most intense pain ever experienced (Fuller & Schaller-Ayers 1990:289). Another method of rating pain is by using the Visual Analogue Scale (VAS), a continuum along which pain is recorded from "no pain" to "severe pain". A VAS consists of a 10cm horizontal line with end-points that are anchored by descriptors such as, "no pain" and "unbearable pain". The patients respond to a VAS by placing a mark at the point along the scale that best represents the intensity of their experience (Bradley 1993:181). This scale is especially useful when comparing the severity of a patient's pain at different times.

Pain intensity may also be measured using word descriptors. The patient may use words like "none", "mild", "moderate" and "severe" to rate pain (Fuller & Schaller-Ayers 1990:290). Another method of rating pain intensity is the use of the McGill Pain Questionnaire (MPQ). The MPQ consists of a 20-word verbal rating scale. The verbal pain descriptors within each scale are rank ordered in terms of pain intensity. Patients must examine each of the twenty scales and choose from each relevant scale one descriptor that best describe their subjective pain experience at that moment (Bradley 1993:180).

Barker et al (2001:172) refer to Steer's (1983) study of women in labour in the United Kingdom, in which 93,5% of the women described labour pain as severe or intolerable, and Ranta's (1995) study in Finland, in which 80% described it as very severe or intolerable.

The present study intended to explore Mozambican women's experience of labour pain. The respondents were required to describe in detail their experience of labour. Severity of labour pain was evidenced in their use of word descriptors like "unbearable" and "intolerable" (see chapter 4).

Character. While intensity is a quantitative measure of pain, *character* is a qualitative measure that uses verbal or pictorial descriptors and analogies to describe pain. For example, a patient might describe her pain as "aching", "pricking", "stinging", "burning" or "nagging", or she might use an analogy such as "It feels like a hot iron pressed against me", or "It's like a knife".

Because some types of pain are more unpleasant than others, pain character can greatly influence the individual's perception of pain intensity (Creager 1992:412; Jimenez 1996:58). Barker et al (2001:173) used the verbal response scale, which utilises adjectives such as "mild", "moderate" or "severe". It also measures sensory descriptors, such as "throbbing", "stabbing" or "cramping", and affective (e.g., "sickening", "punishing", "cruel").

Location. Pain location refers to the body site where the pain is perceived to exist by the person experiencing it. The location of pain often provides a clue about the etiology of pain being experienced. Location can affect individuals' level of distress by affecting their ability to function or to enjoy a sense of wellness. For example, head pain is often quite distressing because it can interfere with individuals' ability to concentrate, thereby decreasing their ability to function and to enjoy, as well as to use attention-focusing strategies to manage pain (Jimenez 1996:57). Pain, classified by location, may be superficial or cutaneous, deep or visceral, or referred or radiating (Potter & Perry 1997:1167). Labour pain is usually located in the lower back and radiates around the waist. The location usually depends on the stage of labour.

2.2.1.6 Types of pain

Five types of pain may be distinguished on the basis of location, namely somatic, visceral, phantom, causalgia and neuralgia.

Somatic pain originates in the trunk, extremities, skin or bones. Superficial somatic pain is localised pain that originates with coetaneous nerve fibres and is called **epicritic pain** (e.g., the pain that occurs after a

first degree burn). Deep somatic pain, which is not as localised, is called **protopathic pain** (e.g., the pain that results from a sprained ankle (Miller, Drackontides & Leavell 1987:200; Fuller & Schaller-Ayers 1999:289). However, women do experience somatic pain during labour as the presenting part descends there is intense pain on the cervical, vaginal and peripheral tissues (Dickason, Silverman & Schult 1993:375).

Visceral pain originates in the internal organs and is caused by factors such as ischaemia, spasm, or acidosis. Visceral pain is often called referred pain because pain radiates away from the origin of pain, or the patient feels the pain at a location other than the origin (Fuller & Schaller-Ayers 1999:289; Jimenez 1996:56). Labour pain is typical visceral pain because the pain is referred to other parts of the body from the original site, the uterus. The uterus becomes the origin of the painful stimuli. Nerve endings deflect the pain sensation to other body parts that they simultaneously supply. The client then experiences the pain as if it is localised in that particular body part. For example, the woman may experience low backache whereas the pain originates from the dilating cervix (Dickason et al 1993:175; Reeder, Martin & Koniak 1992:516).

Phantom pain is usually perceived to be in a missing extremity or body part. For example, the patient may feel right lower leg pain following an above-knee amputation. Nerve fibre alterations at the amputation site probably contribute to this particular type of pain (Fuller & Schaller-Ayers 1990:288). Phantom pain does not occur in labour because there is no involvement of missing extremities in the experience of labour.

Causalgia is an intense, burning pain following traumatic injury that involves the peripheral nerves of an extremity. The pain is severe in relation to the initiating trauma (Melzack & Wall 1975 cited in McGuire 1984:153; Fuller & Schaller-Ayers 1990:289). In labour, causalgic pain occurs because the traumatic tearing of the birth canal involves the peripheral nerves of the lower extremities, and the woman suffers pain on the inner thighs during the delivery of the baby's head (Reeder et al 1992: 516).

Neuralgia refers to intense, burning pain along the distribution of a peripheral nerve. The pain may occur after a nerve's "trigger zone" has been stimulated in the area of pain (Fuller & Schaller-Ayers 1999:289; Jimenez 1996:59). Disease or injury affecting the nervous system produces a wide range of pain syndromes, including trigeminal neuralgia said to be the most severe of all pain. However, neuralgia does not occur with labour and delivery.

Duration. The duration of pain is significant because many pain signals travel along small-diameter nerve fibres that, with repetition, become more responsive to the pain signal. Pain duration is also important because experiencing pain consumes physical, mental, and spiritual energy, all of which are gradually

exhausted as the pain continues, leaving the individual fatigued, and in some cases, feeling hopeless, desperate, and powerless (Jimenez 1996:57; Potter & Perry 1997:1165). The duration of pain during labour is determined by the uterine contractions. If the contractions last more than 35 seconds, the individual usually feels desperate, fatigued and powerless. Some women actually verbalise their feeling of loss of power.

2.2.2 Pain in labour

The pain of labour has been proven to be among the most severe types of pain. Labour pain is still painful even after prepared childbirth training (Melzack, Taener, Feldman & Kinch 1981:357). In the Old Testament of the Bible, pain during labour was seen as a form punishment for sin. In Genesis (3:16), God said to the woman, "I will greatly increase your pangs in childbearing; in pain you shall bring forth children..." (*Women's Devotional Bible* 1995:4). In his study, Jimenez (1996:53) states that pain and discomfort are integral concepts of childbirth education. Establishing a common vocabulary for these concepts allows for a comprehensive exploration of concepts themselves and important issues relating to pain and comfort. Mander (2000:134) explains that labour pain represents disharmony between the body and the mind, resulting in a dualistic splitting of the mind from the body.

2.2.2.1 *Physiology of labour pain*

In labour, two different kinds of pain occur: visceral and somatic. The first kind, **visceral pain** is generally experienced during active dilatation of the cervix, cervical stretching and uterine contraction intensity. Visceral pain is transmitted slowly through unmyelinated fibers; and felt as dull, diffuse, persistent or aching sensations. During the first stage of labour, the nerve impulses enter the sympathetic chain at L1 to L5 and then travel to the posterior roots of the tenth, eleventh and twelfth thoracic nerves and up the spinal cord to the thalamus (Dickason et al 1993:375). Secondly, **somatic pain** usually begins during the transition phase because the descent of the presenting part is speeded up (Fuller & Schaller-Ayers 1990:291). The pressure of the foetus on the cervical, vaginal and peripheral tissues is intense. These pain sensations travel primarily via the pudendal nerves through the dorsal roots of the second, third, and fourth sacral nerves (Dickason et al 1993:376).

2.2.2.2 *Labour pain experience*

Labour pain is the result of a complex and subjective interaction of multiple physiologic and psychological factors on a woman's individual interpretation (Lowe 1996:85). The discomfort and pain of childbirth are unique. Hence, some women expect this experience for a normal outcome of labour (Reeder et al

1992:513). The experience of labour pain is very complex, with many variables apart from the physical cause that can influence the experience and interpretation (Schofield 1995:703). The meaning of pain in general and for labour pain in particular is examined in terms of religion, philosophy, spirituality, biology and nature (Mander 2000:134). Bonita (1975:447) cited in Morse (1992:95) states that "women say that the pain of childbirth is powerful, intense, overwhelming, cramp-like, stretching, burning, pressing, tiring and exhausting". Labour refers to the 'work' of birthing". The pain of labour demands action; it forces women to ask what is to be done during the experience of labour (Morse 1992:95). According to Morse (1992:990), grunting, screaming, walking, finding a comfortable position, active relaxation, breathing pattern, and focusing away from the state of suffering are some of the responses to pain due to labour. The expression of pain is a way of communicating the experience of pain.

The experience of pain during labour is due to the following three factors:

(1) *Uterine contractions*

Uterine contractions are unique among involuntary muscle contractions in that they cause pain. Contractions of the heart, stomach and intestines also involve involuntary muscles but do not normally cause pain. Uterine contractions constrict blood vessels, reducing the blood supply to the uterine and cervical cells, resulting in anoxia. This anoxia causes pain in the same way that a blockage of the cardiac arteries causes pain in heart angina. During the first stage of labour, pain is located in the region of the uterus and its adnexae (Molina, Sola, Lopez & Pires 1997:98). As the labour progresses and contractions become longer and harder, the ischaemia to cells increases, the anoxia increases and the pain intensifies (Pilliteri 1992:527).

(2) *Stretching of the cervix and perineum*

Stretching of the cervix and perineum is another source of pain during labour. The pain results from the pressure of the presenting part to the cervix and lower uterine segment that causes it to dilate (May et al 1990:586). When the stretching of the cervix is complete, the woman begins to feel the desire to push. Pain from the contractions marginally disappears as long as the woman is pushing, until the foetal presenting part causes the final stretching of the perineum (Barker et al 2001:172; Molina et al 1997:98; Pilliteri 1992:526).

(3) *Pressure on organs surrounding the reproductive tract*

Discomfort and pain may be due to pressure of the foetal presenting part on other organs surrounding the reproductive tract. Traction and pressure may be exerted on the adnexae and parietal peritoneum and structures that envelop it. The urinary bladder, urethra and the lower colon may also be extensively stretched as the foetal head descends through the birth canal (Molina et al 1997:98; Pilliteri 1992:527). Barker et al (2001:172) add that "the position of the foetus, descent of the presenting part, stretching of the perineum and pressure on the bladder, bowel and sensitive pelvic structures also contribute to pain".

2.2.2.3 Factors influencing perception of pain during labour

The way women in labour perceive and react to pain is affected by different factors such as the following:

(1) *Fear and anxiety*

Fear and anxiety compound the individual's response to pain. Leaving the woman alone to cope with the experience of labour without any form of support may cause anxiety. Failing to cope well, as well as a previous bad experience, may increase anxiety (Bennett & Brown 1998:184; Pilliteri 1992:527). The pain most women expect to feel can provoke anxiety and fear because it is unknown (Beaton & Gupton 1984:47 cited in Gibbins & Thompson 2001:302). The woman may also be anxious about the health of the baby, and this may affect her experience of labour pain (Sheiner & Sheiner 1999:299).

(2) *Personality*

Personality plays an important role in perception of pain during labour since the woman who is naturally tense and anxious will not cope as well with stress than one who is relaxed and confident. This is partly why some people prefer to express their discomfort while others prefer to keep their feelings to themselves. It all depends on the personality type (Andrews & Boyle 1995:305; Bennett & Brown 1998:184; Pilliteri 1992:527).

(3) *Cultural and social factors*

In addition to personality, cultural and social factors also influence perception of pain during labour. Culture is a component of the social features of a human environment and, as such, needs to be kept in mind when rendering care to a clientele of different cultural backgrounds (Howard & Berbiglia 1997:665). The pain experience and response take place within an elaborate cultural context, in which the client, the family, and

the communities respond in socially patterned ways (Zborowski 1984:95). Morris (1991:57) states that the experience of pain is within the cultural field and is as unique as the skylines of the world's major cities.

Cultural factors are an integral part of providing total health care to the public. When properly regarded, cultural factors assure maximising human potential as nurses create an environment that addresses the health status of individuals, families and communities. Mendyka & Bloom (1997:180) stress the relevance of culture for nursing. They maintain that nurses' work is incomplete without the affirmation of cultural awareness that deserves societal recognition. This applies specifically to rendering care to different ethnic groups, and to something as generally experienced as pain.

(4) *Expectations*

All women seem to develop expectations of childbirth, and their expectations vary and are also determined by their cultural background. Childbirth represents the most painful event that most women will experience in their lifetime. The experience is never the same. It may differ between women, between labours and between the different stages of labour (McCrea, Wright & Stringer 2000:493-494).

People's response to pain is based on cultural expectations and individuals' reactions (Bennett & Brown 1998:180). In some cultures, for example the Swazi culture, women are expected to respond stoically to labour pain. If she cries when in labour, this is seen as a sign of cowardice. The way individuals are expected to respond to labour pain may be due to parental influence (McInerney 1998:35). The girl child may have been socialised that the proof of womanhood is to behave stoically when in labour. Health education in antenatal clinics for labour preparation classes may also contribute to individuals' perceived reactions to labour pain (McInerney 1998:37).

In a study on the expectations of labour pain among primiparous women in the late first stage of labour, Terry and Gijbers (2000:143) made comparisons of assessments of pain obtained before birth, during birth, shortly after birth, and approximately one month after birth. The study allowed the investigation of the consistency of reports of labour pain based on memory and whether these memories are influenced by prior expectations of labour pain or the actual experience of pain in the first stage of labour. The purpose of the study was to determine the accuracy of delayed reports of overall labour pain based on memory and whether these memories are biased by expectancies of the nature of labour pain, formed before the labour pain experience. The results revealed that these women actually experienced less pain compared to the pain intensity they expected before labour (Terry & Gijbers 2000:149). It was also discovered that memories of labour pain were not influenced by the experience of pain during the first stage of labour. In the present study, the participants were merely asked to describe their pain experience. Their descriptions

of labour pain were not compared with any factors such as expectations because “expectations” were not a prerequisite for their experience.

2.2.3 Cultural aspects of pain and labour pain

Pain is a private experience that is deeply personal and influenced by cultural heritage (Davidhizar, Dowd & Giger 1997:346). Culture is people’s entire non-biological inheritance (Hufford 1997:723). Leininger (1985:209) defines culture as the “learned, shared and transmitted values, beliefs, norms and ways of life of a designated or particular group which are generally transmitted inter-generationally and influence one’s thinking and action modes” (McFarland 1996:2). Culture defines the framework by which experience, perception and world-view are patterned and given meaning (Mendyka & Bloom 1997:180).

Culture is shared between people in the form of meaningful symbols communicated through human relationships, transmitted and perpetuated between persons over time. Cultural differences and similarities prevail among various cultures in their respective childbirth practices, but these are still limitedly explicated and understood from a transcultural nursing perspective. Such phenomena are of vital interest to nurses and nurse-midwives, who are expected to provide culture-competent care to mothers during childbirth (Finn 1994:25).

Culture has long been recognised in nursing practice and research as a factor that influences a personal expression and reaction to pain (Villaruel & Ortiz De Montellano 1992:23). Thus, understanding culture is critical when dealing with clients in pain (Andrews & Boyle 1995:301). There are also variations within and among people and cultures.

In addition, Morris (1995:2) states that pain is as elemental as fire or ice and that the experience and construction of pain is decisively shaped or modified by individual human minds and specific human cultures.

Labour is very painful for most women. However, how each woman is able to cope with it depends on factors such as cultural attitude to normalcy and conduct of birth, expectations of how a women should act in labour and the degree and quality of social support (Lauderdale & Greener 1995:110). In this regard, according to Helman (2001:147), not all social or cultural groups may respond to pain in the same way; how people perceive and respond to pain, both in themselves and in others, can be largely influenced by their cultural background, how and whether people communicate their pain to health professionals and to others can also be influenced by social and cultural factors.

Cultural attitudes to the normalcy and conduct of birth clearly differ. As Jordan (1993:52) explains, "What is of interest is not whether women do or do not experience pain, but rather what sort of an object pain becomes in different systems: is it highlighted or discounted?"

In Jordan's (1993) study of childbirth in Yucatan, Holland, Sweden and the USA, she concluded that the experience of labour pain is more visibly displayed in the USA than in Holland, Sweden and Yucatan. Similarly, Rajan's (1993:88) study revealed that some women found their experiences of pain were not recognised by professionals.

Cultural and social factors play a significant role in the way different ethnic groups perceive and react to labour pain. In some cultures, behavioural responses, such as facial grimacing and screaming, are discouraged (Odent 1984:32). The women may have been socialised to believe that labour is a form of illness and expect to feel ill and in distress because pain is associated with disease. Those who perceive labour as a wellness activity expect to remain calm and quiet during the process. It is necessary to assume that the ability to cope with labour pain is a learned behaviour that may be culturally determined. Mander (2000:135) maintains that "the original 'observations' of the cultural meanings of pain were made by missionaries, travellers and other laymen (even some medically trained persons). These 'observations' were little more than assumptions that so-called 'primitive' peoples are less sensitive to pain than their 'civilised' counterparts."

It is essential to understand cultural differences in individuals as they relate to their cultural backgrounds. It is also important to appreciate that all people are unique and thus, it would be impossible not to bring personal beliefs and values to the health care environment. The implication for nurses and nurse-midwives is to avoid stereotyping clients according to their ethnic origins. All clients, regardless of cultural heritage, must be considered unique. It is therefore essential that nursing/maternity care be flexible and uniquely tailored to each client based on the client's cultural values, beliefs and behaviours (Davidhizar et al 1996:99).

In a study of nurses' knowledge of and attitudes to culturally different patients, Rooda (1993:213) found that the knowledge nurses have about culturally different patients is related to their educational preparation. Midwives should recognise and respect the uniqueness and dignity of each patient and client, and respond to their need of care, irrespective of their ethnic origin, religious beliefs, personal attributes, the nature of their health problem or any other factor. There is a need for a concerted effort to improve the education of all midwives on issues of race and culture, to endeavour to redress the effects of discrimination and institutional racism in order to promote equality in the maternal services (Neille 1996:16).

In Swaziland, there is no documented cultural socialisation of young girls in preparation for labour. However, in the researcher's personal experience as a Swazi woman, a woman is supposed to be stoical in labour and not cry out in response to pain because that reflects poorly on her family. Lefeber (1994:25) cited in Chalmers (1990:21), who found that "crying out in labour reflects poorly on the woman's family preparation for childbirth". It is also believed that such behaviour is likely to be repeated throughout her childbearing period.

Krige (1965:63) describes Zulu observances that are said to render the birth successful. These include infusion of certain plants, such as *uHlakahla*, covered in a pot from which the woman drinks a spoonful now and then. This medicine (*siHlambezo*) renders the birth successful, with rapid delivery, presumably reducing the period of suffering due to labour pain. There is, however, no mention of the expected behaviour in response to labour pain.

Makoe (2000:48) found that in Lesotho, traditional birth attendants do not regard pain as a danger sign therefore management of pain during labour is of less concern.

Some women prefer to experience labour to the full. Chalmers (1990:88-91) found that "in order to have a full, worthwhile experience ... some women used the 'going with' the pain approach". Women using this approach report that labour is painful but that it also leaves them with a sense of reality, coupled with achievement and satisfaction. At the same time, the mother does not feel torn by the conflicting attempts to reduce the pain when her natural inclination is to reduce it. The woman is prepared to go through the experience for the reality of labour and her ability to cope with it (Chalmers 1990:91).

2.2.4 Transcultural nursing

Transcultural nursing is the creative synthesis of scientific and humanistic knowledge from the people's emic perspectives and with the best professional etic knowledge to provide meaningful congruent health care practices (Leininger 1997:53). Hence, *transcultural* health care relates to diverse ethnic communities. The indigenous population in a country has its own culture. Despite being the dominant culture, it should not dominate in the study of health care needs with other cultures seen as add-ons (Le-var 1998:529). *Transcultural* nursing is both a scientific and humanistic discipline that requires nurses to understand the holistic and compassionate needs of cultures, but also draw upon available research-based nursing care knowledge that fits the people's needs and ways of life (Leininger 1997:54). The meanings, patterns, and expectations of lived through experiences of people and their humanistic life conditions must be considered scientific knowledge (Leininger 1997:55).

It is not appropriate or adequate to treat all patients or clients the same, irrespective of their race or colour. Each patient or client must be treated as an individual with sensitivity to the particular cultural background (Le-var 1998:530). This *transcultural* phenomenological study was specifically aimed at acquiring such sensitivity with reference to Mozambican women's experience of labour pain.

Transcultural nursing aims to "provide knowledgeable, sensitive and skilled nursing care to people of diverse cultures" (Jeffrey & Smodlaka 1998:219). Transcultural nursing skills are those skills necessary for assessing, planning and evaluating culture-specific nursing care (Jeffrey & Smodlaka 1998:220). It is therefore suggested that education for *transcultural* health care should be integrated into the whole curriculum instead of being seen as a section of it. It should constitute the ethos of the curriculum with ethnicity as a comparable variable (Jeffrey & Smodlaka 1998:224). Nurses themselves represent a variety of cultures and ethnicities and often find themselves working with one another as colleagues and scholars, as well as with patients whose cultures may be different from their own. From the standpoint of nursing science, an understanding of culture helps to clarify people's explanation of and responses to illness and other experiences in ways that are personally meaningful (Ferguson 1997:195). It is therefore imperative for nurse-midwives to learn about differences and similarities among cultures in the world in order to serve clients effectively and work well with other nurses world-wide (Finn & Lee 1996:35).

Culture influences every aspect of the experience of pain for patients, family caregivers and health professionals, including the pain perceived and manifested (Juarez, Ferrell & Bonerman 1998:206). Differences in pain meanings and behaviours vary across cultures and are affected by cultural meanings and expectations associated with different groups. When caring for patients from a different culture or ethnic group than their own, nurses should be aware of ethnocentrism and stereotyping. Ethnocentrism is the mistaken belief that the provider's ethnic group is superior to other cultures or ethnic group. This conscious or subconscious belief can interfere with provision of adequate health care services to individuals from cultural or ethnic groups other than the provider's. Stereotyping patients by assuming that all persons from a particular culture or ethnic group will have the same response to pain must be avoided (Salerno 1995:560). Cultural background has to inform and influence a women's perception of pain during childbirth (Holroyd, Yin-King, Pui-Yuk, Kwong-Hong & Shuk-Lin 1997:66).

2.2.5 Research outcomes on pain in general, labour pain and cultural aspects of labour pain

2.2.5.1 Pain in general

Pain is a universal phenomenon that affects the quality of life of individuals from every culture (Juarez et al 1998:203). Physical and emotional pain is an inevitable part of human existence and is without natural

antidotes. For this reason, Kanji (2000:143) proposes the widespread application of autogenic training as a relaxation technique that has been found to confront pain effectively and also reduce drug dependence substantially. Schwartz, Douglas, DeGood and Shutty (1985:806) state that patients' beliefs, attitudes and expectations about their pain and treatment are important and under-evaluated aspects of the assessment process. Schwartz et al found no specific instrument for direct assessment of these beliefs as they relate to pain experience and treatment.

In their study of pain behaviour among patients with chronic pain, Vlaeyen, Pernet, Kole-Snijders, Schuerman, Van Eek and Groenman (1990:337) found that pain behaviour could be characterized along three dimensions: withdrawal approach, high arousal-low arousal, and visible-audible. In addition, they identified nine components of pain behaviour commonly exhibited by patients with chronic pain: (1) anxiety, (2) attention-seeking, (3) verbal pain complaints, (4) medication use, (5) general verbal complaints, (6) distorted posture and mobility, (7) fatigue, (8) insomnia, and (9) depressive mood.

2.2.5.2 Labour pain

In their study, Molina, Sola, Lopez and Pires (1997:100) found a relationship between the parturient position and her abdominal and lumbar pain during the first stage of labour. Molina et al noted that, in the first stage of labour, the pain intensity of most patients was not influenced by their position. However, as dilatation increased, differences emerged. More patients felt less pain in the recumbent position than in the erect position. The percentage of patients who found no differences in pain between the two positions was the lowest when the cervix was 8 to 9 centimetres in dilatation.

In a study on women's experience of pain during childbirth, Lundgren and Dahlberg (1998:105) identified four themes: (1) Pain is hard to describe and is contradictory; (2) Trust in one's self and one's body; (3) Trust in the midwife and husband and (4) Transition to womanhood. The women felt that pain was a natural part of the delivery process, and the strength and power to cope with it came from within the woman. Lundgren and Dahlberg (2002:156) found that midwives could help birthing women to find their own ability to cope, and should interfere only if the woman asks or if the natural process is disturbed, for example, by complications. The experiences of pain during childbirth together with the experience of childbirth give a satisfying meaning to the women (Lundgren & Dahlberg 1998:108). McCrea, Wright and Stringer (2000:498) found that personal control is a central feature of women's involvement in their childbirth experiences. Knowledge of Mozambican women's experience of labour pain might assist in allowing those women to empower themselves. Burns, Blamery and Lloyd (2000:639) examined whether aromatherapy could facilitate maternal coping mechanisms during labour by improving mothers' sense of well-being, reducing anxiety and fear and influencing the perception of pain. They discovered that

aromatherapy was very effective in reducing the severity of pain during labour. The oil was applied to the abdomen and the smell of the plant produced a pain-reduction effect by improving the sense of well-being, reducing anxiety and fear, thus influencing the perception of pain (Burns et al 2000:641).

McCrea et al (2000:493) identify usefulness of antenatal training and pain intensity coping as predictors of personal control of pain. However, Melzack et al (1981) and Niven and Gijbers (1984) cited in McCrea et al (2000:494) suggest that primigravidae experience more intense pain during labour than multigravidae and multigravidae possibly draw on their previous experience to cope with labour pain. If this is the case, then it is reasonable to suggest that prior experience could enhance coping abilities and thereby confidence to 'bear' labour pain. These findings are however, beyond the scope of this present study, which does not compare the labour pain experiences according to parity, but merely describes these experiences.

Axe (2000:636) states that pain and the distress of labour is quickly forgotten once a woman holds her healthy baby in her arms. This suggests that the joy of holding the baby temporarily diverts the woman's attention from the pain to attending to the baby in appreciation of an achievement. This diversion of attention from the painful experience to the appreciation of the baby makes the woman forget the suffering.

2.2.5.3 Cultural aspects of general pain and labour pain

Pain is a universal phenomenon that affects the quality of life of individuals from every culture. The perception of childbirth pain holds cultural variations on what constitutes a positive and satisfying experience (Bryanton, Frazer-Davey & Sulhman 1994:640). Culture influences every aspect of pain experience for patients, family caregivers and health professionals, including the pain perceived manifested and treated by patients and families (Juarez, Ferrell & Bonerman 1998:202).

2.2.5.3.1 General pain

Salerno (1995:561) states that cultural responses to pain fall into two categories: stoic and emotive. Stoic patients will be less expressive of their pain and will "grin and bear it" with minimal complaints. Emotive patients are more vocal and expressive. Andrews and Boyle (1995:305) refer to Reizan and Maleis (1986), who found that Arab-Americans had a present-time orientation to pain similar to Zborowski's findings with Italian-Americans. Arab-Americans tended to focus on the immediacy of pain. Pain was viewed as an unpleasant experience to be avoided or controlled at all costs. Responses were private and reserved for immediate family members (Andrews & Boyle 1995:305). Calatrella (1990:25) found that Mexican-Americans rarely acknowledge signs and symptoms of pain because they consider lack of stamina a sign

of weakness. However, these individuals may moan while in pain because this is seen as an acceptable expression of pain and may be used as an attempt to relieve pain.

According to Andrews and Boyle (1995:305), in a comparison of Italian-American and Irish-American women experiencing pain, Zola (1983) found that Italian-Americans tended to admit to pain and presented significantly more symptoms than Irish-Americans.

Garro (1990:34) reviewed a number of studies on culture, pain and cancer and reported differences in pain response among Jewish, Italian and American cancer patients. The Jewish and Italian patients were more vocal and demanding of assistance when in pain, whereas the American patients were more apt to conceal pain. Jewish patients worried more about the meaning and source of their pain as well as long-term health effects.

Davitz, Davitz and Higuchi (1977:521) studied "cross-cultural inferences of physical pain and psychological distress" in Puerto Rican, European and American nurses. In Puerto Rico, people are expected to show how they feel. The European nurses said that in their country stoicism and self-control were expected when someone underwent physical and emotional upsets, and the American nurses said that Americans conceal their suffering.

Nayak, Shiflett, Eshun and Levine (2000:135) examined beliefs about appropriate normative pain responses among college students in the USA and India. They also examined differences in pain tolerance and intensity ratings. Participants in India were less accepting of overt pain expression than those in the USA. Consistent with their beliefs, Indian participants had a higher pain tolerance than those in the USA.

2.2.5.3.2 Labour pain

Callister and Vega (1998:292) found that Guatemalan women in labour tended to vocalize pain and considered birth a natural but painful experience. They exhibited several behavioural responses to pain, such as moaning or breathing rhythmically, rubbing their thighs and abdomen to help cope with the pain. These women were offered herbal teas to relieve pain during labour and the postpartum period.

Holroyd et al (1997:69) found that Hong-Kong Chinese women perceive pain-free labour as a positive experience because women were able to maintain control. The alleviation of pain by the administration of analgesics in the first stage of labour was among the most important behaviours of Hong-Kong midwives (Tarkka & Paunamen 1996:73).

Choudhry (1997:533) studied the traditional practices of women from India and found that the women usually cry with pain and scream as the birth approaches.

In a study of episiotomy pain, Flannery and McGovern (1981:46) reported no significant differences in pain response among African-American, Anglo-Saxon Protestant American, Irish-American, Italian-American, and Jewish-American women. While no significant differences are noted between the groups in the degree of pain or the number and types of symptoms experienced, anxiety levels were significantly different. The Anglo-Americans reported less anxiety and were most willing to face and deal with the pain associated with episiotomy.

In a study of Iranian patients in Australia, Omeri (1997:5) discovered that a lack of cultural knowledge seems to be the core of stereotyping and misunderstanding. Knowing the cultural meaning of care that fits with the client's traditional beliefs and expectations could enable midwives to provide culture congruent maternity care to a different cultural group.

McInerney (1998:38) studied European childbirth practices and discovered that during the intrapartum period, women in labour respond to their cultural expectations and norms. Some expect labour to be agonising, while others cope with labour as if it were an everyday occurrence. Zborowski (1989:151) reported that Jewish and Italian patients were more likely to openly express pain than Irish and American patients. Factors that may influence behaviour in labour include past experience, expectations and ideas about childbirth, and expectations of one's own body.

In a study on the lived experience of giving birth for Guatemalan women, Callister and Vega (1998:290) found that the women manifested a stoic acceptance of labour. The predominant themes found in the interviews were (1) a sense of the sacredness of childbearing, (2) the need to rely on the Lord during pregnancy, childbirth and childbearing, and (3) the bittersweet paradox of childbirth (Callister & Vega 1998:292).

According to Lefeber (1994:25), whether or not a woman is supposed to scream during labour is culturally related. He goes on to say that not much information about this from different cultures in Africa could be traced. Some information was found in Sierra Leone (Mende people) and South Africa (Zulu, Xhosa people) where it has been reported that traditional birth attendants do not allow a parturient woman to make any noise (Chalmers 1990, Kuntner 1988 and West 1981 cited in Lefeber 1994:25).

In a study of traditional Zulu practitioners and obstetric medicine, Gumede (1978:824) found that the Zulu community has a great deal of knowledge about pregnancy, labour and delivery and stress the value of

observing certain taboos that guide the pregnant woman and her foetus throughout pregnancy. An example of taboos included avoiding crossing highways or byways lest she cross *imikhondo*, the path crossed by wizards and witches, which could harm the baby. The antenatal medication given during pregnancy was *imbelekisane* or *isihlambezo* so that her confinement should be quick, easy and effortless.

In the literature review, the researcher could not find any literature on Mozambican cultural beliefs and practices on pregnancy, labour and delivery with special focus on the perception of pain by this cultural group hence the need to conduct the present research. Some Swazi cultural beliefs and practices pertaining to pregnancy, labour, delivery, perception and reaction to labour pain as well as taboos observed during pregnancy are known to the researcher. However, no literature could be found on these. In this culture, women are expected to exercise stoicism during labour. Crying during labour is viewed negatively because of the belief that this behaviour could be repeated in subsequent confinements. The negative part is that this behaviour is highly likely to be passed on to the offspring. One of the food taboos is that a pregnant woman should not eat oranges during pregnancy because the baby will get jaundice.

2.3 CONCLUSION

This chapter covered the literature review on the research topic and discussed general pain, its physiological manifestations, perception of, reaction to and measurement of its dimensions; pain during labour, its physiological manifestation and experience; cultural aspects of general pain and labour pain, and transcultural nursing.

Chapter 3 discusses the research design and methodology.