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ACCESS TO LABOUR PAIN RELIEF: PERSPECTIVE OF POST-NATAL WOMEN WITHIN THE ACCRA METROPOLIS

BY

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LIST OF ABBREVIATIONS

IRB:	Institutional Review Board
LPR:	Labour Pain Relief
NHIS:	National Health Insurance Scheme
SVD:	Spontaneous Vaginal Delivery
TENS:	Transcutaneous Electrical Nerve Stimulation
WHO:	World Health Organisation

ABSTRACT

Pain during child birth is unparalleled, it is a global phenomenon that pervades all societies regardless of race, creed, geographical location and economic status. In Africa, attitudes, perceptions and beliefs regarding pain during vaginal birth influence the whole experience of child birth. The concept of access to labour pain relief during spontaneous vaginal delivery (SVD) has not been explored much; this qualitative study was therefore conducted to explore access to labour pain relief among post-natal women who had SVD in the Accra Metropolis, Ghana. An exploratory descriptive design was used to achieve the aim of the study, purposive sampling technique was used to recruit participants and data saturation was achieved with twelve (12) participants. Individual interviews were done and audiotaped, verbatim transcriptions were made and analyzed qualitatively using thematic content analysis. The study was guided by the Access to Health Care Model developed by Penchansky and Thomas, (1981). Findings revealed five main themes namely; availability of labour pain relief, accessibility of labour pain relief, accommodation of LPR, affordability of LPR and acceptability of LPR. This study revealed that post-natal women had similar experiences with labour pain management. They experienced immense pain and were ignored amidst shouts for help with pain management; the limited labour pain relief options available were not easily accessible to the women, there was no antenatal education and preparation for the management of labour pain and despite being registered with the NHIS, women had to pay exorbitant fees for delivery services. In conclusion, it is recommended that health care facilities must ensure the availability of LPR as part of routine care during labour, women in labour should have access to effective pain management, finally, delivery services should be covered by the NHIS and should include all forms of labour analgesia.

Key words: Access, labour pain relief, spontaneous vaginal delivery, post-natal women.

CHAPTER ONE

This chapter describes the background of the study, problem statement, purpose and objectives of the study, significance of the study and operational definitions of key terms.

1.1 Background of the study

Labour pain dates back to biblical times when God cursed the first woman with pain during childbirth. Over the years, it's been handed over from generation to generation that the pain of labour is instituted by God and is to be endured rather than alleviated (Aziato, Acheampong, & Umoar, 2017; Aziato, Odai, & Omenyo, 2016; Sruthi, 2013; Tarekegn, Lieberman, & Giedraitis, 2014). Indubitably, many women have the impression that childbirth is painful and every woman must experience it, though some few experience no pain (Ampofo & Caine, 2015; Czech et al., 2018). Labour pain is unparalleled; the pain involves both physiological and psychological processes in the woman's body (Beigi, Broumandfar, Bahadoran, & Abedi, 2010).

The pain together with its management is an intricate fusion of physical and psychological factors and not limited to the nerves (Czech et al., 2018; Klomp, Witteveen, de Jonge, Hutton, & Lagro-Janssen, 2017). During the first stage of labour, the parturient experiences pain from the uterus, cervix, pelvic joints and ligaments, and during the second stage, from the vagina and perineum owing to stretching of both vagina and perineum to accommodate the foetus that would be born. But fear and tension makes the pain experience much more frustrating (Czech et al., 2018; El-Wahab & Robinson, 2011; James, Prakash, & Ponniah, 2012; Marshall & Raynor, 2014; Sruthi, 2013). Despite the changes in the body that initiate the pain of labour, labour is not a permanent experience hence relieving it is subject to several cultural and social factors that are however subject to change (Almushait & Ghani, 2014).

It is commonly known that labour is one of the most painful experiences of a woman's life (Aziato, Kyei, & Deku, 2017; El-Wahab & Robinson, 2011; Hosseni, Pilevarzadeh, & Vazirinasab, 2016). Authorities in the fields of obstetrics and anaesthesia around the world encourage the use of labour analgesia to improve the overall experience of labour and prevent potential adverse effects (Czech et al., 2018). Unlike in high-income countries, labour pain relief in Africa is not a well-established service, especially in low-income countries like Uganda, little is known about whether laboring women would be amenable to labour analgesia (Nabukenya , Kintu, Wabule, Muyingo, & Kwizera 2015)

For many pregnant women the pain that comes with labour presents with a lot of anxiety and fear, very often there are psychological impacts of these on the whole labour experience. However, there are several ways by which labour pain can be managed to improve the whole labour experience. Involving women in decisions leading to pain management in labour greatly influences and improves the experiences women have with childbirth (Czech et al., 2018; Mansour Lamadah, 2016). Decisions regarding pain management techniques during labour and birth are prominent in public and clinical discussions, antenatal education and within the birth plan of many women (Karn, Yu, Karna, Chen, & Qiao, 2016; Lally, Thomson, MacPhail, & Exley, 2014). Most women expect to experience some degree of pain during labour, however, the majority feel that pain should be relieved, although many also hold concerns about the harmful effects brought about by the use of pharmacological pain management techniques (Pilewska-Kozak et al., 2017; Thomson, Feeley, Moran, Downe, & Oladapo, 2019). These concerns may be informed by reported links to adverse birth outcomes associated with indiscriminate use of pharmacological pain management options such as epidural and pethidine. As such, the factors that drive the use of labour pain management techniques have received the attention of researchers although most of

this attention has focused on pharmacological rather than non-pharmacological pain management techniques, with a primary consideration for epidural anaesthesia (Steel et al., 2015)

Pain relief during labour has undergone progressive advancement since 1847, when Simpson identified that chloroform could relieve labour pain, his findings were not received favourably owing to the notion that parturition is a physiological process best managed with little interference as possible (Barakzai, Haider, Yousuf, Haider, & Muhammad, 2010; Ezeonu et al., 2017). Though pain relief used in labour has gained grounds and is popular in the global obstetric world, its use in low income countries is worryingly inadequate (Okojie & Isah, 2014; Thomson et al., 2019). In a study conducted in Uganda to assess the knowledge, attitudes and use of labour pain relief among women who attended antenatal clinic, of the 1293 participants interviewed, only 7% of the participants had knowledge of labour analgesia. Of the multiparous mothers, 87.9% did not have labour analgesia in their previous deliveries, although 79.2% of them had delivered in a national referral hospital and 87.7% of the participants wanted labour analgesia for their next delivery. In that study, the commonest reason for refusal of labour analgesia was to experience natural childbirth. (Nabukenya et al., 2015).

Beliefs surrounding labour pain dates back to Biblical times and is intertwined with religion and spirituality, hence despite contemporary health care assuring women of labour pain relief that is evidence based, the faith of the midwife may influence midwifery service regarding labour pain relief (Aziato, Ohemeng, & Omenyo, 2016; Ohaja, Murphy-Lawless, & Dunlea, 2019). Despite the clear consensus that pain relief should be available, approximately 80% of the world population has either no, or insufficient access to treatment for moderate to severe pain (World Health Organization, 2008). The American Pain Society in 1996 introduced the phrase “pain as the fifth vital sign” in an attempt to increase the awareness of pain among healthcare professionals.

Untreated or undertreated pain significantly decreases a patient's quality of life by causing sleep disorders, depression, impaired activity, mood alterations, abnormal appetite, inability to focus, and poor hygiene (Manjiani, Paul, Kunnumpurath, Kaye, & Vadivelu, 2014).

Women are to be involved in decision making with regards to pain relief during labour, before their labour commences, pregnant women must consider the various options of labour pain relief and make informed decision on choice of pain relief based on the benefits and risks, degree of effectiveness, availability and the acceptability of each method. In the Netherlands, women in consultation with their midwives determine what kind of pain relief should be used for them during labour (Klomp , de Jonge, Hutton, Hers, & Lagro-Janssen 2016). However, in many developing countries, the story is not the same. Women are not aware of the options available for labour pain, with some revealing no knowledge of the availability of pain relief during labour (Barakzai et al., 2010; Karn et al., 2016; Naithani, Bharwal, Chauhan, Kumar, & Gupta, 2011).

Ancient societies of civilization such as Babylon, Egypt, China and Palestine resorted to several exorcisms to alleviate pain of varying degrees, the use of herbs, heat, pressure and sun as well as the drinking of wine were all means by which pain was treated (Ampofo & Caine, 2015). Pharmacological means of pain relief during labour begun from the 20th century with the use of pethidine, nitrous oxide, para-cervical block and epidural anaesthesia (Ampofo & Caine, 2015; Flett, 2013). Some other pharmacological means of alleviating the pain of labour include the use of hyoscine butyl bromide (Buscopan) which is known to assist in cervical dilation and shortening of the first stage of labour, ketamine and sometimes tramadol are also used to alleviate labour pain (Aziato, Kyei, et al., 2017; Makkar, Jain, Bhatia, Jain, & Mithrawal, 2015). Concerns have been raised with regards to the use of pharmacological means such as epidural analgesia and pethidine, these medications are associated with maternal hypotension, increased risk of caesarean section,

respiratory depression as well as increased hospitalization of the neonate (Logtenberg et al., 2017; Petr Stourac et al., 2016; Thomson et al., 2019). To help reduce labour pain without the use of pharmacological medications, procedures such as deep breathing exercise, sacral massage and positioning are utilized; these are said to reduce the dependence on drugs, help in diverting attention from pain and reduces the incidence of adverse effects on mother, baby and the process of labour (Aziato, Kyei, et al., 2017; Gallo et al., 2013; Vargens, Silva, & Progianti, 2013). The prevention of the laboring woman from losing control during labour and preventing adverse maternal and neonatal outcomes, are some of the reasons for the use of non-pharmacological means of labour pain relief such as aromatherapy and relaxation exercises (Boateng, Kumi, & Diji, 2019; Smith et al., 2018). It is common to find women who wish to be part of the labour experience without this perceived loss of control to the effects of pharmacological pain relief benefitting from the administration of sterile water injections into the lumbo-sacral region (Derry, Straube, Moore, Hancock, & Collins, 2012; Lee, Kildea, & Stapleton, 2017). These non-pharmacological pain relief methods have an added advantage of being inexpensive and simple to use (Boateng et al., 2019; McCauley, Danna, Mrema, & van den Broek, 2018; Thomson et al., 2019). Literature in Ghana suggests that labour pain is not well managed by midwives (Aziato, Kyei, et al., 2017; Ebu, Owusu, & Gross, 2015). Unlike in most developed countries, labour pain is mainly managed non-pharmacologically and include sacral massage, deep breathing exercise and support from a family member (McCauley, Stewart, & Kebede, 2017). It is worthy of note that regardless of the method of labour pain relief that a woman uses, the woman must have a satisfactory experience (Lally et al, 2008).

Access is a major component in discussions when it comes to health policy, health service provision and health research. Though poorly defined it was seen to be used interchangeably with

availability, accessibility and affordability (Penchansky & Thomas, 1981). Access to health care is an intricate global concern and is considered a basic human right; when used in the context of health, access signifies endowing a patient in need with the strength to receive the right care, from the right provider, at the right time and in the right place (Saurman, 2016).

1.2 PROBLEM STATEMENT

According to the WHO, there are 5 billion people living in countries with an absence or little access to pain relief. The WHO has a pain relief ladder that makes room for various types of pain relief that should be administered dependent on the level of pain (Lohman, Schleifer, & Amon, 2010; World Health Organization, 2008). Grave and unacceptable differences in access to pain relief lie between high income countries and low income countries The declaration of Montreal by the International Pain Summit, relayed that access to pain relief without discrimination is a right for all and that persons with pain have a right to have access to suitable assessment and management of their pain by qualified health professionals (Brennan, Carr, & Cousins, 2016). There is global consensus that treatment for pain must be available but despite this consensus, about 80% of the world's population has either no or inadequate access to pain relief (Lohman et al., 2010).

Labour pain relief is widely used in the developed world but this cannot be said of Africa (McCauley et al., 2017). There is evidence that purports that access to pain relief during complicated labour improves psychological and obstetrical outcomes (Mårtensson & Wallin, 2008; Ogboli-Nwasor, Adaji, Bature, & Shittu, 2011). However, in Sub-Saharan Africa, there are constraints in accessing pain relief and the whole concept of pain management is not comprehended and thus not accepted despite the availability, easy administration and low pricing of pain medications. Access to pain relief in this sub region is limited owing to regulatory

inhibitions, cultural and societal interpretation as well as poor training of health care professionals in the utilization of pain relief and in some cases the addictive tendencies of some pain relief options (Knaul, Bhadelia, Rodriguez, Arreola-Ornelas, & Zimmermann, 2018; McCauley et al., 2018; O'Brien et al., 2013). In Africa, ethnic background, culture, knowledge and age are indicators for a woman's disposition to have access to labour pain relief (Olayemi, Aimakhu, & Udoh, 2003).

In Ghana, most midwives view labour pain as a normal phenomenon that must be endured by the parturient, it is not surprising that inadequate pain management in labour is reported (Aziato, Kyei, et al., 2017). Literature in Ghana, records studies on the perception and experiences of midwives on the management of labour pain, knowledge and attitudes of women towards labour pain relief as well as women's experiences and perceptions about labour pain relief but there is paucity of literature on access to labour pain relief. It is in the light of this, that this study is conducted to explore access to labour pain relief among postnatal women within the Accra Metropolis.

1.3 Purpose and objectives of the study

The purpose of the study was to explore access to labour pain relief among post-natal women within the Accra Metropolis.

The objectives of the study were to:

1. determine the knowledge on available labour pain relief options among post-natal women who had spontaneous vaginal delivery.

2. describe accessibility of labour pain relief to post-natal women during spontaneous vaginal delivery.

3. examine the organisation of labour pain relief to meet the needs of women (accommodation)
4. assess women's ability to afford labour pain relief (affordability)
5. describe post-natal women's acceptability of labour pain relief.

1.4 Research questions

Research questions with regards to the study include:

1. what is the knowledge on available labour pain relief among women who had SVD?
2. how accessible is labour pain relief to women during labour?
3. how accommodative is labour pain relief services to women during labour?
4. how affordable is labour pain relief to women during labour?
5. how acceptable is labour pain relief to women during labour?

1.5 Significance of the study

Labour pain is known to be debilitating and has life long psychological, physical and physiological effects on women. In Ghana, thousands of women go through this excruciating pain that is often dreaded. This study provides an avenue to extensively explore access to labour pain relief during SVD within the Accra Metropolis and its implication on the provision of respectful and quality maternal health care during labour. By the findings of this study, scientific evidence would be available in the field of labour pain relief to health care providers as well as women enhancing access to labour pain relief. Midwives, obstetricians and other health care providers who are directly involved in the management of women in labour would have evidence that

significantly imparts their practice. Evidence on availability, accommodation and accessibility of labour pain relief will contribute enormously to broadening and enhancing the scope and nature of the functions of hospital administrators and procurement officers in light of labour pain relief. This study will add onto empirical knowledge on labour pain relief in Ghana and serve as basis for further studies to be conducted.

1.6 Operational definitions

- Care givers: midwives, nurses, obstetricians and doctors.
- Post-natal women: women who delivered by spontaneous vaginal delivery to live infants the past 24 hours.
- Spontaneous Vaginal Delivery: delivering a baby vaginally without an an induction of labour.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter describes an empirical review of relevant and related literature on access to labour pain relief among postnatal women in connection with the purpose and objectives of the study. The chapter also provides a detailed description of the theoretical framework that was used in guiding the course of the study. To enable a scholarly presentation and outcome of the study, literature on access to labour pain relief among postnatal women was gathered from data bases such as JSTOR, Scopus, EBSCOhost, PubMed, ScienceDirect, Hinari, Google Scholar and SAGE. The foundation for the review of literature is based on the objectives of the study. Key terms that were used for the search included "labour pain relief", "access to labour pain relief", "available labour pain relief in Africa", "management of labour pain", "cost of labour pain relief" and "adequacy of labour pain relief".

2.1 Theoretical framework: Access to Health Care

Access refers to the comfort with which a person or community makes use of available services taking into consideration what is expected to be available to them (Richard et al., 2016). The theoretical framework that guided the study was the Access to Health Care model developed by (Penchansky & Thomas, 1981). According to the framework, access is defined as the degree of fit between the user and the service; the better the fit, the better the access (Penchansky & Thomas, 1981). The following are the constructs of the framework; availability, accessibility, affordability, accommodation and acceptability. These constructs are independent yet interconnected and each is important to assess the achievement of access to labour pain relief (Saurman, 2016). A few authors equate access with entry into or use of a health system, while access is more often employed to characterize factors which influence entry or use. Opinions differ concerning the

range of factors included within access and whether access is seen as characterizing the resources or the clients (Penchansky & Thomas, 1981). It has been acknowledged worldwide that access to health care is a basic human right (Frost, Jenkins, & Emmink, 2017). It is the pivot around which health care moves (Levesque, Harris, & Russell, 2013). It was therefore essential to identify a conceptual framework that would bring out the meaning of the concept of access to labour pin relief. During literature search conceptual framework such as access to health care developed by Levesque, Harris & Russel in 2013 and that by Andersen (1995) were explored. Both frameworks were not utilized as a guide for this study because they contained concepts that were not applicable to the concept being understudied. These frameworks contained constructs that did not explore and elicit the concept of access with regards to the objectives of the study, however, what was used as an organizing framework for the study bears all the constructs that define access.

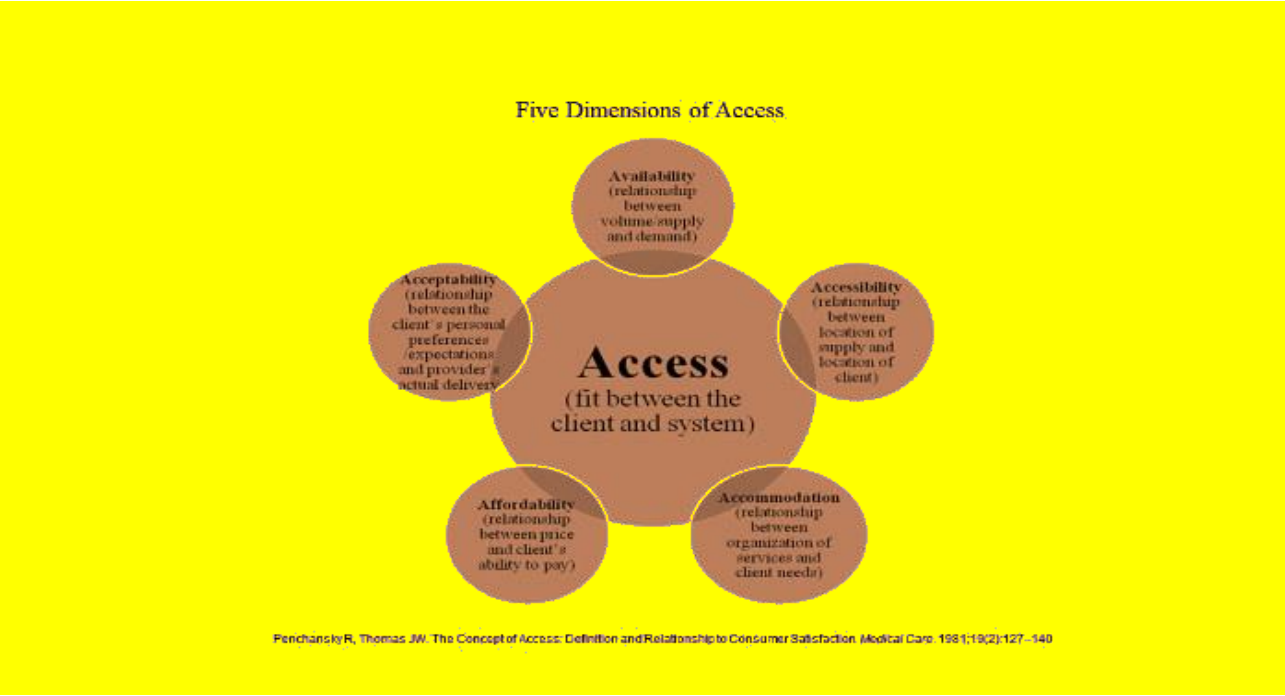

Figure 2.1: Access to Health Care Model by Penchansky and Thomas
Source: Penchansky and Thomas (1981)

Availability is the relationship of the volume and type of existing services and resources to the clients' volume and types of needs. It refers to the adequacy of the supply of physicians, dentists and other providers; of facilities such as clinics and hospitals; and of specialized programs and services such as mental health and emergency care (Penchansky & Thomas, 1981). Acceptability is the relationship of client attitudes about personal and practice characteristics of providers to the actual characteristics of existing providers as well as to provide attitudes about acceptable personal characteristics of clients (Penchansky & Thomas, 1981). In literature, the term applies to be used most often to refer to specific consumer reactions to provider attributes such as age, sex, ethnicity, type of facility, neighbourhood of facility or religious affiliation of facility or provider. In turn, providers have attitudes about the preferred attributes of clients or their financing mechanisms. Providers may be unwilling to serve certain types of clients such as welfare patients or through accommodation make themselves more or less available (Penchansky & Thomas, 1981).

Accessibility is defined by Penchansky and Thomas (1981) as the relationship between the location of supply and the location of clients, taking account of client's transportation resources, travel time, distance and cost. A health care service is deemed accessible if it presents the best avenues for a client to utilize it (Haddad & Mohindra, 2002). It is also described as the distance of travel the patient will have to cover to seek the medical service and Donabedian posits that accessibility can be related to the concept of geographical accessibility which, he indicates, deals with the location of service and the impact of consumer travel time, distance, cost and effort on use of the service (Donabedian, 1976). It is therefore worthy of note that an accessible service is one within the satisfactory reach of the patient in terms of distance and time (Saurman, 2016).

An accommodative service is one that is organized to receive clients and that these clients are able to utilize the service. Considerations for accommodation include working hours with 'after hour services' inclusive, referral and appointment services and facility structures (Saurman, 2016). Accommodation is the relationship between the manner in which the supply resources are organized to accept or receive clients that is, appointment systems, hours of operation, walk-in facilities, telephone services and the clients' perception of the appropriateness of these services as well as the ability of the client to accommodate these services (Penchansky & Thomas, 1981).

Affordability describes the relationship of prices of services and providers' insurance or deposit requirements to the clients' income, ability to pay, and existing health insurance (Penchansky & Thomas, 1981). Client's perception of worth relative to total cost is a concern here, as is client's knowledge of prices, total cost and possible credit arrangement. Saurman (2016) counterforts this by saying that affordable service is one that examines directly the cost incurred by the service provider and the patient in the provision and utilization of a service.

It is suggested that an acceptable service responds to the attitude of the provider and the consumer regarding characteristics of the service and social or cultural concerns (Saurman, 2016). She simply defines it as consumer perception. The way a woman views labour pain during the antenatal period will shape the choices she makes regarding pain management as labour begins and some would argue that these antenatal expectations will shape her actual experience of labour (Green, Coupland, & Kitzinger, 1990). Example, if a woman is anticipating pain in labour to be unbearable, she may already be looking at ways of alleviating that pain. Majority of women despite attending several different types of antenatal preparation classes, are still uncertain about many aspects of labour; and that uncertainty shapes their plans for labour (Lally et al., 2014).

2.2 Literature Review

Relevant and related literature regarding the study will be organized under the following areas:

1. Availability of labour pain relief to women in labour
2. Accessibility of labour pain relief to postnatal women during labour
3. Accommodation of labour pain relief services
4. Ability of postnatal women to afford labour pain relief during labour.
5. Acceptability of labour pain relief during labour and what care giver provides.

2.21 Available labour pain relief to women in labour

Availability according to the conceptual framework, is the relationship of the volume and type of existing services and resources to the clients' volume and types of needs. It takes into consideration, the number of health care providers as well as the resources and services needed to be provided in comparison to what the patient needs (Penchansky & Thomas, 1981). There are varied means by which a woman can go through an uneventful labour while having her pain managed. This can be achieved by two main ways; namely pharmacological and non-pharmacological. Pharmacological pain relief deals with relieving labour pain with the use of medicines. Medicines that can be used in this regard include epidural analgesia; known as the gold standard and opiates including morphine and pethidine. Non-pharmacological means include breathing techniques, birth support, aromatherapy and massage therapies (Aziato, Kyei, et al., 2017; Boateng et al., 2019; Czech et al., 2018).

Globally, the availability of labour pain relief is varied and ranges from women's legal rights to pain relief in Sweden to a non-availability of pain relief in many low and middle income

countries. Women who deliver in high resourced countries have varied options of labour pain relief to choose from and are more likely to have a positive outlook to the labour experience especially when information regarding the available options are given to them before labour sets in (Lindholm & Hildingsson, 2015). For instance, in the United Kingdom, Entonox which is a mixture of nitrox oxide and oxygen for the relief of labour pain has been in existence since 1967 and midwives have been certified to use it while managing labour pain (Alleemudder et al., 2015). Nigerian studies report a high awareness of knowledge about pain relief utilized in labour, however, that knowledge is not proportional to the usage of pain relief during labour as a result of several reasons including an unavailability of the medicines needed for pain relief when labour finally ensues (Chigbu & Onyeka, 2011). Some communities have a limited availability of labour pain relief due to traditions that do not support such pharmacological interventions and in some cases limited availability is a result of economic and educational factors (Mårtensson & Wallin, 2008). In developing countries, medications that have been recommended globally for the relief of pain and are the requisites for the management of mild to severe pain are unnecessarily difficult to come by (Knaul et al., 2018).

In countries with poor resources, systems available for the management of labour pain is not well established, pharmacological means is most difficult to come by as a result of factors such as shortage of qualified staff, poor attitude and knowledge of these staff with regards to managing labour pain as well as cost and unavailability of the needed medications. In areas where health professional are knowledgeable in pain relief options, unavailable logistics to provide the service makes pain relief unavailable to women in labour (McCauley et al., 2018). On the other hand, women who are disadvantaged socially are also more likely to go through labour without labour analgesia and even have unnecessary intervention such as augmenting labour which requires the

administration of analgesia (Leal et al., 2014). Midwives in Ghana, report a good knowledge of mechanisms used in the management of labour pain The most common pain relief available in the labour ward is continuous support which is to be offered by midwives but is not given sufficiently due to the shortage of midwives in hospitals (Nabukenya et al., 2015).

In Ghana, the most available and commonly used pharmacological labour analgesia is pethidine despite a record of its adverse effect on both mother and foetus during labour, however, it is only made available to a woman based on the midwives perception of the pain experienced by the woman in labour (Afriyie, Aryeetey, Annoh, Darkwah, & Dogbe, 2015; Aziato, Acheampong, et al., 2017; Aziato, Kyei, et al., 2017). This form of labour analgesia is recorded as not effective despite its common usage and availability (Larkin, Begley, & Devane, 2017; Thomson et al., 2019). Pethidine may be commonly used because it noted to be available, low priced and easy to administer (Aziato, Kyei, et al., 2017; El-Wahab & Robinson, 2011). Epidural analgesia on the other hand has been tagged the gold standard in relieving labour pain and it is commonly available for the relief of labour pain in high income settings in contrast to what happens in low income settings such Nigeria (Gupta et al., 2016; Okojie & Isah, 2014; P. Stourac et al., 2016). In Nigeria, epidural analgesia is not available for relieving labour pain as a result of the high costs incurred with its usage, a reduced knowledge of this pain relief option coupled with the complex technique associated with administration of an epidural (Ezeonu et al., 2017; Okojie & Isah, 2014).

In the Ghanaian context side lying, deep breathing exercise and sacral massage are available techniques used in alleviating labour pain non-pharmacologically (Ampofo & Caine, 2015; Aziato, Kyei, et al., 2017; Boateng et al., 2019). Midwives commonly use these techniques because the progress of labour, the parturient as well as the foetus are spared the adverse effects that occur with the use of pharmacological LPR (Aziato, Kyei, et al., 2017; Boateng et al., 2019;

Thomson et al., 2019). However, the use of non-pharmacological LPR is hindered by a shortage of staff that subsequently brings heavy workload on midwives. In many health care settings midwives are overwhelmed by the work schedules, in other cases the layout of the labour ward is such that allowing a birth support infringes on the privacy of other patients. These factors further inhibit the rate at which non-pharmacological labour pain relief is made available to women during labour. (Boateng et al., 2019; Hildingsson, Westlund, & Wiklund, 2013)

2.22 Accessibility of Labour Pain Relief

Accessibility is related to the concept of geographical locations which throws light on the location of services and its impact on consumer travel time, distance, cost and effort on the use of the service (Donabedian, 1976). Accessibility can also be described as one within the satisfactory proximity of the patient in terms of distance and time (Saurman, 2016). Accessibility is pivotal when seeking health service around the world but the concept is vaguely understood, it comprises a decision to seek health care, ability to reach health facility and to receive the service on arrival (Levesque et al., 2013). The concept of access in relation to health care has been widely debated upon but one of the most beneficial definitions is providing the right services at the right place at the right time (Rogers, Flowers, & Pencheon, 1999).

In the Netherlands, access to labour pain relief is varied (Klomp et al., 2016). There is a wide discrepancy in access to pain relief during labour among high income countries and low or middle income countries. While in labour, women in high income countries have access to varied pharmacological and non-pharmacological means of reducing pain but this cannot be said of their counterparts in low and middle income countries. Women in low and middle income settings have limited access to effective ways and systems by which pharmacological means can be employed in reducing pain during labour (Knaul et al., 2018; McCauley et al., 2018; McCauley et al., 2017;

Thomson et al., 2019). The concerns that initiated and enhanced systemic and political reforms that inhibit access to pain relief has to do with the addictive effects of opioid medications, known as opiophobia (Knaul et al., 2018). Irrespective of a country's policy on pain relief, women in labour must be allowed to have access to pain relief based on their beliefs, values and perceptions about labour pain either as a natural phenomenon that should be experienced or as a medical condition needing medicinal intervention (Thomson et al., 2019). Midwives and other skilled professionals assisting women in labour have an onus of improving women's access to labour pain relief by supporting women to make decisions about their choice of pain relief since a woman's desire to use labour pain relief is influenced by her expectation of labour pain as well as her relationship with the health care provider (McCauley et al., 2017).

Studies in Ethiopia indicate that women who go in labour majorly deliver at home because of a poor means of transportation, hospitals that are far away from communities and are poorly equipped with qualified staff (Roro, Hassen, Lemma, Gebreyesus, & Afework, 2014; Tarekegn et al., 2014). In other African settings, a similar incidence of a lack of transportation, narrow roads coupled with long distance to the hospital impedes access to delivery in a hospital and subsequently access to labour pain relief. Some of the roads are described as dirt tracks and impossible to be used by a vehicle therefore only motor bikes can travel on the road, making it uncomfortable for a woman in labour to commute on (Treacy, Bolkan, & Sagbakken, 2018; Wong, Benova, & Campbell, 2017). In Nepal, accessibility to delivery services is hindered by an inability of the birthing center to operate 24 hours a day and seven days in a week because there is a shortage of staff, the staff mainly live far away from the birthing center, there is no cafeteria from which the staff could take a break and she usually had family that were not from the immediate community.

This meant that the attending staff may have to take breaks off work duty to attend to personal but important issues limiting access to care (Khatri, Dangi, Gautam, Shrestha, & Homer, 2017).

In Ghana, access to labour pain management is limited because though midwives are the primary care givers during labour, doctors majorly prescribe pharmacological pain relief during labour and the midwives subsequently have to administer the medications (Aziato, Kyei, et al., 2017). It is recorded that some women in labour do not request for analgesia because of the fear of the midwives' negative attitude towards them; some of the midwives are not empathic and believe that women exaggerate labour pain, others shout at women and in some extreme cases there is both physical and verbal abuse of the laboring woman (Aziato, Acheampong, et al., 2017; Chigbu & Onyeka, 2011; Moyer, Adongo, Aborigo, Hodgson, & Engmann, 2014).

2.23 Accommodation of LPR

Many pregnant women underestimate the pain they will experience during labour and therefore do not put in measures to organize pain relief for their labour, all too soon when labour begins they realize they will benefit from some form of pain relief (Lally, Murtagh, Macphail & Thompson, 2008). A lack of relevant and requisite knowledge regarding the merits and demerits of the variety of labour pain relief contribute to an increased anxiety in women during labour (Abdallah, 2002; Reynes-Greenoo, Roberts, McCaffery & Clarke, 2007). Six out of seven studies conducted in a bid to find out the relationship between expected pain during labour and actual pain experienced revealed that women usually underestimated labour pain since the pain experienced far outweighed what they expected (Lally et al., 2014). When women are educated on the various techniques by which pain can be reduced during labour, it increases their confidence and enables them access delivery services well (Anarado, Ali, Nwonu, Chinweuba, & Ogbolu, 2015; Thomson et al., 2019). Literature records that empowering women with activities such as deep breathing

exercise and other techniques aimed at reducing labour pain during the antenatal period increases women's knowledge on what to do to reduce the pain during labour thereby reducing all the distress anticipated when labour is approaching and maximizes the positive outcome of the labour experience (Czech et al., 2018; Miquelutti, Cecatti, & Makuch, 2013). Pain that ensues during labour has detrimental effects on the laboring woman which sometimes linger on long after the delivery. In view of this, several high income countries routinely have antenatal discussions on the choices i.e pharmacological and non-pharmacological labour analgesia that is available to them and this enhances the whole labour process (McCauley et al., 2018; Okojie & Isah, 2014).

Managing of labour pain with both pharmacological and non-pharmacological must start from the antenatal clinic where midwives will teach women about the various methods and help them implement the method of choice when it is needed in labour (Anarado, Ali, Nwonu, Chinweuba, et al., 2015). It will be prudent if government uses mass media, libraries and education in schools as a means by which women can learn about labour analgesia, because this will allow women to be well equipped to make better decisions regarding labour pain relief (Okojie & Isah, 2014). Despite advocacy for antenatal organisation of labour pain relief to meet the analgesic needs of women, it is also important to tailor this need in view of their values, beliefs and norms. Prenatal organisation of labour analgesia must also include all the available labour analgesia, their risks and benefits as well as at which point in the labour process the various types can be administered (Lally et al., 2014). Organisation of labour pain relief should begin during antenatal clinic and continue intra-partum to assist in dispelling rumours and misconceptions about labour analgesia (Boateng et al., 2019). The antenatal period is the time where midwives together with other skilled care providers assist the woman in developing a plan for the management of delivery including labour analgesia. The preferred labour analgesia is detailed and documented and the necessary

interventions needed to implement it are put in place (Chu, Ma, & Datta, 2017; Hadar, Raban, Gal, Yogev, & Melamed, 2012). One of the surest ways of ensuring that women accommodate pain relief during labour is to provide education on the availability of the various pain relief options during pregnancy as well as the effectiveness of these options in alleviating labour pain (Ezeonu et al., 2017).

2.24 Affordability of LPR

Affordability describes a person's economic ability to use resources and time to utilize health care service. The term is derived from the cost of the service and depends on the person's ability to raise enough income to pay for the service (Levesque et al., 2013). Saurman counterforts this by saying that, an affordable service is one that examines directly the cost incurred by both the service provider and the patient in the provision and utilization of a service (Saurman, 2016). It is worthy of note that the pricing of a health service does not determine its affordability but rather, the patient's ability to raise the needed funds to pay for the service (Levesque et al., 2013). A study conducted among 202 expectant women in a teaching hospital in Nairobi, Kenya, indicated that despite the knowledge of labour pain relief among 56% of participants, patronage of labour pain relief was minimal owing to extra cost that would be incurred upon patronage of the service (Karuga, Nekyon, & Mung'ayi, 2008). However, women in high income countries have a higher probability of being registered with the National Health Insurance and therefore are more likely to afford management with labour analgesia. Families with women who accesses routine epidural anaesthesia in labour incur more cost as compared to women who only asked for pain relief in the course of their labour (Bonouvrie et al., 2016).

In Nigeria and many other low income countries around the world, where utilization of epidural analgesia for managing labour pain is low, one reason that accounts for the low patronage

of the gold standard in labour pain management is cost since majority of women are not economically empowered to pay for the service (Aziato, Kyei, et al., 2017; McCauley et al., 2017; Okojie & Isah, 2014). Communities with low resources don't have an established system of pain management during labour owing to factors such as availability of medications, poor staffing and cost of providing pain relief services during labour (Kannan & Rengasamy, 2017; Mahiti et al., 2015; McCauley et al., 2018). Despite recorded adverse effects on both mother and baby, pethidine has been recorded as the most common opioid used in the management of labour pain (Alleemudder , Kuponiyi, Kuponiyi, McGlennan, & Ramanathan, 2015; Okojie & Isah, 2014; P. Stourac et al., 2016). In Ghana it is the most prescribed opioid used in alleviating labour pain because it is cheap and easy to administer, however, its use is marred by established adverse effects on both mother and baby such as depression of the respiratory center of baby and nausea and vomiting in the mother (Aziato, Kyei, et al., 2017). Currently, the WHO recommends the use of non-pharmacological labour pain relief because it is cheap and many families can afford them (Leal et al., 2014). This form of pain relief has been noted to be cost effective (Almushait & Ghani, 2014; Boateng et al., 2019; Hosseni , Pilevarzadeh , & Vazirinasab 2016; Raju & Singh, 2014).

Several countries in Sub-Sahara Africa do not completely fund maternal and new born services in hospitals, families make direct out of pocket payments for more than a half of the services provided which has a toll on the economical status of the family (Ntambue et al., 2018; Sambo, Kirigia, & Ki-Zerbo, 2011; Victora et al., 2016). Hospitals that provide childbirth services charge amounts that are costly for families since they have to make an out of pocket payment for services provided. These direct payments that are burdensome to families further inhibit access to delivery and newborn services increasing the incidence of maternal mortality (Borghi, Storeng, & Filippi, 2008; Richard , Witter, & De Brouwere, 2010).

2.25 Acceptability of LPR

Acceptability describes both cultural and social characteristics of an individual that enables him/her to prefer and hence receive a health care service (Levesque et al., 2013). In many low and middle income countries, labour analgesia is not popular because it is not acceptable to the population (McCauley et al., 2017). In such communities, girls are raised to see labour pain as necessary and inevitable and that the ability to accept and endure the pain of labour is a sign of womanhood (Aziato, Acheampong, et al., 2017; Obuna & Umeora, 2014). It is recorded that the knowledge a woman has about a particular labour analgesia goes a long way to influence whether or not she will accept it and that increase knowledge of a particular labour analgesia implies an increase likelihood of the woman accepting it if offered to her (Okojie & Isah, 2014). Sometimes women are coerced to accept pharmacological labour pain relief; their consent are not obtained, risks and benefits of the medications are not explained to them and in some cases the attending health care giver neglects them after administering the analgesic (Morris & Schulman, 2014; Thomson et al., 2019).

In Ghana and Nigeria, health professionals who manage labour find parenteral opioids such as pethidine more acceptable as labour pain relief (Aziato, Kyei, et al., 2017; Lawani, Eze, Anozie, Iyoke, & Ekem, 2014; Ogboli-Nwasor et al., 2011). Meanwhile in the United Kingdom, epidural analgesia is more common and acceptable during labour (Barakzai et al., 2010). Some women do not accept labour pain relief because they believe God desires that women experience pain with child birth, others feel the pain helps reduce the chances of subsequent pregnancy whiles others believed analgesia during labour robs one of having a natural birth (Nabukenya et al., 2015).

2.3 Summary of literature

Literature concurs that labour is the most painful event of a woman's life and highlights the importance of alleviating the pain either with medicines or with techniques and procedures. This is necessary because unmanaged labour pain leads to unsatisfied labour experience as well as life long consequences such as depression. Taking into consideration the various dimensions of access, women have varied experiences when accessing labour pain relief.

Pethidine, entonox, paracetamol, buscopan and epidural are some of the means by which labour pain can be averted pharmacologically. In high income countries, women in labour have access to effective labour analgesia such as epidural which is considered the gold standard for labour analgesia as well as other forms of effective labour pain management depending on the preference of the woman. This is made possible because of an availability of the various analgesia together with the requisite systems put in place to enhance effective management of labour pain. In Africa and many other low income settings, the story is not the same; systems needed for the effective management of labour pain is not well established leaving many women to go through labour without effective pain management.

To relieve the pain non-pharmacologically, TENS, sacral massage, acupuncture, breathing exercise, side lying, reassurance, birth support among many others are used. These forms of labour pain management are commonly used in low income settings because it is cheap and does not require so much skill to perform. However, the use of these forms of labour pain relief is marred by a shortage of staff with its consequent heavy workload on midwives. Poor road networks, long distance to hospitals coupled with bad staff attitude inhibits accessibility to labour pain management. In some low income settings, women in labour may have to be transported to

hospitals on motor bikes which is uncomfortable for the woman. This leads to an out of hospital delivery and many times no access to labour pain relief. While women in high income countries are exposed to the various mechanisms by which labour pain can be averted with some including a choice of labour pain management in their birth plan, their counterparts in low income countries have a different experience. Antenatal education and preparation towards the management of labour pain is absent in most antenatal settings especially in Africa, women go into labour without a knowledge of what roles are expected of them in managing their labour pain and what is available for their use with regards to effective management of the pain experienced. Though midwives who attend to labour in these settings present an appreciable knowledge in the various labour pain relief options, the notion that labour pain is a natural experience to be encountered by every woman hinders the effective management of labour pain.

High costs associated with the use of labour analgesia reduces the frequent use of effective labour pain management techniques such as epidural in settings where the National Health Insurance does not cater for such a procedure. Women in such settings are not economically empowered to fund such services and a direct out of pocket payment of these services poses a financial burden on families. Labour pain relief is not acceptable to some women because of the belief that labour is a natural phenomenon from God and therefore experiencing it is a sign of womanhood.

This study confirms the challenges with assessing pain relief during labour here in Ghana, as recorded in literature. The study adds on to existing literature demonstrating the unavailability of the more advanced forms of labour pain relief such as the use of epidural, spinal anaesthesia and pudendal block despite the knowledge of these being the best options when relieving labour pain. The non-pharmacological means by which labour pain is relieved has been noted to be cheap

and easily admissible but this study provides evidence that despite these merits, women in labour do not have easy access to these labour pain relief options mainly because the midwives are overwhelmed with work or are simply unconcerned with relieving labour pain.

CHAPTER THREE

METHODOLOGY

This chapter has a detailed description of the study design, the setting of the study, the population, the sampling procedure and the sample, method and procedure for data collection, management and analysis. In addition to these, the chapter also discusses the methods that were used in ensuring the rigour and trustworthiness of data collected.

3.1 Research design

To achieve the purpose of this study, a qualitative approach to research was used, specifically an exploratory descriptive study. This is appropriate because there is little knowledge about the phenomenon being studied. Literature reveals that there is paucity of knowledge regarding access to labour pain relief, moreover labour pain together with labour pain relief has been studied extensively, however, access to labour pain relief has not been studied. The perception, feelings, thoughts and actions coupled with the understanding of participants were necessary for the understanding of the phenomenon being examined. For a researcher to come to an understanding of a subjective phenomenon of health of an individual or group of individuals in a specified geographical area, an exploratory descriptive design is the best approach to be used (Fossey, Harvey, McDermott, & Davidson, 2002; Kline, 2008). Data collected in this study is taken from the perspective of the participants being studiedIn this study, the phenomenon being studied is In qualitative designs the focus of the researcher is on the individual who has experienced the phenomenon under investigation and the phenomenon is described in context as opposed to the outcome (Doring, 2010; Polit & Beck, 2004)

This study was carried out qualitatively within the Accra Metropolis among post-natal women who had SVDs. Access to labour pain relief was explored and determined from the perspective of these women, the research gathered an in-depth knowledge into this aspect of labour pain that had not been explored in our sub region. The qualitative enquiry provide an avenue to understand the thoughts, emotions and actions regarding availability, accessibility, accommodation, affordability and acceptability of labour pain relief that a quantitative enquiry cannot unravel.

3.2 Research Settings

The Accra Metropolis which is located in the Greater Accra Region of Ghana is the setting of this study, the capital town of the Greater Accra Region is Accra which was made the capital city of the republic of Ghana in 1877. Accra was part of the Eastern Region of Ghana until 1882 when it was separated. The city occupies a total land surface of 3,245 square kilometers which is 1.4% of the total land area of Ghana. Accra has the Gulf of Guinea as it's southern border, Eastern Region as it's northern border, Lake Volta as it's eastern Border and the Central Region as it's western border. According to the 2010 population and housing census by the Ghana Statistical Service, Greater Accra has a total population of 4,010,054 and the Accra metropolis has a total population of 1,848,614 (Ghana Statistical Service, 2017). The Ga-Adangbes and Gas are the indigenous people of the Greater Accra Region, the Ga-Adangbes speaks Adangbe and the Gas, the Ga language. In the Greater Accra Region are people of various tribes with the Twi speaking Akans being dominant. The region has two Metropolis, sixteen (16) municipalities and Two (2) district assemblies. The political administration of the region is through the local government system and it is headed by the mayor.

It is a multi-religious metropolis with Christians forming the majority. The participants were recruited from the maternity unit of the Korle-Bu Teaching hospital which is the biggest teaching and a tertiary hospital in the southern sector of Ghana. The hospital was established in 1923, has grown from a 200 bed capacity to 2,000 and currently the third largest hospital in Africa with 17 clinical and diagnostic departments. The hospital was the recruitment outlet for patients who came for delivery services.

3.3 Target population

The target population were women aged 19-45 years who had spontaneous vaginal deliveries in the Accra Metropolis and were also resident in the Accra Metropolis.

3.4 Inclusion Criteria

An inclusion criteria determines who among the general population is eligible to be recruited as a participant of a study, it enhances homogeneity therefore ensuring meaningful interpretation, transferability and applicability. The under-listed are the inclusion criteria for this study:

1. adult female, 19 years and above and had a spontaneous vaginal delivery.
2. female adult had spontaneous vaginal delivery after 12 to 24 hours.
3. participant had healthy live birth.
4. participant was fluent in either English, Twi or both.
5. participant gave her full consent.

3.5 Exclusion Criteria

1. Female adults who had their labour induced.
2. Female adults who had live births but developed complications after delivery
3. Female adults who had live births but whose babies were on admission.

3.6 Sample size

The sample size was not determined before the onset of sampling and data collection; it was determined by saturation when no new response was elicited from participants. With a face to face in-depth interview of 10 participants, responses were found to be similar, two (2) more participants were then interviewed to bring the total number of participants to twelve (12) post-natal women because saturation had been attained (Fusch & Ness, 2015; O'reilly & Parker, 2013).

3.7 Sampling

Participants for the study were recruited by purposive sampling, in this technique the researcher seeks to understand a particular phenomenon from intentionally selected respondents who have an understanding and knowledge of the phenomenon under investigation (Tongco, 2007). In this research the respondents were carefully selected based on the possession of certain characteristics which enabled them provide rich information regarding the purpose of the study. All participants had rested for a minimum of twelve hours after having a spontaneous vaginal delivery before being recruited, participants were aged 19 and above, each of them was delivered of an alive infant who was well and both mother and baby had no complication following labour and delivery.

3.8 Data Collection Instrument

A semi structured interview guide (Appendix C) with open-ended questions to allow for drawing in of the participant's thoughts, perceptions and experiences was used in data collection. The semi-structured interview was developed to study subjective theories because it allowed interviewees to give implicit and explicit responses since they have an opportunity to respond to open ended questions (Flick, 2006). A semi-structured interview is not fixed, neither is it free, it can be best described as flexible with pre-defined questions but at the same time allowing a natural

or conversational flow even giving room to follow interesting unrelated subjects that may develop along the interview (O'Leary, 2005). The interview guide was used together with other methods of data collection such as observation and field notes. The interview guide was divided into two parts; part "A" had demographics of respondents and part "B" had preset questions which were used in guiding the researcher into eliciting rich responses that were detailed enough to answer the research questions.

3.9 Data Collection Procedure

Data collection procedure was in conformity with the philosophical and theoretical underpinnings of the study which ensured that collected data will achieve the purpose of the study, a qualitative instrument for data collection was used because of the nature of the research being undertaken (Polit & Hungler, 1999). The ethical clearance (Appendix A) for this study was received from the Institutional Review Board (IRB) of the Noguchi Memorial Institute for Medical Research (NMIMR). Primary data was collected from participants at the Korle-bu Teaching Hospital after an introductory letter (Appendix B) introducing the researcher and the research was presented to the Director of Nursing Services of the Korle-bu Teaching Hospital, the Nursing Manager at the Maternity Unit and the Ward In-Charge of the Ward. The nurse in-charge of the wards assisted in recruiting participants, they were therefore furnished with guidelines with both inclusion and exclusion criteria outlined. To enhance their knowledge on the kind of participants to recruit, detailed explanation of characteristics within the context of both inclusion and exclusion criteria was given to ward in-charges. The ward in-charge on each day of recruitment introduced the researcher to the post-natal women before steps were put in place to recruit participants. After participants had been recruited, they were enlightened on the purpose and objectives of the study after an explanation was given to them in clear terms. Those who agreed to be part had the roles

expected in the research explained to them after which they were given a consent form to either sign or thumbprint. Participants who gave their consent were assured of anonymity and confidentiality of information relayed, they were also informed of the right to opt out of the study at any point in the course of the study and were encouraged to do that without fear of judgment by health professionals, repercussion on quality of care or access to health services. Participants were given pseudonyms that helped in ensuring anonymity and increased efficiency of the interviews.

The instrument was piloted with four participants interviewed at the maternity unit of the Mamprobi Policlinic, these interviews were assessed and feedback was employed in enhancing the validity and reliability of the interview guide as well as the researcher's skill in performing interviews. All ambiguous questions were revised and clarity was employed to improve comprehensibility of the instrument. Interviews were granted in the homes of participants after discharge at predetermined times and at the convenience of the participants. Privacy was ensured during interviews and interviews lasted about 45-60 minutes. With informed consent of participants, interviews were recorded with an audio device. To enrich the data that were collected non-verbal communication such as mannerisms, gestures, facial expression and other body languages were recorded as field notes. When necessary, probing questions were asked which elicited more responses but caution was taken to prevent breaching participant's privacy. In circumstances where participants demonstrated failure to comprehend questions, further clarification was given by the researcher.

3.10 Data Analysis

Data analysis takes place when the researcher reflects on data collected, asks analytical questions and writes memos in the data collected during the research process (Creswell, 2007; Lewis, 2015). Qualitative data can be analyzed by several means dependent on the theoretical and

philosophical framework that supports the study (Burchett, 2014). Data collected in this study were analyzed concurrently with the interview process by thematic content analysis. Recorded data were listened to intensively and repeatedly; it was then transcribed verbatim. The audio was played severally and compared with verbatim transcriptions to ensure the accuracy of transcriptions and to allow the researcher to identify areas that needed further clarifications. To allow ease of identifying responses, codes were assigned to transcribed data in the order in which they were collected and saved in a file under a unique password. Pseudonyms were assigned to individual files to allow identification of responses from different participants. The transcribed data was read repeatedly to generate an understanding and codes were created from similar ideas and linked with predetermined themes that were identified in connection with the constructs of the conceptual framework. Conclusions were then drawn on data units based on the research questions and the themes under which they were categorized.

3.11 Data Management

The principles provided by Ghana's Data Protection Act 2012, Act 843; *Data Protection Act* 2012) was used to manage the data collected. These principles provide standards that must be followed by all persons who process information across the country in order to promote the right of people regarding information that is given. Data collected has been managed without breaching on the rights of participants, participants were given knowledge on the purpose of the data collected. Security of data collected was enhanced by putting a password on all audio recordings of interviews, consent forms, field notes and transcribed texts. Separate files have been provided for each participants, and each file contains only the responses to the main questions, consent forms as well as biographic data has been stored in separate files. Consent forms, demographic data and responses to main questions have been kept in different lockers with keys which are only

accessible to the researcher and her supervisors. Transcribed data will be preserved for five years to make it available when needed. All other files that had written information regarding data collected were treated as confidential and kept in a drawer under lock and key which is only accessible to the researcher and her supervisor.

3.12 Methodological Rigour

Rigour or trustworthiness of a study refers to the extent to which the study is worth giving attention to, worth taking note of and the degree to which the general public can have confidence in its findings (Tobin & Begley, 2004). In qualitative studies, methodological rigour is difficult to ensure but researchers work at ensuring that their findings contribute to existing literature and portrays the phenomenon that is being described (Lydon, 2007; Parahoo, 2014). In this research, the framework developed by Lincoln & Guba was used to ensure trustworthiness. According to the Framework propounded by the two; credibility, confirmability, dependability, and transferability are the criteria upon which a qualitative study can be deemed trustworthy (Lincoln & Guba, 1985).

Credibility was ensured by transcribing verbatim the responses of participants ensuring that transcribed data was a true reflection of the thoughts and perspectives of participants. This was made possible because interviews were conducted face to face and allowed for responses such as gestures and non-verbal communications to be noted. Interviews wear audio recorded and listened to severally before transcription to ensure that transcribed data was accurate and representative of participant's responses (Speziale, Streubert, & Carpenter, 2011).

When data is collected such that it is devoid of subjectivity and bias, representing what the participant said, confirmability of the study is said to have been achieved. Confirmability refers to

the quality of a qualitative research that ensures that data collected is representative of what participants implied (Streubert & Carpenter, 2010). To ensure this, the data was devoid of bias and researcher subjectivity, a true reflection of what participants said was what was presented. The researcher clarified misconceptions with regards to the responses of participants during transcription of audio recordings. Follow up was made to ensure that written texts were representative of participant's perspectives. Bias and misrepresentations were avoided by ensuring that no false interpretations were made.

An audit trail involves tracking and recording all the steps that influences the outcome of the study to ensure dependability (Streubert & Carpenter, 2010). This is to ensure that the same results will be achieved when the study is tested by another researcher who was not involved in the current research; to allow this, the researcher carefully and accurately recorded all aspects of the study preventing biases. Transcribed texts were read to ensure there were no mistakes, codes were revisited to ensure that they had been correctly defined, they were then cross checked for the researcher to come to the conclusion that there is inter-coder communication.

Transferability is the quality of a qualitative study that makes its findings beneficial to a similar group of people (Parahoo, 2014). In this study, transferability was ensured by accurate recordings of all interactions with participants as well as audio recordings of information given. In transcribing, the researcher listened to the audio recordings over and over again and reviewed transcribed texts to ensure accuracy.

3.13 Ethical Consideration

Ethical clearance and approval for this study was sought from the Institutional Review Board of the Noguchi Memorial Institute for Medical Research of the University of Ghana

(Appendix A), the management and administration of the Korle-bu Teaching Hospital was informed about the study and permission was sought before data collection commenced. Both institutions were served with the proposal for the research as well as the introductory letter (Appendix B) from the School of Nursing and Midwifery, University of Ghana. The purpose and objectives of the study was explained to participants in a language in which they could communicate effectively and were allowed to make informed decisions regarding participating in the study. Participants who accepted to be part of the study were given consent forms to thumbprint or sign but were informed of the right to opt out of the study at any point without fear of receiving ill treatment from staff of the hospital, ward or researcher. The benefits of the study were also communicated to participants and all concerns raised by participants were addressed effectively in plain terms devoid of medical terminology.

Participants were allowed to rest for a minimum of 12 hours after delivery before being recruited into the study, pseudonyms were used to identify participants in order to ensure and improve anonymity. Audiotapes of data collected have been kept under lock and key which will be accessible only to the researcher, files containing signed or thumb-printed consent forms and demographic information of participants have been kept in a different drawer also under lock and key to ensure confidentiality.

CHAPTER FOUR

FINDINGS

This chapter is a representation of the data collected from participants who were sampled purposively after they had met the inclusion criteria. The chapter is presented in two parts; the first part describes the demographic characteristics of participants and the second part describes the findings of the study. With the Access to Health Care conceptual framework developed by Penchansky and Thomas (1981) as a guide, five major themes were developed based on the objectives of the study and these themes further gave rise to nineteen subthemes. The major themes generated were: availability of LPR, accessibility of LPR, accommodation of LPR, affordability of LPR and acceptability of LPR. Verbatim quotations from participants who were given pseudonyms have been used to support both themes and subthemes.

4.1 Demographic Characteristics

A total of 12 post-partum women participated in the study; their ages ranged from 19 to 37years. Nine (9) out of the twelve (12) post-partum women were Christians and the other three were Muslims. All but one of the participants were married and all of them had children ranging from one (1) to five (5). Seven (7) had tertiary education, three (3) were educated up to the Senior High school level, one (1) was a Junior High School drop-out and the other one (1) had no formal education. When it comes to their occupation, three (3) of the participants were in the health sector, four (4) were traders, two (2) were house wives, one (1) was a beauty therapist, one (1) was a business woman and the other one (1) was unemployed. All participants could speak at least one (1) Akan language, six (6) could speak Ga, one (1) could speak Dangbe, another one (1) could speak Dagbani, two (2) could speak Ewe and seven (7) could speak English fluently. Two (2) of

the participants were Ewes, three (3) were Gas, one (1) was Ga-Adangbe, two (2) were Northerners and four (4) were Akans of various tribes. Demographic data has been attached as Appendix E.

4.2 Organisation of themes

The findings of this study was put in themes based on the objectives of the study which were derived from the Access to Health Care model by Penchansky and Thomas (1981). A total of five major themes were developed after a thematic analysis of the data collected was done, these major themes were consistent with the Access to Health Care model and are as follows: availability of labour pain relief (LPR), accessibility of LPR, accommodation of LPR, affordability of LPR and acceptability of LPR. In addition, eighteen (18) sub themes were derived from the study. Table 4.2 below is an illustration of the major and subthemes derived from analyzing the data collected.

Table 4.2 Summary of themes and subthemes

THEME	SUBTHEME
A. Availability of LPR	a. Knowledge on available LPR options b. Source of knowledge of available LPR c. Expertise on LPR d. Availability of staff
B. Accessibility of LPR	a. Distance to hospital b. Challenges accessing LPR c. Timing of administration d. Accessibility of staff e. Supply of LPR
C. Accommodation of LPR	a. Organisation of LPR b. LPR education at antenatal clinic c. Preparation for LPR
D. Affordability of LPR	a. Cost of LPR b. Ability to afford LPR c. Benefits of NHIS
E. Acceptability of LPR	a. Expectation from clients b. Preference of LPR c. Effectiveness of LPR d. Characteristics of midwives

4.3 Availability of Labour Pain Relief (LPR)

Availability of LPR was the first major theme that was developed after analyzing transcribed data. This theme explored the knowledge participants exhibited on various LPR options taking into consideration how these participants came by the knowledge. The depth of knowledge possessed by participants was portrayed in the knowledge of the indications and the side effects of these LPR options, in addition the theme exhibited the existence of staff to supply LPR. All the participants acknowledged that labour is a painful experience that women were to encounter in the event of a vaginal delivery; however, majority of the post-natal women believed in the existence of LPR and iterated that pain associated with labour could be abated with medical intervention. Pharmacological LPR that were available to participant's use during labour included: pethidine and paracetamol, however participants exhibited knowledge in epidural and suppository diclofenac. Deep breathing exercise, side lying, sacral massage and reassurance were the mechanisms demonstrated by participants as means by which labour pain can be averted non-pharmacologically. Analysis of transcribed data gave rise to four subthemes namely: knowledge on available LPR options, source of knowledge on available LPR, expertise on LPR options and availability of staff.

4.3.1 Knowledge on available LPR options

This subtheme portrayed the understanding exhibited by participants regarding various LPR options. Participants demonstrated varied knowledge on available LPR options; while some believed in the nonexistence of LPR, majority displayed knowledge in mechanisms aimed at the relieving pain during labour non-pharmacologically. It was noted that though limited, some of the participants exhibited knowledge in pharmacological means of preventing labour pain. Knowledge exhibited by participants were categorized into pharmacological, non-pharmacological and

unavailable LPR. The commonest pharmacological LPR option cited by participants was pethidine.

As an opioid, pethidine is seldom used in the relief of pain during labour but few of the participants demonstrated knowledge in its use as a pharmacological LPR option. Abrefi and Enyonam had this to say

> *"Yes I read about the options…I read about the signs you see when the baby is coming and what can be done. Ooo, I read it myself on the internet, I remember pethidine and epidural"* ***Enyonam.***

> *"I knew I would be given pethidine or … but opted for pethidine, it is commonly used so I knew that is what they will give me"* ***Abrefi.***

Some of the participants who knew that pethidine is used in preventing labour pain pharmacologically received pethidine in the management of their labour pain, however they could not identify the medication and hence called it the "injection".

> "*When going I felt that I would be taken care of… Yes they did, they gave me an injection"* ***Enyonam***.

> *"it took some time and they gave me some injection and the pain went down for some time"*. ***Abrefi***.

> *"I was in severe pain and I was shouting but they did not attend to me. It took a long time before they gave me the injection"*. ***Sika***.

Some of the participants described the use of epidural as a means of averting labour pain, and indicated its potency as a "strong" medication while citing the location of administration as well as its effect on the body but were unable to associate the description with the name of the LPR.

> *"the one that is put at your back… that is very strong because there will be no pain even the woman cannot even move her legs"* ***Aba.***

A few of the participants indicated that paracetamol could be used in alleviating labour pain however, they were quick to add that they did not receive any.

> *"I was thinking that at least even paracetamol "koraa" could have done something but they didn't give me any"* ***Araba.***

> *"I don't know about the big big medicine but I know paracetamol, if that was there, I could have taken it"* ***Aba.***

Meanwhile, some of the participants cited paracetamol as a means of reducing pain but mentioned that they were uncertain if it could be used in reducing the pain encountered during labour.

> "*I don't remember the medicine I read about, but I know that paracetamol is good for headache…but I can't tell if it can bring down the labour pain"* ***Ataa.***

> *"Everyone can afford paracetamol… I know it reduces pain… well, I am not sure if it could have relieved my pain"* ***Mansa.***

A few of the participants mentioned the use of diclofenac suppository as a means by which pain could be alleviated but like in the case of paracetamol, participants were uncertain about its use in the alleviating of labour pain.

"when I have menstrual pain too I take diclofenac but I can't tell if it can bring down the labour pain" ***Ataa.***

Majority of the participants had knowledge in various forms of non-pharmacological means by which labour pain could be relieved**.** They believed that the pain that came with labour was natural hence some form of natural intervention as well as a performed activity could be used in averting the pain. Participants cited non-pharmacological LPR such as: deep breathing exercise, side lying, reassurance and sacral massage, with deep breathing exercise named as the most popular non-pharmacological LPR known to the participants. When asked about non-pharmacological means of reducing labour pain, deep breathing exercise was always the first to be mentioned by participants.

Some participants reported that, midwives commonly utilized deep breathing exercise in the relieving of pain during labour.

"As for that, you hear them saying it a lot, anytime someone complains of the pain the nurses will say breath through your mouth" ***Efe****.*

When asked to name multiple methods by which labour pain can be managed non-pharmacologically, some of the participants indicated that deep breathing exercise was all that they knew.

*"It is the breathing in****,*** *nothing else… that is all I can say because I don't know anything else"* ***Okailey****.*

*"I don't know much about that, deep breathing exercise****,*** *that was the only non-pharmacological pain relief,"* ***Abrefi.***

Majority of the participants mentioned that whenever they expressed pain during the course of labour, the midwife asked them to breathe through their mouth.

> *"I was complaining that my waist was paining me … the midwives told me not to be rubbing there but breath in and out gently through my mouth"* ***Mansa.***

> *"I think it depends, when the pain is much and I am shouting, they ask me to breathe through my mouth that it will stop"* ***Okailey***.

A few of the participants expressed that deep breathing exercise is what is employed during the second stage of labour to reduce pain and to help the laboring woman have some rest.

> *"When they asked me to push, I could not because I was in severe pain, then the midwife asked me to rest by breathing in deep"* ***Fati***

> *"I know some… like for example they say open your mouth and breathe deeply in and out when pushing at the labour ward"* ***Araba***.

Reassurance was recorded as the second most common non-pharmacological LPR option known to participants with majority of them citing it as a means of preventing labour pain. However, the term reassurance was expressed differently by different participants. In some instances, the term "reassurance" was used interchangeably with the word "assurance", meanwhile some of the participants employed terms such as patience and the use of comforting words.

> *"I think reassurance… they should assure the patient or the pregnant woman that delivery is not easy, it can help"* ***Araba***.

> "*What they say is that be patient, the pain will subside"* ***Sika***.

*"talking to her that she would be okay**,** those kind of words at least that assurance will make her feel okay or good"* ***Enyonam***.

The participant emphasized that some women in labour may not need pharmacological means to reduce their pain and that reassurance was all that was required to avert the pain.

"Sometimes, the person doesn't need a drug or something like that… talking to her, calming her down, you will be okay, nothing will happen to you, at least that one is enough" ***Enyonam***.

Some participants mentioned side lying as a means by which labour pain could be reduced, these participants indicated that midwives asked patients to lie on their side when the patients expressed pain.

"*In instances where I was shouting, they told me it was in vain and that I should lie on my left to be relieved of the pain*" ***Sika***.

"I started shouting when the pain became unbearable, It was when one of them asked me to lie on my side" ***Efe***.

"*The nurses always asked me to lie on my side when I complain of pain"* ***Okailey***.

Meanwhile one participant indicated that side lying was difficult to perform and at the same time she was uncertain with its use as a LPR.

"As for turning to the side, it is so difficult maybe it helps but I do not know. If they had given me some medicine, I am sure it would have been better than the turning " ***Koshie***.

In addition to relieving the pain that comes with labour, it was noted that some participants expressed side lying as a means that allowed the foetus to breath well.

"*She said it (side lying) will help my baby to get enough oxygen and the baby's heart will beat well so she won't get tired"* ***Ataa***.

"Another one said I should lie on my side to help the baby to breathe and help me to have less pain" ***Okailey***.

Some of the participants noted that they lay on their side when in pain and that helped to reduce the pain felt during the labour.

"the person who told me to sleep on my left side really helped me" ***Sika***.

"it was very bad but the person who told me to sleep on my left side really helped me" ***Mansa***.

"So when I was feeling the pain I turn (side lying), when the pain is to the extent I can't even manage I turn (side lying). I was just turning to the right and to the left" ***Araba***.

It was noted by another participant that apart from relieving labour pain, side lying augmented the progress of labour and increased the prospects of delivering the baby quickly.

"*Sometimes they tell you that if you want to hasten your birth or delivery, lie on your left side"* ***Tiwa***.

Few of the participants who were knowledgeable in non-pharmacological LPR mentioned that in the bid to reduce the pain felt during labour, they performed a sacral massage.

"As for me I was doing sacral massage, I was just massaging my back…that will reduce the pain for me" ***Araba***.

However, the participant indicated that to benefit of the use of sacral massage is achieved when used together with other non-pharmacological LPR options.

> *"It's not sacral massage alone, even the nurses' involvement whiles you are in the bed, at least they coming there, giving you assurance and even telling you what is ahead…it would help"* ***Araba***.

A few of the participants also noted that for the maximum benefit of sacral massage, one had to use it together with a pharmacological LPR to reduce labour pain.

> *"I will do that (sacral massage) and add medicine"* ***Araba***.

However, a participant mentioned that the midwife educated her to avoid the performance of sacral massage in the bid to relieve labour pain.

> *"When I was complaining that my waist was paining me and I was having some burning sensations, the midwives told me not to be rubbing there"* ***Mansa***.

Some of the participants exhibited limited knowledge on the use of non-pharmacological LPR, these participants had been exposed to interventions used in relieving labour pain non-pharmacologically but were unaware that these interventions were meant to relieve labour pain. Mansa described the use of side lying and deep breathing in the relief of labour pain but when asked explicitly to name a non-pharmacological means of relieving labour pain, she had this to say:

> *"what I can say is that if you are able to push out the head of the baby, the midwives helps to pull out the rest of the body of the baby out, that is what I have observed that make you feel less pains, because if you push entirely by yourself you get tired"* ***Mansa***.

Another participant made mention of side lying as an instruction received from midwives when pain is expressed but when asked about her knowledge on whether labour pain is relieved by side lying she answered negatively.

> *"I don't know whether if you lie on your side, the pain will go away"* ***Tiwa.***

Another participant made mention of side lying and deep breathing exercise as recommendations from a midwife to reduce her pain when she expressed it, however she could not associate those two methods of non-pharmacological LPR with pain relief when asked to name non-pharmacological LPR.

> *"I don't know anything that can be done the pain is natural. That is how God himself made it." Koshie.*

Some of the participants believed that some pharmacological LPR options were not available in the hospital hence were given a prescription to purchase.

> *"Maybe they didn't have…because they gave me a prescription form to go out to buy"* ***Enyonam***.

> *"The pain, they were not able to manage it well… they wrote 'P'mol' for me to go and buy"* ***Araba***.

4.3.2 Source of knowledge on available LPR

The second subtheme derived from the theme, availability of LPR options was source of knowledge on available LPR options. Participants gave insight on diverse sources from which knowledge on LPR was acquired. Some of the sources mentioned were verifiable while others

were not. A participants mentioned a non-verifiable source as the avenue by which she gained knowledge on LPR.

> "*I have heard people say them (LPR options) but for me I have never been given any drug like that before" **Fati**.*

Some of the participants mentioned that their friends were the source of information about LPR option. The information from these friends were derived from conversations

> *"I know someone (friend) who delivered with what they call an epidural she said she didn't feel any pain" **Sika**.*

> *"I have delivered before so I know and when I meet my friends sometimes we talk about it. Everybody knows that giving birth is very painful" **Efe**.*

Majority of the participants cited that they received knowledge on LPR from midwives, however it was noted that participants obtained the knowledge from routine care rendered by midwives i.e the knowledge was given in line with the needs of participants as and when the patient needed to avert pain and not from deliberate or planned action of the midwife to impart knowledge on LPR options.

> "*They (midwives) taught me how to lie down and what to do if it gets painful and when is time to push, I don't get tired" **Mansa**.*

> *"The midwives told us to lie on the right side, when you feel the pain and don't shout whenever you feel the pain… They taught me, but still I was shouting," **Koshie**.*

It was also noted that the knowledge on LPR options that all the participants derived from midwives only encompassed non-pharmacological LPR options.

"The nurse (midwife) also asked me to breathe through my mouth… the nurses were just saying lie on your side, lie on your side and breath." ***Efe.***

"The nurses always ask to breathe through the mouth and lie on my side when I complain of pain" ***Okailey***.

Some participants added that their knowledge on available LPR was obtained from other patients. These information was randomly collected during conversation.

"One day a midwife asked what can be done and one of the pregnant women mentioned that you could breathe through your mouth" ***Ataa.***

"On the ward someone said she was given the injection and she slept for some time" ***Fati***.

Another participant mentioned that the information she had about LPR options was acquired from learning in school because she was taught.

"*Please I learnt it (sacral massage) from school, I remember a tutor said it once that you can use that to bring the pain down"* ***Araba***.

Some participants obtained knowledge on LPR options from their relatives. Some indicated that their mother mentioned it when giving advice on how to avert labour pain whiles another indicated that she derived the knowledge from her sister who attended a pregnancy school in another health facility.

"No, my mother told me that is what will help me for the pain to go down… we talked about a lot of things that happen during labour, like how you will know when the labour starts and how you can know when the baby is coming" ***Araba***.

"My sister, was attending antenatal at Mamprobi Polyclinic and that time they do some pregnancy school. They teach a lot of things and she told me" ***Ataa.***

For some of the participants, the knowledge gained on LPR options was acquired from experiencing pain in a previous vaginal delivery and utilizing the pain relief option which was mainly non-pharmacological.

"you see I have delivered before. I went through a lot of pain, though I read about what can be done; I know" ***Enyonam***.

"This is not my first child, I have delivered before so I know, everybody who has delivered before knows that it is painful and usually this (breathing exercise) is what we do" ***Efe.***

A few of the participants gained knowledge on LPR as a result of watching a video of pain relief on the internet or by reading about it also on the internet.

"I watched something on YouTube where pregnant women exercise like dancing so that they don't feel the pain" ***Ataa.***

"I read about some of them myself…, I read it (pethidine and epidural) myself on the internet" ***Enyonam***.

4.3.3 Expertise on LPR

This subtheme described the knowledge participants exhibited on the effects of some LPR options they had knowledge on or used in their delivery. Participants commonly made mention of the side effects of pharmacological LPR on the laboring woman, the foetus or the progress of labour. No effect of non-pharmacological LPR was recorded.

A few of the participants exhibited knowledge on the side effect of pethidine on the laboring woman. The commonest effect observed by the women after being administered with pethidine was falling asleep.

> *"that one (pethidine) can make me sleep…I don't want to sleep when I go and deliver"* ***Efe***.

> *"I felt the pain still but I became sleepy and was dozing on and off, when I feel the pain, I sit up when the pain goes away then I lie down small like that"* ***Enyonam***.

> *"The pain went down for some time so I slept, you know that is what happens when you are given the injection"* ***Abrefi***.

Other participants added that apart from falling asleep, another adverse effect of pethidine on the mother was vomiting

> *"…that one (pethidine) can make me sleep or vomit"* ***Efe***.

Few of the participants noted that the side effect of pethidine was evident in the foetus just as it was on the laboring woman. Another effect that was mentioned by participants was the depression of the respiratory center in the foetus causing an inability of the baby to breath well.

> *"I know that the baby too may not breath well when they inject you…and I want my baby to be fine"* ***Efe***.

> *"I know that there are very bad side effects of epidural including asphyxia to the baby"* ***Abrefi***.

A few of the participants knew that some pharmacological LPR had undesirable effects on the foetus but were deficient in which of the medications causes those effects neither did they know the exact effect caused. Such participants referred to the effects as negative.

> *"I know the medicines can have bad consequences on the baby and I don't want anything that will have a negative effect on my baby or me"* ***Ataa***.

Some of the participants exhibited knowledge on the safety of paracetamol as a LPR, however, these participants had no knowledge on definite and specific effects of paracetamol on either foetus or laboring woman.

> *"I think that paracetamol is effective, it will bring the pain down and at the same time it will not have any bad effect on me or my baby"* ***Efe***.

> *"As for paracetamol, I know that when I take it, nothing will happen to me, I have taken paracetamol many times and nothing happened to me"* ***Aba***.

Another participant described the side effect of diclofenac on a woman as a "reaction" and therefore cited that paracetamol could rather be administered.

> *"not all the medicines are good for everyone, someone may react to diclofenac so other drugs like paracetamol can be given"* ***Enyonam***.

Other participants referred to the effect of pharmacological LPR as "harm" that could befall their baby and therefore wanted to dissociate themselves from such medicines. A participant cited that some pharmacological LPR poses harm to the foetus.

> *"it is the same thing, these medicines can cause a lot of harm and I don't want something that will harm me or my baby"* ***Efe***.

4.3.4 Availability of staff

Varied categories of health staff were mandated by the principles of their profession to provide LPR to women in labour, this subtheme seeks to identify the staff that were available in the distribution of LPR in proportion to the numbers that were needed. According to participants the doctors were absent, midwives were few, though some were present and in some cases midwives left clients unattended to.

Some of the participants mentioned that the doctors who worked in the labour wards were not present, in view of that a woman in labour would have to wait for the attending doctor in order to receive LPR.

> *"even if they (midwives) were many you have to wait for the doctor first before they can do anything for you"* ***Abrefi***.

> *"The doctors were not always there, you don't really see them around like you see the midwives passing or sitting"* ***Ataa***.

Other participants pointed out that the staff seen in the labour ward could not be deciphered, it was difficult to tell the difference between a doctor and a midwife especially when the staff on duty were only females. One could not tell whether there was a doctor among the females.

> *"I am not sure if there was a female doctor. It is difficult to tell the difference… I think the women were the midwives and the men were the doctors."* ***Tiwa***.

> *"As for the doctors they were not there all the time and you can't even tell the difference because they are all together wearing the same dress"* ***Enyonam***.

"I cannot really tell, I don't know if some of the women were doctors, they all work together and the women were more" ***Efe.***

Others mentioned that the circumstances under which they were taken to the labour ward prevented them from looking out for the doctor.

"I felt that my baby was coming so I didn't look out for the people but I didn't see any doctor" ***Fati.***

Some of the participants stated that midwives available to participants were few, in many cases. It was indicated that the number of midwives were such that one could forget how many were present.

"when you enter, you don't see many midwives…, I don't remember the exact number but I don't think there were many midwives" ***Enyonam.***

"I didn't take note but I don't think there were more than four midwives in the labour ward" ***Abrefi.***

Majority of the participants noted that the maximum number of midwives present at the labour ward was four and in some cases there were less than four midwives attending to the patients in labour.

"That day there were not many of the midwives, ooo there were two midwives who came to take care of me, at the time I was there and I didn't see any more just the two of them" ***Mansa.***

*"When I went to the ward, there were few midwives there**,** like three, but only one delivered the baby"* ***Sika.***

"I didn't see many nurses (midwives), I saw just about 3 of them" ***Fati***.

A few of the participants mentioned that they were left unattended to by the midwives with one of them delivering her baby by herself before the midwife could return.

"They just come for a short time and go away, they will be gone for a long time before coming around again" ***Araba***.

"*as soon as I was sent inside and was examined, they said I'm full already and the midwife said, I should breath through my mouth but she was coming by the time she returned I had given birth on the bed already*" ***Fati***.

Majority of the participants mentioned that midwives were always available on the wards owing to the different schedules required of them, some noted that the work schedule,,,,,made it possible to find a midwife on duty all the time.

"*I know the nurses (midwives) don't come at the same time so that there's always someone"* ***Enyonam***.

"The nurses (midwives) are always there, I know some come in the morning and some come in the evening" ***Efe***.

Other participants cited that midwives were present in the hospital irrespective of the time of day and therefore whenever one went to the hospital, one was likely to find a midwife.

"It does not matter the time you reach there, there is always a nurse, it is the private hospitals that they close" ***Efe***.

"Well, I don't think it is the time, you know that place there are nurses always on duty, even at night" ***Abrefi***

4.4 Accessibility of LPR

Accessibility to LPR was the second theme identified from analyzing transcribed data, accessibility as described by Saurman (2016), incorporates reasonable proximity of the service to the client. This theme took into perspective, the location of health service in relation to the participant's location, this incorporated the time it took for participants to travel to seek the service, the distance the participant covered in order to reach the service and the supply of the service when the client arrived at the location. There were diverse experiences shared on accessibility to LPR; mainly participants reported that the hospital was in reasonable proximity but highlighted some onerous circumstances one had to surmount to arrive there. Once at the hospital, participants outlined several limitations to accessing LPR which included an inability to have access to staff as well as a poor supply of LPR. Analysis of data, gave rise to five sub themes namely: distance to hospital, challenges accessing LPR, timing of administration of LPR, accessibility of staff and supply of LPR. These subthemes were arrived at in the bid to answer the second research question.

4.4.1 Distance to hospital

This subtheme reviewed the ease with which participants arrived at the hospital as well as the length of time needed for participants to travel from their homes to the hospital where they could access LPR. It also took into consideration their ability to find transportation and whether the hospital was in reasonable proximity.

Majority of the participants indicated that it was easy to get to the hospital because the hospital was located in a place regarded as common and where several other people were conversant with.

"*As for that place everybody knows there, when I was going I told the driver that I*

am going to … and he took me, it was not difficult" ***Sika.***

*"As for the hospital, reaching there was not difficult**,** it is a common place in Accra. I have also gone there before so when the labour started it was not difficult to go at all"* ***Aba.***

"the hospital is far from here but It was not difficult to get there because we already know the place" ***Ataa.***

Other participants added that it was not difficult getting to the hospital because it is situated in a prime location, where several commercial vehicles commute and that made it easily accessible.

"It wasn't difficult at all, there are several vehicles that drive past the hospital so we boarded one and it took us. It was not difficult" ***Koshie.***

"*The hospital is not difficult to get to**,** there is a vehicle at the station that takes you straight to the hospital's station"* ***Okailey.***

Some of the participants indicated that the hospital could be accessed easily if one could have access to a taxi either by having money or by making prior arrangements with a taxi driver. The participants had this to say:

*"That was easy**,** I made arrangements with a taxi driver in this area so when I started feeling the pain… I called him that I wanted him to take me. When I came home for my bag he came and we went"* ***Efe.***

*"No. As for Accra, if you have money you can go anywhere**,** we went with a taxi… we just told the driver that we were going there and he took us without asking for direction"* ***Mansa.***

Some participants stated that the hospital was in close proximity to their location and therefore it took them thirty minutes and below to get there.

> *"this place is not far from the hospital, it was not difficult to get there, when we took the car, not long just about thirty minutes, we were there"* ***Koshie.***

> ***"****If I'm going it takes about thirty minutes to get there, there is no traffic and it is not far too"* ***Abrefi.***

A few of the participants however, indicated some challenges they encountered with finding transportation to the hospital, it was cited that finding a means of transportation to the hospital is difficult at dawn and when one lives in a house far away from the junction, finding a means of transportation is difficult.

> *"It was the taxi that was difficult to get because this place is not close to the junction but when my mother brought the taxi like within 45 minutes to 1 hour we reached there"* ***Enyonam***.

> "*Whenever I had to go to the clinic, it took about an hour but the day I delivered, it took more than 1 hour because we were not getting a car"* ***Tiwa***.

> *"It took some time, but I'm not sure because it was dawn we were not getting a car from here"* ***Fati***.

For some of the participants it took between an hour and an hour and a half to arrive at the hospital, such participants felt that the hospital was far away from them. Others encountered vehicular traffic on their way increasing the time spent in reaching the hospital.

"I didn't check the time but may be like 1 hour, there was small small traffic so it took some time to get there" ***Mansa****.*

"It took about an hour and a half to get there, there was some small traffic but also the hospital is far away from here" ***Aba.***

4.4.2 Challenges accessing LPR

While on admission in the labour ward, majority of the participants faced several challenges accessing LPR, it was noted that the daily routines of the staff limited the contact they had with participants, thereby limiting access to LPR. In some instances, the staff were fewer in relation to the load of work required of them increasing the inability of participants to receive LPR. Generally, it was difficult to find a staff who promptly administered LPR.

Majority of the participants noted that the midwives on duty had a lot of work to do and hence could not give them (participants) the necessary care. On some occasions, the ward was filled with a lot of patients, the midwives were seen moving up and down rendering services to the other patients who needed immediate and urgent care.

"That day there were a lot of people in the ward some were very sick… they (midwives) were very busy that day I felt for them" ***Aba***.

"the midwives are quite busy and few I think they usually have a lot to do… actually everybody was so busy, they were actually so so busy" ***Abrefi.***

A few of the participants indicated that there were times when the midwives were seen seated idle, or were handling their phones limiting the care rendered to participants.

"*I was in a small room I could see them doing other things****,*** *sometimes they pass by or they will be sitting down"* ***Ataa****.*

"*the midwives were seated in front of us but when you ask them to help you nobody will help you"* ***Okailey****.*

"Some of them too like holding their phones too much, as for that it very bad. I cannot understand why they were just looking on the phones ei, hmm" ***Efe****.*

Some of the participants mentioned that there was limited access to LPR owing to the limited number of times they were attended to by the staff on duty in the labour ward.

"as for me when I went nobody came to say anything to me, the doctor examined me once, as for the midwives they came at their own time" ***Ataa****.*

"It was not easy, it was rather difficult looking at how all the nurses and doctors were moving up and down… nobody attended to me when I complained of pain" ***Aba***

"At the time I was there, the doctor came to see me once, that is all that I remember that he came to check me" ***Mansa****.*

Majority of the participants cited that, LPR was not promptly administered by the midwives because they (midwives) had limited knowledge on LPR administration and hence had to provide the service in consultation with the doctor.

'I don't think they know or maybe they have to wait for the doctor to instruct them before they do something' ***Ataa****.*

"*You see the doctor instructing them before they work but the old midwives are very good at the work but the young ones don't know anything"* ***Okailey****.*

*"I don't think she had so much control**,** it looked like she had to find out whether to give or not"* ***Abrefi****.*

Majority of the participants mentioned that the midwives disregarded calls for assistance with the management of their pain, many cited that the midwives only responded to calls for assistance as and when the midwives felt it was necessary or when the client was due for examination.

"As for the nurses (midwives), they were there but no one will come to you except when they are going to check you. Even if you shout, they won't mind you" ***Koshie****.*

"I was just shouting because it was very painful and they did not mind me" ***Sika****.*

"No matter how you shout they would not heed to you, what they did was just monitoring the IV infusion" ***Ataa****.*

A few of the participants stated that they could not access LPR because there were no LPR in the hospital and that accounted for the inability of the midwives to administer LPR.

"When I was on the ward, I endured the pain because they can't help me. I know if there's something they can do, they will do it" ***Aba****.*

A few of the participants noted that there were no pharmacies or hospitals in their neighbourhoods which meant that they had to access LPR in the hospital or at a distance far from them.

"*No, because there is no clinic or hospital around or a pharmacy around"* ***Enyonam.***

4.4.3 Timing of administration of LPR

Timing was noted as an important indicator of the effectiveness of LPR**,** the time at which a LPR was administered determined the benefits the laboring woman derived from the LPR as well

as the effect it had on both mother and foetus. For some of the participants, LPR was administered to them soon after they were admitted in labour and for others it was delayed.

Some participants received pharmacological LPR while others received non-pharmacological LPR at different time intervals. Majority of the participants who received pethidine as LPR indicated that they endured the pain for a long time before having the pethidine administered to them. When asked how long it took to have pethidine administered to her, Enyonam had this to say:

> "*That was the difficult part**,** no one was willing to give the medicine and those willing too were delaying"* **Enyonam**.
>
> *"I requested for it and everyone was like, "I'm coming" and I said "ok". I had emphasized so many times before it came"* ***Abrefi***.
>
> "*It was very long, like forever. I was in severe pain and I was shouting but they did not attend to me. It took a long time before they gave me the injection"* ***Sika***.

For majority of the participants the midwife's education to practice deep breathing exercise or to lie on their side came in long after the onset of painful uterine contractions. For some of them they had gone through a lot of suffering which could have been abated.

> *"Like when I came, she had to tell me that I should breath through my mouth when I am feeling pain but she didn't tell me"* ***Fati***.
>
> *"Yes, I went through the pain, about 2hours before they came and they did "VE" for me"* **Araba**.
>
> *"It took a long time**,** I started shouting when the pain became unbearable. It was when one of them asked me to lie on my side and breath through my mouth*" **Efe**.

On the contrary, a few of the participants indicated that when they arrived in the labour ward, the midwife who admitted them educated them on mechanisms aimed at abating labour pain.

> *"It was not long, when I went to the labour ward, the midwife who gave me the bed asked me to lie on my side and breath through my mouth when I feel pains"* ***Okailey***.

> "*No, it didn't take long**,** she was by my side throughout the labor process and never left me"* ***Mansa***.

A few of the participants indicated that LPR was administered to them only when the midwives perceived that the laboring women was in pain, the opinion of the midwife on the level of pain suffered by the client determined administration of LPR.

> *"They will just be handling their phones unless they see that you have the urge to bear down before"* ***Mansa***.

For a few of the participants they only received a prescription for pharmacological LPR after they had delivered.

> *"No, it was after the delivery, they wrote the prescription for me"* ***Araba***.

> "*Because they gave me a prescription form to go out to buy after I had delivered"* ***Enyonam***.

4.4.4 Accessibility of staff

Having access to the staff on duty was determined by factors such as the number of midwives and doctors on duty, the attitude exhibited by the midwife which made her easily approachable by the patient and how long the midwives stayed with the laboring women.

A few of the participants mentioned that midwives exhibited therapeutic characteristics that made them easily approachable, some of the midwives were noted to be friendly

> *"Yes, they are friendly and loving they reassure and give psychological support a lot and the way they took good care of me I'm sure they would do the same for another person"* ***Tiwa***.

> *"They were lovely midwives, they reassured and encouraged (LPR option) me a lot throughout my labor and that made it looked like the pain was okay"* **Enyonam**.

4.4.5 Supply of LPR

This subtheme looked at whether participants received LPR or not. Some of the participants received pharmacological LPR, others received non-pharmacoloical LPR while some received no pain relief for the entire labour experience.

Some of the participants indicated that during the course of their labour, they accessed pharmacological LPR.

> *"They gave me some injection and the pain went down for some time"* ***Abrefi***.

> *"It was very long, like forever. I was in severe pain and I was shouting but they did not attend to me. It took a long time before they gave me the injection"* ***Sika***.

> *"Yes they did, they gave me an injection"* ***Enyonam***.

Other participants indicated that for the management of the pain that was encountered during the labour process, the midwives employed some mechanisms used non-pharmcvologically for the relief of pain.

"The nurses always ask to breathe through the mouth and lie on my side when I complain of pain" ***Okailey***.

"The nurses ask everyone to breathe through their mouth and lie on their left side" ***Koshie***.

*"The way she talked to me**,** and then giving me assurance that she can manage me"* ***Enyonam***.

A few of the participants who were looking forward to being administered with medicines to relieve the labour pain, however did not receive such intervention.

"Same thing happens each time I deliver. I am offered nothing I just lie down and the pain intensifies and reduces, intensifies and reduces till I am ready to give birth" ***Tiwa***.

"No, as for me each time I deliver the midwives do nothing about the pain" ***Fati***.

For a few of the participants, the labour pain was managed with both pharmacological and non-pharmacological LPR.

"Yes they did, they gave me an injection… they ask me to lie on my left side when I was shouting" ***Enyonam***.

"It took a long time before they gave me the injection… they told me it was in vain and that I should lie on my left" ***Sika***

4.5 Accomodation of LPR.

In the concept of access, an accommodative service is one that is organized to suit the clients needs, it considers the number of hours for which the service is provided in a day as well as the systems put in place to allow the client utilize the service at her conveinience. Accomodation of LPR was the third theme derived from analyzing data collected from participants, this theme

examined how midwives organized services such that participants could conveiniently access LPR, the component of education during the antenatal period and the structures in place in the provision of LPR to participants were explored. This identified the exposure to LPR given to participants beginning from the antenatal clinic up until they were admitted in labour. Under this theme, participants indicated how the working hours of the hospital influenced access to LPR as well as the preparations carried out at the antenatal clinc in the bid to ensure that women were exposed to LPR and were well informed about the service. Emerging subthemes included; Organisation of LPR, LPR education at the antenatal clinic and preparation for LPR.

4.5.1 Organisation of LPR

Organisation of LPR explored the working hours of the hospital and the hours for which participants were able to conveiniently access LPR. Despite being admitted in labour at different times of the day, participants noted that the hospital was in operation.

Majority of the participants noted that the hospital provided an all day and night service with staff working at odd hours, making it possible to receive LPR if the service was required. Participants compared the hours of operation of the hospiatl to that of private hospitals and iterated that unlike private hospitals, the hospital was always opened.

> "*As for that I am very sure, if you go to the private hospital's they close their gate but one thing I know is that as for that place, they are always working"* ***Koshie***.

> *"If the nurse wants to help the pain to come down, it does not matter the time you reach there…it is the private hospitals that close"* ***Efe.***

A few of the participants also noted that the hospital had an array of hospital staff who worked for long hours to provide LPR.

"*there are a lot of senior doctors there…I am sure the pain can be managed at any time of the day" **Okailey**.*

Other participants mentioned that the hospital worked for long hours making LPR accessible any time of the day.

*"It was getting to 4:00 that way but we came, and the nurses and doctor's were down there working" **Koshie**.*

*"Well, I don't think it is because of the time, it is a big place. They do a lot of things all the time, all the other departments are opened the whole day and even at night" **Enyonam**.*

4.5.2 LPR education at the antenatal clinic

At the antenatal clinic participants were noted to have been educated on several issues that were needed to make the pregnancy, labour and the subsequent puerperium uneventful however some of the participants noted that they received no education on the availability of LPR.

*"No, I attended the antenatal clinic**,** but I was not told what to do… the doctor didn't say anything about pain relief and the midwives were also silent about it" **Abrefi**.*

*"I was attending a private hospital. Over there it was a doctor that was attending to me and he didn't say anything about it." **Enyonam**.*

*"There was no education on labour pain let alone how to manage it" **Araba**.*

A few of the participants mentioned that the education received at the antenatal clinic was not varied, the diversity in the topics for education was limited which could have accounted for a lack of education on LPR.

"*Every day exclusive breastfeeding aaba…they talked about breastfeeding, signs of labour but even that one was not into details. There was nothing on what to do when in pain during labour" **Araba**.*

Some of the participants iterated that at the antenatal clinic, the midwives gave education before routine care begun and that posed some limitation to the ability of participants to have a grasp of the information that is being given.

"*The teaching is done early in the morning before they start calling us, you will not hear anything if you are late so I usually go very early but they didn't teach that one" **Fati**.*

A participants noted that education on the management of labour pain was given at the antenatal clinic but mentioned her inability to listen to what the management was about.

*"One day a midwife asked what can be done and one of the pregnant women mentioned that you could breathe through your mouth but I didn't listen to all. I went out to buy food when I returned the talk was over" **Ataa**.*

4.5.3 Preparation for LPR

It was noted that some participants expected the midwives who attended to them during the antenatal period to take them through psychological preparations aimed at relieving labour pain to enable them (participants) better understand how to deal with the pain of labour.

"*they should prepare them psychologically that delivery is not easy or something so that when the person comes the person knows I'm coming to face this…psychological preparation is important" **Araba**.*

"*maybe the patient is not all that psychological she has a whole lot of things to think about so with you talking to her… the nurses have to tell you about the pain and prepare your mind" **Enyonam**.*

A few of the participants also stated that non-pharmacological means by which pain could be averted during labour should be taught during the antenatal period to enable the woman have a command over the procedure before labour sets in.

*"Even the breathing through the mouth if the nurses teach you when you are not in pain it is possible that you can do it better when the pain starts" **Efe**.*

"*During the pregnancy, the pregnant women can be shown the ways by which the pain can be managed because in the labour ward when the midwife asks you to breathe through the mouth you cannot do it well but if you already know it, you can do it" **Okailey**.*

Some of the participant added that management procedures for managing labour pain should begin at the first antenatal clinic visit to allow enough time for the pregnant woman to prepare for it.

*"What I will say is that, whatever they can do to let the pain go down, they have to let you know the first time you come to the clinic… because you will have a long time to prepare for it" **Mansa**.*

Another participant added that non-pharmacological LPR such as deep breathing exercise should be taught when the client is not in pain to enable them better practice it when labour ensues.

*"Even the breathing through the mouth if the nurses (midwives) teach you when you are not in pain it is possible that you can do it better when the pain starts" **Efe**.*

Majority of the participants indicated that, medications used in the management of labour pain could be prescribed during the antenatal period to afford the pregnant woman enough time to prepare for it before labour sets in.

> *"like the medicine they have to write it for you when you attend the clinic… they should have written the drug before me going into labour"* ***Enyonam***.

> *"During the pregnancy, I think the nurses and doctors can write the medicines for us like the way they write the lab"* ***Efe***.

> "*If there are medicines to be bought, the midwife has to inform you at the clinic, all other arrangements should also be done at the clinic"* ***Okailey***.

Others added that in the event that medications would be used to manage labour pain, it should be prescribed when the pregnancy is at term.

> *"When they realize that you're getting close to the delivery, it can be prescribed for you"* ***Araba.***

> *"If it is expensive, they should have just written it for me to go and buy so that I come with it I would not have suffered the way I did"* ***Abrefi***.

4.6 Affordability of LPR

Affordability of a health care service is simply the patient's ability to pay for the health service as posited by Richard et al., (2016). Affordability has been described as a major determinant of access and involves the patient's knowledge base on the cost of the service as determined by the provider of the service. The ability for the patient to raise enough funds to cover the cost of care is also considered under this construct of the conceptual framework. Under this

theme, participant's knowledge on the cost of LPR were determined, in addition their ability to pay for the LPR services provided was explored and the various avenues from which funds was raised for the payment of LPR were also determined. Participant's registration with the National Health Insurance Scheme, its implication and benefits when accessing LPR were also explored. Cost of LPR, ability to afford LPR and benefit of National Health Insurance were the subthemes that emerged from the main theme.

4.6.1 Cost of LPR

The cost that would have been incurred with the patronage of any of the LPR services was not known to participants. All participants iterated that, though they made payment on discharge, they did not know whether it included the cost of LPR.

> *"As for the medicine I don't know but I had to pay so much when I was discharged… I don't know whether it was for medicines"* ***Sika***.

> *"I don't know the medicines involved, I therefore cannot tell how much they cost"* ***Tiwa***.

> *"I don't know how much"* ***Koshie***.

A few of the participants mentioned that they would have preferred to have prior knowledge about the cost involved in accessing LPR service to enable them make adequate preparation towards it.

> *"At least the nurses have to inform you to prepar*e for it… *and even the cost should be mentioned so that the woman can prepare for it*" ***Okailey***.

A few of the participants indicated that some LPR options were not expensive and that a few Ghana Cedis could purchase some of these medications however, the hospital could not provide these medications for the relief of labour pain.

"No, it was not expensive. It cost 50 Ghana Cedis" ***Enyonam***.

"I know it is very cheap, even if you have 1 cedi, you can buy it but even paracetamol the doctor did not write for me" ***Ataa***.

"*Everyone can afford paracetamol but even that, they didn't give me. I know it reduces pain and I could have paid for it"* ***Mansa***.

All the participants reiterated that, the cost of care for labour was extremely expensive, citing in several ways their displeasure with the amount paid on discharge despite the absence of LPR.

"I don't know what the nurses did for me that I had to pay that much money, apart from the false labour and the drip, I don't know why the bill was that much… it was more than 8.5" **Ataa**.

"I didn't know that delivery was so expensive. I thought delivery services was free…

I was not expecting that much, it was too expensive" ***Abrefi***.

"I had to pay so much when I was discharged, more than 800 Cedis, somebody with insurance paying so much money for delivery, hmm" ***Sika***.

4.6.2 Ability to afford LPR

It was noted that none of the participants was unable to fund services provided during the course of labour, despite the assertion that services provided were expensive. Participants expressed various avenues by which monies needed to fund their hospital bills was raised.

Some of the participants indicated that the funds needed to pay all aspects of the delivery cost was provided by their spouses including the total hospital bill; however, participants were unable to determine the exact amounts that were paid.

"*My husband paid money for the medicine and when we were discharged he also paid like 800 Cedis" **Enyonam**.*

*"My husband went to look for the money and paid, it was not easy ooo but he had to look for it" **Aba**.*

Some of the participants indicated that their spouses funded a greater part of the expenditure that had to be made after delivery.

*"My husband made most of the payments but I can't tell what and what he paid" **Mansa**.*

Some of the participants who were given prescriptions for pain relief medications noted that their husbands supported them with the purchase of the medications.

*"Because they gave me a prescription form to go out to buy…my husband went to buy it" **Enyonam**.*

*"No it was not expensive my husband bought it for me" **Araba**.*

Some of the participants had no support with the payment of the services received, the bills were funded by participants, such participants expressed displeasure with the amounts paid.

*"Yes, I paid myself…I paid 900 Cedis, out of my own pocket, but it is not fine" **Okailey**.*

*"I had to pay so much when I was discharged…yes, I paid myself" **Sika**.*

Other participants who had spousal support with the funding of the services iterated the possession of the ability to fund the bills but expressed disapproval of the high amount.

*"Hmm, I would have paid but it would have pained me…it is not fair. The reason I work is to be able to pay some of these things, so I would have paid" **Abrefi**.*

Other participants cited that giving pregnant women prior information about costs involved in seeking care will afford them enough time to prepare and put them in a place to be able to fund the services.

> ***"****When they write the labs for you to go and do, then they add it. That way, everybody can afford it because you will have a long time to prepare for it"* ***Fati****.*
>
> *If you are in pain and suffering, and the medicine can help make the labour less painful why not, I will buy. It would have been good*" ***Fati***.

Another participant added that personal funding of costs was possible if the cost of LPR medications were not so high.

> *"Yes, at least if it was prescribed according to my level maybe I think I would have afforded"* ***Araba***.

A few of the participants had other relations supporting the payment of hospital bills.

> *"I had some money and my sister also added some and I gave it to my husband like 400 Cedis, so he added the rest"* ***Efe****.*
>
> *"The money was so much my mother was complaining about it"* ***Koshie***.

4.6.3 Benefits of National Health Insurance Scheme (NHIS)

Participants bemoaned the huge amount of payments made for the services received despite being registered with the NHIS and for most of the participants the benefits derived from NHIS was not known to them.

Majority of the participants exhibited limited knowledge on the benefits derived from being registered with the NHIS owing to the high amounts of hospital bills issued out to participants at the end of the care received.

> *"I don't know whether I didn't get any medicine because of the insurance, sometimes when you visit the hospital with insurance you are not well catered for, that may be the reason"* ***Efe***.

> *"I don't think the insurance helped me, the bill was so high"* ***Aba***.

> *"I don't know, we had to pay that amount of money even though I had the insurance. These days having the insurance does not help you at all"* ***Fati***.

Majority of the participants stated that to have access to LPR there was no benefit derived from being registered with the NHIS because all services were paid for. When asked about the benefits of the NHIS in relation to accessing LPR, Araba had this to say:

> *"No, nothing at all…I don't know because we paid."* ***Araba***.

Other participants added this:

> *"I paid the bill, the insurance did not cover anything****" Okailey.***

> *"I don't know what the insurance did because my husband paid like 900 Cedis"* ***Abrefi***.

A few of the participants, however mentioned that though limited, the National Health Insurance allowed participants to receive certain services for free.

> "*The insurance is almost useless in Korle-bu, it was only the folder and some of the labs that I didn't pay*" ***Ataa***.

"In case of some laboratory investigations, it was able to cover" ***Sika***.

Other participants were with the opinion that being registered with the NHIS is equal to not receiving the best of care since the NHIS does not cater for several services provided in Ghana.

"Maybe those who do not use the insurance are given the LPR, because I know the insurance does not cover all the medicines I know that having the insurance implies not having very good treatment and that may include not receiving any help with the pain" ***Tiwa***.

Other participants spoke about the possibility of not accessing LPR and not receiving the best of care because of being registered with the NHIS.

"I don't know whether I didn't get any medicine because of the insurance, I know that the insurance does not cover all the medicines that are used especially the expensive ones. Maybe that is why I didn't get any medicine" ***Efe***.

4.7 Acceptability of LPR

According to the definition of the model of choice, acceptability refers to the characteristics of the service that makes it attractive to the consumer such that she is willing to accept the services provided. In this regard acceptability of LPR considered characteristics of both pharmacological and non-pharmacological LPR and what made these LPR options suitable to participants. This subtheme also explored the characteristics of the service providers of LPR and how these characteristics contributed to the attitude of client in accepting the service provided. Lastly, the expectations of participants with regards to LPR administration was reviewed in connection with the realization of these expectations. Majority of participants had a preference for pharmacological LPR despite a lack of knowledge of these LPR options with many citing that,

despite the belief that labour is a painful phenomenon labour analgesia will go a long way to improve labour experience. Some characteristics of the midwives that implicated their inability to administer LPR to participants were also highlighted. After rigorous analysis of transcribed data, the following subthemes were identified: preference LPR of women, characteristic of midwives, effectiveness of LPR and expectation of LPR.

4.7.1 Expectation of LPR

Labour is a painful phenomenon that traverses all communities regardless of race, creed, economic status or geographical location. Participants in this study emphasized the painful nature of labour and expressed the pain in various ways from severe to unbearable. However, majority of the participants expected the pain of labour to be averted either by pharmacological or non-pharmacological means.

For majority of the participants, receiving relief from the pain that is experienced during the course of labour was an expectation when going on admission. However, some of these participants were not specific on the type of LPR they expected to receive i.e pharmacological or non-pharmacological LPR.

> *I expected some form of pain relief, because I know it can be done. Medicine has far advanced and I know that it was possible for the pain to be relieved"* ***Abrefi***.

> *"Yes, I had some hope but I gave birth through the pain… I thought they will help me not feel much pain because the pain is a great deal"* ***Aba***.

Some of the participants indicated that, labour pain relief was a high priority for them when going on admission, with the expectation of receiving pharmacological relief of labour pain.

"I had such an expectation that I will be given medication to help, but they didn't mind me for a long time" ***Sika***.

"Yes, I thought that at least since it was a hospital. I could get some medicine because the labour is painful" ***Koshie***.

A few of the participants mentioned that despite the knowledge of labour being a painful experience, they expected to have a labour devoid of pain because of the intervention that would be put in place to relieve the pain during labour.

"Yes, I had high expectations… I was expecting to be given the epidural and the pethidine so that my whole labor process would be painless or pain free" ***Abrefi***.

A few of the participants mentioned that, they expected to have some pain during labour but were uncertain whether LPR was going to be accessible to them.

"I expected to have some pain, as for medicine, hmm I don't know. I didn't have something like that in mind because I know giving birth comes with a lot of pain but you will forget it" ***Ataa***.

Some of the participants iterated that accessing medical intervention that will prevent the pain experienced during labour was not in their expectation. Citing that all they expected was to have a safe delivery.

"Madam nothing oo… as for that place, I didn't expect to have my labour pain relieved, someone even said the midwives beat the women when they shout… all I wanted was to have a safe delivery and also be healthy" ***Okailey***.

> *"No, I didn't have any hope, I knew that labour would be painful and nothing would be given to me. During birth, same thing happens each time I deliver. I am offered nothing, I just lie down and pain intensifies and reduces till I am ready to give birth"* ***Tiwa***.

A participant added that she expected to have the pain of labour relieved with both pharmacological and non-pharmacological ways.

> *"So I know the pain is natural but like some activity or medicine to reduce the pain will be good"* ***Ataa***.

A few of the participants mentioned that receiving pharmacological LPR was an expectation they had prior to delivery but that expectation was not met.

> *"Yes, that was what I knew, but upon arrival they said I have been operated on before so I can't be given any pain medication. But during the birth of my second child, they gave me pain relieve and I felt no or less pains"* ***Mansa***.

> *"When I came in the midwife said I had to make arrangements for that so I didn't get it, the injection brought down the pain but not like I expected"* ***Sika***.

> *"Madam the nurses did not do anything, I expected some medicine but I didn't receive any medicine"* ***Aba***.

4.7.2 Preference of LPR

This subtheme examined the LPR options that were more preferable to participants which made it possible for them to agree to receive LPR.

Majority of the participants stated that if they had to choose a means by which the pain experienced during labour can be prevented, they will choose pharmacological means of preventing labour pain.

> *"I will want the medicine because lying on my side and breathing did not help me at all"* ***Koshie***.

> *"If I get the one we breath in, I will like it because I don't want anything that will have a negative effect on my baby or me at the same time I want the pain to go down"* ***Ataa***.

> "*They could have given me medicines to let me feel less pain, when someone delivers through operation, they don't feel the pain of the cut because of the medicine that is given to them"* ***Fati***.

A few of the participants however, mentioned that despite wanting pharmacological LPR, they wanted paracetamol because it promised pain relief devoid of adverse effect on both mother and foetus.

> *If that (paracetamol) was there, I could have taken it. As for paracetamol, I know that when I take it, nothing will happen to me…I will choose paracetamol first".* ***Aba***.

> "*If I decide to have another child I will consider that one (paracetamol) because I don't want problems"* ***Okailey***.

> *"I don't want something that is expensive or something that will harm me or my baby, that is why I want paracetamol...I think that paracetamol is effective it will not have any bad effect on me or my baby"* ***Efe.***

A few of the participants cited that they would want the pain of labour prevented with the use of non-pharmacological means of LPR.

> *"I will choose the natural ones together with the oxygen. I will prepare well and pay for it if I have to"* ***Ataa***.

> *"The ones that they will teach that you will do is better than the drugs, because when I did them it helped me a great deal"* ***Mansa***.

4.7.3 Effectiveness of LPR

Effectiveness of LPR referred to the attainment of the desired effect for which the LPR was administered, be it pharmacological or non-pharmacological. Participants expressed varied effects for various LPR administered.

All the participants who received pharmacological LPR stated that, the desired pain relief was not felt immediately after the medication was administered.

> *"the injection brought down the pain but not like I expected… I expected the pain to go immediately but it took a while before I fell asleep"* ***Sika***.

These participants who received pharmacological LPR, indicated that there was a limit to the effectiveness of the pain relief administered and that the pain felt was not completely abated like they wanted it to be.

> *"Yes, on a scale of 1-5, I would say about 3, the pethidine was not all that effective"* ***Abrefi***.

> ***"****Please yes but not all that 100%, it (pethidine) was not all that effective"* ***Enyonam***.

Some of the participants iterated that the effectiveness of pharmacological LPR wore off after a while after which the pain intensified.

"When I woke up, the pain was so intense, it was more painful than my first delivery but I had not slept for long, the pain returned too quickly" ***Sika****.*

"it didn't work for long, because it worked for some time and then later I will felt the pain even more than before" ***Enyonam****.*

Other participant related the limited effect of pharmacological LPR to the late administration of the medication during the labour process.

"I really didn't have the effect. I needed it (pethidine) early. Next time, I will opt for something else, maybe an epidural. I don't know if maybe that one will be given early" ***Enyonam****.*

*"The pethidine was not all that effective it came late. I was just about to deliver****,*** *so I didn't get it early enough"* ***Abrefi****.*

Another participant hinted that combining a non-pharmacological means of LPR with a pharmacological means LPR was effective in the relief of labour pain. Citing a combination of diclofenac suppository and sacral massage. She had this to say:

"Yes, I will do that (sacral massage) and add medicine… the suppository diclofenac, it"s effective against pain" ***Araba.***

Majority of the participants who received non-pharmacological LPR stated that, the method used was not effective in the relieving of the pain felt during labour.

"*The nurses ask everyone to breathe through their mouth and lie on their left side yet everyone will be shouting. I don't think the breathing in helps"* ***Koshie****.*

"*Nothing oo, the pain was still there sometimes even worse, I don't even know why the nurses like saying that when it (deep breathing exercise) does not help"* ***Efe.***

"As for breathing in and out of your mouth, it didn't help me, If the pain can be relieved, entirely, I think they should do so rather than say breath in and out" ***Koshie.***

4.7.4 Characteristics of midwives

One of the key factors that characterized acceptability in the model of choice was the characteristics of the service provider which appealed to the client such that the client was willing to accept those characteristics and therefore accept the service being provided. Participant made mention of some attributes exhibited by the midwives who supported them through labor.

A few of the participants mentioned that the midwives acted in ways that made participant doubt the midwife's qualification to administer LPR.

*"I was asking for the pain relief and it was not coming**,** I was doubting are they qualified enough"* ***Abrefi.***

Other participants mentioned that the midwives exhibited a poor knowledge in the administration of LPR and explained that the inability of the midwives to administer LPR was connected to an absent knowledge of LPR.

"I don't think they know because as for the work like delivering the baby they know how to do it so they will do it for you but as for the pain, I don't think they know how to let it go down" ***Tiwa.***

"I think if they wanted to help me, like they would. They just don't know what to do about the pain" ***Sika.***

"If the nurse knew what to do, she would have done it. She didn't know, all of them" ***Okailey***.

Despite this assertion, a participant mentioned that, the midwives were well vested in their duties and possessed the ability to provide the necessary assistance when needed.

"*They know their job so if they observe and see you are in unbearable pains maybe they can give you pain relieve*" **Mansa**.

A few of the participants mentioned that the midwives were lovely and helpful with the management of the pain experienced during labour.

"The nurses know what is good for you and they help you, to me they were okay and they did well" Tiwa.

"*They were lovely midwives, they reassured and encouraged me a lot throughout my labor"* ***Fati***.

Some of the participants indicated that they could not access LPR because the midwives conducted themselves in ways that portrayed a lowered confidence in the administration of pharmacological LPR.

"I didn't see that confidence there; the confidence level was low… I wasn't so confident in them because I was asking for the pain relief and it was not coming" ***Abrefi***.

4.8 Summary of findings

The above findings were derived from data generated from the narrative of post-natal women who had spontaneous vaginal delivery within the Accra Metropolis. The findings throw light on the

myriad difficulties women encounter when accessing pain relief during a spontaneous vaginal birth.

A comprehensive analysis of the findings will provide all stakeholders the basis for the formulation of systems that incorporates pragmatic ways of improving access to pain relief during a vaginal birth. The Access to Health Care model developed by Penchansky & Thomas, (1981) guided the study, with the constructs of the model being the basis for the development of all the five themes generated from a thematic analysis of transcribed verbatim data. Five major themes which were consistent with the constructs of the model were developed and these five themes further gave rise to nineteen subthemes, the five themes were availability of LPR, accessibility of LPR, accommodation of LPR, affordability of LPR and acceptability of LPR. Participant's knowledge on available LPR options was explored and it was revealed that out of the diverse means by which labour pain could be averted, participants exhibited a limited amount of knowledge in four pharmacological and four non-pharmacological LPR. The findings indicated that midwives and a previous delivery were basically the main source of knowledge on LPR to participants, however the internet, relatives and friends were also indicated as sources from which such knowledge on LPR was derived. A few of the participants expressed a concern with the use of pharmacological LPR owing to the effects imposed on both mother and baby leading to an affinity for LPR options that were less likely to make mothers sleep or vomit and ones that were not having an effect on the respiratory center of the foetus.

The findings revealed the general ease with which the hospital could be accessed but

in contrast highlights the myriad challenges with accessing LPR once on admission; it was revealed that there were limited number of staff to provide LPR as well as a relatively heavy workload expected of the staff. In other cases, the participants indicated that LPR was not

accessible as a result of a lack of LPR or a limited knowledge on LPR on the part of the staff, in few cases the inaccessibility of LPR was related to bad work attitude of the staff on duty. For all the participants, there were no preparations and education to allow accommodation of LPR, however, the hospital was noted to provide services throughout the day and night making it possible to receive LPR services if available. All the participants were able to afford the services provided including LPR, apart from a few of the women, all participants received support with the payment of LPR services provided however, all participants were unhappy with the amounts payed in relation to the services received. The findings portray that there was limited benefit with being registered with the NHIS as huge bills were given to participants despite being registered with the insurance. Majority of the participants expected to have the pain of labour abated and cited a preference for pharmacological LPR while being mindful of options that poses threat to both mother and foetus. Participants listed features such as lovely, helpful and knowledgeable in LPR as characteristics of service providers that made it more likely to accept LPR, however a lack of qualification and low confidence were also iterated as characteristics of some of the service providers.

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter discusses the findings of the study in relation to existing literature, discussions are grouped in themes consistent with the construct of the model that guided the study as was discussed in chapter four. Demographic characteristics of participants are discussed first after which the other findings are discussed.

5.1 Demographic Characteristics of Participants

A total of 12 post-natal women were involved in the study**,** their ages ranged from 19-37, which falls within the reproductive age group. Nine (9) participants, signifying 75%, were practicing Christians while 25% signifying 3 were Muslims, this might be due to Ghana being essentially classified as a Christian country since it is dominated by people who practice the Christian religion (Ghana Statistical Service, 2017). In Ghana, society expects women to be married before having children; the study revealed that 11 out of the12 participants were married under various marital laws. Similarly, 11 out of the 12 participants had received formal education which is contrary to findings of the Ghana Statistical Service, Maternal Health Survey Report which states that about 1 in every 5 Ghanaian women have no formal education (Ghana Statistical Service, 2017). This study revealed that 3 out of the 11 women who had been formally educated were educated to the tertiary level, which is in contrast to findings in Ghana which indicate that fewer women attain tertiary education (Darkwah, 2010; Ghana Statistical Service, 2017). In exception of 3 participants who were unemployed, all the others were working in diverse fields of employment. Each participant could speak at least one Ghanaian language and 7 out of the 12 could speak English fluently. The study also revealed that 2 participants were from the Northern part of Ghana, while the other 10 were from various parts of Southern Ghana.

5.2 Availability of Labour Pain Relief

Several people hold the belief that labour pain is biblical and that God approves of it (Aziato, Odai, et al., 2016; Skowronski, 2015). It is one of the most painful experiences a woman may encounter in her entire life time but fortunately there are several management procedures to relieve the pain and hence improve health outcome (Alleemudder et al., 2015; Aziato, Ohemeng, et al., 2016; Ezeonu et al., 2017; McCauley et al., 2018). Availability of LPR was the first theme to be identified in this study, this theme categorized participant's perception on available LPR under four subthemes namely; knowledge on available LPR. Source of knowledge on available LPR, expertise on LPR and availability of staff. There are several means of averting labour pain: pharmacologically, oral tablets such as codeine, tramadol and paracetamol are used; intramuscular, intravenous and inhalational opioids such as pethidine, fentanyl and remifentanil are also useful; inhalational anesthetics such as nitrous oxide as well as regional and local analgesia such as pudendal block, para-cervical block, epidural or spinal anaesthesia are used. Non-pharmacologically, transcutaneous electrical nerve simulation, relaxation exercise, a birth support, side lying, aromatherapy, massage, water births etc. are used (Aziato, Kyei, et al., 2017; Hosseni et al., 2016; McCauley et al., 2017; Okojie & Isah, 2014).

Despite the myriad of labour pain relief options, the women in this study possessed limited knowledge on LPR. The women were only aware of pethidine, epidural, paracetamol and suppository diclofenac as pharmacological means of reducing labour pain and deep breathing exercise, sacral massage, side lying and reassurance as non-pharmacological means of averting pain during labour. Though limited, the study revealed that all participants possessed knowledge in at least one LPR option but the majority had knowledge in non-pharmacological LPR, this is in support of indications that women possess limited knowledge about LPR, the inferred reason being

that in the management of labour, there is no established pain relief system especially in low income countries (Lindholm & Hildingsson, 2015; Nabukenya et al., 2015; Naithani et al., 2011). Less than half of the total number of participants were aware of pharmacological LPR, with pethidine identified as the commonest pharmacological LPR known to these participants despite its limited use in the global obstetric community as labour analgesia. However, it was noted that, the women could not identify pethidine though they received it as labour analgesia, these participants referred to pethidine as an injection that is administered to relieve pain. This finding is in tandem with findings that indicate that women who receive pethidine in labour exhibit little knowledge of the medication; the reason for this is a lack of consent before the administration of pethidine. In many cases, health professionals in the course of alleviating the pain that comes with labour, administer pethidine without explaining to participants, the name of the medication as well as its indications before administration (Thomson et al., 2019).

In this current study, pethidine happened to be the only pharmacological LPR that was made available for participant's use, this finding is in congruence with findings in Ghana and elsewhere that demonstrate that to alleviate labour pain, pethidine is commonly used. This is largely because administering it does not pose challenges, it is economical and a well-known medication in the medical fraternity (Anderson, 2011; Aziato, Kyei, et al., 2017; Barakzai et al., 2010; El-Wahab & Robinson, 2011). This study also revealed that all the post-natal women who were aware of pethidine as a LPR option received pethidine for the management of the pain whiles those who were not aware of it only received non-pharmacological LPR, this finding is congruent with findings that indicate that laboring women who lack knowledge in pharmacological LPR mainly do not receive pharmacological LPR during labour (McCauley et al., 2017).

In a similar vein, this study revealed that a few of the participants who were aware of pharmacological LPR options possessed knowledge in the use of epidural with just a participant describing its mode of administration as well as its effect on the human body. This finding is similar to findings in other low income countries that demonstrate a limited knowledge on epidural analgesia as an LPR option, reasons cited were limited use of epidural due to the extra costs that comes with its utilization and a lack of trained personnel in the administration of this LPR option. These studies demonstrate that majority of women who were aware of epidural were not aware of its mode of administration, its effectiveness and the complications that come with it (Barakzai et al., 2010; Ezeonu et al., 2017; Gari et al., 2017; Okojie & Isah, 2014; Shidhaye, Galande, Bangal, Smita, & Shidhaye, 2019).

The study also revealed that, majority of the participants had knowledge on non-pharmacological LPR; deep breathing exercise, reassurance, side lying and sacral massage emerged as the non-pharmacological means of LPR known to the women. Each woman was aware of at least one form of alleviating labour pain non-pharmacologically, but these were limited to the afore mentioned. This is in congruence with a Nigerian study that revealed that 68.6% of 245 women were knowledgeable in non-pharmacological LPR with deep breathing exercise emerging as the most commonly known to the parturient; similar to this study (Anarado, Ali, Nwonu, Chinweub, & Ogbolu, 2015). Methods such as transcutaneous electrical nerve stimulation, doula support, water births and aromatherapy were not known to participants. In this study, it was revealed that the methods were known to participants majorly because midwives used them more often as compared to other non-pharmacological means of alleviating labour pain. Deep breathing exercise emerged the most known non-pharmacological LPR. This finding is similar to findings in Ghana, Nigeria and the United States that reveal deep breathing exercise as the most common

non-pharmacological LPR known by women and used by midwives. In tandem with this current study, these studies confirm that non-pharmacological LPR options basically are more common to parturient because they are used commonly by health professionals since they present no adverse effect to mother and foetus, are cheap and are easy to use (Anarado, Ali, Nwonu, Chinweub, et al., 2015; Boateng et al., 2019; Kozhimannil, Johnson, Attanasio, Gjerdingen, & McGovern, 2013). Similarly studies in Saudi Arabia name deep breathing exercise as the most commonly used non-pharmacological LPR by health professionals due to its familiarity and the absence of side effects on both mother and foetus but its cost did not present as a reason for its common usage (Almushait & Ghani, 2014). In this current study, it was revealed that, the non-pharmacological LPR that was available to participants were deep breathing exercise and side lying, occasionally, reassurance was also used. A participant revealed that a midwife stopped her from performing a sacral massage indicating that pain will not be abated with the practicing of a sacral massage. This is in contrast to a finding in Ghana which revealed that women were more likely to prevent midwives from performing a sacral massage because of the belief of its harmful effect on the foetus or the irritability caused to the woman in labour. According to that study, midwives employ the use of sacral massage as one of the commonest non-pharmacological LPR option during labour (Boateng et al., 2019).

This study revealed that none of the participants with knowledge on pharmacological LPR obtained the knowledge from health professionals; rather, reading on the internet, learning from school as well as from friends and relatives were the sources from which participants gained the knowledge. However, friends and relatives emerged as the major sources of knowledge on pharmacological LPR. This finding is similar to findings that name friends and family as the major source of information on LPR options owing to our strong family ties as Africans coupled with the

comfort with which women discuss matters regarding childbirth with friends (Barakzai et al., 2010; Lally et al., 2014). This is in contrast to another study in Enugu, Nigeria that demonstrate that among 247 women whose knowledge on LPR was assessed, only 66 of them gained knowledge from friends, health care providers were the highest source of knowledge for these women (Anarado, Ali, Nwonu, Chinweuba, et al., 2015). With regards to knowledge on non-pharmacological LPR, midwives were the main source from which knowledge was derived. However, this happened when women in labour were taught to ptactice techniques aimed at reducing the pain felt during labour rather than planned education on LPR. Other sources such as relatives, a previous delivery experience, books, internet as well as friends were identified which is comparable to literature (Barakzai et al., 2010; Lindholm & Hildingsson, 2015; Pilewska-Kozak et al., 2017). In contrast, a study conducted in Poland demonstrate that newletteres, websites and blogs run by health professionals on social media were the main source of knowledge on non-pharmacological LPR but not from direct contact with the health professionals like portrayed in this current study (Pilewska-Kozak et al., 2017).

This current study also revealed that the knowledge of non-pharmacological LPR was not just common to participants, they were more available for use as midwives instructed the women to practice some of these pain relieving techniques during their labour as opposed to a study in Ghana that demonstrate a limited use of non-pharmacological LPR due to shortage of staff, a poor layout of delivery wards that do not allow for birth companions to support delivry as well as the inconveneince that some non-pharmacological LPR posed to other women in labour (Boateng et al., 2019).

In this study, awareness on the effects of LPR was a criterion for measuring the knowledge on available LPR. This study revealed that, participants wanted to be in control during the process

of labour and therefore iterated the desire to have LPR that will not take that control from them. None of the women were aware of the adverse effect of non-pharmacological LPR on labour, the foetus and the mother. However, the study revealed that the adverse effect of pharamcological LPR known to the post-natal women were sleeping and vomiting which were related to pethidine administration. In this study, these effects were noted to rob women of their involvement in the labour process, with many of them mentioning that they fell asleep soon after the administration of pethidine. This finding is consistent with findings that named sleeping and vomiting as some of the side effects of the use of pethidine (Anderson, 2011; Aziato, Acheampong, et al., 2017; El-Wahab & Robinson, 2011). Other adverse effects of pethidine such as depression of the respiratory center of the neonate causing asphyxia was another adverse effect that was known to the womwn, with many of them citing that they were not akin to receiving LPR that will pose harm to their babies. Despite the record of this adverse effect in literature, there is paucity of knowledge on the awareness of this effect among women. Literature records headaches, low back pain, feeling of disconnection from the delievry experience, impaired mobility, a delayed second stage and the incidence of caesarean and instrumental deliveries with the use of epidural analgesia, however, this study did not record any as known to participant (Czech et al., 2018; Gupta et al., 2016; Thomson et al., 2019). It was rather revealed by a participant that, epidural labour analgesia causes asphyxia in the neonate just like the opioid pethidine.

The study also revealed that participants held the knowledge that paracetamol when used as labour analgesia had no adverse effect on the process of labour, the labouring woman and the foetus owing to its general safety. Though studies show that when compared to tramadol, paracetamol has comparable analgesic effect on labour, it is also safe on the process and progress of labour, the parturient and the foetus. However, there is paucity of literature on the knowledge

of these effects among women who have had spontaneous vaginal delivery (Dahiya, 2017; Makkar et al., 2015). Paracetamol also has the record for being generally safe for the process and progress of labour as well as foetus and mother when used as an adjunct for other LPR options such as pethidine, fentanyle and levobupivacaine (Gupta et al., 2016). Paracetamol is also known to have no adverse effect on the foetus when used in therapeutic doses during the antenatal period but its intrapartum use is not well established (Alleemudder et al., 2015).

This current study revealed that, during labour, all the women had to contend with the staff who will administer LPR when it was needed, with all the women revealing the difficulties encountered during labour when they made a request for LPR. The doctors to assist with LPR were not readily available during labour and even when there was a midwife, the woman had to wait for the midwife to consult the doctor before pharmacological LPR was administered. This is because, the midwives were not mandated to administer pharmacological LPR, the women therefore had to wait to be attended to by a doctor before the decision of LPR would be made unlike in the United States of America where women make the choice of a LPR i.e either pharmacological or non-pharmacological during the antenatal period and that determined whether a doctor or a midwife will attend to the labour including administering LPR (Gibson, 2014b). The study revealed that, the doctors however, were not always available, there were instances when the women iterated that no doctor reviewed their labour, this could be because the doctors were senior doctors who were not always mandated to be on duty round the clock as expected from junior doctors as represented by Freeman, Savva, and Scholtes (2017) in a teaching hospital in the United Kingdom. The doctors were not promptly attending to the women during labour and appeared to be hesitant with the decision to administer LPR, this is similar to opinions that, doctors tend to be reserved with the decision to administer LPR oweing to several factors such as the incidence of an

instrumental or caeserean delivery with the inception of pharmacological LPR (Skowronski, 2015; Wong & Cambic, 2010). In this study, the midwives were seen to be available always in the labour ward but were few in comparism with the number of women in labour limiting their ability to attend to the LPR needs of paturients, this is relateable to studies in Ghana and Tanzania that demonstrate that midwives attending to labour are few and overwhelmed with workload and are therefore unable to administer LPR (Aziato, Kyei, et al., 2017; Aziato, Ohemeng, et al., 2016; McCauley et al., 2018).

5.3 Accessibility of LPR

The ability to arrive at the hospital and subsequently receive LPR easily was examined; this study revealed that, the hospital was geographically accessible, however it was revealed that it was difficult accessing transportation at dawn and when the patient was not close to the roadside. Congruent with this finding, other studies in Africa identify a lack of transportation to hospital as a limitation to accessing health service (Kumbani, Bjune, Chirwa, & Odland, 2013; Roro et al., 2014). This current study also revealed that LPR was not accessible because the midwives were overwhelmed with the duties expected of them, with women testifying to the workload that midwives were expected to handle on a daily basis. Similar to this finding, studies in Ghana pronounce a busy schedule as a limitation to the management of labour pain (Aziato, Kyei, et al., 2017; Boateng et al., 2019). In a similar vein, Dutch and Iranian midwives reveal that their management of labour pain is limited due to time constraints (Hosseni et al., 2016; Klomp et al., 2016). The attitude of the midwife during labour goes a long way to influence the birth experience of the parturient; with positive attitude of health care providers towards LPR improving accessibility to LPR as purported by several studies (Alleemudder et al., 2015; Mannava, Durrant, Fisher, Chersich, & Luchters, 2015; McCauley et al., 2017; Oluyemisi, Oyadiran, Ijedimma,

Akinlabi, & Adewale, 2014). In this current study, midwives exhibited negative attitudes towards the women during labour which included the handling of phones, idly seated or neglecting women despite several calls for assistance as well as physical abuse with management of labour pain, and these actions of midwives were noted to have further inhibited women's access to LPR. This finding is in agreement with a study in Northern Ghana, where women as well as community members described negative attitudes of midwives such as neglect, verbal and physical abuse as well as descrimination with care (Moyer et al., 2014). Studies in other low and middle income countries also emphasised this assertion of negative attitudes of midwives (McMahon et al., 2014; Onasoga, Opiah, Osaji, & Iwolisi, 2012; Sengane, 2013). In some cases a fear of the midwive's negative attitude prevented women in labour from requesting LPR (Chigbu & Onyeka, 2011). Howbeit, this finding is not ubiquitous, Oluyemisi et al. (2014) purpoted in a study in South Nigeria that, midwives demonstrate positive attitudes towards women during labour.

In this study, the women purported that, the midwives demonstrated a lack of knowldege in the management of labour pain and according to them the knowledge gap in labour pain management accounted for the midwives inability to administer LPR. In contrast to this finding, Aziato, Kyei, et al. (2017), reveal that midwives in Ghana are knowledgeable in both pharmacological and non-pharmacological means of averting labour pain, however the knowledge of these pain relief options is not manifested in the daily management of labour pain oweing to an increased workload of midwives. Several studies in other parts of the world also reveal an awareness of labour analgesia among midwies (McCauley et al., 2018), however, other studies also purports a limitation in the use of some options of LPR as a result of a lack of knowledge in the use of the method (Boateng et al., 2019; Ibáñez-Gil, Oliva-Pérez, & Simonelli-Muñoz, 2015; Lee, Martensson, & Kildea, 2012). This current study revealed that, during labour, non-

pharmacological LPR was more accessible to women with some practicing the method known to them; i.e sacral massage, and deep breathing exercise without prompting from the health care provider because of a pre-knowledge of the method used. In a similar study in Ghana, women were noted to without prompting from a midwife practice non-pharmacological LPR during labour as a result of a pre-knowledge from a previous delivery experience (Ampofo & Caine, 2015).

5. 4 Accommodation of LPR

Long working hours is one of the indices of an accomadative service, in this current study, the facility of choice was noted to provide a 24 hour service on each day of the week. The hospital was always opened since it was a government hospital and though midwives were few, they were always present. The midwives were working several shifts; 8 hours and 12 hours; this made it possible for a midwife to be present in the hospital anytime of day a woman was in labour. The long working shift that midwives had to run perhaps contributed to the inability to administer LPR as purported by Stimpfel, Sloane, and Aiken (2012). In tandem with this study, Stimpfel et al. (2012) purports that, pain levels are never assessed, pain is not managed and nurses do not respond to the calls of patients promptly due to fatigue that comes with long hours of working like revealed in this study.

To enable women accommodate analgesia during labour, awareness of LPR options as well as preparations needed to receive LPR should be commenced during the antenatal period, this affords women time to consider the options and make informed choices as well as make both financial, medical and material preparation and commitement to it (Miquelutti et al., 2013; Thomson et al., 2019). It was evident from the study that, antenatal education on management of pain during labour was not done both at the private and public health facilities, this caused uncertainties with the approach to relieving the pain since non-pharmacological means of reducing

pain was the most available to women during labour and these women had no prior formal education on the use of these methods. In similar studies conducted in Poland, 70 out of 112 puerperal women purport that no antenatal education on labour pain management is given at the antenatal clinic. This posed a problem because majority of the women preferred non-pharmacological LPR, meanwhile to effectively perform any of the methods, a previous education is required and this has to be done during the antenatal period (Pilewska-Kozak et al., 2017). Consistent with this are previous studies that demonstrate an absence of or insufficient antenatal education on LPR (Chigbu & Onyeka, 2011; Sadawarte & Bhure, 2013).

This study purports that, since non-pharmacological LPR was mostly available, women must be taught the options during the antenatal period where they could have a command of the method before labour sets in, this is to increase the effectiveness with which the method will be performed during labour. The reason for this assertion was that, the labour process will prevent the parturient from effectively learning and performing the method unlike if she already had that preparation when labour had not set in. Similar to this finding are Brazillian, Taiwan and Australian studies amongst post-natal women which revealed that women who receive education in the various non-pharmacological methods of LPR when labour had not set in are able to effectively perform the methods during labour increasing their control during the labour process (Fisher, Hauck, Bayes, & Byrne, 2012; Gau, Chang, Tian, & Lin, 2011; Miquelutti et al., 2013)

5.5 Affordability of LPR

The pecuniary implications of accessing LPR was extensively examined by this study. Some studies in the past have cited high cost as one of the reasons analgesia is not administered during labour especially for pharmacological LPR such as an epidural (Ampofo & Caine, 2015; Aziato, Kyei, et al., 2017; Ezeonu et al., 2017; McCauley et al., 2018). In this current study, labour

pain was managed with the cheapest form of LPR i.e pethine and non-pharmacological LPR, however the women had to make financial commitments that were expensive in their view, this is similar to a an Ethiopian study that revealed that delivery services are highly priced (Roro et al., 2014). Taking into considertation, the dollar to cedi rate as at July 8, 2020, the cost of delivery services for each post-natal woman was between $127.5 and $153; which was viewed as expensive and inappropriate by the women. However, this figure is much lower compared to other low-middle income countries such as Mongolia where services for a vaginal delivery cost $255. In Mongolia, services for childbirth are fully funded by the government and women therefore do not make finanacial commitments unlike the situation in this study where women made payments for delivery services despite being registered with the health insurance (Taazan et al., 2020). The high amounts paid could be due to the specialization of the setting since previous studies have demonstrated that service cost for vaginal deliveries in referal hospitals are higher compared to that in health centres (Ntambue et al., 2018). However, the payment for delivery services in this study is much higher than what women in the Democratic Republic of Congo (DRC) pay for delivery. In DRC, the average cost for a vaginal delivery is between $45- $60 (Ntambue et al., 2018).

It was also revealed that a notice of the expected charges that would be incurred with the use of labour analgesia would have been preferred by women since they found the cost of services expensive. In this study, women were able to raise funds to cover the cost of service provided including the purchase of LPR, the study revealed that, the family of the women did the payment with their spouses accounting for the majority. This finding concurs with findings in the Democratic Republic of Congo, which revealed that parturients together with their spouses majorly make direct out of pocket payment for delivery services and in some cases other family members

assist with the payment of delivery services despite a concensus to have these charges funded by the government (Ntambue et al., 2018). Though all the women received support with the payment of the service received, the study revealed that a majority of them had the economical capability to fund the service, however there is paucity of literature in this regard.

Being registered with the National Health Insurance Scheme tends to be very usefeul especially with the purchase of medication and the payment required for medical services. Fortunately, all the women were registered with the National Health Insurance Scheme since pregnant women were required to pay just a little amount of money for registration. However, whatever benefits that were to be derived from the NHIS was eluded to the women, they were not certain whether the inability to access LPR was related to being registered with the scheme. In contrast to this finding, women registered with the Insurance Scheme in China receive a reimbursement of the cost of delivery services despite the economical capabilities of the women to fund the service (Xiao et al., 2010). It was also revealed that the NHIS could not cater for medications that are highly priced and did not cover the cost of LPR and delivery services, therefore, despite being registered with the NHIS, participants had to pay quite an amount of money for services provided which many of them were not prepared for as stated earlier. In consonance with this finding is a study in Burkina Faso which revealed that, women together with their families pay for childbirth services that are fully subsidized by the government and other international orgainizations (Ameur, Ridde, Bado, Ingabire, & Queuille, 2012). The women had no prior knowledge of the amount of money to be paid on discharge from the hospital and many of them were taken by surprise at the amount of money they had to part with especially when they were registered with the NHIS. It was discovered that, services provided were costly with parturients having to purchase pharmacological LPR that were supposed to be covered by the

health insurance. This is similar to findings in a Burkinabe study that revealed that despite being funded by governement, women who deliver make payments for some components of delivery service (Ameur et al., 2012). It was evident from the findings that persons registered with the scheme did not receive the best of care in health facilities and it was implied that perhaps this reason accounted for the limited access to pain management to the women when they were in labour. This finding is in contrast to the finding that women without insurance are less likely to receive pain relief (Leal et al., 2014).

5.6 Acceptability of LPR

The women in this study, bemourned the severity of labour pain with many describing the pain as unbearable; shouting, crying and snapping of fingers were some of the ways by which women expressed their pain similar to previous study in Ghana that portrayed how women expressed labour pain (Aziato, Acheampong, et al., 2017). The women therefore expected the midwives to help relieve the pain felt during the labour process, with an emphasis on the painful nature of the pain that is encountered during the process, similar to this; (Lindholm & Hildingsson, 2015; Steel et al., 2015).

The findings of this study demonstrated that the women preferred to have the pain of labour averted by pharmacological means, particularly by the use of paracetamol owing to its minimal adverse effect on both foetus and mother, however their second preferred method were all non-pharmacological LPR owing to the same reason of reduced incidence of adverse effect on both mother and baby as described in previous studies (Boateng et al., 2019; Thomson et al., 2019). In contrast to this finding, a Swedish study identified nitrous oxide as the most preferred medication for the relief of labour pain for 79% out of 935 women, however similar to this finding, the second most preferred method was non-pharmacological (Lindholm & Hildingsson, 2015). Despite the

preference of the women in this study for pharmacological LPR, deep breathing exercise and sacral massage both of which are non-pharmacological LPR were used by midwives for the management of pain unlike in other studies where women received their preferred LPR (Lindholm & Hildingsson, 2015). Midwives are more akin to the use of non-pharmacological LPR as revealed by previous studies because of the fear of adverse effects of pharmacological LPR (Aziato, Kyei, et al., 2017). In contrast to this finding on preference for pharmacological LPR, is an Australian study among 400 post-natal women that demonstrate more than 90% of the women preferred non-pharmacological LPR (Madden, Turnbull, Cyna, Adelson, & Wilkinson, 2013).

This study exhibited varied opinions on the effectiveness of the LPR used; the few who received pharmacological LPR, received pethidine however, it was evident from the findings that all the women who received pethidine demonstrated a limited reduction in the amount of pain they felt mainly because there was a delay in the administration of the medication. Similar to this finding, are studies that rated pethidine as a poor labour analgesic with some mentioning its use as unethical (Abdollahi et al., 2014; Mobaraki, Yousefian, Seifi, & Sakaki, 2016). Despite the effectiveness of the use of pethidine in this study, other studies indicate that epidural remains the gold standard for labour pain relief despite its adverse effect on both the progress of labour and the foetus (Alleemudder et al., 2015; Anim-Somuah, Smyth, Cyna, & Cuthbert, 2018; Czech et al., 2018; Logtenberg et al., 2017; Sng, Kwok, & Sia, 2015). The current study revealed that these women expected to have the medication administered very early in the labour process but that expectation was not met. All participants had to call for pain relief several times before being administered and this was after participants had experienced pain for a long time. This finding is in line with studies that indicate that labour analgesia is only administered only when the midwife deems it fit (Aziato, Acheampong, et al., 2017; Rachmawati, 2012). The reason for the delays were

not identified but it's been proven that delays in administering pharmacological labour pain relief improves both maternal and neonatal outcomes and these may account for the delay demonstrated by midwives in the administration of LPR (Gallo, Santana, Marcolin, Duarte, & Quintana, 2018; Santana et al., 2016). In a similar vein, the study revealed that, non-pharmacological LPR used in the management of labour pain was not effective in averting the pain of labour, this counterforts studies that depicts that, non-pharmacological LPR is not effective in relieving labour pain (Gibson, 2014a).

This chapter concludes that, there is no established labour pain relief system in the facility with several factors inhibiting access to labour pain relief. Moreover, despite the myriad of pharmacological means by which labour pain can be relieved, women demonstrated knowledge in only pethidine, epidural, paracetamol and diclofenac, though only pethidine was available. With many of the women, knowledge on labour pain relief were received from family, relatives and friends, however, the knowledge was limited to the medications but not their dosages or side effects. It was also revealed that there was limited access to transportation to the hospital at certain times during the day, though the hospital was easily accessible. However, the study revealed that once in the hospital, access to labour pain relief was limited owing to the busy schedules of the midwives or a sheer neglect of the women in labour. It was also revealed that none of the women in labour planned to accommodate labour pain relief, there were no education on labour pain relief at the antenatal clinics; both private and government hospitals. The chapter also concludes that the whole labour was financially draining for the women and their families. All of them complained of the unexpected exorbitant charges despite being registered with the NHIS with a few of the women struggling to raise funds to pay their bills. Majority of the women found the side effects of pharmacological labour pain relief such as a depression of the respiratory centre quite unpleasant

and were not keen to accepting any pharmacological labour pain relief that was going to affect them adversely. However, they were very receptive to the non-pharmacological labour pain relief though many of them were denied the proper administration of these methods of relieving labour pain.

CHAPTER SIX

SUMMARY, IMPLICATIONS, LIMITATIONS AND CONCLUSION

This chapter describes the summary of the entire study, the implications of the study to nursing practice, education and policy as well as highlighting limitations of the study. The chapter also outlines recommendations and the conclusion made on the study.

6.1 Summary

Labour is ubiquitously the most painful event a woman will experience in her entire lifetime; however, it is amenable to relief. Despite the availability of analgesia, management of labour pain in Ghana seem to be relegated to the background of obstetric care, nit is in light of this, that this study was conducted to explore access to labour pain relief among post-natal women who had spontaneous vaginal delivery within the Accra Metropolis. The study was conducted qualitatively, specifically by an exploratory descriptive design. The Access to Health Care model developed by Penchansky & Thomas (1981) guided the study. The maternity unit of the Korle-bu Teaching Hospital was the locale for recruiting participants. Post-natal women who met the inclusion criteria were allowed to rest for 12 hours after which an in-depth explanation of the study and its objectives were given to them in a language which they could understand. Those who consented to be part of the study were given consent forms to either thumbprint or sign after which a one-on-one interview was conducted at the convenience of the participants. Interviews were audiotaped and saturation was attained with 12 participants, verbatim transcriptions of data collected was done concurrently with data collected after which thematic content analysis was used in analyzing data. Analysis of the data collected gave rise to five themes namely: availability of LPR, accessibility to LPR, accommodation of LPR, affordability of LPR and acceptability of LPR. All five themes were consistent with the constructs of the model of choice and they further

gave rise to subthemes which assisted with answering the research questions. Majority of the findings in this study were found to be consistent with existing literature.

The study disclosed that, the available pharmacological LPR was pethidine while deep breathing exercise and side lying were the available non-pharmacological LPR. The women in this study exhibited a limited knowledge in LPR options; they were aware of pethidine, epidural, paracetamol and diclofenac suppository as pharmacological LPR and deep breathing exercise, side lying, reassurance and sacral massage were the non-pharmacological LPR options known to them. The women were oblivious of the side effects of the pharmacological LPR options but were confident that on-pharmacological came with no negative effect on both mother and baby. Though a previous delivery, the internet, family and friends were some of the sources from which the women in this study acquired knowledge on LPR, it emerged that midwives were the major source from which knowledge on LPR was acquired however, identifying a staff to administer LPR was difficult.

The hospital was easily accessible apart from a difficult means of transportation during the early hours of the day, when the women arrived at the hospital in labour, the study revealed that accessing LPR proved challenging. The midwives were always overwhelmed with the workload required of them and were also few in number. In several instances, the midwives exhibited bad attitude towards the women and delayed in the administration of LPR even if it was instructing or teaching the parturient to perform a non-pharmacological LPR option. The delays were associated with a lack of knowledge on LPR, the need to consult with a doctor or a lack of empathy. A majority of the women had their pain managed by non-pharmacological means while some did not receive any form of LPR.

The hospital operated at all times during the day and night and had midwives working on several shifts to make up for the demands of the wards. During the antenatal period, the women did not receive education on the management of labour pain and were not aware of what was available to them or how to access any of the LPR options. There was no preparation for the management of pain during the antenatal period and the women were therefore not aware of the role they were expected to play in the management of pain during the management of labour.

All the women were able to afford the services provided during labour but were oblivious of the costs incurred with the management of labour pain. The payments made for the services provided were deemed as expensive though all the women had either spousal or other family support with funding the costs incurred. The study disclosed that a previous knowledge of the costs to be incurred would be appreciated by the women. All the study participants were registered with the National Health Insurance Scheme yet payed exorbitant amounts as cost of delivery; therefore, being registered with the National Health Insurance Scheme was perceived as unnecessary.

The LPR options made available for the use of the women in this study did not meet the expectation of the women. All the women employed more than one means of LPR to relieve the pain felt; for pharmacological LPR, the anticipated effect was not perceived immediately after administration, that coupled with the delay in the administration reduced the satisfaction felt by women with the LPR option used. None of the non-pharmacological LPR options employed by the women was effective with the relief of pain, similar to pharmacological LPR, the methods were employed late and were not performed well. The LPR options preferred by the women were not used for the management of their pain and this further put a limitation on the acceptability of the LPR option used.

6.2 Implications

The findings of this study has implication for nursing education, clinical practice, policy formulation and also presents an avenue for further research.

6.2.1 Implications for nursing education

Labour pain is the only pain that lacks prioritization during management in the hospital setting and lacks management even under the watch of health care providers. The pain experienced during childbirth is debilitating and if not managed, presents with life long implications on the woman, it is therefore vital for all health care providers, especially nurses to possess an in-depth knowledge in the myriad modalities employed in the management of labour pain both pharmacologically and non-pharmacologically. The curriculum for nursing training should be upgraded to involve labour pain and its management as a course rather than a topic, and a lot more emphasis should be placed on the teaching of labour pain. Tutors and lecturers must receive special professional training in labour pain to enhance their skills in order to be able to impart the knowledge to students as required. Student midwives especially must have clinical experience purposely in the assessment and management of labour pain to provide them with the requisite knowledge and skill for management of labour pain during clinical practice. Post graduate training should be introduced where nurses could train specially to be experts in managing labour pain.

6.2.2 Implications for nursing practice

All stakeholders involved in the management of labour pain must collaborate in ensuring that women in labour have access to LPR; procurement officers together with accountants must work as a team to ensure that all medications as well as logistics needed for the management of labour pain are always available for use. Nurses and doctors directly involved in managing labour pain must work collaboratively to improve the management of labour pain; workshops, seminars

etc should be organized periodically for the staff in the labour ward to increase their knowledge on labour pain management as well as improve on staff attitude and quality assurance. Protocols for management of labour pain must be formulated, communicated and practiced in labour wards across the nation and there should be continues professional training for nurses and doctors in the assessment and management of labour pain. All new staff that are employed in the maternity units must receive training in the management of labour pain and all staff must make conscious and deliberate efforts at being empathetic with women in labour.

6.2.3 Implications for policy formulation

There should be a deliberate effort of government to include the cost of delivery services together with medications used in alleviating labour pain in the National Health Insurance Scheme such that the costs are completely waved off rendering LPR services free of charge regardless of the type used. Hospitals must institute policies that allow for the integration of antenatal education and preparation of pregnant women for labour pain management into the routine antenatal care services.

6.2.4 Implications for nursing research

This study explored the concept of access to LPR qualitatively among post-natal women and revealed a limited access to services aimed at alleviating the pain, further studies could be conducted quantitatively to determine the relationship between the various constructs of the Access to Health Care model. Other studies in determining access to LPR could also be conducted among midwives, anaesthetists and obstetricians. This study was conducted in the Accra Metropolis, but further research could be conducted in other metropolises of the country to determine the outlook of access to LPR in the whole country.

Each construct of the model could also be studied independently to determine the concept of availability, accessibility, accommodation, affordability and acceptability of LPR among both health professionals and parturient.

6.3 Limitations of the study

This study is not without limitations; the qualitative nature in which the study was conducted presents with a challenge with generalization of the findings. All but one of the participants was a primiparous woman, this limits the ability of the findings to be representative of the whole population because perhaps conducting the study among primiparous women may present with different findings. However, it is worthy of note that the findings are consistent with previous findings across the globe.

Some of the data were translated into English and that may influence the trustworthiness of the study though it is worthy to note that words without exact meanings in English were translated to their nearest expressions.

6.4 Conclusion

This study revealed access to LPR, among women who had spontaneous vaginal delivery within the Accra Metropolis when the Access to Health Care model was used in exploring access to LPR among the women. The constructs of the model buttress the findings of the study; making room for an integrated approach to the management of labour pain by all stakeholders. It was evident from the findings that, despite the myriad LPR options, only a few are available in our health care facilities, similarly accessibility to the available options were limited. The women could not accommodate the services provided, cost of service was overly expensive and the women did not accept the LPR options mainly because their expectation was not met and their preferences

were not accessible. Deliberate efforts should be put in place to improve the services available for LPR.

6.5 Recommendations

The following recommendations have been made based on the findings of this study.

6.5.1 Ministry of Health, Ghana

The Ministry of Health should ensure that:

i. the management of labour pain is covered by the National Health Insurance Scheme
ii. hospitals across the nation integrate antenatal education and preparation for labour pain in the routine care rendered at the antenatal clinic
iii. all hospitals place priority on procurement of necessary logistics needed in the management of labour pain.
iv. there is post-basic training of midwives who will specialize in managing labour pain.

6.5.2 Nursing and Midwifery Council, Ghana

i. The registered midwifery and post NAP/NAC midwifery curriculum should be reviewed to include a lot more emphasis on the management of labour pain.
ii. Student midwives should have clinical experience exclusively for the management of labour pain.
iii. Nursing educators should have regular mentorship programs in the management of labour pain.

6.5.3 Health Care Providers

i. Midwives, obstetricians and anaesthetists who work in maternity units must have continues professional training in the current trends of managing labour pain.

ii. Midwives and obstetricians who hold antenatal clinics must make deliberate and conscious efforts at educating pregnant women on the various LPR options including communicating the roles that women are expected to play in receiving LPR.

iii. Midwives must develop a friendly and therapeutic disposition towards women in labour

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APPENDIX A
ETHICAL CLEARANCE

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH
Established 1979A Constituent of the College of Health Sciences
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INSTITUTIONAL REVIEW BOARD

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My Ref. No: DF.22
Your Ref. No:

9th January, 2019

ETHICAL CLEARANCE

FEDERALWIDE ASSURANCE FWA 00001824 **IRB 00001276**

NMIMR-IRB CPN 027/18-19 **IORG 0000908**

On 9th January 2019, the Noguchi Memorial Institute for Medical Research (NMIMR) Institutional Review Board (IRB) at a full board meeting reviewed and approved your protocol titled:

TITLE OF PROTOCOL : **Access to labour pain relief: Perspective of post-natal women within the Accra Metropolis**

PRINCIPAL INVESTIGATOR : **Amoateng Vida Afoah, MPhil Cand.**

Please note that a final review report must be submitted to the Board at the completion of the study. Your research records may be audited at any time during or after the implementation.

Any modification of this research project must be submitted to the IRB for review and approval prior to implementation.

Please report all serious adverse events related to this study to NMIMR-IRB within seven days verbally and fourteen days in writing.

This certificate is valid till 8th January, 2020. You are to submit annual reports for continuing review.

Signature of Chair: .....
Mrs. Chris Dadzie
(NMIMR – IRB, Chair)

APPENDIX B
LETTER OF INTRODUCTION

UNIVERSITY OF GHANA
DEPARTMENT OF MATERNAL AND CHILD HEALTH
SCHOOL OF NURSING

Ref. No.:.....SON/A.12..... October 19, 2018

The Chairperson
Institutional Review Board
Korle Bu Teaching Hospital
Accra

Dear Sir/Madam,

LETTER OF INTRODUCTION

This is to introduce to you Amoateng Vida Afoah, an MPhil second year student of the School of Nursing and Midwifery.

The Scientific Review Committee of the School has approved the thesis topic: **"Access to Labour Pain Relief: Perspective of Post-natal Women within the Accra Metropolis".**

I hope that the Institutional Review Board will consider the proposal to enable her collect data.

Counting on your usual co-operation

Thank you.

Yours faithfully,

Dr. Mary Ani-Amponsah
SUPERVISOR

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APPENDIX C

INTERVIEW GUIDE

Demographic Information

1. Age (years): 21-25 [ ] 26-30[ ] 31-35[ ] 36-40[ ] 41-45[ ] 45-50[ ]
2. Obstetric history:
3. Marital status: single [ ] married [ ] divorced [ ] widowed [ ]
4. Religious background: Christian [ ] Moslem [ ] Traditionalist [ ] other [ ]

   specify ……
5. Level of education: Primary [ ] Secondary [ ] Tertiary [ ] Specify ……..
6. Ethnicity: Akan [ ] Ewe [ ] Ga/Dangbe [ ] Mole-Dagbon [ ] Guan [ ] Hausa [ ]

   Mamprusi [ ] other ……..
7. Languages spoken: Akan [ ] Ga [ ] Ewe [ ] Mole-Dagbani [ ]
8. Occupation: Self Employed [ ] Government Sector [ ] Private sector [ ]

Main Questions

Availability

1. How much confidence do you have in receiving labour pain relief during labour?
2. How satisfied are you with your ability to receive pain relief during labour?
3. Tell me about the pain relief options available to you during your labour.
4. How did the staff manage the pain you felt during labour?

   Probe: did your birth attendant have control over management of your pain?

   What was used in managing your pain?

5. What are the non-pharmacological pain relief you received during labour?

   Probe: What was the effectiveness of these pain relief options?

6. What are the pharmacological labour pain relief you know of?
7. How effective was the pain relief you received during labour?

   Probe: why would you/ not encourage another woman to receive that pain relief?

   What are the effects of the pain relief used in labour?

Accessibility

8. How did you go to the hospital when your labour started?
9. How long did you take to get to the hospital?
10. How easy was it to get pain relief during delivery?
11. How many doctors and midwives were working in the labour ward and how many attended to you?
12. How easy is it to get pain relief in your community?
13. Could you have accessed pain relief in a clinic closer to you?

Affordability

14. What benefits did you derive from your health insurance with regards to pain management?
15. What cost did you incur as a result of accepting pain relief during labour?

    Probe: Do you think the cost is worth the management you received?

14. How did you pay for the bill that you received?
16. Are the charges of pain relief realistic?
17. How satisfied are you with the cost of the pain relief?

Accommodation

18. How did the working hours affect the pain relief you received?
19. How long did you have to wait to receive pain relief?

    Probe: Are you satisfied with how long you had to wait?
20. How easy was it to get in touch with someone who could give you pain relief?

    Probe: Was the staff proficient in his or her delivery?
21. How prepared were you to receive labour pain relief?
22. How did your antenatal clinic attendance influence the management of labour pain?

Acceptability

23. How satisfied were you with the effectiveness of the pain relief you received during labour?
24. Why would you want / not want to choose the pain relief method you received?
25. Do you think other clients received better pain relief than you did?
26. What were your expectations regarding pain relief?

    Probe: To what extent have these expectations been met?
27. Is there anything you would like to add to our discussion?

APPENDIX D

CONSENT FORM

Title: Access to labour pain relief: perspectives of post-natal women who had Spontaneous Vaginal Deliveries within the Accra metropolis

Principal Investigator: Vida Afoah Amoateng

Address: School of Nursing and Midwifery, University of Ghana, Legon. P.O Box LG 43

General Information about Research

This study is a scientific enquiry into access to labour pain relief among post-natal women who had Spontaneous Vaginal Delivery (SVD) in the Accra Metropolis. The purpose of the study is to explore access to labour pain relief among women who had SVD within the Accra. To attain this purpose, the following objectives have been set:

1. Determine the availability of labour pain relief among postnatal women who had spontaneous vaginal delivery.
2. Describe women's preference for labour pain relief and the provider's actual delivery. (acceptability)
3. Ascertain women's ability to afford labour pain relief (affordability)
4. Assess midwives preplanning ability of labour pain relief and the woman's need. (accommodation)
5. Describe accessibility of labour pain relief to women during spontaneous vaginal delivery.

Data would be collected from participants at the Korle-bu Teaching Hospital after an introductory letter introducing the researcher and the research has been presented to the Director of Nursing Services of the Korle-bu Teaching Hospital, the Nurse Manager at the Maternity Unit and the Ward In-Charge of the Ward. A participant will be allowed to rest hours before being engaged in an interview, interviews will be held within 48 hours after delivery at the convenience of the

participant and in her home. The date and time for interview will be predetermined by participant before interviews are held. The purpose and objectives of the study would be explained to participants in clear terms, their expected roles should they consent to be part of the research would also be explained to them. Participants will also be informed that interviews will be recorded. Those who agree to be part will be given a consent form to either sign or thumbprint. Participants who give their consent would be assured of anonymity and confidentiality of information relayed, they would be informed of the right to opt out of the study at any point in the course of the study without fear of being maltreated by health professionals, or being denied quality care or access to health services. Participants will be given pseudonyms to help ensure anonymity and to increase the efficiency of the interviews.

Possible Benefits

This study will provide an avenue to extensively explore postnatal women's access to labour pain relief during SVD within the Accra Metropolis and its implication on the provision of respectful and quality maternal health care during labour in Ghana. By the findings of this study, scientific evidence would be available in the field of labour pain relief to Ghanaian women enhancing access to labour pain relief.

Confidentiality

Your identity would be hidden since your name would not be required, pseudonyms would be given out that will ensure anonymity. All audio recordings as well as any information you provide would be accessible only to the investigator and her supervisor. Your name will not be put in any report. Consent forms, bio-data and responses to main questions will be kept in different lockers with keys that are only accessible by the researcher and her supervisors. These will be kept in

separate files and kept in a drawer under lock and key. Transcribed data will be preserved for five years to make it available when the necessary.

Compensation

There will not be monetary compensation for being a participant of this study but participants would be given a drink to refresh them after an interview session.

Voluntary Participation and Right to Leave the Research

You have the right to opt out of the study at any point in the course of the study without fear of judgment by health professionals or repercussion on quality of care or access to health services.

Contacts for Additional Information

In the event that you want to contact anyone with regards to concerns with this study, you can please contact Vida Afoah Amoateng on 024 2161881 or 050 4514754 or Dr. Mary Ani-Amponsah on 0244368205 Concerns may be sent via e-mail to vaamoateng@gmail.com or mary.aniamponsah@gmail.com.

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of Noguchi Memorial Institute for Medical Research (NMIMR-IRB). If you have any questions about your rights as a research participant you can contact the IRB Office between the hours of 8am-5pm through the landline 0302916438 or email addresses: nirb@noguchi.ug.edu.gh

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title 'Access to labour pain relief: perspectives of post-natal women who had Spontaneous Vaginal Deliveries within the Accra metropolis'

has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

_____ _____

Date Name and signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

_____ _____

Date Name and signature of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

_____ _____

Date Name Signature of Person Who Obtained Consent

APPENDIX E

DEMOGRAPHIC DATA

PSEUDONYM	AGE	MARITAL STATUS	NUM. OF CHILDREN	ETHNICITY	LANG. SPOKEN	OCCUPATION	EDUCATIONAL BACKGROUND	RELIGION
ABREFI	35	MARRIED	3	ASHANTE	TWI, GA, ENGLISH	NURSING	TERTIARY	CHRISTIAN
MANSA	29	MARRIED	3	AKUAPEM	AKUAPEM, TWI, ENGLISH	NURSE ASSISTANT	TERTIARY	CHRISTIAN
SIKA	37	MARRIED	3	EWE	EWE, TWI, ENGLISH	HOUSE WIFE	TERTIARY	CHRISTIAN
TIWA	24	MARRIED	2	NORTHERNER	TWI, FANTE	TRADER	SHS	MUSLIM
KOSHIE	19	SINGLE	1	FANTE	FANTE, TWI, GA	UNEMPLOYED	JHS	CHRISTIAN
FATI	34	MARRIED	5	DAGOMBA	DAGBANI, TWI	HOUSE WIFE	SHS	MUSLIM
ARABA	25	MARRIED	1	FANTE	FANTE, TWI, ENGLISH	NURSE ASSISTANT	TERTIARY	CHRISTIAN
ENYONAM	30	MARRIED	2	EWE	EWE, ENGLISH, TWI	BUSINESS WOMAN	TERTIARY	CHRISTIAN
EFE	27	MARRIED	2	GA-ADANGBE	DANGBE, GA, TWI, ENGLISH	TRADER	TERTIARY	CHRISTIAN
ATAA	26	MARRIED	2	GA	GA, TWI, ENGLISH	TRADER	TERTIARY	CHRISTIAN
ABA	26	MARRIED	3	GA	GA, TWI	TRADER	NO FORMAL EDUCATION	CHRISTIAN
OKAILEY	24	MARRIED	2	GA	GA, TWI	BEAUTY THERAPIST	SHS	CHRISTIAN