DEVELOPMENT OF GUIDELINES IN UTILISING BIRTH COMPANIONS OF WOMEN IN LIMPOPO PROVINCE, SOUTH AFRICA

by

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submitted in accordance with the requirements for the degree of

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at the

University of South Africa

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28 February 2022

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SIGNATURE

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28 January 2022

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ABSTRACT

DEVELOPMENT OF GUIDELINES IN UTILISING BIRTH COMPANIONS OF WOMEN IN LIMPOPO PROVINCE, SOUTH AFRICA

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The purpose of the study was to investigate the utilisation of birth companions by women in the public sector labour wards of Limpopo Province, South Africa, to develop guidelines for implementation of birth companionship. A mixed method research approach of inquiry was used to determine if the postnatal women have knowledge on birth companionship, how midwives perceive the utilisation of birth companions and what are the factors that inhibit the utilisation of birth companions. A questionnaire was used to collect information from postnatal women (n=304) while a semi-structured interview was utilised to obtain data from the midwives (n-15). The target population was postnatal women between 18-45 years and midwives who worked in the labour ward. Quantitative data were analysed using SPSS Version 26 by generating frequencies, descriptions, inferential statistics and a chi-square. The quantitative response rate was 100%. The following constructs were examined: the socio-demographic characteristics of postnatal women, reproductive health information during ANC, physical factors during labour, postnatal, psycho-social and the motivating factors and challenges of having a birth companion. The study revealed that most postnatal women (245 out of 304) (80.59%; f=245) did not have knowledge on birth companions. The postnatal women (260 out of 304) (85.53%; f=260) and midwives perceived birth companionship as good. The study also highlighted that that there were factors that inhibit the utilisation of birth companions in public health facilities on women and the midwives which may hamper the successful offering of respectful

maternity care services to the women during labour. The research findings were used to develop guidelines that will help the health care professionals to initiate birth companionship in health care facilities to improve birth outcomes on both mothers and neonates.

KEYWORDS

Birth companion; childbirth; pregnant women; maternal health; new-born's health; emotional support; health care professionals; respectful maternity care; human rights; quality of care.

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LIST OF ABBREVIATIONS

Antenatal care ANC Mixed methods research MMR National Department of Health NDH Statistical Package for the Social Sciences SPSS United States of America USA United Kingdom UK United Nations Children's Emergency Fund UNICEF World Health Organisation WHO

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

An overview on the utilisation of birth companion during labour and child birth will be outlined in this chapter. An outline of what prompted the researcher to undertake the study will be briefly explained. The aim, background to the research problem and objectives of the research study will be discussed. Research questions, significance and theoretical foundations of the study will be provided. Research design and methodology and scope of the study will be clarified. The structure of the thesis will also be outlined.

According to the World Health Organisation (WHO 2016:3), a birth companion is any person the woman chooses to provide her with continuous support during labour and childbirth. The woman may choose her partner/spouse, any person from her social network/family or relative/ friend, or even a community member she may prefer. The researcher observed that most of the public health care facilities where pregnant women deliver their babies in Limpopo Province, birth companions were not available. Pregnant women were accompanied by relatives, friends or partners when they were in labour and immediately after admission; they left the women with the midwives. Although some of the pregnant women were aware of birth companions, this was not practised.

The study conducted in London by Thompson, Balaam, Lesson, Jerkins, Austin, Burnell and Leavey (2016:5-6) indicated that pregnant women did not form relationships with the health care professionals. The pregnant women who did not have any form of support from birth companions had to face challenges of giving birth unaccompanied such as inconsistent, inappropriate and insensitive health

care. The presence of a birth companions may reduce the challenges the women encounter when they do not have birth companions.

Thompson et al (2016:5-6) further report that those who had birth companions explained how the presence of birth companions enabled them to receive support and needs-based care, they were ready and prepared for the birth of their children, forged positive and trust based relationships and received non-judgemental care. This enabled the pregnant women to feel calmer, in control during labour and childbirth and in turn it enabled them to experience a positive childbirth. The pregnant women received the much-needed essential related items for both mother and baby. More importantly, available support the pregnant women received enhanced their general wellbeing. The participants felt a sense of reassurance, more confident in taking care of their new-born babies, especially those who were supported by the birth companions (Thompson et al 2016:5-6). This was essential for child survival as the pregnant women will be committed and confident in taking care of the baby, including breastfeeding.

1.2 BACKGROUND TO THE RESEARCH PROBLEM

1.2.1 The research problem

Pregnant women have been supported and attended by other women during labour historically, in the comfort of their own homes or space of origin by people they know. Nowadays pregnant women deliver their babies in hospitals by health care professionals sometimes they hardly know. There are instrumental interventions that the midwives and doctors perform when labour does not go as anticipated such as episiotomies, Caesarean births and vacuum extractions. In hospitals worldwide, continuous support during labour and childbirth has often become a practice that is not done in a general practice rather than a sequence of actions regularly followed. The following are the benefits of continuous support during labour and child birth: decreased instrumental vaginal and Caesarean births, increased vaginal birth, low five minutes Apgar score, shorter duration of labour, use of any analgesia, negative feelings about childbirth experiences and

improved birth outcomes for pregnant women and neonates (WHO 2017:2) It is vital for health care professionals to allow the availability of birth companions in their health care facilities to enable the pregnant women to benefit from the services of birth companions.

According to Saving Mothers' Report 2014-2016 (NDH 2017:48), it was indicated that in 2016, 1143 maternal deaths were reported in South Africa. Two hundred and eighteen (218) maternal deaths occurred owing to obstetric haemorrhage while 25 were owing to anaesthetic complications in 2016 (NDH 2017:48). The March to November 2017 Report on professional misconduct cases by the South Africa Nursing Council statistics indicates the impact of non-utilisation of birth companions during labour by the midwifery personnel, which led to some of them committing some offences (4 out of 12) which were midwifery related. Most of the complications that lead to maternal deaths during labour and puerperium occur in the labour wards.

1.2.2 The source of the research problem

Pregnant women are required to be exposed to institutional routines according to modern obstetric care (Bohren, Hofmeyr, Sakala, Fukuza & Cuthbert 2017:4). These may have led to the non-utilisation of birth companions during labour as health professionals might have not needed their routines to be disturbed. The pregnant women might have also felt a need to be attended to by the professionals only, as they needed privacy.

A study conducted in 12 health care facilities in Ghana, Guines, Myanmar and Nigeria by Bohren, Mehrtash, Fawole et al (2019:1) indicate that (34.4%) participants experience verbal or physical abuse, stigma and discrimination. The physical and verbal abuse of pregnant women reached the highest point of activity at 30 minutes before childbirth up to 15 minutes after childbirth. Lack of education and (15-19) ages were factors that affect the nature of maltreatment. This study indicates the impact of non-utilisation of birth companions which may remedy the situation.

Chang, Coxon, Portela, Furuta and Bick (2018:14) in a systematic review report assert that one area of knowledge of respectful maternity was practising and encouraging effective non-verbal communication, being available, honest and interpreting language deficiency and cultural differences where they exist, engaging effective communication which entails talking and listening to pregnant women and provide empathy. These were important to pregnant women and maternity health professionals in different settings. The results from this study provide evidence that the services of birth companions may breech the gap of culture and language deficiency.

1.3 RESEARCH PROBLEM

A research problem is an enigmatic or perplexing condition that can be investigated through disciplined enquiry (Polit & Beck 2017:4). Burns and Grove (2011:547) define research problem as an area of concern in which there is a gap in the knowledge base needed for nursing practice. Research problems are problems or issues that lead to the need for an investigation (Creswell & Creswell 2018:250).

The researcher while visiting some of the hospitals in Limpopo Province observed that there were no birth companions for pregnant women who deliver their babies in most of the public health care facilities. Although pregnant women who are attending antenatal clinic (ANC) were being supported through a programme called Momconnect whereby vital information about pregnancy and baby was discussed, no one was available to support the pregnant women during labour. The unavailability of birth companions during labour may lead to increased maternal/infant morbidity and mortality. It appears that some of the pregnant women were aware that they can choose a birth companion during labour, but none of them who delivered at these facilities had a birth companion. The utilisation of birth companions might improve the physical, emotional and social wellbeing of pregnant women. It seems that the availability of birth companions has not being carefully researched to determine the perceptions of pregnant women, its impact, cost-effectiveness, and efficacy. Therefore, the problem to be

researched was the perceptions of pregnant women in utilising birth companions, the impact, cost-effectiveness, safety and efficacy towards both pregnant women and the health care department.

Even though there is growing emphasis on respectful maternity care, most maternity health care facilities still do not permit pregnant women to have a companion during labour and childbirth (WHO 2016:3). Barriers of birth companion were identified. These include the physical infrastructure of health care facilities, which restricts privacy and adds to overcrowding in the labour wards and problems in maintaining good hygiene standards; little knowledge among managers and health care professionals in relation to the benefits of labour and birth companionship (WHO 2016:3). It seems the availability of birth companions has not been carefully researched in Limpopo Province to determine the perceptions of pregnant women and midwives, its impact, cost effectiveness, and efficacy.

Dippenaar, da Serra and Nolte (2014:127) assert that it is desirable that pregnant women have a person of their choice with them during labour. The significant person can be their partners, friends or relatives. The presence of a supportive person reduces the pregnant women's need for pain relief, shortens labour and the babies are healthier as they were not exposed to analgesia or anaesthesia. Pregnant women need support to face the labour and birth process and acquire good health outcomes. The undesirable outcomes of the unavailability of birth companions during labour might have a long ill-effect on the mothers, babies, midwives, community and the Limpopo Department of Health.

1.4 AIM OF THE STUDY

1.4.1 Research purpose

The purpose of the study was to investigate the utilisation of birth companions by women in the public sector labour wards of Limpopo Province, South Africa, in order to develop guidelines for implementation of birth companions.

1.4.2 Research objectives

The research objectives were:

- To establish knowledge of postnatal women towards utilisation of birth companions in the public sector labour wards of Limpopo Province (quantitative method).
- To explore and describe the perceptions of postnatal women towards utilisation of birth companions (quantitative method).
- To explore and describe the perceptions of midwives towards utilisation of birth companions (qualitative method).
- To identify and describe factors that inhibits non-utilisation of birth companions by the midwives and managers (qualitative method).
- To develop guidelines on promotion of birth companions in public health facilities where delivery of babies is taking place to improve labour outcomes (quantitative/qualitative methods).

1.4.3 Research questions

The following research questions were asked:

- Which knowledge do postnatal women have about the utilisation of birth companions during labour and childbirth in the public sector labour wards of Limpopo Province (quantitative method)?
- What are the perceptions of postnatal women towards utilisation of birth companions during labour and childbirth (quantitative method)?
- What are the perceptions of midwives towards utilisation of birth companions during labour and childbirth (qualitative method)?
- What are the factors that inhibit utilisation of birth companions by the midwives (qualitative methods)?

Which recommendations on birth companions can be made to health care
professionals in public health facilities where delivery of babies is taking
place in order to improve labour outcomes and to develop guidelines on
promotion and utilisation of birth companions (quantitative/qualitative
methods)?

Convergent mixed methods strategy was used in this study, whereby the researcher collected both quantitative and qualitative data, analysed them separately and then compared the results to see if the findings confirm or disconfirm each other. The perceptions of postnatal women/midwives towards utilisation of birth companions during childbirth and the factors that inhibit utilisation of birth companions by both pregnant women and the midwives was investigated so as to find out what hinders the implantation thereof. The findings informed the development of the guidelines

1.4.4 Research hypothesis

Hypothesis is a prediction of the expected relationship between the independent and dependent variables (Botma, Greeff & Mulaudzi 2016:94).

- The earlier the postnatal woman book for ANC the more knowledge on birth companionship they have.
- The postnatal women who did not received pain medication during labour have less influence on the knowledge of birth companionship.

1.5 SIGNIFICANCE OF THE STUDY

Creswell and Creswell (2018:250) define the significance of the study as an introduction which conveys the importance of the problem, for the different audiences that may profit from reading and using the study. Respondents will not directly benefit this research, but will benefit with subsequent pregnancy if they fall pregnant. Even if the respondents do not fall pregnant again, other pregnant women will benefit from this study.

The pregnant women will receive continuous support during labour which may increase spontaneous vaginal birth, decrease assisted birth such as Caesarean section and the use of analgesia, negative feelings about childbirth experiences and low five minutes Apgar score. Moreover, the pregnant women will be provided with psychosocial and physical support by their companions of choice during labour which will lead to satisfaction and good labour outcomes. The vulnerable e.g. young pregnant women will receive better services from the health care professionals which will reduce inhuman practices. Maternal and infant morbidity/mortality will be reduced as some of the deaths occur owing to some interventions. The health care professionals, namely, the midwives will be relieved from solely providing supportive duties; therefore, quality care will be provided. The community at large will receive better maternity services from the Department of Health as the burden of orphans, which results from maternal deaths and low Apgar scores related conditions will be reduced.

Guidelines will be formulated for the Department of Health in Limpopo Province to promote the availability of birth companions in the units where pregnant women deliver their babies. The guidelines will assist the vulnerable pregnant women such as teenagers to receive proper health care they deserve. The formulated guidelines will be disseminated to the health care professionals and community members to utilise. The Department of Health will have enough money to provide resources for better health services, as law suit will be reduced.

1.6 DEFINITIONS OF TERMS

Birth companion: is a person (friend, partner, relative) whom pregnant woman choses to be with when giving birth to a baby (Hornby 2015:138). In this study, a birth companion is a friend, partner or relative who will support the woman physically, emotionally and socially during the labour and childbirth processes.

Development of guidelines: is a new stage or event that is likely to affect what occurs in a continuing situation, whereby a set of rules or instructions are given by an official organisation telling a person how to do something difficult. It can be

something that can be used to help a person to decide or form an opinion (Hornby 2015: 409 & 677). In this study, development of guidelines is the action that the Limpopo Department of Health will consider in implementing the general rules that the health care professionals and community members in the health care facilities where pregnant women deliver their babies should utilise.

Midwife: is a person who, having been regularly admitted to a midwifery educational programme, duly recognised in the country in which it is located, has successfully completed the prescribed course of studies in midwifery and has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery (De Kock, van der Walt & Jones 2010:9). In this study, a midwife refers to a person (man/woman) who is trained to help pregnant women give birth to babies in public health care facilities of four regional and one tertiary hospital in Limpopo Province, namely, Capricorn, Mopani, Sekhukhune, and Waterberg districts.

Roy's adaptation model: indicates that human beings have a bio-psychosocial adaptive system and can deal effectively with the environmental changes through the adaption process (Polit & Beck 2017:122). In this study, the birth companions and midwives will help the pregnant women in labour to adapt to the labour process so as to be able to cope well. Pregnant women in labour will experience less traumatic labour process be it physical, psychological, functional, and social.

Utilise: is to use something, especially for a practical purpose (Hornby 2015:1665. In this study utilise refers to effective use of birth companions by health care professionals and pregnant women.

Women: are adults' female's human (Hornby 2015:1730). In this study, women refer to adult pregnant human females who were in labour and delivered their new-born baby.

1.7 THEORETICAL FOUNDATIONS OF THE STUDY

Theoretical framework is the structure that can hold or support a theory of a research study (Ravitch & Riggan 2017:9). The theoretical framework introduces

and describes the theory which explains why the research problem under study exists. Theories are formulated to explain, predict and understand phenomena, and extend existing knowledge within the limits of critical bounding assumptions (Ravitch & Riggan 2017:10).

Polit and Beck (2017:122) posit that theories allow researchers to integrate observations and facts into orderly scheme. They are efficient mechanisms for drawing together accumulated facts, often from separate and isolated investigations. The linkage of findings into coherent structure can make a body of evidence more accessible and therefore, more useful. Theories and models can guide a researcher's understanding of not only the "what" of natural phenomena but also the "why" of their occurrence. The role of theory is to make things that were hidden, to define some patterns and give some meanings to the sorts of observations that social researchers continually make when investigating society (Botma, Greeff, Mulaudzi & Wright 2016:57). The researcher utilised Roy's Adaptation Model. The model postulates that human beings have a biopsychosocial adaptive system and can be able to cope with the environmental changes through the process of adaption (Polit & Beck (2017:122). These subsystems contribute to adaptive models that provide mechanisms for coping with environmental stimuli and change.

According to Adom, Hussein and Adu-Ayem (2018:1), theoretical and conceptual framework explains the path of a research and grounds it firmly in theoretical constructs. The overall aim of the two frameworks is to make research findings more meaningful, acceptable to the theoretical constructs in the research field and ensure generalisability. They assist in stimulating research while ensuring the extension of knowledge by providing both direction and impetus to the research inquiry (Adom et al 2018:1).

1.7.1 Research paradigm

The researcher was interested in pragmatism paradigm. The latter acknowledges the practical imperative of the dictatorship of the research question (Polit & Beck 2017:739). The researcher was interested in investigating what works at the time

to provide the best intellect of the study problem by using both the qualitative and quantitative data in mixed method research (Creswell 2018:10-11). Based on the review of the various paradigms' features, pragmatism paradigm was preferred in this study.

1.7.2 Theoretical framework

According to Polit and Polit (2017:121), theories permit investigators to integrate facts and observations into orderly system. Theories are also efficient mechanisms for drawing together accumulated facts, often from isolated and separate investigations. A system which links the findings into coherent structure can make a body of evidence more accessible and useful. Theories can guide an investigator's understanding of not the "what" of the natural phenomena but also the "why" of their occurrence. The role of theory is to define some patterns, make things that were hidden, and give some meanings to the sorts of observations that social investigators continually make when investigating society (Botma, Greeff, Mulaudzi & Wright 2016:57).

1.7.2.1 Roy's adaptation model

The researcher used Roy's Adaptation Model. According to Polit and Beck (2017:122), Roy's Adaptation Model indicates that humans being have a bio-psychosocial adaptive system and can cope well with the environmental changes through the process of adaption. These subsequent contribute adaptive models that provide mechanisms for coping with environmental stimuli and change.

Health is viewed as both a process and a state of becoming and being integrated and whole that reflects the maturity of persons and environment. According to the Roy's Adaptation Model, the nursing goal is to promote client adaptation and also regulates stimuli affecting adaptation. The nursing interventions usually take the form of decreasing, increasing, modifying, removing, or maintaining external and internal stimuli that affect adaptation (Polit & Beck 2017:122).

Roy's Adaptation Model adaptation model fits well with the topic under study, as pregnant women need to adapt to the labour process for them to be able to cope well. Furthermore, Roy's Adaptation Model might assist the health care professionals in the caring for pregnant women in labour to experience less traumatic labour process be it physical, psychological, functional and social. This model guided the researcher with the literature to develop data collection instrument. In this study, birth companions were required to provide the physical, emotional, functional and socially acceptable need to the pregnant women to encourage them to adapt to the labour and birth processes.

The pregnant women in labour need physical support such as a person to help in the provision of the physical needs such as drinking water, shoulder to lean on, back massage or assistance in warm bath or shower. Psychosocial needs may include support, encouragement when the woman feels that she cannot take it anymore and remind the pregnant woman on the birth plan that they planned during antenatal period. Functional and social needs include helping the woman to take the best possible decision that will benefit both mother and the foetus without undermining the culture of the labouring woman.

1.7.3 Research assumptions

Research assumptions are things that are accepted as true by researchers or peers who will read the study. In this research, an assumption is an accepted theory (beliefs) that the researcher uses to base the research on. The research assumptions were based on the following components of the Roy's adaptation model (Polit & Beck 2017:122). The goal of nursing, according to this model, is to promote client adaptation. Nursing also regulates stimuli of adaptation (Polit & Beck 2017:122). The following components will be discussed; the physical, emotional, functional and social components of adaptation.

1.7.3.1 The physical component of adaptation

The woman's emotions are tested during labour owing to the intensity, frequency of labour contractions and descend of the foetus. The people who are close to the

pregnant woman (partner, friends and family members) need to understand these changes, so that they can be able to support her during labour until childbirth. The women in labour may not need birth companions if they think that they can cope with labour process. A health care professional who has few deliveries in a day may not need a birth companion.

1.7.3.2 The emotional component of adaptation

The woman's emotions are tested during labour owing to the intensity, frequency of uterine contractions and descend of the foetus. During this period, the woman needs support from the chosen birth companion. A woman, who thinks her privacy will be invaded, may not allow anybody to invade her space.

1.7.3.3 The functional component adaptation

Some women experience low-risks of labour and childbirth, while other experience high risks. Some labour progresses are short while other prolong. A woman who thinks that her labour progress will be normal as indicated in her antenatal assessments may not need any birth companion than the one who has risks factors. Furthermore, a health care professional who does not have experience of managing a pregnant woman in labour may not need a birth companion while a health care professional who has many deliveries in a day or where there is shortage of staff may need the services of a birth companion.

1.7.3.4 The social component of adaptation

This will depend whether the pregnant woman has good relations with the people that are associated with her. If there is good association with her partner, friends or family, the pregnant woman will be keen to accept them as her companions, but if there are poor relations, she will not need anyone during labour and childbirth. A health care professional who is self-centred may not need the services of a birth companion he/she thinks that he/she can equally provide the services of a birth companion better. If a pregnant woman's culture and religious beliefs do not

accept male birth companion during labour and childbirth, the pregnant woman will not accept the services of a male birth companion.

1.8 RESEARCH DESIGN AND METHODOLOGY

The following sub-headings will be discussed under research methodology: research design, data collection and data analysis methods. A more detailed discussion will follow in chapter 3.

1.8.1 The research design

A research design is well-known as the backbone of the study. It provides the structure for the research design and methods that must be taken to plan the study (Botma, Greeff, Mulaudzi & Wright 2016:108). De Poy and Gitlin (2016:374) further assert that a research design is a blueprint/plan that structures and specifies the action process of collecting, analysing and reporting data to answer a research question. In this research, convergent, descriptive, explorative and cross sectional design was used.

1.8.2. Research methodology

Research methodology is the techniques used to structure, gather and analyse information in a systematic fashion in a study (Polit & Beck 2017:743). It covers the research setting, population, sample and sampling, data collection and data analysis. In this study, a mixed methods approach will be undertaken by using both quantitative and qualitative methods of collecting and analysing data. Descriptive, explorative, cross-sectional and convergent design will be used. A more detailed discussion will follow in chapter 3.

Polit and Beck (2017: 577) define mixed methods (MM) research as a study in which the researcher collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches/methods in a single study or programme of inquiry. The mixed methods research does not just involve the collection of qualitative and quantitative approaches/methods at some

stage of the research process, therefore giving rise to meta-inferences. A meta-inference is a conclusion generated by integrating inferences obtained from the results of both qualitative and quantitative strands of a mixed methods study. Mixed methods research is an approach to inquiry that integrates and combines approaches both qualitative and quantitative approaches, and the mixing or integrating of both in the study (Creswell & Creswell 2018:249). A mixed methods study was undertaken by the researcher using quantitative and qualitative methods of collecting and analysing data.

1.9 SCOPE OF THE STUDY

The study focused on the utilisation of birth companion during labour and child birth in Limpopo Province. The scope of the study covered four districts which are Capricorn, Mopani, Sekhukhune, and Waterberg regional hospitals and one tertiary hospital of Limpopo Province. The five hospitals are in rural area and the chiefs are involved in the institutional activities. The hospitals are accessible and centrally located so as to reduce the distance patient's travels between district, regional and tertiary hospitals in the district/province. There hospitals offer 24 hours service and have Obstetrics ambulances which cater for pregnant women only. The rural tertiary hospital has a larger Neonatal Intensive Care Unit than the urban maternity setting therefore a larger number of pregnant women are admitted in this health care facility. The rationale for choosing the regional hospitals and one tertiary hospital was that a large number of high risks pregnant women deliver their babies at these facilities while others are referred from local clinics/hospitals to make booking for delivery. Some of the local clinics do not operate 24 hours, while some of the regional and tertiary hospitals do not have district hospitals nearby. Therefore, they provide the services that should be provided by those health facilities.

1.10 STRUCTURE OF THE THESIS

Chapter 1: orientation to the study

This chapter outlines the general overview of the study. It includes the background information about the research problem, research problem, aim of the study and research objectives, significance of the study, definitions of terms, and theoretical foundations of the study, research paradigm, theoretical framework, research design and methods and scope of the study. It also offers an outline of the chapters.

Chapter 2: Literature review

Chapter 2 provides an insight into similar studies conducted by other researchers. The chapter outlines the historical background of birth companions, respectful maternity care charter, and importance of birth companions on the pregnant women. It also discusses management of pregnant women in labour, factors that inhibit utilisation of birth companions, the barriers and benefits of utilising birth companions, the impact of non-utilisation of birth companions on the women and the birth outcomes.

Chapter 3

This chapter describes the research design, convergent design (mixed methods research design), convergent design variants, descriptive research (mixed methods research design), exploratory research (mixed methods research design), cross-sectional research (mixed methods research design), steps to develop guidelines, research methods, sample and sampling, ethical issues related to sampling, data collection methods and procedures, ethical considerations related to data collection, data analysis, validity and reliability/trustworthiness of the study.

Chapter 4

Chapter four (4) outlines analysis, presentation and description of quantitative research findings, data management and analysis, Section A: socio demographic characteristics, Section B: reproductive health information (antenatal period), Section C: physical factors (labour period), Section D: postnatal, Section E: psycho-social factors, Section F: the motivating and enabling or modifying factors, and Section G: overview of research findings.

Chapter 5

In chapter five (5), analysis, presentation and description of qualitative findings was outlined. The following topics were covered: data management, discussion of the research findings, participants' age, participants' years of experience of working in the labour ward, discussions under themes and subthemes on development of guidelines in utilising birth companions of women in Limpopo Province: Theme 1: existing knowledge of a birth companion, Theme 2: the midwife's reaction to a woman who want to have a birth companion, Theme 3: a person who is allowed to remain with the woman during labour, Theme 4: midwives perceptions of the presence of a birth companion, Theme 5: the benefits of the presence of a birth companion to the woman, Theme 6: factors that inhibit utilisation of birth companions, Theme 7: critical challenges confronting the midwife for utilisation of birth companions and Theme 8: strategies to improve the availability of birth companions.

Chapter 6

This chapter presents the summary and interpretation of quantitative research findings: research design and methods, interpretations of the research findings, Section A: the socio-demographic characteristics, Section B: reproductive health information (ANC), Section C: physical factors (labour period), Section D: postnatal, Section E: psycho-social factors and Section F: the motivating and enabling or modifying factors.

Chapter 7

The summary and interpretation of qualitative research findings was presented as follows: research design and method, participants' age, participants' years of experience of working in the labour ward, discussions under themes and subthemes on development of guidelines in utilising birth companions of women in Limpopo province: Theme 1: description of the existing knowledge of a birth companion, Theme 1: existing knowledge of a birth companion, Theme 2: the midwife's reaction to a woman who want to have a birth companion, Theme 3: a person who is allowed to remain with the woman during labour, Theme 4: midwives perceptions of the presence of a birth companion, Theme 5: The benefits of the presence of a birth companion to the woman, Theme 6: factors that inhibit utilisation of birth companions, Theme 7: critical challenges confronting the midwife for utilisation of birth companions and Theme 8: strategies to improve the availability of birth companions.

Chapter 8

The finding, conclusions, limitations, recommendations and guidelines was presented in this chapter. Research design and methods and interpretations of the discussed: Section A: research findings was the socio-demographic characteristics, Section B: reproductive health information (ANC), Section C: physical factors (labour period), Section D: postnatal, Section E: psycho-social factors, relationship/correlation/association of the following: age, marital status, live children, gestational age at 1st booking, pain medication given and knowledge of a birth companion, Section F: the motivating and enabling or modifying factors and the challenges/barriers of having a birth companion.

1.11 CONCLUSION

In this chapter, the general overview on utilising birth companion by pregnant women and the midwives was provided and a brief explanation of what prompted the researcher to undertake the study was also outlined. Background to the research problem, aims and objectives of the research study were discussed. Definitions of key concepts, research questions, significance and theoretical foundations of the study were provided. Research design and methodology, and the scope of the study were clarified. The structure of the thesis was outlined. Chapter 2 will present the literature review.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In the previous chapter, problem statement, purpose and objectives of the study, the significance, theoretical foundations and research design were outlined. Chapter two will discuss the review of the literature. The following topics will be discussed in this chapter: historical background of birth companion, respectful maternity care, importance of birth companions on the pregnant women, management of woman during labour and childbirth, types of supports needed during labour and childbirth, the benefits of utilising birth companions, barriers of utilising birth companions, the impact for non-utilisation of birth companions on mothers and birth outcomes, and self-efficacy.

Literature review is a critical summary of research on a topic of interest, often prepared to put a study problem in context (Polit & Beck 2017:733). Furthermore, literature review is used first in the contextualisation of the research to argue a case, identify a suitable role to be occupied by your own study (Henning, van Rensburg & Smit 2018:28). Moreover, literature review consists of all written sources relevant to the topic of interest. A review of literature involves finding, reading, understanding and forming conclusions about the published theory and research (Brink, van der Walt & van Rensburg 2018: 57).

The researcher used the following search engines to download relevant literature for the study which were: EBSCO Host, Google Scholar, Sabinet and Science Direct with the assistance of a subject librarian from Mankweng Hospital and University of South Africa. The following key words were used to collect data during the literature review which are birth companions, labour, pregnant women and Roy's Adaptation Model. Government circulars/reports, grey sources, journals, articles, books, health service documents, and websites were used to

obtain information starting from 2016 to 2021. Two hundred and fifteen (215) documents related to the topic under search were retrieved whereby 120 relevant documents were utilised. The unused documents were not applicable to the topic under study. The targeted participants/respondents were postnatal women admitted in postnatal ward and the midwives who worked in the labour ward for more than two years. The literature review focused on South Africa and global community's birth companions. The following topics were covered: historical background of birth companion, respectful maternity care, importance of birth companions on the pregnant women, management of woman during labour and childbirth, the types of supports needed during labour and childbirth, the factors that inhibits utilisation of birth companions, the benefits and barriers of utilising birth companions, the impact for non-utilisation of birth companions on mothers and birth outcomes, and self-efficacy.

2.2 HISTORICAL BACKGROUND OF BIRTH COMPANION

A birth companion is defined as any individual chosen by the pregnant woman to provide her with continuous support during labour and childbirth (WHO 2016:3). Johns Hopkins (2020:2) further defines a birth companion as an individual who supports woman before, during labour and delivery of the baby, and after delivery of the baby with their continuous presence and complementary interventions. This may be someone from the social networking or woman's family such as a female friend or relative, her spouse/partner, a community member (such as a female community leader, health worker or traditional birth attendant) or a doula. A doula is a woman who has been trained in labour support but is not part of the health care facility's professional staff. Birth companion provides physical, emotional, informational support to woman and serve as an advocate during the entire labour and childbirth.

Perkins, Rahman, Mhajabin et al (2019:228) indicate that throughout history, childbirth occurred in the homes of a labouring woman, whereby the close social network supported her. Over the past two centuries, moving births into the health facilities which are equipped to manage common births-related complications and

ensuring that skilled health service providers are present, has contributed to preventing a number of maternal and neonatal deaths globally. However, a concern has emerged that this medicalization of childbirth may have contributed to dehumanisation of the birthing experience, whereby women are losing many of the benefits of emotional and social support which they used to enjoy while giving birth in their home environment.

Approximately 140 million births occur every year globally. Most of pregnant women give births vaginally with no identical risks factor for complications for either themselves or their babies, at the onset of labour. However, the risk of serious morbidity and mortality increases for both the woman and the baby in situations where complications arise during labour. Moreover, a substantial proportion of pregnancy-related life-threatening conditions and over a third of maternal deaths are attributed to complications that arise during labour, childbirth or the immediate postpartum period, often as a result of obstructed labour, haemorrhage or sepsis. Similarly, a quarter of neonatal deaths and approximately half of all stillbirths result from complications of labour and childbirth. The burden of perinatal deaths and maternal is disproportionately higher in low-and middleincome countries compared to high-income countries. Therefore, improving the quality of care around labour and birth, especially in low-and middle-income countries, has been identified as having a major impact strategy for reducing maternal, stillbirths and new-born deaths, compared with antenatal or postpartum care strategies (WHO 2018:1).

In 1997, the birth companion programme was initiated by student nurses interested in doula care in Spain. At the Johns Hopkins Bayview Medical Centre, members of the faculty offered the training and students provided on-call doula services. A two credit clinical course was taught by a trainer certified by the doulas of North America in 1998. The course taught theories of community and maternal health nursing and the use of supportive techniques during childbirth, such as, breathing methods, different body position, cold compresses, massage and hot showers and birthing balls. Students learned about postpartum health, breastfeeding and infant care. They also learned to communicate with nurses and

doctors about a mother's birth plan and help identify other community resources. Each year today, about 60 to 80 of all midwifery students and baccalaureate students take an elective course in birth companionship (Johns Hopkins 2020:3).

2.3 RESPECTFUL MATERNITY CARE CHARTER (THE UNIVERSAL RIGHTS OF CHILDBEARING WOMAN)

The process of delivering a baby in many instances is a natural birth, a woman needs to be protected/ supported from all of mishap that may arise. Pregnant women are vulnerable. Therefore, they need to be protected so as to be able to reduce the maternal and morbidity in the health care settings and community at large. According to WHO (2019:4-5) on Respectful-Maternity-Care-Charter, every pregnant woman has the following rights:

The right to freedom from harm and ill-treatment by the health care professionals. It is imperative that health care professionals should protect the pregnant women from physical harm and verbal abuse.

Pregnant women have the right to information, informed consent and refusal, and respect for her choices and preferences including companionship of choice where possible. The health care professional should respect the women's rights, permit them to have birth companions and allow them to choose the position they want to adopt during delivery of their new-born baby. Before doing any procedure, the health care professionals should always obtain consent from the women.

Pregnant women have right to privacy and confidentiality. The health care professionals should also ensure that privacy and confidentiality are provided to the pregnant women during labour and childbirth. Moreover, pregnant women have the right to be treated with dignity and respect as well as the right to be protected from physical abuse, humiliation/ verbal abuse or be treated in a disrespectful manner. Furthermore, pregnant women have the right to equality, freedom from discrimination, and equitable care. Pregnant women like any citizen have the right to freedom of discrimination and the right to make decisions about what happens with their bodies. More importantly, pregnant women have the right to be treated holistically: physically, psychologically and emotionally. The pregnant women have the right to be provided with high quality care which is provided

timely by trained health care professionals, in a clean environment. In addition, pregnant women have the right to liberty, self-determination and freedom from coercion. Even if a pregnant woman cannot be able to pay for the service, no one is allowed to detain her or her new-born.

In the study conducted in South Africa, Lambert, Etsane, Bergh, Pattinson and van den Broek (2018:259) report that the most prevalent theme that was described by the participants in their research was that they felt exposed, unsupported and feeling that they are alone in the labour wards. The women related the absence of a support person and the health care professional during labour process. In this study, the women were denied their right to have a companion of choice and provision of high quality care. The health care professionals may have an influx of pregnant women in labour at one point in time. This may hinder them from providing continuous emotional support to the women therefore the services of a birth companion may fill the gap.

2.4 IMPORTANCE OF BIRTH COMPANIONS TO THE PREGNANT WOMEN

The importance of birth companion is to provide supportive care, which may include having someone who is continuously present, reassures and praises the women in labour, assist with physical comfort measures. The latter include providing massage, comforting touch, warm baths or showers and promoting adequate fluid intake and output and undertakes any advocacy when necessary on the women's behalf (example helping the women to articulate her wishes to health care professionals). Supportive care during labour and childbirth may also include the presence of health care professional who can advise pregnant women about the progress and coping techniques, and support the women in making decisions and expressing her wishes regarding procedures that may need to be undertaken. During labour, birth companions will stay with the pregnant women and offer back rubs, comfort messages and soothing compresses. After childbirth, the birth companions will talk to the women about feeding and caring for the baby (WHO 2016:1). In the birth settings where there are a large number of women in labour, birth companions can act as an extended hand of the nurses.

According to WHO (2016:2), birth companion's roles are to facilitate and ensure respectful and clear communication between health care professionals and the pregnant women in labour, especially in emergency situations. For the prevention of mistreatment of pregnant women during childbirth the companions can act as an advocate to the women, to witness neglect and safeguard against mistreatment by health care professionals. Pregnant women are vulnerable; therefore, having birth companions may facilitate good communication between the women in labour and the health care professionals to prevent mistreatment.

The results in the study conducted in Brazil demonstrate that non-pharmacological methods of interventions are able to reduce the severity of pain enough to allow pregnant women in labour to decrease their use of analgesia medications. Exercises on the Swiss balls were able to decrease pain severity at 4 to 5 centimetres dilatation of the cervix. The severity of pain was significantly reduced when exercises followed a massage whereby cervical dilatation reached 5 to 6 cm. After 7cm of cervical dilation when warm shower was added to those interventions, the severity of pain was again reduced significantly. This resulted in some improved obstetrics and neonatal outcomes. The women's satisfaction was also significantly increased when the interventions were utilised (Gallo, Santana, Marcolin, Duarte & Quintana 2018:39). Not every woman in labour needs pharmacological methods to relief labour pains; therefore, non-pharmacological interventions such as the duties of a birth companions can be crucial.

Birth companions will provide practical, emotional, psychological and advice to the pregnant women. Physical presence of birth companions during labour and childbirth offers pregnant women opportunity of having positive childbirth experiences as well as good childbirth outcomes (Maputle 2018:1). Therefore, providing emotional, psychological and practical continuous support to a woman in labour can provide the woman with positive birth experience.

2.5 MANAGEMENT OF WOMAN DURING LABOUR AND CHILDBIRTH

Miller, Abalos, Chamilard et al (2016:2179-2180), in a systematic review report indicate that despite reductions of maternal deaths over the past two decades,

rates of preventable maternal deaths remain at its peak in low-income and middle-income countries, particularly in South Asia and sub-Saharan Africa. Continuous support of women in labour may reduce the rates of preventable maternal deaths, as birth companion will add a voice (act as advocate) to liaison between the woman and the health care providers.

2.5.1 Intrapartum period

The World Health Organisation (WHO) framework for improving quality of care for pregnant women during childbirth report that in achieving the desired personcentred outcomes, experience of care is as important as clinical care provision (WHO 2018:1). Women in labour should be offered respectful care, through the facilitation of good communication between the pregnant women and the health care professionals in collaboration with the birth companions. Pregnant women should be offered the possibility of being cared for by midwives who will provide one-to-one continuous supportive care. Health care professionals should allow and encourage the pregnant women to come with a birth companion of their choice. Health care professionals should also treat every pregnant woman with respect and also equip the woman with information about her expectations, and involve the woman in the decisions about her care. This will give a pregnant woman the courage to endure labour, as there is always someone who cares about her (Miller et al 2016:2179-2180).

2.5.2 Assessment and monitoring of labour progress, maternal and foetal health

Vaginal examination should be performed four-hourly in the latent phase of labour and two-hourly in the active phase of labour to assess the cervical dilatation, sagittal moulding and caput and liquor colour if membranes have ruptured. Uterine contractions should be assessed four-hourly in the latent phase of labour and half hourly per ten minutes in the active phase of labour to exclude abnormalities. Maternal pulse, blood pressure, respiration, temperature and foetal heart rate should be assessed four hourly in latent phase of labour. Foetal heart rate needs to be monitored half hourly in active phase of labour. All assessments should be

plotted on a partograph which will reflect if the labour progress is good or poor so that appropriate action could be taken timeously (Miller et al 2016:2179-2180; NDH 2016:41). Consistent assessment of pregnant woman in labour can help the health care professionals to identify deviations from normal and be able to act promptly to prevent complications.

2.5.3. Care during the first-stage and second-stage of labour

To reduce cross-contamination between the pregnant women in labour and babies, the health care professionals need to practice the following recommended measures: routine hygiene including single use of examination gloves and standard hand hygiene. Health care professionals are to encourage and allow pregnant women to drink juice or isotonic drinks, water and eat snacks or light meals during labour. Moreover, health care professionals should encourage and assist the pregnant women to move and choose any position they find comfortable throughout labour and childbirth, except semi-supine or supine to reduce the risk of supine hypotension syndrome (Miller et al 2016:2179-2180; NDH 2016:41). Health care professionals have a duty to prevent cross infection by adhering to universal hygiene standards, prevent complications and promote health.

2.5.4 Care during the third stage of labour

Health care professionals should inform the pregnant women that the following will be performed: active management of the third stage to prevent postpartum haemorrhage. Immediately after the birth of the baby, abdominal palpation will be done to exclude undiagnosed second twin. Oxytocin (10 units intramuscularly or intravenously) is recommended for the prevention of postpartum haemorrhage. After clamping the umbilical cord, a skilled birth attendant should palpate the abdomen to ensure that the uterus is well contracted and controlled cord traction can be used to minimise post-partum bleeding. Skin-to-skin contact can be provided to the women with their babies and breastfeeding by the health care professionals as soon as possible after birth unless the new-born needs resuscitation (Miller et al 2016:2179-2180; NDH 2016:43).

Shakibazadeh, Namadian, Bohren et al (2017:435), in a systematic review, indicate that across the world with humanised care, both pregnant women and the health care professionals reported maintaining privacy and confidentiality. The pregnant women expressed a need for privacy during procedures by preventing them from being seen by visitors or other women and limiting the number of staff and attendants who are present in the labour room. Health care professionals reported that they care about the pregnant women's privacy. The women in Malawi, Tanzania and Nepal believed that maintaining secrecy and confidentiality about their health status was part of good quality care.

Women also indicated that they needed the health care professionals to preserve their dignity. Women preferred health care professionals, who spent time with them, have kind attitudes, are calm, warm, tactful, smiling, and caring. Women also stated that their expectations to the health care professionals were to be treated as a person and not as processed things. Respecting the cultures, values and beliefs of pregnant women was highlighted by women and health care professionals. Most Muslim women expressed their strong preference for having a female birth attendant during labour and birth in different countries (Shakibazadeh et al 2017:435). The wishes of women in labour are genuine. Therefore, the health care professionals are obliged to abide by their request.

2.5.5 Duration of labour

Definition of the latent and active phase first stages of labour

The latent first stage of labour, according to WHO (2018: 3), is define as a period of time characterised by painful uterine contractions, changes in cervical dilatation, and effacement and slower progression of dilatation up to 5 cm for first and subsequent labours. The active first stage of labour is a period of time characterised by painful regular uterine contractions, cervical effacement and more rapid cervical dilatation from 5 cm until full dilatation for first and sub-sequent labours.

The duration of the first stage of labour can vary widely from one woman to another. The duration of active first stage (from 5 cm until full dilatation of the cervix) usually does not extend beyond 12 hours in first labours and usually does not extend beyond 10 hours in subsequent labours. The cervical dilatation rate threshold for pregnant women with spontaneous labour is 1 cm / hour during active first stage (WHO 2018: 3).

The duration of labour for a woman who has a companion of choice was compared to a woman who receives routine care during labour and childbirth. The results reveal that stage I and II of labour were less among the study group women in comparison with the control group which led to the acceptance of the research hypothesis that labouring women who received supportive care from a companion of choice from the onset of active phase of labour until two hours post-delivery compared with the woman who received routine care will experience shorter duration of labour (Eid, Salama, Heeba and Mohamed 2020:234). The study results show positive influence on the duration of labour of women who has a birth companion during labour.

Davidson, London and Ladewig (2014:649-651) state that there are four stages of labour which are: First stage, second stage, third stage, and fourth stage. The first stage has the latent (early) phase, active phase and transition phase. The latent phase of a nullipara (a woman who has never given birth before) will take 8.6 hours, active phase 4.6 hours, transition phase 3.6 hours, second stage up to three hours while a multipara (a woman who has had two or more viable offspring) the latent phase will take 5.3 hours, active phase 2.4 hours, transition phase variable hours, second stage up to 0-30 minutes. Third stage is the period of time from the birth of the baby until the delivery of the placenta. A placenta is considered retain after 30 minutes post-delivery of the baby. The fourth stage of labour is the time from 1 to 4 hours post-delivery of the baby. The pregnant women in labour can be prepared to endure the period of labour pains if they are having birth companions.

2.5.6. Prospective provision of information and seeking informed consent

Health care professionals need to provide pregnant women with information during antenatal clinic so that the women can know what is expected of them during labour and childbirth. This includes breathing techniques, relaxation techniques, pushing and be physically and psychologically prepared to give birth. Women also believed that midwives should ask permission from them before undertaking procedures that seem embarrassing like vaginal examinations (Shakibazadeh et al 2017:435). This is part of the health care professionals' duties in the care of pregnant women in labour.

2.5.7 Ensuring continuous access to family and community support

Some health care professionals and most women in the systematic review valued the importance of family birth attendants and presence of labour companion of choice, and emphasised it as every woman's right. Health care professionals valued family interaction with the pregnant women and active involvement in their care. The health care professionals and women in Japan categorised some rules and regulations as barriers to humanising birth and the policies restricting labour companions. The important factor that determines the accommodation of birth companions in the labour ward was the physical structure (Shakibazadeh et al 2017:436). It is the duty of the health care facilities managers to make provision of space for the accommodation of birth companions in their institutions to support the women in labour.

2.5.8 Treatment of women during labour

According to Mukamurigo, Dencker, Nyirazinyoye, Ntaganira and Berg (2019:80) in the study conducted in Rwanda, few pregnant women received pain relief and 1.4% received non-pharmacological pain relief (such as massage) and (1.8%) received pharmacological pain relief. About (32.9%) of the women were performed amniotomy (17.2%) routine care, (6.9%) had insufficient contractions, (1.4%) delayed labour progress, (1.1%) insufficient foetal descent and (6.2%) unspecified reasons. An episiotomy was performed in (18.6%) of all the pregnant women,

(10.7%) of the multiparous women and (29.7%) of the primiparous women. The protection of the perineum was cited as the main reason. Only one (0.2%) woman was accompanied by her partner/husband. Most of the women (79%) gave birth vaginally and spontaneously, and 6.0% women had an assisted birth through emergency Caesarean section. At discharge, around three-quarters (69.7%) of the women reported good or very good health status. Almost all the new-borns (88.5%) had a good health status at birth. Non-utilisation of birth companions may expose the women to pharmacological and medical interventions. Therefore, it is vital for the health care institutions where women deliver their babies to utilise birth companions.

2.5.9 Pain relief

Health care professionals should assess the level of pains of the labouring women and their desire for pharmacological and non-pharmacological approaches to pain relief. Pregnant women are encouraged to adopt an upright position they find comfortable throughout labour to assist descend of the foetal head. More importantly, health care professionals should offer women with psychological and emotional needs to relief labour pains. The women in labour are advised to perform breathing exercises. Immersion in water by the health care professionals and massage might also reduce pains during the first stage of labour while breathing exercises might reduce pains during the second stage of labour. Companionship and support have been shown to reduce the need for pain medication during labour. Health care professionals should promote companionship in labour (Miller et al 2016:2179-2180; NDH 2016:42). Furthermore, the health care professionals should also ensure that there is availability of opioids (e.g. Pethidine, Diamorphine) in all labour wards. Moreover, pregnant women should be informed about its side effects if opioids are used for pain relief. Health care professionals should give the woman an antiemetic treatment in case of nausea or vomiting. The availability of nitrous oxide should be ensured in all birth settings for pain relief (1.1 mixtures with oxygen); the pregnant women should be informed about the side effects. Health care professionals should ensure that there is availability of regional analgesia in obstetrics units and

potential risks and benefits should be explained to the women. Pregnant women who request a regional analgesia should be provided with it (which includes recommendations for drugs, dosing, co-interventions, maintenance, and precautions), and health care professionals should ensure intravenous access before initiation of analgesia (Miller et al 2016:2179-2180; NDH 2016:42; Marshall & Raynor 2014:354).

Basgol and Koc (2020:2) also state that there are pharmacological and non-pharmacological methods that pregnant women may choose during labour to relieve pain. The non-pharmacological option includes continuous support during labour and birth, relaxation, position changing, hydrotherapy, spiritual/mental arousal, ambulation, acupuncture, focusing attention, acupressure, dreaming, massage, therapeutic touch, breath awareness and efloraj. Nevertheless, non-pharmacological methods do not require medical prescriptions while pharmacological methods require medical rules. Midwives have the capacity to give pregnant women information related to non-pharmacological measures to relieve pain. Pharmacological methods of pain relief include systemic treatment with sedatives, tranquilizers, narcotics, and amnetics which consist of regional and conduction anaesthesia and general anaesthesia.

2.5.10 Factors affecting response to pain during labour and child birth

Davidson et al (2014:681) indicate that the need for analgesia during labour has shown reduced through preparation for childbirth which covers: reading, talking to others and what to expect in the labour ward. The woman will also know the techniques required to decrease the discomfort of labour pain which will reduce anxiety. Some women tend to respond to painful stimuli in the way that is acceptable to their culture. Therefore, health care professionals need to be accustomed with the cultural norms and preferences of the woman and family.

Fatigue and sleep deprivation also affect response to pain during labour because she will not be able to use the strategies to distract or imagination to deal with pain owing to lack of energy. The ability to manage current and future labour pains is affected by the woman's previous experience. Women who have had experience with labour pains seem to be more sensitive to painful stimuli than those who have not (Davidson et al 2014: 681).

The woman's response to pain may be affected by her anxiety. Separation from the loved ones, unfamiliar environment and unfamiliar health care professionals may increase the woman's anxiety. Attention and distraction have an influence on the perception of labour pain. Therefore, reassurance from family members and health care professionals can help (Davidson et al 2014:681). Orientation of the woman to the labour ward setting and staff may reduce the level of anxiety during labour.

2.6 CULTURE AND CHILDBIRTH

Pregnant women do not exist in a vacuum; they belong to religious, social and cultural backgrounds and they have certain needs and expectation related to childbirths. Therefore, health care professionals need to observe those needs to be able to assist the women in labour holistically. Many women giving birth believe it is important to follow their traditional pregnancy and birth practices of their culture in Australia. During labour, women from some cultures avoid walking around too much, some prefer to stay lying down and some prefer to sit or squad. In some cultures, the fathers are not required to be available during birth, but the mother or mother-in-law does (Health Direct Australia 2019:1). When the woman has a baby in Australia, there are many choices the woman is given. For example, a woman can choose where to give birth (in a birth centre or home, hospital), and the woman can choose public or privately-funded care. A woman has also a choice of whether to have a female doctor or midwife. However, this may not always be possible, especially in an emergency situation. Every pregnant woman has a right to health care that is suited to individual needs, including cultural needs in Australia. This means that health care professionals and hospitals will respect the woman's wishes as much as possible. In most states and territories, multicultural health workers are available to help with things like choosing an antenatal clinic, getting appointment and finding relevant services and support

groups in the woman's area (Health Direct Australia 2019:1). Health care professionals should where possible provide cultural services to the pregnant women in labour/childbirth.

According to Withers, Kharazmi and Lim (2018:1), the articles that examined the beliefs and practices helped to explain the women's aversion to institutional births, such as preference for traditional birth positions, as they were afraid of medical interventions. Other practices and prevalent beliefs across Asian countries included massage, the use of traditional healers and traditional medicine/herbs, beliefs relating to hot/cold imbalance, the state of pollution after childbirths, behavioural taboos, magic and superstitions. Many Asian pregnant women continue to practice a wide range of traditional beliefs and practices during childbirth and the postpartum period. The benefits of educational programme for formal maternal health care services are geared towards not only pregnant women, but also husbands, parents and in-laws. The recognition and appreciation of common local beliefs helps health care professionals to be able to provide culturally competent care to their clients. More importantly, health care professionals should provide safe choices available for pregnant women during experience and understands, respect and integrate cultural interpretations of child birth and the needs of pregnant women and their families.

Adatara, Strumpher, Ricks and Mwini-Nyaledzigbor (2019:359) in the study conducted in Ghana report that the study participants admitted that they gave birth at home as they needed to eat culturally acceptable foods such as hot "zoomkom" which is a local drink rich in Vitamin C prepared from Millet or "puusakoom" and also a local drink prepared from fruits after delivery of the baby at home. The participants felt that eating nutritious food prepared at home for women after childbirth was of central importance as these dishes could motivate the women's decision to deliver at home. The participants expressed concerns that in the health facility-based birthing units, women are often compelled to eat whatever is available and not what they want to eat during labour/childbirth. They also indicated that even if relatives make efforts to bring home-made dishes, they are sometimes not allowed to bring them in some health care facilities.

Overall, 50.9% of respondents in the study conducted in Ethiopia had some cultural malpractice during pregnancy. Out of 318 of pregnant women, 62 (19.5%) of the women practiced nutrition taboo, 87 (29.7%) delivered their babies at home, 78 (24.5%) practiced abdominal massage, 96 (32.8%) avoided colostrum's, 132 (45.2%) washed their babies before 24 hours after delivery and 6 (6.9%) cut the umbilical cord using an unclean blade. Cultural practices taboos and beliefs are often implicated in determining the care mothers received during pregnancy and childbirth which is an important determinant of maternal mortality (Gedamu, Tsegaw & Debebe 2018:1).

The results also revealed that in the rural areas of Ghana, placenta disposal according to culturally acceptable way after childbirth was one of the norms women associated with home births. The participants indicated that taking placenta home to be buried was another cultural practice which made them prefer giving birth at home as they believed that how the placenta was disposed after birth partly influenced the future of their children. Some participants claimed that how the placentas were disposed after birth attributed the current armed robbery, prostitution and other social issues in the society. They argued that in the case of home delivery of the baby, a relative buries the placenta and therefore, preserves the future of the child. This is compared to health facility-based births, whereby the placentas are incinerated or burnt. The study results suggest that some traditional beliefs related to childbirths are of special value to pregnant women in Ghana and therefore, health care professionals need to respect the women's wishes by enhancing the provision of skilled birth attendants in the rural communities (Gedamu et al 2018:1).

Among those interviewed in the study conducted in the rural Cambodia reported that some women moved away from harmful practices that were indicated in the past, such as food restrictions, putting mud on the umbilical cord and discarding colostrum. Throughout the interview, it was evident that grandmothers were involved in the care of their daughters in law during pregnancy, childbirth and postpartum. However, there was no sense of dominance. Mothers were able to

decide for themselves whether to take traditional medicine or to partake in traditional practices. Nevertheless, some mothers, particularly for the first child, followed and took advice from the older generation (Turner, Pol, Saon, Neou, Day, Parker & Kingori 2017:6-7). Health care professionals should embrace the good practices and advice the community about the harmful practices.

2.7 TYPES OF SUPPORTS NEEDED DURING LABOUR AND CHILDBIRTH

A study conducted in South Africa reported that midwives provide the women during labour with the following support measures: emotional and informational to the pregnant women in labour and childbirths (Maputle 2018:1). In another South African study, Bohren, Hofmeyr, Sakala et al (2017:3) found that pregnant women value and benefit from the presence of a support person during childbirth process. The support may be emotional (which is continuous presence, praise and reassurance) and providing the woman with information about the progress of labour. Pregnant women in labour needed someone whom they can talk to in the language they understand. A person who can explain to the health care professionals any birth plan and cultural/traditional routines the woman prefers. These services can be performed by a birth companion. The birth companion will remind the woman about coping techniques and provide comfort measures which are: rubbing the woman's back/massage, warm baths/showers to relief pain, encouraging adequate fluid intake and output to prevent dehydration, encouraging mobility to promote descend of the foetal head and advocating for the woman when required. Birth companionship may enhance a woman's feeling that she is in control, boost physiological process of labour, as well as women's feeling of confidence and control in their own strength and ability to give birth. Lack of continuous support during childbirth may dehumanise the pregnant woman.

In the study conducted in South-East China, Zheng, Morrel and Watts (2018:159) indicate that the lowest scores of informational support reported for Chinese primiparous women was that parenting informational needs were unmet in the first three months postnatally. Therefore, support from health care professionals could

be crucial in enhancing advice and instructions for Chinese primiparous women, in addition to support from women's own social networks.

2.8 CHOICE OF BIRTH COMPANIONS

WHO (2018:1) defines a birth companion as a person the woman has chosen to provide her with continuous support during childbirth process. The person may be her spouse/partner, someone from the woman's family/relative or social networking such as a female friend, a community member (such as a health worker or traditional birth attendant, female community leader) or a doula (is a woman who is not part of the health care facility's professional staff although trained in supporting woman in labour).

In a study conducted in Rwanda, Mukamurigo, Dencker et al (2019:81) indicate that companion was rarely present during labour and birth. The researchers described the need of the husband to be present as women experienced poor childbirth and health care providers denied this. According to the study conducted in Turkey by Demirci, Kabukcuglu, Haugan and Aune (2018:4), most participants needed support from their husbands during labour and childbirth. They gave reasons that sharing their labour process with their partners was vital to their childbirth experience. Some participants reported that they do not trust some of their family members (such as mother-in-law) owing to lack of good relationship, while others felt that the presence of many relatives in the delivery (birth) room to be stressful.

The women in the study conducted in Spain considered their partners as the most important form of support they need during childbirth and distinguished two types of attitudes among them (active and passive attitude). Active attitude entails the involvement of the partner in meeting the physical and emotional demands of the woman. Conversely, passive attitude entails the absence of a partner who opted not to participate but present, actively staying on the side as a spectator (Pereda-Goikoetxea, Martin-Fernandez, Liceaga-Otazu & Elorza-Puyadena 2019:95). The

type of companion selected by the women should be supported by the health care providers.

2.9 THE UTILISATION OF BIRTH COMPANIONS

Research has shown that physiological process of labour and childbirth outcomes are enhanced by continuous support during labour. For the implementation of birth companion to be successful, it is vital that health care professionals understand the benefits and potential threads of birth companionship so as the importance of supporting pregnant women to decide whether they want a childbirth companion (WHO 2016:1&3). The willingness of the pregnant women to utilise the labour and birth companions will depend on how health care professionals support the birth companionship.

According to a systemic review of publications from Ireland, United Kingdom (UK), United States of America (USA), Scandinavia, Italy and New Zealand reported that women were offered help by birth companions in the early stages of labour at home. Women were not allowed to come to the health care facilities in the early stages of labour as there was insufficient space and enough health care providers to look after them (Beake, Chang, Cheyne et al 2018:77). According to this review, some of the labour companions find it difficult to stay at home with the women in labour when they were witnessing a situation which they have not anticipated, especially the male companions. Insufficient knowledge provided by health care providers also may have contributed to the women's anxiety.

Dynes, Binzen, Twentyman et al (2019:94) in the study conducted in Tanzania stated that less than half of pregnant women in their study had a companion in labour (44.7%). The most common companion at time of birth constituted the following: the woman's mother (34.5%), mother in law (30.4%) and a neighbour (22.5%). It seems there is still reluctance regarding the utilisation of birth companions in Tanzania.

According to the study conducted in Rwanda by Mukamurigo et al (2019:78), there were health care professionals who were assisting pregnant women in labour whereby (49.4%) were midwives, (28.8%) were nurses and (22%) doctors, and one woman (0.2%) had a birth companion present (her husband). These may be an indication that without the support of the health care providers, the implementation of successful birth companionship may fail. Therefore, health care providers need to value the benefits of birth companions so that they will be able to motivate the women to utilise the birth companions.

According to the study conducted in South Africa by Martin and Filies (2018:61), the birth companions were not allowed in the Midwife Obstetrics Unit. The women reported that midwives did not allow their partners to be with them while in labour, while midwives cited the issue of shortage of human resources.

2.10 FATHER INVOLVEMENT DURING LABOUR AND CHILDBIRTH

According to the study conducted in Latin America by Molina-Velasquez, Belizan, Perez-Villalobos, and Contreras-Garcia (2018:36) reported that the study results showed a significant statistical inverse correlation between "support of the health system" and "parental concern", which means that the greater the support of the health system the lesser the paternal concern. This indicates that parents of the woman in labour need more interaction and information during childbirth. Health care professionals should facilitate this access to information and allow partners to assume a leading role in childbirth.

In the study conducted in Portugal, Coutinho, Antunes, Duarte et al (2016:440) report that a father/partner who comes with the pregnant woman for the consultations during pregnancy and took part in preparations for birth will be informed about the context of labour and childbirth, therefore, confident in the birthing room. The father will be able to embark in a unique and enriching experience for him and the woman and the baby since he has the capacity to give maximum support to his partner/ spouse and enjoy moments of becoming a father. More importantly, paternal involvement in the context of birthing units brings

benefits to everyone who is involved in this process to make it unique experience and a major shared moment for the woman and partner. First time expectant fathers in this literature review were more likely to accompany their partners for antenatal clinic check-ups, sign up for antenatal classes and actively participated in the labour process. Fathers who were involved and present during childbirth were younger and also possessed better education. In addition, fathers of higher income were more willing to participate in the labour process as compared to fathers with lower income levels who had reservations to participate and were also uninformed about their role during birth process (Xue, Shorey, Wang & He 2018:143). Health care providers have a duty to disseminate information to the community members about the importance of birth companions so that everybody can have access to the information.

In the study conducted in Portugal, Coutinho et al (2016:435) further report that fathers' presence in the birthing units makes them feel that they are playing a vital role in the process. This encourages father to be closer therefore, more intimate, able to share the birth experiences with the mother and contribute to her well-being in addition the assumption of a parental role. Moreover, health care professionals have a vital role in the integration of the partner into the birth process with his presence also being reflected in the humanisation of health care. Even though there are benefits of utilising birth companions, there may be obstacles that hinder one to utilise birth companions. The next topic will outline the benefits of utilising birth companions.

2.11 COMPASSION AND TRUSTWORTHY

The review noted that women who wanted companions to be present during labour and childbirth identified compassion and trustworthiness as the most important characteristics of labour companion. In general, compassion and trust appeared to help women to have more positive birth experience. Pregnant women should be treated with compassion. Other findings of the review show that trust and compassion mediated close bond or interpersonal relationship between women and their companions. The review also noted that women who have

doulas develop close bonds with their doulas, often meeting them before birth to build rapport and understand expectations (WHO 2020:2). Mothers who were having doulas during labour show more affectionate interaction with their infants. This involves significantly more smiling, talking and stroking (Johns Hopkins 2020:3). Women should have compassion and trust which may affect the choice and the implementation of birth companions. Health care professionals have a duty to ensure that pregnant women are given an opportunity to choose whoever they so wish to be present during labour and childbirth (WHO 2020:2).

2.12 THE BENEFITS OF UTILISING BIRTH COMPANIONS

The benefits of utilising birth companion were divided into the following: the benefits on pregnant women, benefits on health care professionals and benefits to the Department of Health. The benefits of utilising fathers as birth companions were also covered.

2.12.1. The benefits of utilising birth companions on the pregnant women

WHO (2016:1) reports that during labour and child birth; pregnant women want to be accompanied by a friend, spouse/partner, family member or community member. This can improve a woman's' experience of childbirth by facilitating her access to practical and emotional support from someone she trusts. Pregnant women's desires can be met when the health system and the midwives see it deem necessary to utilise the chosen birth companions.

In the study conducted in Tanzania, Dynes et al (2019:96) indicated that pregnant women who perceived that they may be at risks of obstetrics complications were more likely to request or arrive at a facility with a birth companions. A heavier delivery workload (high risks client) was associated with greater odds of birth companionship. The reason for high risk pregnant women to request or come with a birth companion maybe that the women want to be helped in taking decisions that will benefit both the baby and the mother.

In a systematic review, Bohren et al (2017:3) assert that continuous support during labour may improve birth outcomes of the infants and the women, which include increased chances of vaginal birth, which reduced duration of labour, decreased Caesarean section delivery and instrumental vaginal births, reduced utilisation of analgesia, reduced low five minutes Apgar score and negative feelings about the experiences of childbirth. Health care professionals need to harmonise the birth companion services to acquire patient's satisfaction, which may produce good health outcomes.

In a study conducted in London, Thomson, Balaam, Lesson et al (2016:6) report that a pregnant woman who received support from birth companion felt less isolated, better informed and more prepared (for child birth and parenting); which led to improved confidence and general wellbeing. Conversely, pregnant women who received support from birth companions were less likely to be given anaesthesia during labour, induced and were more likely to have a vaginal births and able to sustain breastfeeding following the birth of their infants (Thomson et al 2016:6).

In a study conducted in Turkey by Demirci et al (2018:4) participants who reported that they received support from family, partners and friends during labour felt safe and comforted. The study further reported that family and friends provided the pregnant women with encouragement, personalised guidance and stressed that they had positive thinking. Pregnant women needed this kind of support to be able to cope with birth process.

Downe, Finlayson, Oladapo et al (2018:1) report that what mattered to most pregnant women was a positive experience during child birth that exceeded/fulfilled their personal expectations and socio-cultural belief. These include giving birth to a healthy baby in a clinically safe environment with practical emotional support system in the form of birth companions and with competent, reassuring, kind health care professionals. Most pregnant women wanted a natural (physiological) labour and child birth. Immediately the women received what they envisaged, they were fulfilled. A healthy working relationship between

the health care professionals and the birth companions may offer women in labour what their hearts desires, most of which are a healthy baby in a safe environment and emotional support.

2.12.2 The benefits of utilising birth companions on the health care providers

In a study conducted in Tanzania, Dynes et al (2019:96) report that in relation to a companion of pregnant women in labour, greater odds of companionship during birth was associated with a heavier delivery workload. The busy health care professionals appreciated the help and surveillance from birth companions. Health care professionals who have a greater number of deliveries and prolonged working hours seem to show an interest towards accepting companionship. According to the Kabakhian-Khasholian and Portela (2017:11), birth companions can be useful in health care facilities that have shortage of nurses and midwives. Health care professionals who were working in institutions where there is great number of deliveries with nurse shortages were to consider the services of birth companions, as they may offer a helping hand to attend to the women's' physical, emotional and social needs.

In a study conducted in Zimbabwe, Fernandes, Kambarami, Dhlandhlara et al (2016:3) indicate that as a low cost preventive intervention to improve maternal and perinatal outcomes, birth companions can be involved in supporting pregnant women during childbirth. Health care professionals need to consider the assistance that the birth companions may provide to the pregnant women in labour and child birth; be it emotional, physical and psychological.

2.12.3 The benefits of utilising birth companions to the health system

There are simple measures that could be used to allow female relatives to accompany pregnant women during labour which are cost-effective and culturally sensitive to address the concerns from pregnant women in labour. The Department of Health may even benefit from birth companions in situations were by the health care providers do not understand the language that is used by the

labouring women, to facilitate good communication which will intern facilitate cooperation (Maputle 2018:1). The next topic will discuss the barriers for non-utilisation of birth companions.

2.13 THE BARRIERS FOR NON-UTILISATION OF BIRTH COMPANIONS

The barriers for non-utilisation of birth companions were divided into the following: client factors and their families, health care professionals' factors, communication factors and fathers as birth companions.

2.13.1 Client factors and their families

Marginalised or vulnerable pregnant women did not to find it easy to find a companion of choice to support them during labour or if the women live far from the health care facilities, or if the birth companion requires remuneration. Health care facilities need to consider steps and take consider this to ensure that there is always support available for all pregnant women during labour and child birth (WHO 2018:1).

According to a review conducted by Kabakhian-Khasholian and Portela (2017:11) among high-income population in high income countries, it is expected that pregnant women themselves should cover the cost of hiring a doula. These indicate that if a low-income pregnant woman finds herself among the high-income population, they may not be able to afford to pay a birth companion. As a result, the woman will not receive the services of birth companion. The involvement of family members as a companion during birth is an inexpensive practice in low-income setting. However, the cost of transportation for volunteer companion needs to be considered to sustain the programme at the health care facilities. The policy makers of countries need to consider the financial factors to be able to implement utilisation of birth companions in health facilities as some women may not have the money to pay birth companions' services.

In areas where most people knew each other, in some close-knit communities, pregnant women were not easy about the presence of the female member or

doulas recruited from the same communities during childbirth citing the problem of gossip (Kabakhian-Khasholian & Portela (2017:10). A study conducted in Kenya by Afulani, Kusi, Kirumbi and Walker (2018:1) further reports that reasons for the pregnant women in labour not desiring birth companions was lack of privacy, fear of gossip, embarrassment and abuse. The NDH (2016:41) avers that every patient has the right to confidentiality, privacy and courtesy concerning health care issues and treatment. Therefore, health care professionals should be able to respect the women's wish by not utilising birth companions if the woman so wishes.

According to the study conducted in Zimbabwe by Fernandes et al (2016:3), there were pregnant women who were against birth companionship. The women felt that the presence of husbands in the delivery room was culturally inappropriate and unnecessary as the support from nurses was sufficient. Delivery of babies in most cultures is regarded as women's work; therefore, the presence of man is perceived inappropriate. If pregnant women feel that the presence of midwives is sufficient, they may not need any birth companions.

2.13.2 Health care providers' factors

Women have been encouraged to give birth in health care facilities over the last two decades to ensure access to skilled health care professionals and timely referral should be done when a need arises. Accessing labour and childbirth health care facilities, however, was not a guarantee of good quality. Globally, undignified care and disrespectful was prevalent in health facilities setting, particularly for underpinned populations and this does not only violate their human rights, but also a significant barrier to accessing intrapartum health care services. The prevailing model of intrapartum care in many parts of the world may expose apparently healthy pregnant women to unnecessary medical interventions that interfere with the physiological process of childbirth as it enables the health care professionals to control the birthing process (WHO 2018:2).

In the study conducted in North West Province of South Africa, Spencer, du Preez and Minnie (2018:1) note the challenges that impacted the implementation of continuous support during childbirth negatively at an organisational level. These

included shortage of staff, the absence or lack of implementation of guidelines and various policies, the architectural outlay of maternity units and the attitudes of nurses. If health care professionals do not support a programme in place, it is likely to have a negative impact in the implementation thereof. Limited knowledge among health care providers and managers about the benefits of labour companions and negative attitudes of health care providers towards labour companions were cited as barriers of implantation of birth companions (WHO 2016:3).

In a study conducted in Zimbabwe, Fernandes et al (2016:3) alluded that 80% of health professionals were supporting an idea of birth companions but cited cultural and logistical issues as barriers. If there is no organisational support of a programme for the implementation of the programme, it is likely to fail. The authorities need to support the organisation with the necessary resources to facilitate the smooth running of the programme.

In the study conducted in Tanzania, Dynes, Binzen, Twentyman et al (2019:92) posit that health professionals are the gatekeepers of companionship, and the work environment influences professionals' allowance of companionship. Therefore, the Department of Health needs to hire supervisors who are experts in midwifery so that they will also be able to monitor the implementation of the birth companionship policies.

In a review study, Kabakiab-Khasholian and Portela (2017:1) report that health care professionals were worried about the role of the birth companions and possible interference in labour ward activities. Organisation of care unit, allocation of resources and facility related constraints were also identified as barriers to the implementation of birth companion. Despite that pregnant woman needs someone during labour, one should not ignore the concerns of the health care providers as women also need to utilise the resources.

The experiences, perspectives, knowledge and skills of different stakeholders involved in the implementation, as well as relevant decision-making process,

facilitators and barriers outside and within the health care facility influence the successful implementation of birth companionship. Institutional policies and routines, health care professionals' attitudes as well as the physical layout of health care facilities do not always support the implementation of the intervention (Kabakiab-Khasholian & Portela 2017:2)

2.13.3 Health system factors

Hordin (2017:1) accentuates that health care facilities may need to adjust aspects of management or allocate resources to implement a policy which supports birth companions. Health care facilities need to consider privacy in the labour rooms and physical space for lay birth companions. Some of the facility-level and national policies do not allow the presence of lay birth companions. Furthermore, some women may not afford to hire a doula for continuous labour support. The physical infrastructure of health care facilities which will limit privacy, absence of institutional policies allowing women to have a companion of choice during labour and childbirth contributing to overcrowding in the labour ward were cited as a barrier for allowing birth companions in health care facilities (WHO 2016:3).

In a systematic review, Shakibazadeh et al (2017:936) report that most of the health care professionals and pregnant women valued the significance of labour companions of a women's choice. The Japanese health care professionals and women cited some rules and regulations as barriers of humanising births, such as the policies restricting birth companions. The space was an important factor in the accommodation of birth companions in the labour wards. Health care providers and women in this review seem not to have problems in relation to birth companions. The people who are in authority were to provide systems/structures that will make it possible to accommodate birth companions.

2.13.4 Communication factors

Hornby (2015:295) defines communication as a process or activity of expressing feelings and ideas or of giving people information. According to NDH (2015:1), every patient has the right to health information in their language of choice, all

information regarding their illness, treatment and cost. It is the health care professionals' responsibility of giving women and their birth companions' information regarding the services that are offered in their health care facilities. The women also need to be told about their health status/progress of labour so as to encourage them and gain cooperation.

According to WHO (2016:2), health care providers should ensure autonomy of the pregnant women in labour, and therefore, provide them with freedom to choose if they want to have a birth companions or not. The women should be given an opportunity to choose whom they want as their birth companions. Health care professionals should provide pregnant women with information/education and the means to make and implement the women's choices.

Spencer et al (2018:5) indicate that communication was a challenge in the study conducted in South Africa citing the language concerns and importance of communication. Participants reported communication barriers if the health care professional and the woman did not understand each other's languages. Health care professionals need to provide women with information of what is expected of them during antenatal clinic visits and labour to gain cooperation and allay their anxieties. In a study conducted in South Africa, Maputle (2018:9) also indicated that from a total population of 24 mothers who were recruited in the study, nine (37%) did not speak the same language with the midwives who were attending them. This impeded verbal communication. As a result, non-listening skills and language barriers were displayed during interaction of a midwife and pregnant woman during childbirth. Despite the language barrier, no midwife encouraged the women to bring a companion during labour and childbirth to resolve communication problem.

According to Chang et al (2018:15), barriers of communication between the pregnant women in labour and maternity health professionals such as high workload, the role of the women in society which are likely to be specific to particular settings or cultures would need to be addressed individually. It is the health care professional's responsibility to be acquainted with the communication

strategies and the languages that are used in the area of work so as to be able to avoid conflicts with the women she serves. In the event that a woman cannot speak the local language, a health care professional or someone chosen by the woman can do so.

2.13.5 The barriers of utilising fathers as birth companions

Some fathers desired to be actively involved in the antenatal and labour period, but they indicated several barriers that blocked their involvement. Their barriers of involvement included level of information (lack of knowledge), attitudes of fathers towards involvement, the marital relationship qualities such as positive and satisfying marital status, relationship with their own parents whereby there was a dysfunctional family foundations and socio-demographic factors (Xue et al 2018:135). According to this study, fathers should be encouraged to attend antenatal clinics with their partners as when listening to the foetal heart rate or ultrasound scan may be encouraged to support their spouse during labour and childbirth.

A study by Vallin, Nestander and Wells (2019:48) reported that fathers may need additional support from health care professionals when unpredictable birth complications arise. Child health professionals should reconsider how to support fathers during the complicated childbirths, as a lack of support may expose fathers to a feeling of exclusion and may lead to negative birth experiences and poor psychological mental health. Efforts should be made to change the behaviours and attitudes of health care professionals towards fathers so that they can support their partners better and have a positive childbirth experience.

2.14 THE IMPACT FOR NON-UTILISATION OF BIRTH COMPANIONS ON MOTHERS AND BIRTH OUTCOMES

The non-utilisation of birth companions by pregnant women during labour might results in complicated labour, while the new-borns might have poor health outcomes that might need continuous support from the Department of Health. Pregnant women need to be given information on the need to have a birth

companion during labour to attend to their physical, emotional and social needs. The involvement of birth companions during labour may reduce complications of labour, and prolonged hospitalisation, improve breastfeeding and mother/child bonding, reduce legal costs on Department of Health, and job losses. The involvement of birth companions during labour might also assist health care professionals in the delivery of the health information, which is meaningful to the pregnant women.

In a study conducted in London, Thomson et al (2016:6) report that pregnant women who did not receive support from birth companions experienced inappropriate/insensitive and inconsistent care from health providers. Furthermore, Simpson and Catling (2016:203-207) indicate that pregnant women with health disorders were likely to suffer from traumatic birth event; other risk factors included obstetric emergencies and also neonatal complications. Thomson et al (2016:6) further stated that poor quality of provider interactions with the pregnant women in labour led to birth trauma. The introduction of birth companions in the birthing units may benefit both mother and baby so as the health care professionals as the women will experience minimal complications. Mother and infant bonding will be enhanced and breastfeeding sustained.

An increased proportion of Chinese primiparous women in the study suffered from postpartum depression symptoms than women in western countries at six and 12 weeks postnatally. The women reported that they received less informational support (Zheng et al 2018:158). The health care professionals may have failed to provide the pregnant women with information on how to take care for themselves and the new-born postnatally, which led them to develop depression. The women's family may have failed to support the women when they encountered postnatal problems and even the techniques to care for the new-born baby with challenges.

Moyer, Rominski, Nakua et al (2016:1) report that there was 72% of mistreatment which was a problem in Ghana and 77.4% argued pregnant women were treated respectfully in private than public facilities. The students described health care

providers: telling pregnant women to stop making noise (78.5%), shouting at the pregnant women (68.8%), scolding pregnant women if they did not bring along birth supplies (54.5%), treating educated/wealthy pregnant women better than less educated/poor pregnant women (41.5%/38.9%), detaining pregnant women who could not pay (37.9%). Only four (4%) of the students reported that they did not witness any disrespectful treatment. Students also reported that the health care professionals were stressed (74.2%), overworked (76.5%) and hard working with inadequate resources (64.1%). The provision of companions can curb the disrespectful behaviours of health care professionals towards women during labour and birth. Therefore, re-orientation of health care professionals on communication skills and provision of adequate supplies can remedy the situation.

In a study conducted in India Diamond-Smith, Sudhinaraset, Melo and Murthy (2016:114 &119) indicate that pregnant women were to a greater extent likely to report mistreatment. Pregnant women who received any type of support from their partners or mothers in law or health care workers were likely to report lower score of mistreatment. Although receiving support from friends, neighbours/ or other family members was associated with a higher score of mistreatment. The most common support women received was from their mother in law (80%), followed by husbands (79%) and health care professionals supported about (53%). The health care professionals in this study need to respect the women in their care irrespective of who accompanied then during labour and birth.

According to the study conducted in the USA by Morrel, Peralta, Higgins et al (2019:66) report that, ninety six percent (96%) of pregnant women who had birth companions in the labour rooms reported that they were greatly satisfied with the care they received as compared to the 77% of those with the birth companions out of the rooms. In this research the birth companions should have never left the pregnant women in the rooms with the health care professionals. The unit supervisors also need to sensitise health care professionals to refrain from mistreatment of the pregnant women in the labour and encourages the women to utilise suggestion box to verbalise their concerns.

According to the study conducted in Ghana, Guinea, Myanmar and Nigeria, by Bohren et al (2019:11), 41% of pregnant women had experienced verbal abuse, and physical abuse, stigma or discrimination, most commonly occurring from 30 minutes before birth until 15 minutes after child birth. The risks increased during this period might be because health care professionals are more likely to be present around the time of birth. This could be a reason companions should be utilised during labour and birth to stop the mistreatment of pregnant women.

2.15 SELF-EFFICACY

According to van Dyk, Tlou and van Dyk (2017:189), self-efficacy is defined as the belief of one's ability to carry out a desired behaviour, which is when the pregnant women and health care professionals allow birth companions to be present during labour and child births. The pregnant women and the health care professionals need to have a strong belief to be able to negotiate the utilisation of birth companions during labour process. Information regarding the utilisation of birth companions is provided to pregnant women during antenatal clinics aimed at providing physical, emotional and psychological support which could lead to good birth outcomes. National Department of Health (2016:41) asserts that the health care professionals should permit the pregnant women's family and friends to provide companionship during labour and child birth.

According to a study conducted in Cape Town by Martin and Filies (2018:61), three women requested the health care professionals to allow their partners to offer them support during labour. The response was "No", citing the issue of infrastructure problem. The results from this study depict that even health care professionals need to have a belief that birth companions can be utilised in their health care facilities.

2.16 SUMMARY

In this chapter the literature was reviewed and aided in the development of a questionnaire and establishment of content validity. The literature presented historical background of birth companion, importance of birth companions on the

pregnant women, management of women during labour and childbirth, types of supports needed during labour and childbirth, the choice of birth companions, utilisation of birth companions, father involvement during labour and childbirth, compassion and trustworthy, benefits of utilising birth companions, barriers of utilising birth companions, the impact for non-utilisation of birth companions on mothers and birth outcomes, and self-efficacy. In chapter 3, the research design and research methodology will be presented.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The previous chapter outlined reviewed literature pertaining to utilisation of birth companions by the pregnant women. In this chapter the researcher focused on research design and methodology that were employed in this research. Sampling and sample, study population, ethical issues related to sampling, data collection process, ethical issues related to data collection, data analysis, internal and external validity of the study/trustworthiness are also described.

3.2 RESEARCH DESIGN

A research design is the proverbial backbone of the study. It provides the structure for the research methods and designs that must be taken to plan the study (Botma, Greeff, Mulaudzi & Wright 2019:108). In the same vein, Polit and Beck (2017:56) also define research design as the architectural backbone of the study. DePoy and Gitlin (2016:374) further assert that a design is a plan/blueprint that specifies and structures the action process of collecting, analysing and reporting data to answer a research question. In this research, convergent, descriptive, explorative and cross-sectional mixed methods design were used.

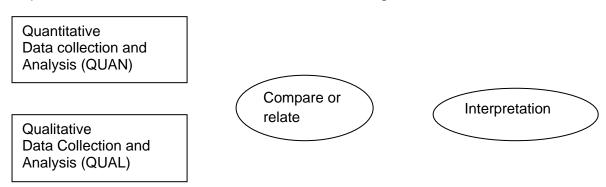


Figure 3.1: Convergent mixed methods

The above figure illustrates the description of the convergent mixed methods strategy. The researcher collects both quantitative and qualitative data, analyses them separately, and then compares the results to see if the findings confirm or disconfirm each other (Creswell 2014:219).

3.2.1 Convergent design (Mixed methods research design)

Convergent design is defined as a concurrent, equal-priority mixed methods design in which different, but complementary data, qualitative and quantitative, are gathered about a central phenomenon under study (Polit & Beck 2017:724). In this investigation, both qualitative and quantitative data was utilised. The goal was to converge on "the truth" about a problem or phenomenon.

3.2.2 Convergent design variants

The parallel-databases variants approach will be utilised whereby two parallel results of the two separate analyses will be compared and contrasted during the discussion (Creswell & Plano Clark 2018:221; Polit & Beck 2017:584).

3.2.3 Descriptive research (Mixed methods research design)

According to Polit and Beck (2017:206), the purpose of descriptive studies is to observe, describe and document aspects of a phenomenon as it naturally occurs. Descriptive research methods are used to report the distributions (or spread) of a sample or population across a wide range of variables (using all four levels of measurement, which are descriptive, association, causation and inferences). The main aim of this method is to produce a scope of characteristics of such distributions through frequencies, measures of central tendency and dispersion (De Vos, Strydom, Fouché & Delport 2017:251).

3.2.4 Exploratory research (Mixed methods research design)

Rather than simply observing and describing a phenomenon of interest, exploratory research investigates the full nature of the phenomenon, the way it manifests, and other factors to which it is related (Polit & Beck 2017:15). The

researcher explored the full nature of the perceptions of pregnant women, and midwives towards utilisation of birth companions in the health care facilities of Limpopo Province.

3.2.5 Cross-sectional research (Mixed methods research design)

According to Polit and Beck (2017:725) and Creswell and Creswell (2018:149) assert that a cross-sectional design is a study in which data are collected at one point in time. The information on a specific topic is collected at the same time from the same participants and no identical study is undertaken after specific period. A cross-sectional design involves obtaining data from a cross-section of a population at a point in time and indicating that the data are from a specific sample (Botma et al 2016:113; Polit & Beck 2017:168). Data were collected from postnatal women who were in labour for more than three hours, delivered live infant(s) and still admitted in the hospital, and midwives who worked in the labour ward with at least two years and above experience.

3.2.6 Steps to develop guidelines

The guidelines indicate the best treatment plan for patient care to promote quality health outcomes (Grove, Gray & Burns 2015:443). The PICO format was followed during the development of research guidelines:

- P-population or participants of interest;
- I-intervention needed for practice;
- C-comparison of intervention to determine the best practice; and
- O-outcomes needed for practice.

The researcher investigated on women who were in labour for more than three hours, and still admitted in the ward and midwives who worked in the labour ward for a period of two and more years. The relevant literature that deals with the topic under scrutiny was consulted. Recommendations were done in the form of guidelines based on the results of the investigation for the Limpopo Department of Health to utilise.

3.3 RESEARCH METHODOLOGY

Research methodology is the techniques used to structure, gather and analyse information in a systematic fashion in a study (Polit & Beck 2017:743). It covers the study setting, study population, sample and sampling, data collection, trustworthiness/validity and reliability, and data analysis. In this study, mixed methods research approach was undertaken by the researcher using both quantitative and qualitative methods of collecting data.

Polit and Beck (2017:577) define mixed methods research as a research in which the investigator collects and analyse data, integrates the findings, and draws inferences using both qualitative and quantitative approaches/methods in a single study or programme of enquiry. It is a combination of two or more data collection methods, and reference to multiple sources of information to obtain data. Mixed methods research involves not just the collection of qualitative and quantitative data, but also the integration of the two at some stage of the research process, giving rise to meta-inferences. A meta-inference is a conclusion generated by integrating inferences obtained from the results of qualitative and quantitative strands of a mixed methods study. A mixed methods study was undertaken by using quantitative and qualitative methods of collecting and analysing data.

3.3.1 Sample and sampling

3.3.1.1 Study setting

Study setting is the physical location and condition in which data collection takes place in a study (Polit & Beck 2017:744). It is the site in which a study is conducted. Study setting could be an entire community or an institution like a hospital. Brink, van der Walt and van Rensburg (2018:47) further define study setting as a specific place where data are collected. Research can be undertaken in a variety of settings at the specific situation where information can be gathered at one or more sites. Some studies take place in naturalistic settings in the field, such as in people's homes, while other studies are conducted in controlled

laboratory or clinical settings. A natural setting or field setting is an uncontrolled, real-life situation or environment (Burns & Grove 2011:40).

The study was conducted in hospitals of the four districts which were: Capricorn, Mopani, Sekhukhune and Waterberg of Limpopo Province, South Africa. The hospitals operate 24 hours services from Sundays to Saturdays. Some of the midwives working in maternity units do not rotate and have undergone specialised training in advanced diploma in midwifery and neonatal nursing sciences. There are five districts with 38 public hospitals in Limpopo Province which conduct deliveries of pregnant women. There is one regional hospital per district and two tertiary hospitals. The researcher conducted the investigations in four regional hospitals of the five districts and one tertiary hospital. The four regional hospitals and one tertiary are in the rural areas which are ruled by the traditional leaders who are representing the community in health related matters whereas the urban areas are led by the municipal managers. Most of rural health facilities have resources constrains than the urban health facilities.

The rationale for choosing the regional hospitals and one tertiary hospital is that most of pregnant women deliver their babies at these heath care facilities and some other pregnant women are referred from clinics and hospitals to make bookings for delivery. Some of the regional/tertiary hospitals do not have district hospitals nearby; while some of the clinics do not offer 24 hours' services. Therefore, they provide the services that should be provided by those health care facilities. Regional hospitals render services at a general specialist level, receive referrals from district hospitals, and they serve as a platform for training and research. They may also provide some district services within the local sub-district. Experienced specialists lead the teams and the medical disciplines include general surgery, general medicine, paediatrics, obstetrics and gynaecology, and anaesthetics (NDH 2016:18). Tertiary hospital renders specialised and subspecialists care to a number of regional hospitals and serve as a platform for training health care professionals and research. They may also render some regional services (NDH 2016:19). Therefore, a high number of pregnant women

go directly to hospitals while some are referred from different levels of care to these hospitals.

3.3.1.2 Study population

Brink et al (2018:116) define a population as the entire group of persons or objects that is interested to the researcher, and which meet the criteria that the researcher is interested in studying. Population is defined as the entire set of individuals or objects having some common characteristics (Polit & Beck 2017:739). In the same vein, population is also defined as all possible individuals making up a group of interest in a study (Bordens & Abbott 2018:G-9). The reasons for choosing the regional hospitals and one tertiary hospital was that many normal and high risks pregnant women deliver their babies at these institutions while others came directly or referred from local clinics/district hospitals to make bookings for delivery. Some of the local clinics do not offer 24-hour health services; therefore, they provide services that should have been provided by those health care facilities.

In this study, the target population comprised all pregnant women who were in labour for three hours and more and delivered their babies normally (vaginally) and midwives who worked in the labour ward for two or more years in the following districts of Limpopo Province: Mopani, Capricorn, Sekhukhune and Waterberg. The four districts were selected based on convenience sampling. The four districts have a population whereby the researcher found rich informants. According to maternity case register of the four regional and one tertiary hospitals, 1150 pregnant women delivered normally (per vagina) in the health care facilities in February 2019 (Maternity case register hospital records 2019). The Researcher targeted twenty-five midwives who were accessible, thus five per hospital.

3.3.1.3 Sampling

Sampling is the process of selecting the subset or portion of the population to represent the accessible population (Botma et al 2016124; DePoy & Gitlin 2016:191). Polit and Beck (2017:743) further define sampling as the process of

selecting a portion of the population to represent the entire population. In this study, purposive and convenience sampling were used to select the postnatal women and the midwives.

Purposive sampling

Purposive sampling is also known as "judgemental" sampling as it involves the deliberate selection of individuals or elements by the researcher on the basis of predefined criteria about which ones will be most informative (DePoy & Gitlin 2016:199; Polit & Beck 2017:741). Pregnant women in the age range 18-45 years who were in labour for three and more hours, delivered live infant(s) and still admitted in the hospital and midwives with two or more years' experience of working in the labour ward were sampled.

Convenience sampling

Convenience sampling involves using clients that are available and willing to participate in the study (Polit & Beck 2017:252). Convenience sampling is referred to as "accidental" or "availability sampling" and requires readily available participants. Elements are included in the sample because they happen to be in the right place at the right time (Brink et al 2018:125). In this research, convenience sampling was utilised.

Most women who have delivered normally are being discharged after 24 hours post-delivery. Therefore, new responsibilities of caring a new-born infant who has some abdominal cramps (colic pains), maternal post-delivery pains and tiredness may hinder data collection process. Some of the respondents/participants may have experienced difficult labour e.g. prolonged, were unwilling to take part in the study and therefore anyone who meets the study criteria and willing to participate was welcomed. A questionnaire was utilised to collect quantitative data from the postnatal women and semi-structured interview guide was used to collect quantitative data from the midwives.

The inclusion criteria were pregnant women in the age range of 18-45 years who delivered live infant(s) normally and still admitted in the health care facility during a period of data collection and willing to participate in the study. The rationale for the given period for the postnatal women was that labour and childbirth memories were still fresh. So, the respondents were able to give researcher enough information. Midwives who worked in the labour ward with at least two or more years' experience and willing to participate in the research were interviewed. The reasons for the given period were that the midwives have witnessed and delivered a number of pregnant women during labour/childbirth process. Therefore, they have enough memories related to the topic under search. Midwives are the ones responsible for admission of most women who come in the health care facilities to give birth.

In contrast, exclusion criteria were pregnant women who are below 18 and above 45 years of age, induced and those who had undergone Caesarean section. The reason behind the exclusion of the age group is that it is not a child bearing age. Therefore, a smaller of number of people deliver in this age group and most induced labour are precipitous (hastened). Moreover, those who delivered through elective Caesarean section did not experience labour process and those who are still pregnant as they have not experience labour yet. Exclusion criteria for the midwives were that information rich informant was needed. Therefore, those who were less than two years and those who were not working in the labour ward do not have enough experience.

3.3.1.4 Ethical issues related to sampling

Ethics is a set of moral principles suggested by an individual or group, which is subsequently widely accepted, and offers rules and behavioural expectations about the correct conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistants, and students (De Vos et al 2017:114). In this study, beneficial research problem from the prospective participants was identified and principle of justice was adhered to.

Identify the beneficial research problem

The guidelines set by the NHREC (2015:10 Section 1.4) indicates that, all research involving human participants in South Africa must be reviewed by an accredited research ethics committee (Botma et al 2016:12). Prior to the beginning of the study, the researcher needs to identify the beneficial research problem by conducting a need assessment or informal conversation with the prospective participants/respondents (Creswell 2018:92-93). The researcher conducted an informal conversation with some of the postnatal women and midwives during hospital visit at some of the public health care facility in Limpopo Province where deliveries of babies were conducted about the topic under study.

Principle of justice

Botma et al (2016:13) indicate that the principle of justice which is fair selection and treatment of participants apply to the sampling process. Selection of participants/respondents should be based on reasons directly related to the research and not because people are easily accessible. The participants/respondents in this study were purposely selected as they knew more about the topic under study.

Creswell (2018:93) asserts that the purpose of the study needs to be disclosed to the research participants/respondents. The general purpose of the research was explained to the participants/respondents prior to data collection. The participants/respondents need not be pressured into signing the consent forms (Creswell 2018:93). The participants/respondents were told that they do not have to sign the consent form if they do not want to take part in the study. Participation was voluntary and they were told that they can withdraw to participate in the study at any time if they so wish. Privacy was ensured during sampling process whereby a private room was used to recruit participants/respondents.

3.3.1.5 Sample and sample size

A sample is a relatively small number of individuals drawn from the population for inclusion in a study (Bordens & Abbott 2018:G-10). According to Botma et al (2016:129), the sample size should be calculated at the design stage of the study. Sample size is the number of people who participate in the study; an important factor in the power of analysis and in statistical conclusion validity (Polit & Beck 2017:743). The pregnant women who met the inclusion criteria, and were willing and available to take part in this study were invited. A sample size calculator by "Raosoft" was utilised to calculate the quantitative sample size (www.raosoft.com > sample size calculator). The population of 1150 needs 305 sample size. The maternity case records of the respondents were reviewed by the researcher to check if they meet the inclusion criteria. Sixty-one respondents were sampled from each hospital for the purposes of transferability. In qualitative studies, sample size was based on informational need. Hence, a guiding principle is data saturation, that is, sampling to the point at which no new information is obtained and redundancy is achieved (Polit & Beck 2017:497). The target frame was five regional hospitals and two tertiary hospitals. Twenty-five midwives were accessible sample thus five per hospital. Regional and tertiary hospitals cater for a larger number of high risks and some low risk pregnant women, therefore midwives who worked in the labour ward for two years and above, and willing to take part were conveniently sampled. Data saturation was reached with 15 participants. Midwives who did not meet the inclusion criteria such as those with less than two years' experience of working in the labour ward and those who were not willing to take part in the study, were excluded.

3.3.2 Data collection methods and procedures

Data collection provides an audit trail which includes a clear and specific explanation of how data will be collected and how the findings were derived (Brink et al 2018:133). Data were collected over four months—December 2020, January, February and March 2021.

In this research, a pre-test is conducted to refine the instrument by identifying flaws or assessing time requirements (Botma et al 2016:284). A pre-test was conducted to identify if the respondents/participants will be able to understand the questions and time required to complete the questionnaire, which guided the actual data collection process. Five postnatal women and five midwives who took part in the pre-test did not take part in the main study. The postnatal women and midwives were randomly selected. Questions that were not clear to the respondents were restructured. The supervisor and the statistician checked the questionnaire and the interview guide and recommendations were effected before the actual data collection.

The investigator acquired ethical clearance from Higher Degrees Committee, of the Department of Health Studies at Unisa. Permission was also obtained from the Department of Health and stakeholders and consent form was obtained from participants/respondents prior to actual data collection process to validate that participants/respondents voluntarily accepted to take part in the research. The researcher visited the maternity wards of the hospitals in the four districts: Capricorn, Mopani, Sekhukhune and Waterberg, and information on the aim and objectives of the study were provided to potential respondents/participants through information leaflets. Pregnant women and midwives who complied with the inclusion criteria were invited to participate in the study.

The researcher was available to answer clarity-seeking questions from respondents. The investigator has 20 years of working in the maternity wards. Questionnaires were given to the respondents who were available and willing to voluntary take part in the study. The respondents who were able to read and write filled the questionnaires on their own in a quiet private room at the maternity wards. Those who were unable to read and write were assisted by the investigator to complete the questionnaires. The respondents were provided with a sealed box where filled questionnaires were placed. The box was kept under lock and key in the maternity units and collected the same day.

The researcher conducted a semi-structured interview on the midwives and a tape recorder and field notes were utilised to collect data. A security code was used to open the electronic apparatus so that any unauthorised person could not access the data collected from the participants. Pseudo names were utilised during the data collection process. Qualitative and quantitative data were collected simultaneously and with equal priority. The goal was to converge on the actual facts about a problem or phenomenon. The qualitative data was collected and analysed in parallel with the collection and analysis of qualitative data. The results of the two separate analyses were compared and contrasted, leading to an overall interpretation of both sets of results (Polit & Beck 2017:584). Mixed methods research approach was followed.

3.3.2.1 Data collection approach and method

In this study, a questionnaire and semi-structured interview schedule were used to collect data. The researcher collected both numerical information on the survey instrument (questionnaire) and text information (interview) to answer the study's research questions.

Questionnaire

A questionnaire was used to collect quantitative data. According to maternity case registers of the four regional hospitals and one tertiary hospital, 1150 pregnant women delivered their new-born babies normally at the public health care facilities in February 2019. Therefore, the population was 1150 postnatal women. The quantitative sample size according to 'Raosoft sample size calculator' was 305. The confidence level was 95% while the response distribution was 50%. The margin error was 5%. Sample size calculator was used to determine representative sample in the quantitative data. Purposive sampling was used by the researcher, which entails selecting individuals who are more informative to the subject under discussion (DePoy & Gitlin 2016:199; Polit & Beck 2017:741). Postnatal women in the age range 18-45 years who were in labour for three and more hours, delivered live infant(s) normally and still admitted in the hospital were

sampled, and midwives who work(end) in the labour ward for two or more years were recruited. Postnatal women with less than 18 and above 45 years of age, in labour for less than three hours and those who were done Caesarean section were not included in the study.

Semi-structured interview

In qualitative study, a semi-structured interview which is an interview in which the researcher has a list of topics to cover rather than specific questions to ask was conducted (Polit & Beck 2017:744). According to DePoy and Gitlin (2016:377), an interview is a face-to-face information gathering action process conducted through verbal communication which may be structured or unstructured and usually conducted with one individual. In this investigation, qualitative data were collected through semi-structured interview with the use of a voice recorder and field notes. Midwives who did not work in the labour ward and those with less than two years' experience were not included in the study. Twenty-five midwives were accessible sample thus five per hospital. The qualitative sample size was determined by data saturation, whereby no more new information emerged. Data saturation was reached with 15 participants.

3.3.2.2 Development and testing of data collection instrument

The researcher developed a questionnaire for quantitative research section and semi-structured interview for qualitative inquiry. The questionnaire was developed for the postnatal women while a semi-structured interview for the midwives. The researcher opted for a questionnaire for postnatal women as most of those who deliver normally with no complications do not stay for a long time post-delivery. The researcher developed a questionnaire and the semi-structured interview with the assistance of the supervisor and the statistician.

Botma et al (2016:284) indicate that a pre-test is conducted to refine the instrument by identifying flaws or assessing time requirements. A pre-test was conducted to assess if the respondents/participants are able to understand the

questions and time collection process. Five postnatal women and five midwives took part in the pre-test but did not take part in the main study. Random selection of participants/respondents was done. Questions that were not clear for the participants/respondents were restructured and 305 respondents sampled for quantitative research. Time allocation for a questionnaire was 20 to 35 minutes while an interview was allocated 15 to 20 minutes.

3.3.2.3 Characteristics of data collection instrument

The questionnaire for the postnatal women consists of sections: Section A; the socio-demographic characteristics, Section B; reproductive health information, Section C; Physical factors, Section D; Psycho-social factors, Section E; The motivating factors and Section F; The challenges/barriers of utilising birth companions in health care facilities.

An interview guide which consisted of ten semi-structured questions for the midwives was used to obtain qualitative data (see Annexure F) for more information.

3.3.2.4 Data collection process

Polit and Beck (2017:725) define data collection as the gathering of information to address a research problem. Botma et al (2016: 13) also define data collection as the precise and systematic gathering of data to be able to resolve the research purpose. Numerical data was collected in quantitative research whereby the researcher was interested in obtaining a large number of postnatal women. In qualitative research, the interview was used to gain more insights into the topic under investigation.

Qualitative and quantitative data were collected simultaneously and with equal priority. The goal was to obtain facts about a problem under investigation. The researcher was interested in investigating if the postnatal women have knowledge towards utilisation of birth companions, the perception of the postnatal women/midwives towards the utilisation of birth companions and to identify factors

that inhibit non-utilisation of birth companions. The findings of this study informed the development of the guidelines. Qualitative data were collected and analysed in parallel with the collection and analysis of quantitative data and the two separate data were compared and contrasted leading to an overall interpretation of both sets of results (Polit & Beck 2017:584). The researcher collected information from the participants/respondents and also followed the mixed method research approach.

3.3.2.5 Ethical considerations related to data collection

Botma et al (2016:129) state that important issues should be explored with experimental subjects that no harm should come to them; that prospective respondents should give their informed consent; should not be deceived in any way, and that the researchers should be competent and responsible. Throughout this study, the researcher observed and applied the ethics pertaining to research. The researcher utilised the ethical moral code which includes: respect for human dignity, right to privacy (anonymity and confidentiality), principle of justice, beneficence, respect for human dignity, the right to self-determination, the right to full disclosure and informed consent which are applicable during data gathering phase (Botma et al 2016:17).

The respondents/participants were obtained from a public domain source, which were maternity wards of the institutions under study. The researcher obtained permission from Unisa Ethics Committee (The Chairperson, HSREC @ HSREC @unisa.ac.za) Annexure A, Limpopo Department of Health ethics committee (Annexure C) and head of institutions (Districts managers and Chief Executive Officers: Annexure D). Some of the patients' data were obtained from the patient's file to select information rich informants. The aim of the study was outlined to the participants/respondents. Those who agreed to take part in the study signed an informed consent as an indication that they were not coerced, but participated voluntarily (Annexure H).

According to Botma et al (2016:17-25), there are three principles that need to be considered during data collection process which are: respect for people, justice and beneficence. Respect for people was demonstrated by maintaining confidentiality. The researcher considered ethical issues that may arise during data collection process: Respect the site and disrupt as little as possible by building trust and convey extent of anticipated disruption in gaining access (Creswell 2018:93). The researcher observed the busy moments to minimise disruption of routine and a private room was used to collect data. Creswell (2018:93) further maintains that the researcher should make sure that all participants/respondents receive the benefits. In the research, no incentives were awarded for participation.

Principle of justice

According to Botma et al (2016:19), the principle of justice entails that the participant should be treated fairly. Polit and Beck (2017:141) accentuate that justice includes exposing participants to fair treatment. An information leaflet was provided to the prospective participants/respondents to provide them with information about the purpose, potential risks and benefits of the study. The time stated on the information leaflet was adhered to. The facilities where the study was conducted offer free psychologist services to pregnant and postnatal women. There was no participant/respondent who needed follow-up or referral to the psychologist for emotional support.

Beneficence

The principle of beneficence is grounded in the premises that a person has the right to be protected from harm and discomfort and should strive to do good to the participants (Botma et al 2016:20). Bordens and Abbott (2018:G-2) posit that the researchers should not do harm to the participants and strive to maximise benefits while minimising harm. In the same vein, Polit and Beck (2017:139) further indicate that the researchers in a study have a duty to minimise harm which may be physical, emotional and social and maximise benefits. The researcher gave

prospective participants/respondents information about the purpose of the study. A private room was used to collect data so that the participants can relax and be able to give information freely. After data collection, a debriefing period was offered to the participants to air their feelings and ask questions. The researcher directly involved in data collection process. None of the was participants/respondents experienced discomfort or harm. Moreover, none of the study participants needed psychological support. The study might benefit the women who might fall pregnant again and even those who will later deliver their babies in the public health care facilities of Limpopo Province.

Confidentiality and anonymity

Confidentiality in data collection refers to the situation whereby the identity of the research participants/respondents is only known by the study investigator while anonymity indicates that the identity of research participants is unknown even to the study investigator (Brink et al 2017:208-209). Polit and Beck (2017:719) define anonymity as the protection of participants' confidentiality that even the researcher unable to link individuals with data provided. In this study, the participant's/respondents' names were not written on the questionnaires and pseudo names were used during the interview. Raw data were entered into the computer using codes. Accordingly, no names of the respondents and that of the hospitals were written on the questionnaires. Pseudo names were used to collect The qualitative data. information that was collected from the participants/respondents was not made available to anyone who was not directly involved in the research. Confidentiality agreement was signed by those who were involved in the study.

Respect for human dignity

According to Polit and Beck (2017:140), respect for human dignity includes the right to self-determination and full disclosure.

• The right to self-determination

The right to self-determination means that a person has the right to voluntarily decide whether or not to participate in a study (Polit & Beck 2017:744). The participants/respondents were provided with information leaflet and also told that participation in this study was not compulsory and that they can withdraw anytime if they wish without loss of benefits. More importantly, those who agreed were asked to sign an informed consent before they can take part in the study to ensure that the participants were not coerced. The research participants/respondents took part in the investigation voluntarily.

The right to full disclosure

Polit and Beck (2017:729) define disclosure as the communication of complete, accurate information to potential study participants. The participants/respondents were provided with a written information leaflet which was comprehensive regarding the purpose, process of the study and no information was withheld by the researcher. The participants/respondents were given researchers' and supervisors' contact numbers in the event of questions/complaints or comments. The researcher was available during data collection period to answer the respondent's/participants' questions.

Informed consent

According to Bordens and Abbott (2018:G-5) an informed consent is agreeing to serve as a research participant after being informed about the nature of the research, participants rights and responsibilities. The participants'/respondents read the information leaflet which indicated the process, purpose of the study, and that no incentives were given for participating in the research. The participants/respondents, who agreed to take part in the research, signed an informed consent. The investigation may benefit women in their subsequent pregnancies. None of the study participants needed to be referred to the psychologist for emotional support.

3.3.3 Data analysis

Burns and Grove (2011:372) accentuate that the data analysis process consists of several stages: (1) organising and preparing the data for analysis, (2) read and look at all the data, (3) start coding all of the data, (4) use the coding process to generate a description of the setting or people as well as categorising or themes for analysis, (5) advance how the description and themes will be presented in qualitative narrative, and (6) making an interpretation of the results. Data analysis is a systematic organisation and synthesis of research data, and in quantitative studies, the testing of hypotheses using those data (Polit & Beck 2017:725). In this research, quantitative data were captured and analysed using the SPSS version 26-computer software program, with the assistance of a statistician. Descriptive statistics were used to analyse and describe the data obtained. Moreover, descriptive statistics allow the researcher to summarise the properties of the entire distribution of score with just a few numbers (Bordens & Abbott 2018:G-3).

According to Creswell (2014:197-200), qualitative data analysis occurs in steps example, Step 1: Entails organising and preparation of data for analysis. Interviews were transcribed, field notes typed and data arranged and sorted into different source of information. Furthermore, a separate sheet was used by the researcher to record and code the statements based on their transcript. Fifteen transcripts were formulated by the researcher. The researcher listened to the audiotape to discriminate units from the narratives made by the participants. Pseudo names and labels were attached to the participants' responses. Preconceived ideas were put aside by the researcher to be able to understand the collected data.

Step 2: Reading and look through all data (Creswell 2014:197). The text was read and reread by the researcher and margin notes were written. The researcher formulated meanings and coded in one category as they reflect an exhaustive description. To maintain consistency of description, the researcher compared the meanings of the formulated original meaning.

Step 3: Coding of all the data. Botma, Greeff, Mulaudzi and Wright (2016:224) define coding as the process whereby materials are organised into segments of text before bringing meaning to the information. The researcher took text data such as words or phrases and labelled the categories with a term base on the participant language.

Step 4: Use the coding process to generate a description of the setting or people as well as categories or themes for analysis. A detailed rendering of information about the people, places or events in a setting is defined as description (Creswell 2014:199). Codes were reviewed to eliminate overlapping and being reduced to potential themes by the researcher, which display perspectives from individual participant and supported by quotations.

Step 5: Advance how the description and themes will be presented in qualitative narrative (Creswell 2014:200). A theme is a recurring regularity emerging from analysis of qualitative data (Polit & Beck 2017: 746). In this step, the researcher used specific illustration, quotations and detailed discussion of several themes and subthemes that represent a common idea by using figures or tables.

Step 6: Make an interpretation of the findings (Creswell 2014:200). The researcher presents the themes that show the flow of ideas, from more general picture to a specific picture. The researcher used personal interpretation together with the literature to interpret the findings.

The results of the two separate analyses were compared and contrasted, leading to an overall interpretation of both sets of results. The goal of the convergent model was to develop internally confirmed conclusions about a single phenomenon (Polit & Beck 2017:584). The researcher first reported the quantitative statistical results and then discussed the qualitative findings (e.g. themes) that either confirm or disconfirm the statistical findings (Creswell 2018:247).

Ways to merge the two databases

The researcher merged the two databases. Transformed data were evaluated so that meaning from the relationship and limitations can be drawn. The researcher also interpreted the extent to which the two databases converge or are similar or differ.

3.4 VALIDITY AND RELIABILITY OF THE STUDY

3.4.1 Internal and external validity of the research design

Validity indicates whether the conclusions of the study are justified based on the design and interpretation (Botma et al 2016:174). Polit and Beck (2017:747) and Bordens and Abbott (2018:G-9) define validity as a degree to which inferences made in a study are accurate and well-founded; in measurement, the degree to which an instrument measures what is intended to measure. Roy's Adaptation Model was adapted and relevant literature was reviewed. The questionnaire was pre-tested with five postnatal women who delivered normally at the public health facilities and still admitted in public hospitals of Limpopo Province, aged 18-45 years, who were not included in the main study sample. The semi-structured interview guide was pretested on the five midwives who satisfied the inclusion criteria and were also not included in the main study. The pre-test enhanced the validity of the data collection instrument as it ensured that research questions were clarified. The questionnaire was reviewed by the researcher's supervisor and the statistician before it was administered to study participants.

3.4.2 Content validity

Content validity refers to the representativeness or sampling adequacy of the content of an instrument (De Vos et al 2017:173). Content validity of a test is established by judging how adequately the test samples behaviour representative of the universe of behaviour the test was designed to sample participants (Bordens & Abbott 2018G-3). More importantly, the content of the instrument was discussed with field experts to ensure the relevance of the questions to the

context of the study. Questions were verified with field experts, through a pre-test, and with the supervisor and the statistician before actual data collection. Data were analysed by using computer software (SPSS version 26) with the assistance of a statistician.

3.4.3 Face validity

Face validity refers to whether the instrument looks like it is measuring the target construct (Polit & Beck 2017:310). Bordens and Abbott (2018:G-4) further define validity as to how well a test appears to measure what it is designed to measure. The questionnaire was constructed in such a way that it identified and described the utilisation of birth companions by women in the public sector labour wards of Limpopo Province, South Africa. Two field experts who worked in maternity units were requested to review the instrument, to determine whether the questionnaire measured what it was supposed to measure.

3.4.4 Construct validity

Polit and Beck (2017:315) define construct validity as the degree to which evidence about a measure scores in relation to other scores support the inference that the construct has been appropriately represented. Construct validity occurs when investigators use adequate definitions and measures of variables. Construct validity is especially relevant for abstract constructs that are measured either by self-report or through observational methods, but may also be relevant for performance tests. Construct validity applies when a test is designed to measure 'construct' or variable constructed to describe or explain behaviour on the basis of theory (Bordens & Abbott 2018:G-23).

The researcher obtained information from Roy's Adaptation Model, which entails the physiological/physical, self-concept/group identity, role function and interdependence. These adaptive modes will provide the pregnant women with mechanisms for coping with environmental stimuli and change. The literature and field experts who are offering services to pregnant women in labour, and the researchers' supervisor, assisted in ensuring construct validity. The questionnaires

sections were guided by the Roy's Adaptation Model which covered the following: Socio-demographic characteristics, reproductive health information, physical factors, psychological factors, the motivating factors and the challenges for having a birth companion during labour.

3.4.5 Validity and Reliability of data gathering instrument

Validity is defined as the extent to which a measuring instrument measures what it was designed to measure (Bordens & Abbott 2018:G-2). According to Polit and Beck (2017:160-161), reliability refers to the accuracy and consistency of information obtained in the study. This means that if a valid measuring instrument is applied to different groups under similar circumstances; it should produce similar results (Botma et al 2016:177).

Respondents completed the same questionnaire during data collection, which facilitated the analysis, comparison and discussion of the study findings. The researcher collected data in the regional and tertiary hospitals of the four districts. The respondents, who were could not be able to complete the questionnaire, were assisted by the researcher. The answers that the respondents provided were reread to the respondents to ensure data accuracy. Accordingly, the researcher was available to provide clarity of questions to respondents if required to increase response rate. During the development phase of the instrument, the following steps were taken to ensure that only relevant information was considered: stability of research instrument, internal consistency, and equivalent reliability. Internal consistency addressed the extent to which reliability was appropriate when the instrument is examining one concept at a time (Botma et al 2016:177).

3.5 Measures of ensuring trustworthiness

According to Lincoln and Guba's framework in Polit and Beck (2017:559), the following are measures of ensuring trustworthiness.

3.5.1 Dependability

Polit and Beck (2017:559) define dependability as the stability of data over time and conditions. Dependability is important to trustworthiness as it is the criterion that establishes the research study's findings as consistent and replicable. Data were collected by using multiple methods, which include the interview, field's notes, voice recording and the questionnaire.

3.5.2 Credibility

According to Polit and Beck (2017:559), credibility refers to confidence in the truth of the data and the interpretations of them. Credibility is seen as the most important criterion in establishing trustworthy because that is where the researcher clearly links the research study's findings with reality to demonstrate the truth of the research study's findings. Credibility was ensured through consultation of participants to confirm if the drafted information reflects their utterances.

3.5.3 Conformability

Conformability refers to objectivity, that is, the potential for congruency between two or more independent people about data accuracy (Polit & Beck 2017:559). This criterion deals with the level of confidence that the research study's findings are based on the participants' narratives and words rather than potential research biases. The researcher used multiple data collection methods such as the interviews, voice recording, field notes, and a questionnaire to collect data and the participants' voice were reflected to exclude the researcher's biases.

3.5.4 Transferability

Transferability refers to the potential for using the facts that you have now, which is the extent to which findings can be transferred to other settings or groups (Polit & Beck 2017:559). Transferability is established by providing readers with evidence that the research study's findings could be applicable to other contexts, situations, times, and populations. In this study, quantitative data were collected and analysed in parallel with the collection and analysis of qualitative data. Based

on the results of the two separate analyses, leading to an overall interpretation of both sets of results, it was concluded that these research findings could be applicable to other contexts, situations, times, and population.

3.6 CONCLUSION

Chapter three (3) described the research design and methodology, which includes the study population, sample and sampling techniques, ethical issues related to sampling to meet the research objectives, data collection methods, ethical issues related to data collection, data analysis, and internal/external validity and reliability/trustworthiness of the study. Study findings will be analysed in the next chapter.

CHAPTER 4

ANALYSIS, PRESENTATION, DESCRIPTION OF QUANTITATIVE RESEARCH FINDINGS

4.1 INTRODUCTION

Chapter four presents the data analysis and the interpretation of the research results. Both qualitative and quantitative research results were analysed and presented according to the research objectives. This chapter presents graphs, tables and figures to present the quantitative data, whereas the qualitative data were presented in the form of themes that emerged from the research interviews. The researcher used mixed method design, whereby convergence method and the Roy's Adaptation Model were applied. Since this study has used a mixed method, each research approach complements the other in data interpretation and discussion. The quantitative data were collected and analysed in parallel with the collection and analysis of qualitative data to develop internally confirmed conclusion of the research (Polit & Beck 2017:584).

The objectives of the study were to:

- To establish knowledge of postnatal women towards utilisation of birth companions.
- To explore and describe the perceptions of postnatal women towards utilisation of birth companions
- To develop guidelines on promotion of birth companions in public health facilities were delivery of babies is taking place to improve labour outcomes.

The researcher conducted a review of literature to reason and supports the study findings through critical discussion. The researcher downloaded and used information related to the research topic from the following search engines: Google Scholar, Science Direct, Sabinet and EBSCO Host. The following key words were utilised during the literature review: Birth companions, respectful

maternity care, health care professionals, and pregnant women. The data were obtained from books, journals, articles, government circulars/reports, grey sources websites and health services documents. Two hundred and nine (229) documents related to the topics under study were retrieved from 2016 to 2021 both in qualitative and quantitative studies and 106 relevant documents were used. Documents that were not utilised were not applicable to the topic. The literature search focused on the global and the South African context of utilising birth companions of women in Limpopo Province from the participant's/respondents' responses to get answers from research question of birth companions. Related type of information was clustered together so as to be able to identify themes and sub-themes to be able to describe the phenomena under study, which is: Qualitative data was collected from midwives while quantitative data from postnatal women from October 2020 to March 2021.

4.2 STATISTICAL ANALYSIS

The researcher was assisted by a university statistician who is an expert in quantitative research. The expert helped in various areas of the study. First, the statistician provided guidance on the applicable research design as well as the design and construction of the data collection instrument. When the data was ready for analysis, the statistician provided guidance on choosing the most appropriate data analysis methods as well as how to use the SPSS software to analyse the data. Furthermore, the statistician also assisted by double-checking to see whether the interpretations done by the researcher were accurate. After the questionnaires were returned, they were screened to eliminate those that were incomplete as well as those in which the same question was answered throughout, which indicated that some of the respondents had not read the questions. This procedure was immediately followed up with the capturing of the data on a Microsoft Excel computer package. The Excel document was then imported into the SPSS Statistics Version 26 where it was coded in preparation for data analysis. The data analysis involved several rigorous statistical tests such as reliability tests, descriptive statistics and inferential statistics. A comprehensive

diagrammatic representation of the research path adopted for data analysis in the current study is also made in next section.

4.2.1 Descriptive Statistics

Descriptive statistics are techniques that help to state the characteristics or appearance of sample data (Gray, Grove & Sutherland 2017:787). Frequency tables and the mean score ranking technique are the major descriptive statistics employed in this study.

4.2.2 Response rate, results and discussions

Statistics on the response rate of questionnaires as provided by the respondents are displayed in Table 4.1. Frequency distributions such as percentages, graphs, line charts, pie charts, histograms and bar charts were utilised to display research findings. Frequency distributions are used to depict absolute and relative magnitudes, differences, proportions and trends (Gray et al 2017:805). These methods use both horizontal and vertical bars to examine different elements of a given variable (Gray et al 2017:805). The use of frequency distributions facilitated from 304 respondents.

Table 4.1: Response rate (n=304)

Sample	Total	Percent
Original sample	305	100%
Not returned	1	0.37%
Returned	304	99.67%
Discarded	0	0%
Response rate	304	99.67%

Table 4.1 indicates that 305 questionnaires were administered to the respondents whereby 304 of the questionnaires were returned. One of the respondents did not return the questionnaire which gave a 97.67% response rate which is enough to

guarantee accurate results. The response rate is defined as the rate of taking part in a study, calculated by dividing the number of respondents who are participating, by the number of people sampled is known as the response rate. Normally a well-designed research achieves a response rate of 80% to 90% (Polit & Beck 2017:256; Polit & Beck 2017:743).

4.3 SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

The respondents' biographical data of the research will be presented in this section. Biographical data are important because it provides the attributes of the sample of the study population. The characteristics of the respondents can be seen through meaningful representativeness in research. To understand the research problem, it is useful to have an idea of the demographical data of the research respondents.

Table 4.2: Demographic characteristics of the study respondents: Frequency distribution

Demographic characteristics	Postnatal women			
Respondents' age (n=304)	Frequency	Percent		
18 – 30yrs	60	19.74%		
31- 35yrs	196	64.47%		
36 – 45yrs	48	15.79%		
Total	304	100%		
Marital status (n=302)	Frequency	Percent		
Married	46	15.23%		
Single	215	71.19%		
Cohabiting	41	13.58%		
Total	302	100%		
Did not indicate	2	0.66%		
Number of live children (n=304)	Frequency	Percent		
1	116	35.16%		
2+	188	61.84%		

Total			304	100%
Number of deceased children (n=34)		Frequency		Percent
1			26	76.47%
2	2		7	20.59%
3	3		1	2.94%
Total			34	100%
Employment status (n=299)		Frequency		Percent
Employed			37	12.38%
Self-employed			7	2.34%
Full time			7	2.34%
Part time			10	3.34%
Unemployed			238	79.60%
Total			299	100%
Not indicated			5	1.64%
A person who is staying with the		Frequency		Percent
respondents (n=304)				
Nobody			1	0.33%
Friend			1	0.33%
Family members			302	99.34%
Total			304	100%

4.3.1 Respondents' age (n=304)

Figure 4.1 presents the age groups of the respondents. The investigator was interested in the respondents aged from 18 to 45 years. Precisely, 60 out 304 (19.73%; f=60) of the respondents were 20 years and below, 196 out of 304 (64.47%; f=196) were in the 21-35 years' age group while 48 out of 304 (15.79%; f=48) were in the 36-45 age group. This shows that the study was dominated by the youth since 256 out of 304 (84.21%; f=256) of the collective population make up the study. In contrast, the older age group of 36-45years old was 48 out of 304 (15.79%; f=48). The majority of the respondents were younger people, which mean that the young people had high representation in the study than senior mothers.

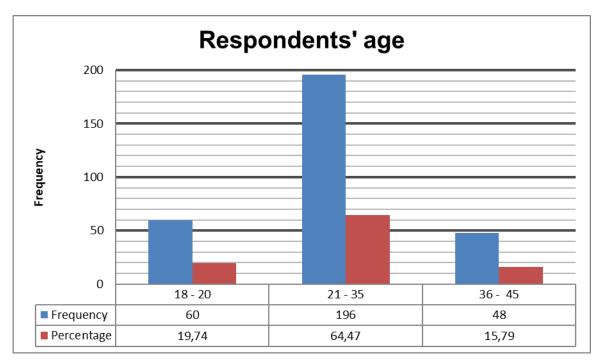


Figure 4.1: Age of the respondents (n=304)

4.3.2 Marital status (n=302)

One of the demographic factors that were used to compare and determine patterns among different categories of the study respondents was the relationship status whereby they were to indicate if they are single, married, and cohabiting. The marital status was required to establish the situations which favour the utilisation of birth companions.

Three hundred and two (n=302) respondents answered this question, while two did not answer. Table 4.2 shows that 46 out of 302 (15.23%; f=46) respondents were married, 215 out of 302 (71.19%; f=2015) respondents were single (not married), 41 out of 302 (13.58%; f=41) respondents were cohabiting (living together without being married) and 2 out of 304 (0.66%; f=2) respondents did not answer this question.

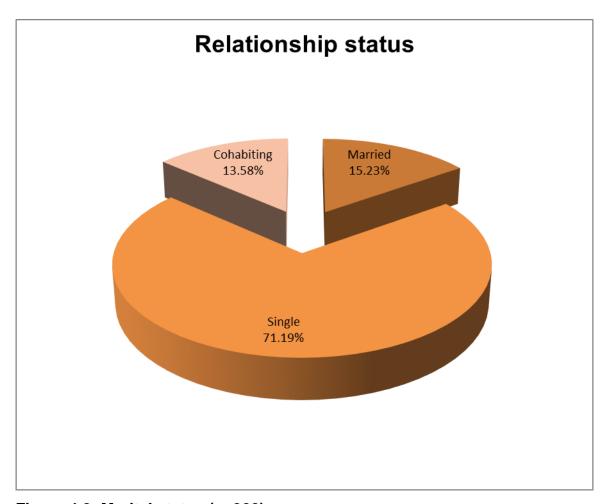


Figure 4.2: Marital status (n=302)

The findings reveal that 215 out of 302 (71.19%; f=215) respondents were single (not married); therefore, this study was more represented by single mothers.

4.3.3 Number of respondents' live children (n=304)

This question was answered by all the respondents (n=304). This question was developed to ascertain if the respondents had a chance to receive information on birth companionship from the health care professionals. The respondents were to indicate the number of live children they are having. Table 4.6 indicates that 116 out of 304 (35.16%; f=116) respondents had only one child alive and 188 out of 304 (61.84%; f=188) had 2+ live children.

4.3.3.1 Number of respondent's deceased children (n=34)

This question was asked in this research, though sensitive, to display the impact of non-utilisation of birth companion. The number of deceased children for each individual respondent was investigated which ranged from 1 to 3. Thirty four (34) out 304 (11.18%; f=34) respondents answered this question. Table 4.6 reveals that 26 out of 304 (76.47%; f=26) respondents had lost one child, seven out of 304 (20.59%; f=7) lost two children and one out of 304 (2.94%; f=1) respondent lost three children. The majority of respondents (76.47%) have lost one child.

4.3.4 Employment status (n=299)

The investigator wanted to explore if there is a relationship between employment and having a birth companion. The employment status of the respondents was categorised into the following: employed, self-employed, full time, part-time, and unemployed. Table 4.2 shows that 299 out of 304 respondents answered this question. Thirty seven (37) out of 299 (3.68%; *f*=37) respondents were employed, seven out of 299 (2.34%; *f*=7) were self-employed, 7 out of 299 (2.34%; *f*=7) were employed full time, 10 out of 299 (3.34%; *f*=10) were employed part-time. The results show that the majority of respondents 238 out of 299 (79.60%; *f*=238) were unemployed.



Figure 4.3: Employment status (n=299)

As indicated in Figure 4.3, 79.60% respondents in this research were unemployed.

4.3.5 A person who is staying with the respondents (n=304)

All the respondents (n=304) answered this question. The investigator was interested to find out if the respondents were staying with someone who can be able to be her birth companion. Table 4.2 indicated that one out 304 (0.33%; f=1) respondents was staying nobody, 1 out of 304 (0.33%; f=1) respondent stated that she was staying with a friend, 302 out of 304 (99.34%; f=302) respondents reported that they say with their family members.

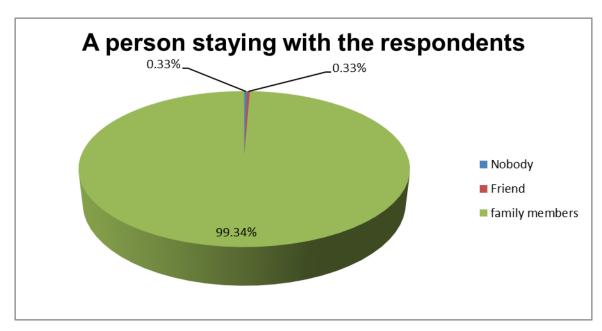


Figure 4.4: A person who is staying with the respondents (n=304)

From Figure 4.4, it is evident that 99.34% respondents are staying with their family members.

4.4 SECTION B: REPRODUCTIVE HEALTH INFORMATION (ANTENATAL PERIOD)

Table 4.3 displayed the topics that will be covered in this section which are; gestational age at first antenatal bookings, if anyone accompanied the respondent to the antenatal clinic visit, how many times did the respondent visit the antenatal

clinic, if the respondent has received information on birth companion and who gave her the information. The reproductive health information will assist the researcher to assess if the response favours the utilisation of birth companions.

Table 4.3: Reproductive health information during ANC

Gestational age at first antenatal visit (in		
months) (n=295)	Frequency	Percent
1 to 3 months	134	45.42%
4 to 6 months	138	46.78%
7 to 8 months	23	7.80%
Total	295	100%
Never attended ANC	9	2.96%
Anyone who accompanied the respondents to		
the ANC visit (n=297)	Frequency	Percent
Yes	95	31.99%
No	202	68.01%
Total	297	100%
Not indicated	7	2.30%
Number of ANC visits (n=293)	Frequency	Percent
1	9	3.07%
2	20	6.83%
3	30	10.24%
4	45	15.36%
5 to 13	189	64.50%
Total	293	100%
Not indicated	11	3.61%
Knowledge of a birth companion (n=304)	Frequency	Percent
Yes	59	19.41%
No	245	80.59%
Total	304	100%
A person who gave you birth companion	Frequency	Percent
information (n=48)		

Friends	2	4.17%
Health care professionals	31	64.58
Social media	6	12.50
Community members	5	10.42
Family members	4	8.33%
Total	48	100%
Not indicated	11	18.64%

4.4.1 Gestational age at first ANC visit (n=295)

According to Table 4.3, 134 out of 295 (45.42%; *f*=295) respondents attended first ANC visit while they were 1 to 3 months pregnant, 138 out of 295 (46.78%; *f*=138) were 4-6 months pregnant and 23 out of 295 (7.80%; *f*=23) respondent were 7 to 8 months pregnant. There were some respondents in this study (9 out 304) (2.96%; *f*=9) who never attended ANC visit. The researcher was interested in investigating if there will be enough time to negotiate and prepare the birth companions.

4.4.2 Anyone who accompanied the respondents to the ANC visit (n=297)

The respondents were to indicate if they were accompanied by someone to the ANC visit whereby they were to indicate either "Yes" or "No". Figure 4.5 display that 95 out 297 (31.99%; f=95) respondents said that they were accompanied by someone to the ANC visit, 202 out of 297 (68.01%; f=202) had no one to accompany them to the ANC visit, while seven out of 304 (2.30%; f=7) did not indicate if someone accompanied them to the ANC visit.

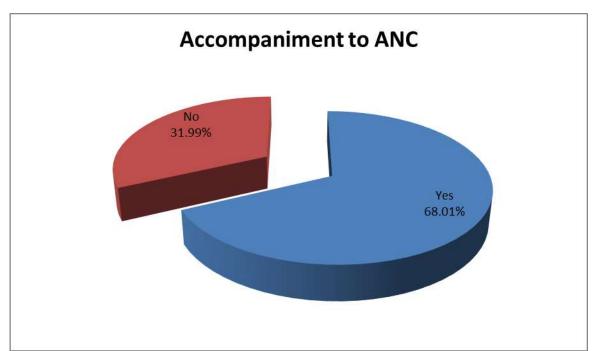


Figure 4.5: Anyone who accompanied the respondents to the ANC visit (n=297)

The majority of respondents (68.01%) were not accompanied by anyone to the ANC visit.

4.4.3 Numbers of ANC visit (n=293)

Table 4.3 shows number of visits respondents attended the ANC whereby 293 out of 304 answered the question. Nine (9) out of 293 (3.07%; f=9) respondents had one visit, 20 out of 293 (6.83%; f=20) had 2 visits, 30 out of 293 (10.24%; f=30) had three visits and 45 out 293 (15.36%; f=45) had four visits while 189 out of 293 (64.50%; f=189) respondents had five to 13 ANC visits. Eleven (11) out of 304 (3.61%; f=11) respondents did not indicate how many times they visited the ANC.

4.4.4 Knowledge of a birth companion (n=304)

All respondents answered this question (n=304). The respondents were asked to indicate with a "Yes" or "No" to this question. Figure 4.6 shows how the respondents answered, whereby the majority 245 out of 304 (80.59%; *f*=245) said

that they did not receive information on birth companion while 59 out of 304 (19.41%; *f*=59) received information on birth companions.

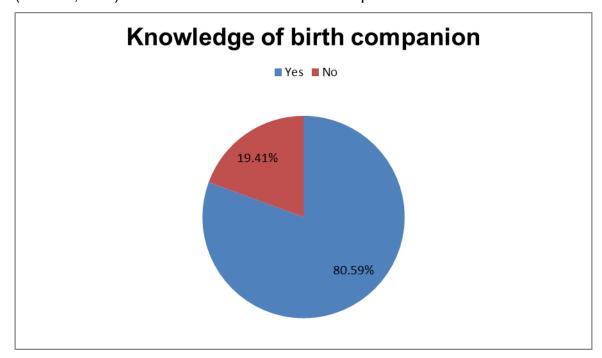


Figure 4.6: Knowledge of birth companion (n=304)

Figure 4.6 displays that 80.59% of respondents do not know what a birth companion is.

4.4.5 A person who gave you birth companion information (n=151)

A total number of 48 out of 59 respondents answered this question while 11 respondents did not indicate who gave them information on birth companion. Table 4.3 shows that two out of 48 (4.17%; f=2) heard from a friends, 31 out of 48 (64.58%; f=31) from health care professionals, six out of 48 (12.50%; f=12) from social media, five out of 48 (10.42%; f=5) from community members and four out of 48 (8.33%; f=4) from their family members. Eleven (11) out of 59 (18.64%; f=11) respondents did not indicate.

4.5 SECTION C: PHYSICAL FACTORS (LABOUR PERIOD)

Table 4.4 shows the percentages and frequency related to anyone who accompanied the respondents to the hospital, the reasons for not having a birth

companion, whether the person who accompanied the respondent remains until discharge, mode of delivery, who provided the assisted birth, the period of pregnancy, the Apgar score in 1 and 5 minutes following birth, whether the respondents were given pain relief medication and treatment to augment (boost) labour progress, whether the woman had laceration and the midwife performed an episiotomy and the duration of labour.

Table 4.4: Physical factors (labour period)

A person who accompanied the		
respondents to the hospital (n=302)	Frequency	Percent
Alone	3	0.99%
Friends	15	4.97%
Neighbours	4	1.32%
Family members	280	92.72%
Total	302	100%
Not indicate	2	0.66%
Did the person who accompanied you to	Yes	No
the hospital remain? (n=299)		
After admission	11(3.68%)	288(96.12%)
Labour	5(1.67%)	294(98.33%)
Delivery	3(1.00%)	296(99.00%)
Immediate post delivery	3(1.00%)	296(99.00%)
Rooming in	0 (0.00%)	299(100%)
Ever present till discharge	0 (0.00%)	299(100%)
Method of childbirth (n=301)	Frequency	Percent
Vaginal (Normal)	299	99.34%
Vacuum delivery (Assisted)	2	0.66%
Total	301	100%
Not indicated	3	0.99%
A health care professional who provided	Frequency	Percent
the assisted birth (n=2)		
Doctor	2	100%

Total	2	100%
Gestational age at childbirth (in Months)	Frequency	Percent
(n=300)		
5	2	0.67%
6	14	4.67%
7	28	9.33%
8	32	10.66%
9	222	74.00%
10	2	0.67%
Total	300	100%
Not indicated	4	1.32%
The time it took the baby to cry (n=289)	Frequency	Percent
1 minute	279	96.54%
5 minutes	10	3.46%
Total	289	100%
Not indicated	15	4.93%
Pain medication given to respondents	Frequency	Percent
during labour (n=299)		
Yes	76	25.42%
No	223	7458%
Total	299	100%
Not indicated	5	1.64%
Medication given to the respondents to	Frequency	Percent
speed up labour (n=302)		
Yes	46	15.23%
No	256	84.77%
Total	302	100%
Not indicated	2	0.66%
Lacerations/tears sustained by the		
respondents during delivery childbirth	Frequency	Percent
(n=302)		

Yes	83	27.48%
No	219	72.52%
Total	302	100%
Not indicated	2	0.66%
Episiotomy performed during childbirth	Frequency	Percent
(n=299)		
Yes	75	25.08%
No	224	74.92%
Total	299	100%
Not indicated	5	1.64%
Duration of labour (n=304)	Frequency	Percent
More than 3 hours	86	28.29%
More than 8 hours	107	35.20%
More than 12 hours	85	27.96%
More than 24 hours	18	5.92%
More than 2 days	8	2.63%
Total	304	100%

4.5.1 A person who accompanied the respondents to the hospital (n=302)

The researcher was interested in finding out a person who accompanied a respondent during labour. Table 4.4 indicates that three out of 302 (0.99%; f=3) respondents indicated that they came alone, 280 out of 302 (92.72%; f=280) reported that they came with their family members, 15 out of 302 (4.97%; f=15) respondents were accompanied by friends, and four out of 302 (1.32%; f=4) respondents were accompanied by neighbours. Two (2) out of 304 (0.66%; f=2) respondents did not answered this question. The results indicate that 299 out of 302 (99.01%; f=299) respondents were accompanied by someone to the health care facility.

4.5.1.1 The reasons that no one accompanied the respondents to the hospital (n=22)

Table 4.5 indicates the reasons that emanated when a respondent went to the hospital without being accompanied which were as follows lack of knowledge, admitted prior establishment of labour and does not need a birth companion.

Table 4.5: The reasons why no one accompanied the respondents to the hospital (n=22)

Statements	Frequency	Percent
Respondents did not know about birth	10	45.46%
companions		
Admitted to the hospital	8	36.36%
Respondent does not need a birth	4	18.18%
companion		
Total	22	100%
Not indicated	282	92.76%

The results in Table 4.5 show that 22 out of 304 respondents answered this question. Ten (10) out of 22 (45.46%; f=10) respondents indicated that they did not know that it is allowed to have a birth companion, eight out of 22 (36.36%; f=8) were admitted to the hospital for obstetrical reasons and four out of 22 (18.18%; f=4) women do not need a birth companion. The results indicate that 45.46% of respondents were not aware that they should have a birth companion.

4.5.2 Did the person who accompanied you to the hospital remain? (n=299)

The investigator was interested in finding out if the person who accompanied the respondent in labour remained after admission, during labour, delivery, immediately post-delivery, rooming in (the baby is kept by the side of the parents) and ever present until being discharged. The respondents were required to answer either "Yes" or "No". Table 4.4 shows that 11 out of 299 (3.68%; *f*=110) respondents indicated that the person who accompanied them remained during admission while 288 out of 299 (96.12%; *f*=288) did not remain with the woman in

labour. Five (5) out of 299 (1.67%; f=5) remained during labour while 294 (98.33%; f=294) did not remain during labour. Three (3) out of 299 (1.00%; f=3) remained during delivery while 296 (99.00%; f=3) did not remain during delivery of the baby. Three (3) out of 299 (99.00%; f=3) remained immediately post-delivery while 296 out 299 (99.00%; f=296) did not remain immediately post-delivery. Zero (0) out of 299 (0.00%; f=0) reported that no rooming in was practised. Zero (0) out of 299 (0.00%; f=0) indicated that no one remained until the woman and the baby are discharged from the postnatal ward.

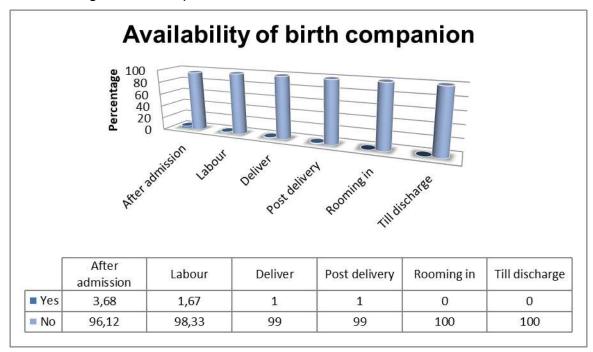


Figure 4.7: Did the person who accompanied the respondents to the hospital remain? (n=299)

The results in Figure 4.7 display that 98.33% respondents were not having a companion during labour.

4.5.3 Method of childbirth (n=301)

The researcher was interested in investing the method in which respondents delivered their babies. The women were to choose between vaginal (normally) or vacuum delivery (assisted). Table 4.4 indicates that 299 (99.34%; f=299) delivered normally, while two out of 299 (0.66%; f=2) through assisted delivery and three out of 304 (0.99%; f=3) did not indicate.

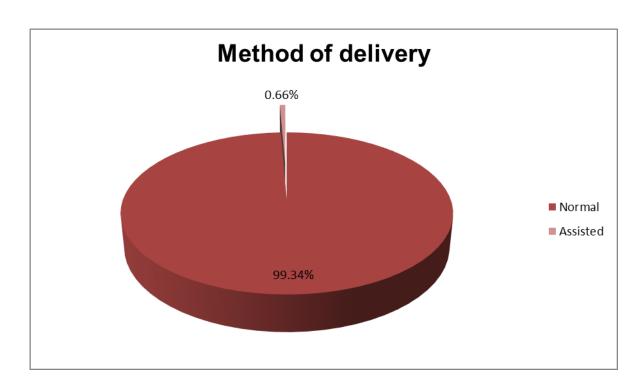


Figure 4.8: The method of childbirth (n=301)

The findings in Figure 4.9 display that more than (99.34%) delivered normally.

4.5.4 A health care professional who provided the assisted birth (n=2)

Table 4.4 reveals that the health care professional who assisted the woman giving birth through vacuum extraction was the doctor 2 (100%; f=2).

4.5.5 Gestational age at childbirth (in Months) (n=300)

The researcher was interested in finding out the gestational age at birth from the respondents to see if they had enough time to prepare for the utilisation of birth companion. Table 4.4 indicates that (n=300) respondents answered the question whereby 2 out of 300 (0.67%; f=2) were 5 months, 14 out of 300 (4.67%; f=14) were six months, 28 out of 300 (9.33%; f=28) were seven months, 32 out of 300 (10.66%; f=32) were eight months, 222 out of 300 (74.00% f=222) were nine months while two out of 300 (0.67%; f=2) were 10 months and four out of 304

(1.32%; f=4) did not answer this question. The majority of respondents delivered their babies at nine months gestation.

4.5.6 The time it took the baby to cry immediately after delivery (n=289)

Two hundred and eighty-nine (289) respondents answered the question. Table 4.4 reveals that 279 out of 289 (96.54%; f=279) initiated their breathing within one minute following birth while 10 out of 289(3.46%; f=10) took \geq 5 minutes to initiate their first breath and 15 out of 304 (4.93%; f=15) did not indicate how long their babies initiated first breath.

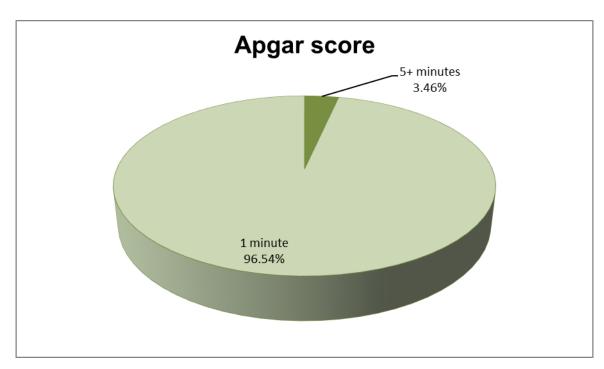


Figure 4.9: The time it took the baby to cry immediately after delivery (n=289)

The results in Figure 4.11 show that 96.54% of babies initiated their first breath within a minute after birth.

4.5.7 Pain medication given to respondents during labour (n=299)

The researcher needed to find out if pain relief medication was given to the respondents during labour and childbirth. Table 4.4 indicates that 76 out of 299 (25.42%; *f*=76) were given pain medication during labour, 223 out of 299 (74.58%;

f=223) were not given pain medication during labour while five out of 304 (1.64%; *f*=5) did not respond to the question asked. The results show that 74.58% respondents were not given pain relief medication.

4.5.8 Medication given to the respondents to speed up labour (n=302)

The responded were required to answer "Yes" or "No". Table 4.4 shows that 46 out of 302 (15.23%; f=46) were given treatment to augment (speed-up) labour while 256 out of 302 (84.77%; f=256) were not given treatment to speed up labour and 2 out 304 (0.66%; f=2) did not answer the question.

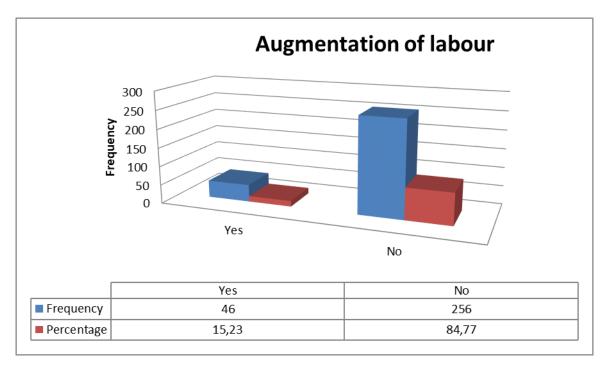


Figure 4.10: Medication given to the respondents to speed up labour (n=302)

The majority of respondents (84.77%) indicated that they were not given any medication to speed up labour.

4.5.9 Lacerations/tears sustained during delivery of the baby (n=302)

The respondents were to indicate either "Yes" or "No" to this question. Table 4.4 shows that 83 out of 302 (27.48%; f=83) stated that they sustained some lacerations (tears) during delivery of their babies, 219 out of 302 (72.52%; f=219) indicated that they did not sustain any tears during delivery of the baby and two

out of 304 (0.66%; *f*=2) did not state if they sustained tears or not during delivery of the baby. In this research, most respondents (72.52%) reported that they did not sustain tears during childbirth.

4.5.10 Episiotomy performed during childbirth (n=299)

The respondents were to answer by indicating either "Yes" or "No" to this question. According to Table 4.4, 75 out of 299 (25.08%; f=75) reported that the midwife/doctor performed an episiotomy (vaginal cut) during delivery of the baby, 224 out of 299 (74.92%; f=224) indicated that no vaginal cut was performed and five out of 304 (1.64%; f=5) did not indicate. The findings reveal that the majority of respondents (74.92%) were not done an episiotomy (vaginal cut) during childbirth.

4. 5.11 Duration of labour (n=304)

All the respondents answered this question (n=304). The researcher was interested in investigating the time the respondent took to deliver their babies. Table 4.4 displays that 86 out of 304 (28.29%; f=86) respondents took more than three hours in labour, 107 out of 304 (35.20%; f=107) took more than eight hours in labour, 85 out 304 (27.96%; f=85) took more than 12 hours in labour, 18 out of 304 (5.92%; f=19) respondents took more than 24 hours in labour and 8 out of 304 (2.63%; f=8) took more than two days in labour.

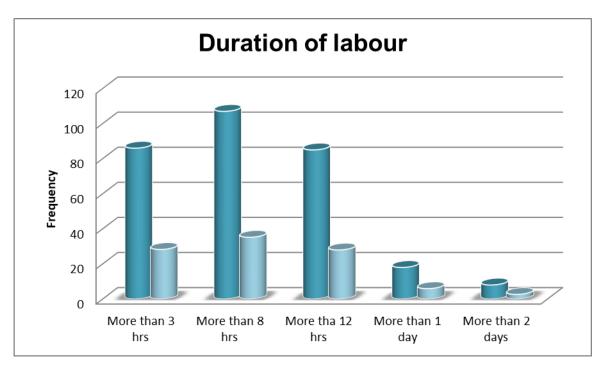


Figure 4.11: Duration of labour (n=304)

The results in Figure 4.12 display that 35.20% of the women had more than eight in labour.

4.6 SECTION D: POSTNATAL

The researcher required the respondents to respond to the following post-delivery questions: The baby's birth weight, whether was admitted in the neonatal unit after birth and the reasons for the admission to the neonatal unit, the feeding method the respondent commenced and the period the method will be practised, and the relationship between the respondent and the baby.

Table 4.6: Postnatal section

The baby's birth weight (n=303)	Frequency	Percent
Less than 1000g	11	3.63%
1000 to 1800g	36	11.88%
1900 to 2500g	41	13.53%
2600 to 3500g	181	59.74%
More than 3500g	32	10.56%
I do not know	2	0.66%
Total	303	100%
Not indicated	1	0.33%
Admission into neonatal unit after	Frequency	Percent
birth (n=304)		
Yes	100	32.89%
No	204	67.11%
Total	304	100%
The reasons for admission into	Frequency	Percent
neonatal unit (n=100)		
Low Apgar score	11	11.00%
Difficulty in breathing	22	22.00%
Low birth weight/prematurity	55	55.00%
Meconium aspiration	6	6.00%
Congenital abnormalities	5	5.00%
Big baby for observations	1	1.00%
Total	100	100%
Babies who were not admitted	204	67.11%
The feeding method the women		
commenced (n=304)	Frequency	Percent
Breastfeeding	300	98.68%
Formula feeding	4	1.32%
Total	304	100
The duration the mother will practise	Frequency	Percent

the chosen feeding method (n=291)		
<1 year	86	29,55%
1 to 2 years	200	68,73%
3 to 4 years	5	1,72%
Total	291	100%
Not indicated	13	4,28%
The bonding status between the	Frequency	Percent
women and babies (n=304)		
Good	299	98.35%
Fair	2	0.66%
Not sure	3	0.99%

4.6.1 The baby's birth weight (n=303)

The researcher was interested with the baby's birth weight distribution to be aware of the weight intervals. The birth weight that was well represented was 2600g to 3500g. The minimum birth weight was less than 1000g, while the maximum birth weight was more than 3500g and the average birth weight is 2250g. Eleven (11) out of 303 (3.63%; f=11) babies weight was less than 1000g, 36 out of 303 (11.88%; f=36) was 1000g to 1800g, 41 out of 303 (13.53%; f=41) was 1900g to 2500g, 181 out of 303 (59.74%; f=181) was 2600g to 3500g, 2 out of 303 (0.66%; f=2) indicated that they do not know while 1 out of 304 (0.33%; f=1) did not indicate.

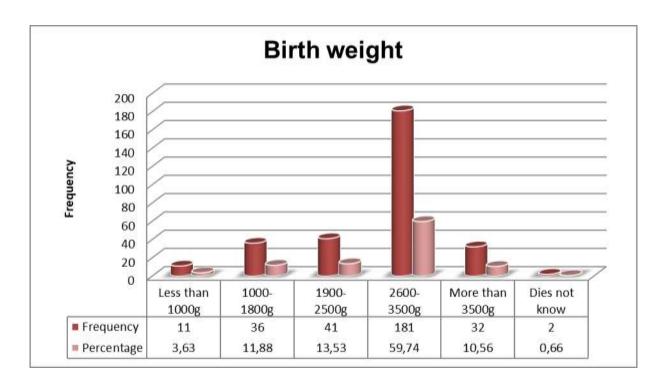


Figure 4.12: The baby's birth weight (n=303)

Figure 4.13 displays that most of the babies had a birth weight of 2600g to 3500g.

4.6.2 Admission into neonatal unit after birth (n=304)

All the respondents answered this question whereby 100 out of 304 (32.89%; f=100) said that their babies were admitted in neonatal unit, while 204 out of 304 (67.11%; f=204) reported that they were not admitted in neonatal unit. Table 4.6 shows that (33%) new-born babies were admitted in neonatal unit immediately after birth.

4.6.2.1 The reasons for admission into neonatal unit (n=100)

Table 4.6 indicates the following reasons for admission in neonatal unit which were: Low Apgar score, difficulty in breathing, low birth weight/prematurity, meconium aspiration, congenital abnormalities and big babies for observations. Eleven (11) out of 100 (11.00%; f=100) babies were admitted in neonatal unit owing to low Apgar score, 22 out of 100 (22.00%; f=22) admitted with difficulty in breathing, 55 out of 100 (55.00%; f=55) with low birth weight/ prematurity, six out

of 100 (6.00%; f=6) with meconium aspiration, five out of 100 (5.00%; f=5) with congenital abnormalities and one out of 100 (1.00%; f=1) admitted for observations. The study reveals that 55.00% of babies were admitted in neonatal unit owing to difficulty in breathing.

4.6.3 The feeding method the women commenced (n=304)

The respondents were asked about the method they have chosen to feed their babies between formula and breastfeeding. All the respondents answered the question stating that 200 out of 304 (98.68%; f=300) have commenced with breastfeeding and 4 out of 100 (1.32%; f=4) commenced with formula feeding.

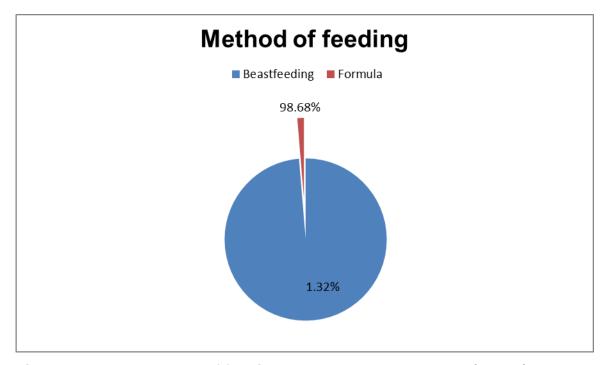


Figure 4.13: The method of feeding the women commenced (n=304)

As indicate in Figure 4.13, the method which the majority 98.68% of respondents commenced with was breastfeeding.

4.6.4 The duration the mother will practise the chosen feeding method (n=291)

The duration the respondents will keep on practising the chosen feeding method ranges from less than a year to four years. Eighty six (86) out of 291 (29.68%;

f=86) respondents reported that they will feed their babies for less than one year, 200 out of 291 (68.73%; f=200) opted for 1 – 2 years, 5 out of 291 (1.72%; f=5) said 3-4 years and 13 out of 304 (4.28%; f=13) women did not indicate. Table 4.6 indicates that most of the respondents in this study 68.73% have chosen to feed their babies for 1-2 years.

4.6.5 The bonding status between the women and babies (n=304)

All the research respondents answered this question. Three (3) out of 304 (0.99%; f=3) reported that they are not sure of their boding status with their new-born baby, two out of 304 (0.66%; f=2) indicated that the bonding was fair and 299 out of 304 (98.35%; f=299) respondents said it was good. The study findings in Table 4.6 shows that (98.35%) of respondent's bonding status with their new-born babies was good.

4.7 SECTION E: PSYCHO-SOCIAL FACTORS

Table 4.7 indicates the percentages and frequencies related to the importance of having a birth companion, who the respondents preferred to be their birth companion, number of days admitted post-delivery, and if the woman suffered from depression after delivery. According to Roy's Adaptation Model, human beings are adaptive systems, which can adapt to the following: physical, group identity, interdependence and role function which enhance coping with environmental stimuli through adaptation (Polit & Beck 2017:134). Pregnant women need to be guided to adapt to the labour process to cope with the labour challenges through utilisation of birth companions.

Table 4.7: The Psycho-social factors

Do you think it is important to have a birth			
companion? (n=304)	Frequency		Percent
Yes	2	260	85.53%
No		44	14.47%
Total	3	304	100%
A person the respondents prefer to be	Frequency		Percent
their birth companion (n=265)			
None		8	3.02%
Friend		5	1.89%
Family	2	252	95.09%
Total	2	265	100%
Not indicated		39	12.83%
Number of admission days post childbirth			
(n=290)	Frequency		Percent
1 to 3	2	213	73.45%
4 to 10		52	17.93%
11 to 20		19	6.55%
21 to 30		5	1.72%
31 to 60		1	0.35%
Total	2	290	100%
Not indicated		14	4.61%
Did the respondents suffer from	Frequency		Percent
depression ofter shildbirth (p_204)			
depression after childbirth (n=304)			
Yes		38	12.50%
	2	38 266	12.50% 87.50%

4.7.1 Do you think it is important to have a birth companion? (n=304)

The respondents had to indicate either "Yes" or "No" to answer this question. All the respondents answered this question. Forty four (44) out of 304 (14.47%; f=44)

respondents reported that it is not important to have a birth companion while 260 out of 304 (85.53%; f=260) indicated that it is important to have a birth companion.

Table 4.8 Do you think it is important to have a birth companion? (n=40)

Reasons why it is not important to have a		
birth companion (n=40)	Frequency	Percent
Not necessary to have a birth companion	19	47.50%
The health care professionals' assistance is		
enough	10	25.00%
A need to keep secrets	1	2.50%
Birth companions may not cope when		
complications arise	9	22.50%
Lack of trust in utilising birth companions	1	2.50%

Table 4.8: shows that 19 out of 40 (47.50%; f=19) respondents indicated that it is not necessary to have a birth companion, 10 out of 40 (25.00%; f=10) were satisfied with the assistance from health care professionals. 1 out of 40 (2.50%; f=1) needed to keep secrets, nine out of 40 (22.50%; f=9) thought that birth companions may not cope when there are complications and one out of 40 (2.50%; f=1) does not trust birth companions.

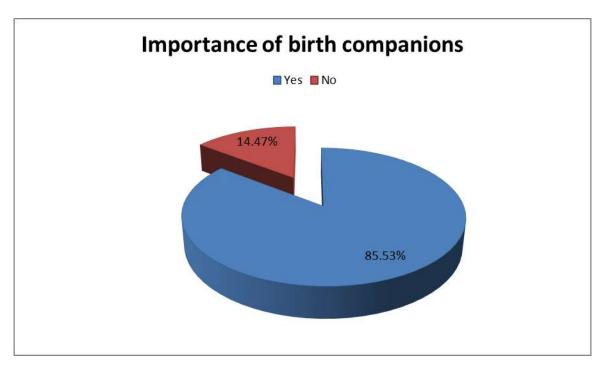


Figure 4.14: Do you think it is important to have a birth companion? (n=304)

The majority 85.53% of respondents in Figure 4.15 pointed out that it is important to have a birth companion.

4.7.1.1 The reasons why the respondents think it is not important to have a birth companion (n=40)

The respondents were asked why they think it is not important to have a birth companion and the results indicate that 264 out of 304 (86.84%; *f*=264) respondents did not answer the question. Therefore, the calculations were based on (n=40) who answered the question.

4.7.2 A person the respondents prefer to be their birth companion (n=265)

The person whom the respondents preferred to be their birth companions in a tubular form. Each of the respondents indicated a person she prefers to be her birth companion: 252 out of 265 (95.09%; f=252) stated their family members, 8 out of 265 (3.02%; f= 8) respondents indicated that they do not prefer anybody, 5 out of 265 (1.89%; f=5) respondents preferred friends and 39 out of 265 (2.83%; f=39) respondents did not indicate.

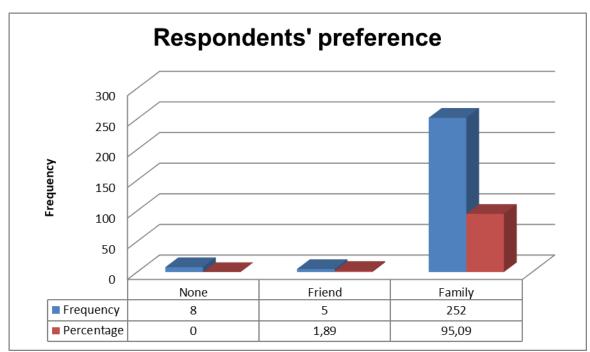


Figure 4.15: A person the respondents prefer to be their birth companion (n=265)

Figure 4.16 indicates that 95.09% women preferred their family members as their birth companions.

4.7.3 The reasons the respondents prefer the person they have chosen

The respondents were required to indicate in their own words the reasons for their preference of a birth companion.

Table 4.9: Why do women prefer the person they have chosen? (n=228)

Statements	Frequency	Percent
Husbands share responsibility with the women on	81	35.53%
pregnancy		
Mothers are experienced with childbirth process	101	44.29 %
Aunts cited as primary caregivers of the family	2	0.88%
Friends understand the situation of giving birth	5	2.19%
Siblings (brother and sister): respondents are	34	14.91%
closer/comfortable to be with them		

Both parents: Are always available when the women	2	0.88%
need help		
Gran-mothers: will assist in taking care of the babies	3	1.32%
Total	228	100%
Did not indicate	76	25.00%

According to Table 4.9, 81 out of 228 (35.53%; f=81) of the postnatal women's reason for the choosing a husbands/partners as a birth companion was to share responsibility of the pregnancy. One hundred and one (101) out of 228 (44.29%; f=101) respondents chose the mother as birth companions because of the mother's experience on childbirth. Aunts were preferred by respondents were by two out of 228 (0.88%; f=2). The reasons for selection of aunts were that they are primary caregivers in the respondents' family. Five (5) out of 228 (2.19%; f=5) women preferred friends because they have experience of giving birth. The reasons for the preference of siblings as indicated in Table 4.12 were by 34 out of 228 (14.91%; f=34) were that women are comfortable and close to the respondents. Both parents were also preferred by two out of 228 (0.88%; f=2) respondents in this research for being available when they need assistance. Three (3) out of 228 (0.31%; f=3) preferred grandmothers as they will take care of the babies. Seventy six (76) out of 304 (25.00%; f=76) did not answer the question. The results in Table 4.12 indicate that most women 44.29% preferred their mothers to be their birth companions

4.7.4 Number of admission days post childbirth (n=290)

The respondents' responses indicated that 213 out of 290 (73.45%; f=213) were admitted for one to three days after delivery, 52 out of 290 (17.93%; f=52) four to10 days post-delivery, 19 out of 290 (6.55%; f=19) 11 to 20 days post-delivery, five out of 290 (1.72%; f=5) 21 to 30 days after childbirth, one out of 290 (0.35%; f=1) 31 to 60 days after delivery of the baby while 14 out of 304 (4.61%; f=14) respondents did not indicate.

4.7.5 Did you suffer from depression after delivery of the baby? (n=304)

All the respondents answered this question (n=304). The respondents were requested to answer using either "Yes" or "No". Two hundred and sixty-six (266) out of 304 (87.50%; f=566) respondents indicated that they did not suffer from depression post-delivery while 38 out of 304 (12.50%; f=38) respondents reported that they suffered from depression.

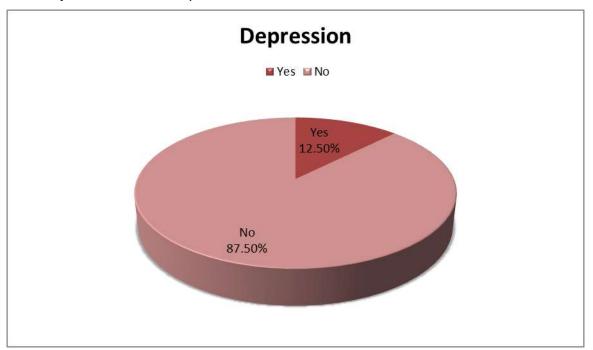


Figure 4.16: Did you suffer from depression after delivery of the baby (n=304)

The results in Figure 4.16 indicate that some respondents 12.50% suffered from depression.

4.8 RELATIONSHIP/CORRELATION/ASSOCIATION BETWEEN AGES, RELATIONSHIP STATUS, LIVE CHILDREN, GESTATION AT 1ST BOOKING, PAIN MEDICATION GIVEN DURING LABOUR AND KNOWLEDGE OF BIRTH COMPANION.

Table 4.10 compares the p-values between two variables. Statistical significance shall be discussed in Chapter 5.

Table 4.10: Relationship/correlation of the following: age, marital status, live children, gestational age at first booking and pain medication, and knowledge of a birth companion.

Variable: Knowledge of a birth companion	Had Knowledge (n=304)	Did not have knowledge (n=304)	Chi-Square	P-Value
Age(n=304): 18-35yrs 36-45yrs Total	49 (16.12%) 10 (3.29%) 59	207 (68.09%) 38 (12.50%) 245	0.01 0.05 0.06	P = 0.81 0.90 <p<0.75 p<0.05</p<0.75
Relationship status (n=302): Married/In relationship Single Total	18 (5.96%) 40 (13.25%) 58	69 (12.85%) 175 (57.94%) 244	0.10 0.04 0.14	P = 0.73 0.75 <p<0.5 p<0.05</p<0.5
Mothers' live children(n=304): 1 2≤ Total	21 (6.91%) 46 (15.13%) 67	95 (31.25%) 142 (46.71%) 237	0.83 0.51 1.34	P = 0.23 0.25 <p<0.10 p<0.05</p<0.10
Gestation at first booking(n=295): 1 to 3 months 4 to 8 months Total	31 (10.51%) 28 (9.49%) 59	103 (28.81%) 133 (51.19%) 236	0.67 0.55 1.22	P = 0.28 0.50 <p<0.25 p<0.05</p<0.25
Pain medication given during labour (299): Given (Yes) Not given (No) Total	76 (25.42%)	223 (74.58%)	166.57 56.70 223.27	P = 0.023 0,025 <p<0.010 p>0.05</p<0.010

Table 4.10 indicates that 16.12% of postnatal women of between 18 and 35 years of age and 3.29% of between 36 and 45 years know what a birth companions is while 68.09% of between 18 and 25 years of age and 12.50% of between 36 and 45 years do not know what a birth companion is. The chi-square (x^2) of both age intervals is 0.06 and the p-value is between 0.90 and 0.75 (0.90 . Therefore, the p-value is less than 0.05 <math>(p < 0.05).

Table 4.10 reveals that 5.96% of postnatal women who were in a relationship (married/cohabiting) and 13.25% of those who were single know what a birth companion is while 12.85% respondents who were in a relationship and 57.94% of those who were single reported that they do not know a birth companion. The chi-square (x^2) of marital status interval is 0.14 and the p-value is between 0.75 and 0.5 (0.75<p<0.5). Therefore, the p-value is less than 0.05 (p<0.05).

As indicated in Table 4.10, 6.91% of postnatal women who have 1 (one) child alive and 15.13% of those who have two and more children alive know a birth companion while 31.25% of those who have one child alive and 46.71% women who have more than two children alive do not know what a birth companion is. The chi-square (x^2) of the live children is 1.34 and the p-value is between 0.25 and 0.10 (0.25<p<0.10). Therefore, the p-value is less than 0.05 (p<0.05).

From Table 4.10, it is evident that 10.51% of respondents whose gestational age at first ANC visit was between 1-3 months and 9.49% women's who were 4-8 months pregnant at first ANC visit know what a birth companion is while 28.81% women whose gestational age at first ANC visit was 1-3 months and 51.19% of those were 4-8 months pregnant at first ANC visit do not know a birth companion. The chi-square (x^2) of the live gestational age at first ANC visit is 1.22 and the p-value is between 0.50 and 0.25 (0.50<p<0.25). Therefore, the p-value is less than 0.05 (p<0.05).

Table 4.10 shows that 25.42% of respondents who were give pain medication know what a birth companion is and 74.58% respondents who were not given pain medication do not know a birth companion. The chi-square (x^2) of the live pain medication given during labour is 223.27 and the p-value is between 0.025 and 0.010 (0.25<p<0.010). Therefore, the p-value is greater than 0.05 (p>0.05). A comprehensive discussion will follow in chapter 5.

4.9 SECTION F: THE MOTIVATING AND ENABLING OR MODIFYING FACTORS

The questions were developed to determine the respondents' knowledge on factors that motivate utilisation of birth companions. The respondents were to use

the following: "strongly agree", "agree", "uncertain", "disagree", "strongly" and "disagree" according to the Likert scale. Table 4.11 will provide the number of respondents who answered each specific question which will differ from each question asked. The Roy's Adaptation Model indicates that humans are adaptive systems that cope with change through adaptation. The nursing intervention helps to promote client adaptation during health and illness (Polit & Beck 2017:134).

Table 4.11: The motivating factors utilising birth companions

Statements	Stro	ngly	Agre	е	Uncer	certain Disagree		Stro	ngly	Not	i	Total	
	agre	е							disagree		indicated		
	n	%	n	%	n	%	n	%	n	%	n	%	
A birth companion	151	50%	101	33%	5	2%	16	5%	28	9%	3	1%	100
will remain with you													%
throughout labour													
to help when in													
need													
A birth companion	153	50%	99	33%	4	1%	16	5%	28	9%	4	1%	100
will help you with													%
basic needs													
A birth companion	157	52%	97	32%	4	1%	18	6%	25	8%	3	1%	100
will help in taking													%
care of the baby													
while you take a													
nap													
A birth companion	125	41%	107	35%	10	3%	24	8%	36	12%	2	1%	100
will help you in													%
decision making													
A birth companion	150	49%	105	35%	2	1%	19	6%	24	8%	4	1%	100
is important to you													%
and the baby													
The relationship	132	43%	98	32%	14	5%	18	6%	33	11%	9	3%	100
between you, your													%
partner and the													
new-born baby will													
be increased													

Table 4.11 indicates that 216 out of 265 (81.51%; f=215) agree that birth companion will remain with you throughout labour to help when in need while 44 out of 265 (16.60%; f=44) respondents disagree. These results correlate with 44 out of 304 (14.47%; f=44) respondents who indicated that a birth companion is not vital. Two hundred and fifty-two (252) out of 300 (84.00%; f=252) respondents agree that a birth companion will help you with basic needs, while 44 out of 300 (14.67%; *f*=44) disagree. Two hundred and fifty-four (254) out of 301(84.39%; f=254) respondents agree that a birth companion will help in taking care of the baby while the mother take a nap while 43 out of 301 (14.29%; f=43) disagree. Two hundred and thirty-two (232) out of 302 (76.82%; f=232) respondents agreed that a companion will help the woman in decision making while 60 out of 302 (19.87%; f=60) disagree. Two hundred and fifty-five (255) out of 300 (85.00%; f=255) respondents agree that a birth companion is important for mother and the baby while 43 out of 300 (14.33%; f=43) disagree. Two hundred and thirty (230) out of 295 (77.97%; f=230) respondents agree that the relationship between the mother, partner and new born baby will be increased while 51 out of 295 (17.29%; *f*=51) disagree.

4.9.1 Any other factors that can motivate you to utilise a birth companion

The respondents were requested to indicate any other factors that were not stated before that can motivate them to choose a birth companion. Twenty four (24) out of 304 (7.89%; f=24) respondents answered this question whereby they repeated the information in Table 4.12 i.e. decision making, physical, psychological and a sense of belonging (good relationship). Eleven (11) out of 24 (45.84%; f=11) respondents indicated physical help, eight out of 24 (33.33%; f=8) strong bond between mother, father and infant and five out of 24 (20.83%; f=5) stated psychological assistance from birth companions.

Table 4.12: Any other factors that can motivate you to utilise a birth companion (n=24)

Statements	Frequency	Percent
Physical help	11	45.84%
Feeling free and not neglected/ strong	8	33.33%
bond between mother, father and the child		
Psychological/emotional assistance	5	20.83%
Total	24	100%
Did not indicate	280	92.11

4.9.2 What are the benefits of having a birth companion?

Thirty two (32) out of 304 (10.53%; f=32) respondents answered this question. Table 4.13 shows the respondents' statements on the benefits of birth companions. Table 4.13 indicates that six out of 32 (18.75%; f=6) respondents' benefits of having a birth companions in this study were; good relationship with partner and baby, 19 out of 32 (59.37%; f=19) were psychological support, two out of 32 (6.25%; f=2) women indicated to be safe and five out of 32 (25.63%; f=5) reported to be physically supported. The majority of the respondents 59.37% who answered this question indicated that they will benefit from psychological support which will be provided by the birth companions.

Table 4.13: The benefits of having a birth companion (n=32)

Statements	Frequency	Percent
Good relationship/ strong bond with their	6	18.75%
partners and baby		
Emotional/psychological support from	19	59.37%
birth companions		
Respondents will be safe	2	6.25%
Physical support	5	15.63%
Total	32	100%
Did not indicate	272	89.47%

Most of the postnatal women (59.37%) indicated that they will benefits emotionally if they can be allowed to have a birth companion.

4.10 SECTION G: THE CHALLENGES/BARRIERS OF HAVING A BIRTH COMPANION

The question was developed to determine whether there are challenges that inhibit the utilisation of birth companions. According to Roy's Adaptation Model, the nursing goal is to promote the client's adaptation. The respondents had to indicate "strongly agree", "agree", "uncertain", "disagree", and "strongly disagree" according to the Linkert scale. Table 4.14 provides the number of respondents who answered the questions which will differ from one question to another.

Table 4.14: Challenges of having a birth companion during labour

Statements	Stro	ngly	Agre	ее	Unc	ertain	Disag	gree	Stron	gly	Not		Total
	agre	e							disag	disagree		cated	
	n	%	n	%	n	%	n	%	n	%	n	%	
I am afraid she/he	33	11	34	11	10	3%	121	40	105	35%	1	0	100%
will invade my		%		%				%					
privacy													
I am afraid that	39	13	45	15	32	11%	97	32	90	30%	1	0	100%
my partner will		%		%				%					
faint during													
delivery													
My partner works	43	14	55	18	9	3%	95	31	98	32%	4	1%	100%
far		%		%				%					
I am staying far	36	12	43	14	8	3%	95	31	100	33%	22	7%	100%
from home, so I		%		%				%					
am not sure if my													
parents can be													
able to come to													
support me													
during labour.													
My relationship	36	12	36	12	14	5%	111	37	101	33%	6	2%	100%
with my partner		%		%				%					
will be reduced													
The birth	42	14	45	15	11	4%	100	33	100	33%	6	2%	100%
companion will		%		%				%					
get tired if labour													
prolong													

Table 4.14 indicates that the majority of respondents 226 out of 303 (74.19%; f=226) do not agree that birth companions will invade their privacy while 67 out of 303 (22.11%; f=67) agree. Seventy eight (78) out of 297 (26.26%; f=78) respondents agree that their partners will faint during delivery of the baby while 187 out of 297 (62.96%; f=187) disagree that their partners will faint during the delivery of the baby. Ninety eight (98) out of 300 (32.67%; f=98) respondents agree that their partner works far from place of residence while 193 out of 300

(64.33%; f=193). Seventy nine (79) out of 282 (28.01%; f=79) respondents agreed that they are staying far from home therefore they were not sure if their parents will come to support them during labour while 195 out of 282 (69.15%; f=195) disagree. Seventy two (72) out of 298 (24.16%; f=72) respondents agree that their relationship with their partners will be reduced if they become their birth companions while 212 out of 298 (71.14%; f=212) disagree. Eighty seven (87) out of 298 (29.19%; f=87) respondents agree that the birth companion will get tired if labour prolong while 200 out of 298 (67.11%; f=200) disagree.

4.10.1 Any other challenges/barriers that were not included in those mentioned above (n=14)

The respondents were asked to indicate any other challenges that were not indicated. Fourteen (14) out of 304 (4.61%; f=14) respondents answered this question and their responses were grouped in the next table. One (1) out of 14 (7.14%; f=1) respondent indicated that COVID-19 restrictions as a challenge for availability of birth companions, 10 out of 14 (71.43%; f=10) stated that their partners will be afraid of having another baby and 3 out of 14 (21.43%; f=3) reported that some birth companions may increase their anxieties.

Table 4.15: Any other challenges that were not mentioned above (n=14)

Statements	Frequency	Percent
Covid-19 restrictions.	1	7.14%
Birth companions (partner) can be	10	71.43%
traumatised and become afraid of making		
babies if things do not go as anticipated.		
The birth companion can increase anxiety	3	21.43%
on the woman during complicated labour.		
Total	14	100%
Did not indicate	290	95.39%

The majority of the postnatal women (71.43%) who answered this question stated that their birth companions who happens to be their partners may become

traumatised if things do not go as anticipated and become afraid of making babies for the subsequent time.

4.11 OVERVIEW OF RESEARCH FINDINGS

The data aided the investigator to reach the research objectives of the study which were to:

- To establish knowledge of postnatal women towards utilisation of birth companions.
- To explore and describe the perceptions of postnatal women towards utilisation of birth companions
- To identify and describe factors that inhibits non-utilisation of birth companions by the midwives and managers.
- To develop guidelines on promotion of birth companions in public health facilities were delivery of babies is taking place to improve labour outcomes
 Most of the postnatal women 216 out of 265 (81.51%; f=215) agree that birth companion will help you throughout labour. This may be a sign that postnatal women can accept and utilise birth companions.

4.12 CONCLUSION

Quantitative data were collected from 304 postnatal women and results analysed using SPSS version 26. The research findings in this chapter were presented, analysed and described in graphs, tables and figures. The results reflected the utilisation of birth companions of women in Limpopo Province of South Africa. The majority of the respondents 245 out of 304; (80.59%; f=245) indicated that they did not receive information on birth companions. Although 299 out of 202 (99.01%; f=299) respondents were accompanied by someone to the hospital, only 11 out of 299 (3.68%; f=11) were having a birth companion while 288 out of 299 (96.12%; f=288) were not having a birth companion. In chapter 5, the summary, interpretation the research findings, limitations, conclusions of and recommendations of the study will be presented.

CHAPTER 5

ANALYSIS, PRESENTATION, DESCRIPTION OF QUALITATIVE RESEARCH FINDINGS

5.1 INTRODUCTION

In this chapter presentation, description and analysis of data was done by means of interviews. The quantitative data were collected and analysed concurrently with the collection and analysis of qualitative data to develop internally confirmed conclusion of the research (Polit & Beck 2017:584). The purposes of the study were:

- To explore and describe the perceptions of midwives towards utilisation of birth companions (qualitative method)
- To identify and describe factors that inhibits non-utilisation of birth companions by the midwives (qualitative method) - midwives and managers.
- To develop guidelines on promotion of birth companions in public health facilities where delivery of babies is taking place to improve labour outcomes.

According to Creswell (2014:197-200), qualitative data analysis occurs in steps example, Step 1: Entails organising and preparation of data for analysis. Interviews were transcribed, field notes typed and data arranged and sorted into different source of information. Furthermore, a separate sheet was used by the researcher to record and code the statements based on their transcript. Fifteen transcripts were formulated by the researcher. The researcher listened to the audiotape to discriminate units from the narratives made by the participants. Pseudo names and labels were attached to the participants' responses. Preconceived ideas were put aside by the researcher to be able to understand the collected data.

Step 2: Reading and look through all data (Creswell 2014:197). The text was read and reread by the researcher and margin notes were written. The researcher formulated meanings and coded in one category as they reflect an exhaustive description. To maintain consistency of description, the researcher compared the meanings of the formulated original meaning.

Step 3: Coding of all the data. Botma, Greeff, Mulaudzi and Wright (2016:224) define coding as the process whereby materials are organised into segments of text before bringing meaning to the information. The researcher took text data such as words or phrases and labelled the categories with a term base on the participant language.

Step 4: Use the coding process to generate a description of the setting or people as well as categories or themes for analysis. A detailed rendering of information about the people, places or events in a setting is defined as description (Creswell 2014:199). Codes were reviewed to eliminate overlapping and being reduced to potential themes by the researcher, which display perspectives from individual participant and supported by quotations.

Step 5: Advance how the description and themes will be presented in qualitative narrative (Creswell 2014:200). A theme is a recurring regularity emerging from analysis of qualitative data (Polit & Beck 2017: 746). In this step, the researcher used specific illustration, quotations and detailed discussion of several themes and subthemes that represent a common idea by using tables.

Step 6: Make an interpretation of the findings (Creswell 2014:200). The researcher presents the themes that show the flow of ideas, from more general picture to a specific picture. The researcher used personal interpretation together with the literature to interpret the findings.

5.2 DATA MANAGEMENT

Data management in qualitative research involves converting masses of data into smaller, manageable segments. A semi-structured interview guide was used to collect qualitative data whereby probing was done to get clarity to the question asked after approval from High Degrees Committee of Department of Health Studies at the University of South Africa (Unisa) (Reference number: HSHDC/955/2020) (Annexure A), Department of Health Limpopo Province (Annexure C), the district managers, hospital managers (Annexure D) and the midwives where requested to sign an informed consent to validate that no form of coercion was instituted on them (Annexure I). A voice recorder was used to capture responses from the participants and field notes were taken to support the information recorded. Data collection was done in four districts hospital and one tertiary hospital of the four districts of Limpopo Province intermittently from October 2020 until saturation was reached in March 2021.

Pilot testing

The researcher pre-tested the interview guide with five participants who were qualified midwives with two and more years of experience working in the labour ward to gather, and analyse data. The midwives that were used in this pilot test did not form part of the main study (Annexure E). A pilot test was done to assess the clarity, applicability and feasibility of the research instrument. The pilot test also assisted the researcher to discover issues that might interfere with the collection of data. Some modifications were effected based on the pilot test's results. It became apparent that 40 minutes' duration was adequate to collect the information from participants.

5.3 DATA ANALYSIS

Qualitative data analysis and collection were done concurrently, which was transcribed and categorised into themes. The seven steps of data analysis by Colaizzi (1978) were utilised as cited Polit and Beck (2017:541).

Step 1: Read written transcript

The researcher read each transcript to acquire a feeling or sense of the content, and preconceived ideas were put aside to prevent contamination of the research findings.

Step 2: Extract significant statements

Significant statements were recorded separately by the researcher "development of guidelines in utilising birth companions of women in Limpopo Province" from the transcript.

Step 3: Formulate meaning for each significant statement

The meanings were formulated by the researcher from significant statements. Each meaning was coded in one category. The description of the formulated meanings was compared with the original meanings to maintain consistency.

Step 4: Organise formulated meanings into clusters of themes

The researcher sorted formulated meanings into themes and sub-themes to reflect a unique structure of clusters themes. The cluster of themes were coded to include the formulated meanings related to the group of meanings.

Step 5: Integrate results into exhaustive description of the phenomenon

All themes were merged into an exhaustive phenomenon and the structure of "development of guidelines in utilising birth companions of women in Limpopo Province" was extracted.

Step 6: Statement identification

The misused, redundant and overestimated descriptions of findings were checked and eliminated by the researcher from the overall structure.

Step 7: Return to participant for validation of findings

Member checking was done whereby the researcher gave the participants an opportunity to validate the analysed data when the data was referred back to them to review and make comments or corrections on the themes and categories. A telephone was used to achieve the verification of the findings. Persistent observations were done by the researcher by pursuing interpretations in various ways.

Step 8: Relevant new data worked into final products

The researcher did not receive any new data to be merged or corrected to the old findings.

5.4 DISCUSSION OF RESEARCH FINDINGS

Data were collected from midwives who worked in the labour ward for two or more years in the four district hospitals and one tertiary hospital of Limpopo Province. The study adapted Colaizzi's (1978) steps of data analysis as cited in (Polit & Beck 2017:541). A semi-structured interview (Annexure G) was used to obtain participants' views. A voice recorder was used to collect data and field notes were taken. Data collection was done until no new information emerged from the research participants and the following eight themes and twenty-nine sub-themes emerged.

5.4.1 Sample description

Fifteen participants who met the inclusion criteria which was; a qualification in midwifery with at least two or more experience of working in the labour ward took part in this research. Pseudo-names were used for the purpose of anonymity and confidentiality.

Mable is a 28 years old female midwife who worked in the labour for five (5) years. She defined "a birth companion as someone who accompanies a woman in labour and stay with the woman until she delivers". She further indicated that she "does not have a problem if a woman requests to have a birth companion as it even makes her work easier because the person is there to comfort the woman". According to Mable, any choice of the woman e.g. mother, partner or any one she chooses is allowed to remain with her during labour. Birth companionship is very good as it will help to allay anxiety and comfort the woman.

The presence of a birth companion will benefit the woman as her anxieties will be allayed, comforted and will make her to be calm. Mable indicated that factors which inhibit the utilisation of birth companions as "lack of information, fear that the women may lose their partners as they think that their partners will lose interest in them". The challenges the midwives had when it comes to the utilisation of birth companions was that the birth companions are not cooperative, they will be moving up and down not adhering to the labour ward guidelines, interfering with the midwives' work and telling them what to do. To improve the availability of birth companions, Mable suggested that the pregnant women to be given health education in local clinics, and hospitals when they come for ANC. The hospitals should also have spacious labour rooms that will provide privacy to the women.

Rose is a 31 years old female midwife who worked in the labour for five years. She defined a birth companion as "someone who comes to the hospital with the pregnant woman who is labour until the woman gives birth". Rose explained that she will not have a problem if the woman requests to have a birth companion, but now with COVID-19; they are not allowed to come with a birth companion. Midwives or birth companions are allowed to come and stay with the woman in labour. She perceives birth companionship as a good idea and every pregnant woman to come with a birth companion for continuous support, since midwives are few in the labour ward and the women expert a lot from them.

Birth companions are beneficial to the women as they will cooperate. Factors that inhibit the utilisation of birth were cited by the participant as lack of knowledge, because only few women who approach the midwives that they want to come with their birth companions. Majority of the women come alone saying that they stay alone. The challenge that women faces was that some midwives are not approachable. Most women who come from neighbouring countries do not know the languages that are being spoken in Limpopo Province. This may be the reason they do not come with their birth companions. To improve the availability of birth companions, pregnant women should be given health education so that they will know that they are allowed to bring along a birth companion. Labour and birth related topics to be covered in the health talks.

Flora is a 32 years old female midwife with seven (7) years of experience of working in the labour ward. She defines a birth companion as "any person who stays with a woman in labour." Flora indicated that she will be surprised as she is not used to the situation whereby birth companions are allowed in maternity unit. She further indicated that birth companionship is good, as it relieves the woman's anxieties so that she will have confidence and cooperate during labour.

Environmental factors were cited as factors that inhibit utilisation of birth companions whereby labour rooms lacks privacy. To improve the availability of birth companions, hospital settings should accommodate birth companions. Midwives should be enough to be able to allow the birth companions.

Tiny is a 27 years old female midwife with two years' experience of working in the labour ward. She defines a birth companion as "a person/family member who comes and be with a woman in labour." Tiny said that she does not have a problem if a woman requests to have a birth companion; the problem is lack of privacy in the labour room. Only the mother or husband is allowed to remain with the woman in labour. According to Tiny, birth companions are helpful as most women are not cooperating during labour. In most occasions, midwives had to call the women's mother at home to talk to the woman in labour to cooperate

especially with teenagers. If the pregnant women's mother is present, everything seems to be easy.

Labour ward settings inhibit the utilisation of birth companions. Every woman must have her own room and a chair or couch for a birth companion. Tiny said that they do not have those resources; therefore, it is difficult to have birth companions. According to Tiny, "if the other midwife went to theatre, you will be alone in the labour ward with the birth companions; they will be looking up to you". It needs more staff to be able to attend the women in labour and the birth companions. If the government can hire enough midwives and increase space, birth companions will be allowed in the labour ward.

Julia who is 38 years old female midwife has two (2) years' experience working in the labour ward. She defines birth a companion as "somebody who is staying or accompanying the patient in labour". The participant indicated that she will explain to the woman that they will allow her to have a birth companion and if it is impossible to have a birth companion, they will tell the woman the reasons they cannot allow her to come with a birth companion. Husband or relative, mother or sister is allowed to be with the woman in labour. Julia reported that birth companionship is helpful; for example, like when you are having complicated delivery, you can explain to the birth companion. The birth companion will further explain to the woman who will eventually agree to procedures that need to be done.

The space of the labour ward inhibits utilisation of birth companions. Julia further said that "when there is no enough space, birth companions will not be allowed in the labour ward". The health care professionals should give women health education during ANC, telling them that they are allowed to bring birth companions when they are in labour, to improve the availability of birth companions.

Mary is a fifty-eight (58) years old female midwife who has twenty-eight (28) years of experience working in the labour ward. She also defines birth companion as "someone who accompanies a mother when she is in labour, until she delivers."

Mary indicated that she "will be happy if a woman requests to have a birth companion" and will allow the mother to have a birth companion if it is someone she prefers. At the moment, nurses are allowed to be with a woman in labour, but if the woman has brought a birth companion, they do allow them. The birth companions will be useful because of shortage of staff; they will be the midwives' eyes, allay anxieties, as anxiety tends to delay the progress of labour. With a mother who is relaxed, labour will progress fast.

Mary responded that owing "to cultural beliefs, some mothers don't want their families or friends to come to see them when they are in labour. Some other cultures do not have problems with birth companionship". Mary further revealed that some midwives' have attitudes towards birth companionship. Midwives do not want other people to be there when they assist the woman delivering their babies. To improve the availability of birth companions, Mary responded that the midwives should be given workshop on respectful maternity care and mothers to be given health education on labour issues such as birth companions.

Joyce a female midwife who is 30 years old has five years' experience of working in the labour ward, defined birth companions as "any other person that the woman feels comfortable to be with her when she is in labour". Joyce further said that "the person is allowed to be her with from active phase of until delivery". Joyce said that she will not hesitate to allow the woman to have a birth companion, but now owing to COVID-19, they are restricted. "Whoever the woman feels comfortable with as a birth companion is allowed". Joyce perceived "birth companionship as good because it allows the woman to relax. The woman feels comfortable because she is with someone whom she is familiar with, and she is able to progress well without any stress that can affect labour."

The restrictions that the Department of Health has put now which are COVID-19 related inhibit the utilisation of birth companions. Joyce suggested that "midwives should allow every woman to choose anyone she wants to be her birth companion because at the moment only the partner and mother are allowed".

Mercy is a 34 years old female midwife who has six years' experience in the labour ward. She defines birth companion as "someone who accompanies the woman until delivery of the baby". She said that she will be happy "if someone requests to bring along birth companion because the woman will cooperate. A midwife and a companion are allowed to remain with a woman during labour. Birth companions will help in reducing the discomfort of the women in the labour wards and if they are there, they will guide the woman."

A labour ward which lacks privacy and a ward with many beds will inhibit the utilisation of birth companionship as cited by Mercy. Fear that the companion will ask complicated questions may inhibit utilisation of birth companions. In addition, fear that the companion will be calling the midwife now and again was one of the critical challenges the midwives were confronted with in the labour rooms. Mercy indicated that health care professionals are to encourage all pregnant women in the form of health education on birth companionship.

Maria is a 29-year old female midwife who worked in the labour ward for six years, defined birth companion as "a pregnant woman's mother who is helping her daughter in the process of giving birth". She reported that she will "positively accept the woman's request to have a birth companion, since she need the birth companion to support the woman as sometimes many women are admitted in the labour rooms and there is shortage. The woman's mother, husband/partner, health professional and her sister are allowed to be with her during labour". Maria indicated that she "does not have a problem of allowing birth companions, as they will benefit both the midwife and the woman".

Maria pointed out that birth companions will see that the health practitioners are doing everything in their power to help the women in labour. Privacy was cited as one of the factors that inhibit utilisation of birth companions as they do not have adequate space enough to accommodate many people and sometimes they admit many women. Now with COVID-19, Mary said that "they do not allow visitors. Most of women deliver before the woman arrives in the hospital e.g. in taxis". Mary suggested that "midwives should give the pregnant women health talk during

ANC, about the labour ward situation as some of them do not know that their partners are allowed during labour".

Aletta is a 33 year-old female midwife who has six years' experience of working in the labour ward. She defines birth companion as "a person who accompanies the woman who is in labour and decide to stay with the woman until delivery of the baby". Aletta said that she will be happy "if someone requests to bring along a birth companion because some patient cooperate well when they are with a person, they are comfortable with. Anyone whom the pregnant woman agrees to be with, will be allowed to be with her woman in the labour ward. The woman will feel free to tell the birth companion everything she feels, the birth companion will then tell the midwife".

According to Aletta, "most black people are scared to see what is happening in the labour rooms. They just want to stay at home and call to find out if the woman has delivered and also to know the sex the baby". Aletta is afraid that <u>"if an error can occur, there will be somebody who is a witness</u>". Aletta stated that it should be emphasized in ANC that pregnant women are allowed to have birth companions and this should also be written in the ANC records so that the birth companion may be called when the woman falls into labour.

Pearl is a 28 years old midwife who worked in the labour ward for two (2) years. She defines a birth companion as "someone who is there to support the woman in labour. A midwife, husband, mother, relative/sister or anyone of the pregnant woman's choice is allowed to remain with the woman in labour. It is a good thing for someone to be there to support the woman during the process of giving birth.

"Women are depersonalised in hospitals, as they are with a person whom they are unfamiliar with. This will bring a sense of belonging and allay anxiety." The structure was cited as a "factor that inhibits the utilisation of birth companion whereby the rooms are small and they admit many women to such an extent that they don't even have space for someone to accompany the women. Other women have to wait in the antenatal ward until they are four centimetres before they can

be transferred to the labour rooms. You also find out that all the beds are occupied. If they can restructure the hospital where there will be enough room to accommodate the birth companions and the women in labour; this will encourage the utilisation of birth companions".

Alice (42) years old female midwife with two years' experience of working in the labour ward explains that a birth companion "is someone who can be with patient during the labour process. It will be a good idea allowing a person to be with a woman in labour, as there is shortage of staff so they will be useful. A husband is allowed to remain with the woman in labour. It is a good thing to have a birth companion as the woman will cooperate."

"The birth companion will provide psychological and physical support such as massaging the woman. Sometimes is the space, the layout of the ward and cultural beliefs e.g. Africans that inhibit utilisation of birth companions. It is rare for men to observe women delivering the babies, it is a taboo". Alice revealed that "if a midwife knows that she does not have good attitudes towards women, she will not allow birth companions in the labour room". Alice also said that "her community members are not well educated with regard to birth companionship and sometimes it is difficult to control them. It becomes a heavy work to the midwives. The Department of Health is to design the labour ward that has privacy and enough space to allow the birth companions".

Glenda is 35 year-old female midwife who worked in the labour ward for two years. She asserts that a birth companion as "someone who accompanies the woman who is in labour. It is a good thing for a woman to have a birth companion, as the labour process is strenuous. According to the hospital policy, a husband or the mother of a woman who is coming to deliver the baby is allowed to remain with her. The birth companion will alert the midwife if anything arises from the patient; therefore, it is good as midwives will be busy attending to other patients.

There is also overcrowding of patients and shortage of resources in our labour ward. Sometimes it is difficult for one midwife to attend one woman in the labour

room. One of the inhibitors of utilising birth companions is that other people think they know much and they will tell you what you should do whereas the situation does not allow that. To improve the availability of the birth companions, the labour rooms should be more spacious to accommodate the birth companion and the woman. Owing to COVID-19, we need enough space".

Marlin a 45 year-old female midwife has seven years' experience of working in the labour ward. She explains that birth companion is "a person who is there to help the woman to go through labour pains". It is not easy to have a birth companion in a practical situation because when the birth companions are there in the labour ward, there are disturbances. They are not experienced with the midwifery staff and end up affecting the midwifery procedures. Anyone that the woman is comfortable, mother/partner or relative is allowed to remain with the woman in labour. Birth companionship is good because the woman will feel free to communicate anything she wants to the nurse; therefore, the woman will cooperate.

"Birth companion will provide the woman with psychological and physical support like rubbing her back". Marlin mentioned the inadequacy of space which inhibits utilisation of birth companion as women are progressed in an open space where privacy of other patients will be compromised if there are birth companions. The following were needed to improve the availability of birth companions which were: "material resources, human resources and increasing space in a way that privacy is ensured".

Paul is a 27 year-old accoucheur (a male midwife) who has two years' experience of working in the labour ward. He explained that a birth companion is "someone who accompanies the woman in labour as long as the midwife is around. A birth companion can encourage the woman to push when it is time to push; so, the labour can be much easier for the woman therefore it is a good thing. The woman will be given moral support".

"There is an inadequate space in the delivery rooms therefore privacy is compromised. Some families/relatives confront the midwives if they are told that they will not be allowed in the labour rooms owing to lack of privacy or space. The space needs to be increased and enough resources is made available to cater for both the women and the birth companions."

5.4.2 Participants' age

The participants' age was required by the investigator based on the number of participants who answered a question. The participants' age in this research ranged from 27-58 years. The participants' age was vital in this study as the government employs people who are 18 years and above. In this study, the maximum age was 58 years and the minimum age was 27. Table 5.1 reveals that (11 out of 15) participants where between 27 to 35 years while (4 out of 15) where between 36 to 58 years of age.

Table 5.1: Participants' age

Demographic characteristics	Midwives who worked in the labour ward			
Age (n=15)	Frequency	Percentage		
27-35	11	73.33%		
36-58	4	26.67%		
Total	15	100%		

The age demographic characteristics of the study participants allowed the researcher to identify the interval of the participants' age. Table 5.1 shows that most participants who worked in the labour wards were between 27 to 35 years of age.

5.4.3 Participants' years of experience of working in the labour ward

The researcher was interested in the investigation of participant's years of experience of working in the labour ward. According to WHO (2019:4-5) on

Respectful-Maternity-Care-Charter, pregnant women have the right to be provided with high quality care which is provided timely by trained health care professionals. These may not be feasible when the midwives are inexperienced in working in the labour ward. About six participants had two years of experience, while three participants had five years of experience, three participants had six years' experience and one participant had three years' experience, two participants had seven years' experience and one participant had 28 years of experience working in the labour ward of the four district hospitals and one provincial hospital of Limpopo Province. Table 5.2 shows that the participants' years of experience ranged from 2 to 28 years.

Table 5.2: Participants years of experience of working in the labour ward

Demographic characteristics (n=15)	Midwives who worked in the labour ward		
Years of experience	Frequency	Percentage	
2	5	33.33%	
3	1	6.67%	
5	3	20.00%	
6	3	20.00%	
7	2	13.33%	
28	1	6.67%	
Total	15	100%	

The findings reveal that nine out 15 participants had more than three years' experience of working in the labour ward. The two and more years of midwives' experience working in the labour were vital to have information rich participants who witnessed/assisted many women delivering babies. The next topic will examine the knowledge of midwives of what a birth companion is.

5.4.4 Discussions under themes and subthemes on development of guidelines in utilising birth companions of women in Limpopo Province

The following themes emerged from the findings of this study: Description of the existing knowledge on birth companions, midwives' reaction to a woman's request to have a birth companion, a person who is allowed to remain with the woman during labour, midwives' perception of the presence of a birth companion, the woman's benefits on the presence of a birth companion, factors that inhibit utilisation of birth companions, critical challenges confronting the midwife in utilising birth companions and strategies to be done to improve the availability of birth companions.

Table 5.3: Themes and subthemes

Themes	Subthemes
1. Description of the existing knowledge	1.1 Birth companion as someone who
of a birth companion.	accompanies a woman in labour and
	stay until she delivers.
	1.2 Birth companion as a
	person/family member who comes
	and stay with a woman in labour.
	1.3 Birth companion viewed as any
	other person that the woman feels
	comfortable to be with, from active
	phase of labour until delivery.
2. Midwives' reaction to a woman's	2.1 Accept for woman to have a birth
request to have a birth companion.	companion.
	2.2 Surprised as she is not used to
	the situation that allows a birth
	companion to be there.

3. A person who is allowed to remain	3.1 The woman's mother.
with the woman during labour.	3.2 Midwives/Health professionals.
with the woman during labour.	3.3 Husband/partner.
	·
	3.4 Relative, sister
	3.5 Whoever the woman chooses.
4. The midwives' perceptions of the	·
presence of a birth companion.	of birth companions as good.
5. The benefits of the presence of a birth	5.1 Birth companions assist the
companion to the woman.	women to relax and bring a sense of
	belonging.
	5.2 Birth companion helps to allay
	anxiety and offer psychological
	support to the woman.
	5.3 Birth companionship promotes
	labour progress.
	5.4 Birth companions provide physical
	support to the woman.
6. Factors that inhibit utilisation of birth	6.1 Fear that partners will lose
companions	interest in the women.
·	6.2 Women's lack information.
	6.3 Overcrowding of women in labour
	which leads to inadequate space/
	resources which compromises privacy
	in the labour rooms.
	6.4 The cultural belief.
	6.5 COVID-19 restrictions.
7. Critical challenges confronting the	
	'
midwife for utilisation of birth companions	cooperative and confront the
	midwives.
	7.2 Overcrowding of women in the
	labour ward which leads to lack of
	space.

	7.3 Inadequacy of the midwives.
	7.4 Midwives fear of lawsuits.
	7.5 Language problems.
8. Strategies can be done to improve the	8.1 Pregnant women to be given
availability of birth companions.	health education on birth
	companionship.
	8.2 Employer to hire more midwives.
	8.3 Space in the labour rooms to be
	increased and to ensure that the
	women's privacy is provided.
	8.4 Midwives to be give workshop on
	respectful maternity care.
	8.5 The employer to provide midwives
	with adequate resources (tools of
	trade).

The next topic will cover the existing knowledge of a birth companion in detail.

5.4.4.1 Theme 1: Existing knowledge of a birth companion

The objective was to establish the knowledge of midwives towards utilisation of birth companions. Three sub-themes emerged from this theme, namely; existing knowledge that a birth companion as someone who accompanies a woman in labour and stay until the delivery of a baby, knowledge that a birth companion as a person/family member who comes and is with a woman in labour and knowledge that birth companion as any other person that the woman feels comfortable to be with, from active phase of labour until delivery. The participants' answers are presented in Table 5.3.1.

Table 5.3.1: The knowledge of a birth companion by midwives

Themes	Sub-themes
1. Description of the existing knowledge	1.1 Existing knowledge that a birth
of a birth companion.	companion as someone who
	accompanies a woman in labour and
	stay until delivery of a baby.
	1.2 Knowledge that a birth companion
	as a person/family member who
	comes and is with a woman in labour.
	1.3 Knowledge that birth companion
	as any other person that the woman
	feels comfortable to be with, from
	active phase of labour until delivery.

Three sub-themes are discussed in the next topic in details.

Sub-theme 1.1: A birth companion as someone who accompanies a woman in labour and stay with the woman until she delivers.

The study results revealed the existing knowledge of birth companions as explained by the participants. The majority of participants (11 out of 15) described birth companion as someone who accompanies a woman in labour and stay with the woman until she delivers.

Mable defined a birth companion and said: "Birth companion is someone who accompanies a woman in labour and stay with the woman until she delivers."

Mary also defined a birth companion and said: "Birth companion is someone who accompanies a mother when she is in labour, until she delivers."

Aletta also defined a birth companion and said: "Birth companion is a person who accompanies the woman who is in labour and decides to stay with the woman until delivery."

Sub-theme 1.2: A birth companion as a person/family member who comes and is with a woman in labour

The findings of this research indicate that (3 out of 15) participants stated that a person/family member comes and is with the woman, but the time frame was not stated.

Tiny said: "Birth companion is a person/ can be a family member who comes with a woman during labour, be with the woman during labour."

Sub-theme 1.3: A birth companions viewed as any other person that the woman feels comfortable to be when she is in labour, from active phase until delivery.

The findings show that (1 out of 15) participant point out that the person the woman feels comfortable with, will be allowed to be with her only when she is in the active phase of labour until delivery of the baby but not while the woman is in the latent phase of labour.

Joyce said: "Birth companion is any other person that the woman feels comfortable in that when she is in labour, she is allowed to be with from active phase of until delivery." The participants in this research know what a birth companion is.

A labour companionship refers to support provided to a woman during labour and childbirth. It may be provided by a partner, family member, friend, doula or health care professional (WHO 2019:1). According to de Kock, van der Walt and Jones (2010:13-8), a birth companion is someone a labouring woman could benefit from their presence. The birth companion can either be the woman's spouse, partner, friend, relative, caregiver, or a voluntary doula (woman trained to act as a support companion to women during labour and delivery). De Kock et al (2010:13-8) further maintain that birth companion provides unhurried care and attention, reassurance, motivation, comfort, encouragement and physical contact which helps the women to withstand the labour pains. In a study conducted in Southern

Ethiopia by Getahun, Ukke and Alemu (2020:2) define a birth companion also as support provided to a woman during labour and child birth which may be provided by a partner, family member, friend, doula or a health care professional. A companion is the involvement of an empathetic person who provides guidance, knowledge, comfort measures and assistance to a woman to cope with labour and birth stress. The aim of having a birth companion was to provide the woman in labour with emotional reinforcement, praise, reassurance, listening and a constant physical presence (Eid, Salama, Heeba & Mohamed 2020:219).

5.4.4.2 Theme 2: The midwife's reaction to a woman who want to have a birth companion

The objective in theme 3 was to explore and describe the perceptions of midwives towards utilisation of birth companions. The participants were asked the following question: If a woman requests to have a birth companion how will you react to the request? The midwives' reaction was investigated to identify if they have a problem with the accommodation of birth companions in the labour ward. Two sub-themes were identified. Table: 5.3.2 indicates the reaction of the midwife to a woman who requests to have a birth companion.

Table 5.3.2: Midwife's reaction to a woman who request to have a birth companion

Themes	Sub-themes
2. Midwives' reaction to a woman's	2.1 Participants do not have problems
request to have a birth companion.	for woman to have a birth companion.
	2.2 Participants were surprised as
	they were not used to the situation
	that allows birth companions in the
	labour wards.

Most of the participants (13 out of 15) indicated that they do not have problems with a woman who requests to have a birth companion while two out 15

participants said that they will be surprised as they are not used to the situation that allows a birth companions in their institutions.

Sub-theme 2.1: Participants do not have problems for woman to have a birth companion.

The evidence from the study findings shows that (13 out of 15) participants did not have problems for pregnant woman in labour to have a birth companion.

Rose said: "Being as a young midwife, I will not have a problem if they ask me, as they usually request if they want to come with their birth companion or partner."

Mary said: "I will be happy to that request and I will allow that mother to have a birth companion if it is someone she prefers."

Mercy said: "I will be happy because maybe if the companion is here with us, the woman will cooperate because some of the women when a companion is not present, they feel scared. They are not open to us nurses, so if the companion is there they will cooperate."

In the study conducted in Latin America and the Caribbean, De Mucio et al (2020:4) pointed out that there is evidence that birth companion of choice was available for many years but it appears that there were countries in Latin America and the Caribbean that have not implemented birth companion of choice.

WHO (2016:1) revealed that supporting and allowing the woman to have a birth companion is an effective intervention that is respectful of her autonomy which can be vital for improving and providing quality care. The birth companion will provide the woman with emotional and practical support from someone she trusts which can improve the childbirth experience.

Sub-theme 2.2: Participants were surprised as they are not used to the situation that allows a birth companion in the labour rooms.

The findings reveal that (2 out of 15) participants indicated that are not used to see birth companions in their labour wards.

Flora said: "Eish, I will be surprised as we are not used to the situation that allows a person to be there."

Marlin said: "I think with me, it is not easy (Hahaa), to have a birth companion in a practical situation because when we have birth companions in most of the time, there are disturbances. They are not experienced with the nursing staff and end up affecting the nursing procedures."

It is evident from the above statements that some of the participants will find it difficult to allow birth companions in the labour wards where they are working. The overall findings from the sub-themes reveal that most of the participants do not have problems if women want to have birth companions when they are in labour.

The majority of participants acknowledged that they do not have problems when a woman's request to have a birth companion. This is in contrast to the study conducted in Tshwane District, South Africa by Malatji and Madiba (2020:8) who found that women reported that they were denied to have birth companions although they desired to have one. The women's deprivation of a birth companions increased the feeling of being abandoned and alone during labour and childbirth.

5.4.4.3 Theme 3: A person who is allowed to remain with the woman during labour

The objective in theme 3 was to explore and describe the perceptions of postnatal women towards utilisation of birth companions. This question was interested in investigating the midwives' knowledge on who was supposed to support the woman during labour, which shows that one out of 15 participants did not answer.

Table 5.3.3 indicates people who were supposed to be birth companions of women during labour process.

Table 5.3.3: A person who is allowed to remain with the woman during labour

Themes	Sub-themes
3. A person who is allowed to remain	3.1 The woman's mother.
with the woman during labour	3.2 Midwives/Health the participants
	also professionals.
	3.3 Husband/partner.
	3.4 Relative, sister
	3.5 Whoever the woman chooses

Sub-theme 3.1: The woman's mother

The results reveal that (five out of 14) participants said a mother is allowed to remain with the woman during labour.

Maria said: "Mother of a pregnant woman, husband/partner, health professional, sister."

Rose said: "Husband, mother for now, they are the ones allowed."

Julia said: "Husband or relative, mother or sister."

Sub-theme 3.2: Partner/husband

The results reveal that most of the participants (eight out of 14) reported that the partner is allowed to remain with the woman in labour.

Alice said: "Husband."

Glenda said: "According to the hospital policy, husband or the mother of a person who is coming to deliver."

Sub-theme 3.3: Midwives/ Health professionals

The study results indicated that (five out of 14) participants reported that midwives/ health care professionals are allowed to be with a woman in labour.

Flora said: "Midwife or birth companion can come and stay with the woman."

Mercy said: "A midwife, a companion so that the woman can feel free and deliver a normal baby."

Maria said: "Mother of a pregnant woman, husband/partner, health professional, sister."

Sub-theme 3.4: Relative or any one the woman chooses

The findings show us that, (six out of 14) study participants reported that whoever the woman chooses, can be a birth companion.

Aletta said: "Anyone as the pregnant woman agreed to be with them."

Marlin said: "Anyone that the woman is comfortable, mother/partner or relative."

Pearl said: "A midwife, husband, mother of the pregnant woman, a relative/sister or anyone."

The results show that family members, partners or anyone the woman is comfortable to be with, can be a birth companion. In a study conducted in Ghana, Guinea, Nigeria and Myanmar, Balde, Nasiri, Mehrtash et al (2020:3) reported that 47% family members were the most common person that acted as labour companions, while in Nigeria 47.9% were male partners. About 68% of women had a birth companion of choice during labour and childbirth in Bangladesh. Approximately 81% preferred the mother to be their birth companion, 44% mother in law, 42% sister, 32% husband, 15% aunt and 18% preferred others to be their birth companions during childbirth process. Among women who gave birth in a

health facility, 39% indicated that the health provider/health facility did not allow them to have a companion of their choice (Perkins et al 2019:8).

5.4.4.4 Theme 4: Midwives perceptions of the presence of a birth companion

The objective in theme 3 was to explore and describe the perceptions of postnatal women towards utilisation of birth companions. This theme investigated how the midwives perceived the presence of birth companions in the labour wards. The rationale was to ensure if midwives are unable or able to accept the birth companions in the labour wards. Table 5.3.4 present the midwives' perceptions of the presence of a birth companion.

Table 5.3.4: Midwives perceptions of the presence of a birth companion

Th	emes					Sub	-them	es			
4.	The	midwives'	perception	of	the	4.1	Par	ticip	ants	perceived	the
pre	esence	of a birth c	ompanion			pres	ence	of	birth	companions	as
						good	d.				

Sub-theme 4.1: Participants perceived the presence of birth companions as good.

All participants (15 out of 15) reported that they perceived the presence of birth companions as good.

Paul said: "Is a good thing because a companion can encourage the woman to push so, the delivery of the baby can be much easier to the woman."

Glenda said: "I think it is a good thing because the woman will feel free to communicate anything she wants to the nurse who will be helping her, thus will cooperate."

Alice said: "I don't have a problem. It is a good thing as the woman will cooperate."

The study results show that all participants perceived the presence of birth companions during labour to be good.

In a study conducted in Ethiopia by Sheferaw, Bazant, Gibson et al (2017:8) concur with the findings in this study that the health care workers in their investigations do not have problem in birth companionship as they frequently allowed a support person to be with the women during labour. Women appreciated the presence of a continuous support person who provided them with individualised attention during labour and childbirth (Lunda, Minnie & Benade 2018:8).

5.4.4.5 Theme 5: The benefits of the presence of a birth companion to the woman

The objective in theme 3 was to explore and describe the perceptions of midwives towards utilisation of birth companions. The theme investigated the benefits of birth companions on the woman to be able to see if it's worth for a birth companion to remain with the woman during a period of labour and the health sector managers to accept the accommodation of the birth companions. One out of 15 participants did not answer this question. Table 5.3.5 shows the benefits of the presence of a birth companion to the woman.

Table 5.3.5: The benefits of the presence of a birth companion to the woman

Themes	Sub-themes	
5. The benefits of the presence of	5.1 Birth companion will assist the woman to	
a birth companion to the woman	relax and bring sense of belonging.	
	5.2 Birth companion will help to allay anxiety	
	and offer psychological support to the woman	
	in labour.	
	5.3 Birth companionship promotes labour	
	progress.	
	5.4 Birth companions provide physical	
	support to the woman.	

Sub-theme 5.1: Birth companions assist the woman to relax and bring a sense of belonging.

About (one out of 14) participant said that birth companions will allow the women to relax.

Pearl said: "It will allay anxiety of the woman." Participant further said that: "In hospitals women are depersonalised as they are with a person whom they are unfamiliar with. This will bring a sense of belonging."

Lunda et al (2018:9) report that good interpersonal relationships between the woman and the birth companion promote steadiness in the woman and trust in the support person, facilitating interaction with birth companion. Women need to be relaxed during labour and childbirth.

Sub-theme 5.2: Birth companion will help to allay anxiety and offer psychological / moral support to the woman.

The results on the sub-theme indicate that (one out of 14) participants did not answer this question. About half (seven out of 14) participants reported that birth companions will help to allay anxiety and offer psychological/moral support to the woman.

Paul said: "Birth companion will help with some sort of moral support."

Flora said: "It will relieve anxiety on the woman and the woman will have confidence and cooperate."

According to WHO (2019:1), birth companions provide women with informational support about childbirth and bridge communication gaps between clinical staff and women. Birth companions also provide emotional support and non-pharmacological pain relief such as meditation and massage. Birth companions act as advocates for the women, speaking in support of the woman and her preferences. Pregnant women in the study conducted in Kenya reported that they felt at ease with the re-oriented traditional birth attendants who offered them psychological support during pregnancy and delivery (Anono, Ochola, Wawire et

al 2018:6). Birth companions will provide a continuous support to the woman that includes emotional support, comfort, protects, informs, and offers suggestions and supports. A birth companion can help the woman to move/walk around, change position and also use awareness practices. The continuous support can be provided by a woman's family, a midwife, a nurse, a trained birth supporter or anyone close to the woman (WHO 2018:2).

Sub-theme 5.3: Birth companionship promotes labour progress.

The findings of the research show that (three out of 14) participants indicated that the availability of birth companions will promote good labour progress.

Mary said: "Birth companion will allay anxiety because they will be accompanying the woman since we know that anxiety affect the progress of labour and with a mother who is relaxed, labour will progress fast."

Joyce said: "The woman feels comfortable because she is with someone whom she is familiar with, and she is able to progress well without any stress that can even affect labour."

According to WHO (2016:1), research demonstrates that the presence continuous support by birth companions enhance physiological process of labour, improves childbirth outcomes, reduce duration of labour, increased rates of spontaneous vaginal birth and decrease the use of medical interventions; for example, Caesarean section, use of analgesia. The woman experiences less fear and distress during labour and also babies are less likely to have low five minutes Apgar score (a numeric description of the condition of the new born designed for rapid assessment at birth, developed by Dr Virginia Apgar).

Sub-theme 5.4: Birth companions provide physical support to the woman.

Participants (3 out of 14) reported that birth companions will reduce discomfort of the woman during labour.

Marlin said: "Birth companion will give her emotional, psychological and physical support like rubbing her back."

Alice said: "Ehh, for example, during pain management, you can give medical treatment then psychologically the patient will be having someone next to her who will be doing massages and comforting her."

The findings on this theme show that participants have knowledge on the benefits of birth companions. This is vital for the promotion of birth companions. The woman who chooses to have a birth companions will be provided with the preceding benefits from their chosen birth companion. According to the study conducted in rural Northern Ghana cited they preferred to give birth at home as they will be having their mothers and women who will stay close to provide support like back massage which will help them to go through the delivery process without any pain or anxiety (Adatara, Strumher & Mwini-Nyaledzigbor 2019:7). They further explained that in health care facilities, family members are not allowed in the delivery rooms. In the study conducted in Limpopo Province of South Africa, 25% of women reported that midwives provided them with physical care (Maputle 2018:8).

5.4.4.6 Theme 6: Factors that inhibit utilisation of birth companions

Objective four identified and described factors that inhibit non-utilisation of birth companions by the midwives and managers. The investigator was interested in finding out if there are factors that inhibit midwives in the utilisation of birth companions so that guidelines can be developed to promote the utilisation of birth companions in the labour wards. Table 5.3.6 presents factors that inhibit utilisation of birth companions. Three out of 15 participants cited fear that their partners will lose interest in the women and lack of pregnant women's knowledge as factors that inhibit utilisation of birth companions while other participants reported inadequate infrastructure/resources, African cultural beliefs and COVID-19 restrictions.

Table 5.3.6: Factors that inhibit utilisation of birth companions

Themes	Sub-themes
	0.4.5
6. Factors that inhibit utilisation of	6.1 Fear that partners will lose interest in the
birth companions	women.
	6.2 Women's lack information.
	6.3 Overcrowding of women in labour which
	leads to inadequate space/ resources and
	midwives which compromises privacy in the
	labour rooms.
	6.4 The cultural belief.
	6.5 COVID-19 restrictions.

Sub-theme 6.1: Fear that partners will lose interest in the women

The research results show that (one out of 15) participants indicated that women were afraid.

Mable said: "Due to lack of information about birth companions and fear, others do not prefer their partners to be there when they deliver their babies; they say their partners will lose interest in them."

Aletta said: "Black people in most of the cases are scared; they don't want to see what is happening in the labour room, as they afraid of being traumatised. They just want to stay at home and call to find out if the woman has delivered and also to know if the baby is a girl or boy."

The Arab, Nepalese and most of the Russian women believed that the birthing process does not need spectators like husbands (Lunda et al 2018:5). This statement confirms that the women did not appreciate the presents of their partners during labour and childbirth.

Sub-theme 6.2: Women's lack information

The findings reveal that lack of information was reported by (two out of 15) participants.

Rose said: "Our women do not have knowledge as only few who are approaching us that they want to come with their birth companions. Majority of the women come alone saying that they stay alone."

Mangesha, Desta, Maeruf and Hidru (2020:3) assert that 16 to 92.5 percent of women in 15 of the studies consistently dishonoured the right to information and informed consent during a facility-based childbirth. Lack of information during labour and childbirth may inhibit utilisation of birth companions. Some of the participants in a study conducted in Lilongwe, Malawi further stated that they did not receive any information on childbirth during antenatal clinic visits or during labour (Munkhondya et al 2020:308).

Sub-theme 6.3: Overcrowding of women in labour which leads to inadequate space/resources

The majority of participants that is: (nine out of 15) said that the space is inadequate; therefore, privacy is compromised in the labour rooms.

Glenda said: "In our public institutions there is lack of resources and shortage of staff. Sometimes in our labour rooms, it is difficult for one midwife to attend one woman as there is overcrowding of patients."

Tiny said: "Labour ward setting: for the birth companion to be utilised in a hospital, every woman must be in her own room and have a chair or couch for a birth companion to be there. In our hospital we do not have that. Therefore, it is difficult for us to have birth companions."

Inadequate space of the labour wards was cited as constraints for birth companionship as it was perceived that privacy could not be maintained as wards would be overcrowded. Some of the labour wards are separated with a curtain

and therefore other women's privacy is invaded; therefore, only female's companions allowed. The allowance of a female birth companion led to restriction of women's choices (WHO 2019:9).

Sub-theme 6.4: Inadequate materials resources and staff which compromises the privacy of women in the labour rooms

Participants (six out of 15) reported that there was an inadequacy of material and staff in the labour room which compromises the privacy of women.

Mercy said: "Labour ward have no privacy, when there are many beds in a ward, we will not allow birth companions."

Glenda confirmed and said: "In our public institution there is lack of resources and shortage of staff." Glenda went on to say that: "Sometimes in our labour rooms, it is difficult for one midwife to attend one woman. There is also overcrowding of patients."

According to a study conducted in India by Mayra et al (2021:6) in the interviews with midwifery leaders from United Kingdom and Switzerland further indicate that the nurse-midwives were frustrated as they were overburdened by work overload, lack of infrastructure and unhygienic birthing environment which are disrespectful to the women. One of the midwives reported that the birth rate increased from 400 to 1000 per month over the last year but the number of staff remained the same. Overcrowding of women in a unit might cause frustration on the midwives as there will be limited staff with many women who need quality midwifery care. Shortage of staff was also reported in both rural and urban areas of South Africa by Lambert et al (2018:260) whereby health care providers recognised that women in labour wanted more care given to them while they did not feel able to provide this.

Sub-theme 6.5: The cultural belief

The study results revealed that (two out of 15) participants reported that the African culture does not allow men to witness the delivery of babies. The African

cultural belief interferes with the needs of a pregnant woman as men are not allowed to support their women during labour.

To support the preceding statement Alice said: "Sometimes is the space, the layout of the ward, cultural beliefs-with us Africans it is rare for men to observe women delivering babies, it is a taboo."

A meta-synthesis by Lunda et al (2018:5) found that women in their study were worried and embarrassed about the presence of their husbands as it was culturally not acceptable for their husbands to witness their wives giving birth. Lambert et al (2018:259) report that women in the rural areas for cultural reasons sometimes negatively perceived companionship. In most instances, it appeared that a companion had to be the male partner and this was not acceptable.

Sub-theme 6.6: COVID-19 restrictions

As from March 2020, South Africa and the rest of the world were hit by a COVID-19. Since then, there were restrictions that were put in place to curb the spread of the infection whereby restrictions of visitors in the health care institution was among the rules. About (two out of 15) participants mentioned that one of the factors that inhibit utilisation of birth companions since March 2020 was COVID-19 restrictions. This was indicated by Joyce who said: "The restrictions that have been put now, which is Covid-19 related." Maria confirmed and said: "Now with COVID-19 we do not allow visitors."

Wright, Nassar, Visser, Ramasauskaite, and Theron (2020:174) assert that many facilities do not allow companions or partners to remain with women during labour. This may be partly owing to the design of shared delivery rooms, lack of privacy example partitions and curtains or out-dated hospital regulations. The restrictions were also put in place to minimise infection during the COVID-19 pandemic.

Several hospitals in the New York City announced a policy of prohibiting all visitors to labour, delivery and postnatal ward in an attempt to reduce exposure to COVID-19 infections. The guidance was provided by the New York Department of Health

to help reduce the spread of COVID-19 (Arora, Mauch & Gibson 2020:1). This practice violated the women's right for: The right to information, informed consent, respect for choices and preferences including a birth companion of choice during maternity care (Jolivet, Warren, Sripad et al 2020:392). Jolivet et al (2020:293) further indicate that the COVID-19 crisis highlighted the deficiencies within the health systems but also presented the opportunities to strengthen and improve the quality and equitability of maternal health care. The health care professionals should employ mechanisms to protect, uphold and fulfil the rights of women and new-borns while reducing the spread of infections. The health care professionals are to respect the women's right to have a birth companions especially who do qualify (according to COVID-19 guidelines), because no one knows when the pandemic will end.

5.4.4.7 Theme 7: Critical challenges confronting the midwife for utilisation of birth companions

Objective four identified and described factors that inhibit non-utilisation of birth companions by the midwives and managers. Participants identified the following critical challenges: Birth companions were not cooperative and confronting the midwives, overcrowding of women in the labour wards, shortage of staff and resources and midwives' fear of lawsuits.

Table 5.3.7: Critical challenges confronting the midwife for utilisation of birth companions

Themes	Sub-themes		
7. Critical challenges confronting	7.1 Birth companions are not cooperative		
the midwife in utilisation of birth	and confront the midwives.		
companions	7.2 Overcrowding of women in the labour		
	ward which leads to lack of space		
	7.3 Inadequacy of the midwives.		
	7.4 Midwives fear of lawsuits.		
	7.5 Language problem		

Sub-theme 7.1: Birth companions are not cooperative and confront the midwives.

Participants (five out of 14) stated that the birth companions are not cooperative, and confronting the midwives when they are executing their midwifery regiments.

Mable went on to say: "Other companions are not cooperative; they will be moving up and down not respecting the labour ward guidelines, interfering with our work and telling us what to do."

Glenda also said: "Other people think they know much. They may know but may not understand the situation you are in. They will tell you what you should do whereas the situation does not allow that."

Tiny further said: "Eish, pause: if you are working alone, the other midwife went to theatre and the birth companions are there in the ward, they will be looking up to you. It needs more staff to be able to attend all the birth companions."

In the study conducted in North West of South Africa participants reported that some of the women from other cultures come with many family members demanding many things from the midwives (Spencer et al 2018:5). There is a need for midwives to learn other people's culture to be able to work effectively with them.

Maziero, Zani, Bernardy et al (2020:533) in the study conducted in University Hospital of north of Panama support the statement made by Glenda that during normal and Caesarean section delivery, health care professionals still show resistance towards the presence of birth companions. The health care professionals indicate that the birth companions interfere with their professionals' procedures while not understanding what is happening.

Sub-theme 7.2: Overcrowding of women in the labour ward which leads to lack of space

The findings show that (three out of 15) participants said that there are inadequate resources.

Paul said: "Some families/relatives may not take it well if you tell them that you will not allow a birth companion to be available in the labour room due to lack of privacy or space."

Marlin went on and said: "Working space to be designed for privacy."

Spencer et al (2018:5) in the study conducted in North West Province of South Africa cited that there is inadequate space which compromised privacy of women in labour. Overcrowding may pose a risk of infection to the women, staff and birth companions. According to a study conducted in Tanzania, it was also reported that about 32.9% of women were not happy with lack of privacy during labour and delivery of babies (Bisinga, Massenga, Mwanamsangu et al 2019:7).

Sub-theme 7.3: Inadequacy/shortage of the midwives

About (two out of 15) participants indicated that there is shortage of staff. Mary pointed out the theme of critical challenges related to inadequacy of midwives and said: "Companions may need your attention which you will not manage to attend to their request while there is shortage of staff."

Tiny also said: "It needs more staff to be able to attend all the birth companions."

Spencer et al (2018:5) further report that there is shortage of midwives to be able to provide continuous support during labour and childbirth as many patients were admitted.

Sub-theme 7.4: Midwives fear of lawsuits

The findings indicate that (one out of 15) participant stated that she fears law suits. Pearl said: "If an error occurs, there will be somebody who is a witness."

Some midwives in the study conducted in China expressed fears of misconduct, being judged and blamed by others when they have failed to detect some abnormalities. Other participants cited the feelings of anxiety, tension and overwhelming demands of midwifery care (Gu, Wang, Li & Qian 2020:102).

Sub-theme 7.5: Language barrier

Women from neighbouring countries do not know the languages that are being spoken in Limpopo Province. One out of 15 participants indicated that there is a language barrier with women who cannot understand English and languages that are being spoken in Limpopo Province.

Rose said that "Most women who come from neighbouring countries do not know the languages that are being spoken in Limpopo Province".

Maputle (2018:4) found that one of the participants indicated that she did not understand the language of the midwife. Therefore, the midwife failed to cater the woman with her labour and birth cultural preferences.

5.4.4.8 Theme 8: Strategies to improve the availability of birth companions

Objective 4 four, being to develop guidelines on promotion of birth companions in public health facilities where delivery of babies is taking place to improve labour outcomes. Participants have suggested strategies to improve the availability of birth companions in the health sector labour wards to overcome the challenges/complications that the mothers and their babies may experience during the labour process.

Table 5.3.8: Strategies to improve the availability of birth companions

Themes	Sub-themes
8. Strategies to be done to	8.1 Pregnant women to be given health
improve the availability of birth	education on birth companionship.
companions	8.2 Employer to hire more midwives.
	8.3 Space in the labour rooms to be
	increased and to ensure that the women's
	privacy is provided.
	8.4 Midwives to be give workshop on
	respectful maternity care.
	8.5 The employer to provide midwives with
	adequate resources (tools of trade).

Sub-theme 8.1: Pregnant women to be given health education on birth companionship.

Study findings revealed that the pregnant women do not have knowledge related to birth companions. Participants (six out of 15) indicated that pregnant women should be given health education to improve the availability of birth companions in the labour wards.

Mable confirmed and said: "The pregnant women to be given health education starting from local clinics, even in the hospitals when they come for high risks clinic."

Rose also said: "Midwives to give women health education so that they will know that they are allowed to bring along a birth companion."

In the study conducted in South Africa stated that none of the women who were interviewed had a birth companion. The staff members reported that they had staff shortages and structural challenges. Therefore, they did not provide pregnant women with knowledge related to birth companions (Lambert et al 2018:259).

Sub-theme 8.2: Employer to hire more midwives.

The study findings reveal that (three out of 15) reported that employer should hire more midwives to render midwifery services.

This was indicated by Marlin who said: "We need material resources, human resources and space."

Flora supported Marlin and said: "Midwives should be enough to be able to allow birth companions."

Spencer et al (2018:6) suggested that more posts for doulas, advance midwives and Postgraduate Diploma in Midwifery and Neonatal Nursing Science should be enough to be able to provide optimal care including continuous support during labour and childbirth.

Sub-theme 8.3: Increased space in the labour rooms is required to ensure that the women's privacy is provided.

The participants (six out of 15) reported that enough space to be created by employer to accommodate and provide privacy to the women in labour.

Tiny supported the notion that the space should be increased by saying: "If the government can hire staff and increase space, we will allow birth companions in the labour ward."

Glenda said: "The employer needs to make the labour rooms more spacious to accommodate also the birth companions so that the woman can be able to walk around."

The labour wards to be kept clean, well ventilated and appropriately illuminated and children/neonatal areas that is adequately equipped and maintained to be provided to the woman to allow privacy (WHO 2018:22).

Sub-theme 8.4: Midwives to be given workshop on respectful maternity care.

Participant (one out of 15) participant stated that a workshop is needed to teach the midwives on respectful maternity care to correct bad attitudes.

Mary said: "Bad attitudes: Midwives to be given workshop on respectful maternity care and mothers be given health education on labour issues e.g. birth companions."

Bisinga et al (2019:7) found that 73% of women reported one form of disrespect and abuse in the labour rooms during the delivery of babies. Mayra et al (2020:1) also indicate that there were factors that lead to disrespect and abuse were age, gender, physical appearance, education, social status, family support, culture of abuse, myths around childbirth and sex-based discrimination.

In a study conducted in Cape Town of South Africa by Martin and Filies (2018:68), it was recommended that the institution should keep midwives informed about formal measures that ensure professional accountability for the wellbeing of the women. The study further indicates that refresher training on ethics of care to be offered regularly for all the midwives.

Sub-theme 8.5: The employer to provide midwives with adequate resources (tools of trade).

According to the study findings, (one out of 15) participant reported that midwives need adequate resources to improve the availability of birth companions.

This was indicated by Paul who said: "We can change the structure-ensuring the availability of enough resources to cater for the birth companions." The participants were aware of the measures that can be taken to promote utilisation of birth companions in their health care facilities.

WHO (2018:22) indicates that the health care facilities should provide resources for the woman and her companion and also for the health care professionals to provide respectful maternity care.

5.5 CONCLUSION

In this chapter, the study elaborated on the reaction of the participants related to the non-utilisation of birth companions in health care facilities and themes as well as the themes and sub-themes that emerged from the research. Most participants cited the challenges that inhibit utilisation of birth companions as their lack of cooperation and inadequate space/lack of privacy Chapter 6 presents the discussion of the findings.

CHAPTER 6

DISCUSSION, ANALYSIS AND INTERPRETATION OF FINDINGS

6.1 INTRODUCTION

The implementation of utilisation of birth companions can assist the women in labour and midwives to fill the gaps of social isolation and increase a sense of belonging. Data were presented and analysed in chapter four and five. The aim of the study was to investigate the utilisation of birth companions by women in the public sector labour wards of Limpopo Province, South Africa to develop guidelines for implementation of birth companions. The Roy's Adaptation Model was used, which specifies that humans are adaptive systems that cope with change through adaptation. The model postulates that the midwifery interventions can help the labouring women to adapt to the labour processes (Polit & Beck 2017:134). This model will be applied in this chapter.

The objectives of the research were as follows:

Objective one:

To establish knowledge of postnatal women towards utilisation of birth companions

The researcher developed a questionnaire with the assistance of the supervisor and the statistician. The literature was reviewed in chapter 2 and chapter 3 focused on the research methodology. In chapter 4, 288 out of 299 (96.12%; f=288) respondents were not having a birth companion. These indicate that 96% of women were having a challenge in utilising birth companions. The challenges which the women had were lack of information. Figure 4.6 illustrates that 245 out of 304; (80.59%; f=245) respondents did not have information related to birth companions. Table 4.17 indicates that some respondents 10 out of 14 (71.43%; f=10) were afraid that their birth companions especially (partners) will be afraid of making babies if things do not go as anticipated. Seventy two (72) out of 298

(24.16%; f=72) respondents agree that the relationship with their partners will be decreased if they become their birth companions.

Chapter five revealed that all midwives (15 out of 15) were able to explain what a birth companion is. There is no knowledge gap with midwives of Limpopo Province that inhibits utilisation of birth companions in the health care facilities. Even though the midwives know what a birth companion is, the where factors/challenges that inhibit utilisation of birth companions in health care facilities that were identified. The midwives said that birth companions are not cooperative and they confront them while executing their midwifery regimens, overcrowding of women in the labour wards, inadequacy of midwives and fear of lawsuits. Table 5.3.7 displays the critical challenges that inhibit the midwives in utilisation of birth companions.

Objective two:

To explore and describe the perceptions of postnatal women towards utilisation of birth companions

The researcher explored and described the perceptions of postnatal women towards the utilisation of birth companions in public hospitals of Limpopo Province. Two-hundred and sixty (260) out of 304 (85.53%; f=260) respondents in Figure 4.15 indicated that it is important to have birth companions and 252 out of 265 (95.09%; f=252) stated that they prefer their family members to be their birth companions. Despite that most postnatal women perceive the presence of birth companions as important; fears that can inhibit utilisation were identified. According to Table 4.16, 78 out of 297 (26.26%; f=78) respondents stated that they agree that their partners will faint during delivery.

Objective three:

To explore and describe the perceptions of midwives towards utilisation of birth companions (qualitative method)

The majority of participants (13 out of 15) indicated that they do not have problems with a woman who request to have a birth companion, while (2 out 15) participants

said that they will be surprised if a woman request to have a birth companion as they are not used to the situation that allows a birth companion in their institutions. Some respondents 3 out of 14 (21.43%; f=3) in this research stated that some birth companions may increase their anxieties, even though the majority of participants said that it is good to have a birth companion.

Objective four:

To identify and describe factors that inhibits non-utilisation of birth companions by the midwives and managers (qualitative method).

The study results revealed that; 1 out of 15 participants said that women may be afraid that their partners might lose interest in them, 2 out of 15 participants reported that the women lack knowledge on birth companionship, 9 out of 15 stated that overcrowding, inadequate space and lack of privacy, 6 out of 15 participants cited lack of resources, 2 out of 15 participants claim that the African cultural belief as one of the inhibitors of utilisation of birth companions and COVID-19 restrictions that the health care facilities has imposed.

Some respondents 3 out of 14 (21.43%; *f*=3) in this research stated that some birth companions may increase their anxieties. Fear was cited as a factor that inhibits utilisation of birth companion as displayed in Table 4.16 whereby 78 out of 297 (26.26%; *f*=78) respondents agree that their partners will faint during delivery. The participants need to believe that they can be able conquer their fears related to accommodating the birth companions to help them deal with labour challenges. The health advices, the physical, psychological, and emotional support the respondents will be provided with by their birth companions will alleviate the labour challenges and promote good health outcomes for both mother and baby.

The benefits and motivating factors

The benefits and motivating factors will encourage the women and birth companions to belief that they will manage the labour process with fewer challenges. According to Table 4.13, 230 out of 295 (77.97%; *f*=230) respondents

believe that the relationship between the mother, partner and baby will be enhanced if the partner is a birth companion. Table 4.13 further shows that 255 out of 300 (85.00%; *f*=255) respondents agree that a birth companion is important for mother.

Mothers remember what transpired in the labour wards when they indicated the factors that can motivate them to have a birth companion. Eight (8) out of 24 (33.33%; *f*=8) respondents said that there will be strong bond between mother, father and infant and 5 out of 24 (20.83%; *f*=5) reported that they will receive psychological assistance from the birth companions. Each member of society desires to be accepted by her/his members of a community or family which enhance a sense of belonging.

6.2 RESEARCH DESIGN AND METHODS

A descriptive, explorative, cross sectional and convergent mixed methods research design was utilised to describe and explore the utilisation of birth companions of women in Limpopo Province, South Africa. The study was conducted in four regional hospitals and one tertiary hospital of Limpopo Province that were conveniently and purposively sampled in the above mentioned districts. The four regional hospitals and one tertiary hospital offer 24 hours' services, deliver a vast number of women with low risk and high risk pregnancies/ babies from local clinics and hospitals.

A questionnaire was used to obtain data from purposively and conveniently sampled postnatal women. The participants who met the inclusion criteria were conveniently and purposively sampled. A detailed description of data collection process was discussed in Chapter 3. A semi-structured interview was used to collect qualitative data and a questionnaire was utilised to collect quantitative data. The researcher used the literature; the Roy's adaptation model to develop the questionnaire, the qualitative research questions with the assistance of the statistician and the supervisor. The interview took about 40 minutes, while the questionnaire took 20 to 25 minutes to complete. The following headings were

covered in the interview guide: Age, work experience in the labour ward, explanation of a birth companion, reaction of the midwife related to woman's request to have a birth companion, a person who is allowed to be a birth companion, how midwives perceive the presence of a birth companions, the benefits of birth companions on the woman, factors that inhibit utilisation of birth companions, challenges that confront midwives when it comes to utilisation of birth companions and what can be done to improve the availability of birth companions in health care facilities. The quantitative data collection instrument includes the following: Section A: The socio-demographic characteristics, Section B: The reproductive health information, Section C: Physical factors, Section D: Psychosocial factors, Section E: The motivating and enabling or modifying factors and Section F: The challenges/barriers for utilising birth companions. The open ended questions were analysed by the researcher while the structured questions were analysed using a computer software (SPSS Version 26) with the assistance of the statistician.

Twenty-five participants were invited to take part in the interview and data saturation was reached with fifteen participants. Three hundred and five (305) respondents were sampled and invited to participate in the quantitative study and 304 respondents returned the completed questionnaires. The response rate was 99.67%, which was enough to generate accurate results. Polit and Beck (2017:743) state that a normal well-designed response rate is 80% to 90%.

The women need self-efficacy to utilise birth companions. The emotional support they will receive from the birth companions will encourage the woman to get the good health outcomes they envisage. Roy's Adaptation Model was used to examine factors that may help in the adaptation of women to utilise birth companions. Health care professionals are recommended to equip mothers and community members with information about birth companions through campaigns and other media to promote utilisation of birth companions.

6.3 INTERPRETATIONS OF THE RESEARCH FINDINGS

Effective management of women during labour enhances the promotion of maternal comfort, prevention of maternal and neonatal morbidity and mortality.

6.3.1 Section A: The socio-demographic characteristics

The following biographic data of postnatal women were covered in Section A: age, marital status, alive and deceased children, employment status and a person who is staying with the respondents. Postnatal women who were in labour for more than three hours, delivered normally (vaginally) and from 18 to 45 years of age participated in this study. The reason behind the chosen criteria was to have women who have fresh memories still remembers what transpired in the labour rooms. The socio-demographic characteristics of the midwives covered the age from 27 years to 58 years and experience of working in the labour ward ranged from 2 years to 28 years.

The following themes of qualitative data presented in Chapter 5 which were: Participants' age, years of experience of working in the labour ward; explanation of what a birth companion is, the midwives' reaction when a woman request to have a birth companion; a person who is allowed to be a birth companion; how midwives' perceive the presence of a birth companion; the benefits of birth companions on the woman; factors that inhibit utilisation of birth companions; challenges that confront the midwife when it comes to utilisation of birth companions; and measures to improve utilisation of birth companions in health care facilities.

6.3.1.1 Respondents' (Postnatal women) age (n=304)

The results in Table 4.5 reveal that 256 out of 304 (84.21%; *f*=256) respondents were 18 to 35 years old while 48 out of 304 (15.79%; *f*=48) were 36 to 45 years old. Many women deliver their babies during the 18 to 35 years' category because they are still sexually active (within the bearing age) than the 35 to 45 years of age.

The majority of respondents 84% were in the 18 to 35 years old category. The average age of respondents in this research was 27.34 years. In the study conducted in South Africa, Malatji and Madiba (2020:5) reported that 36 women participated in their study. The age of participants ranged from 18 to 41 years of age while the average was 29 years. Most of the participants were between 21 and 35 years and four women were younger than 20 years old while seven were above 36 years. Similar to this investigation, there were 435 participants who had a mean age of 27.4 years in the study conducted in Rwanda by (Mukamurigo, Dencker, Nyirazinyoye, Ntaganira & Berg 2019:80).

6.3.1.2 Participants' (Midwives) age

The inclusion criteria in Chapter 3 (Refer to section 3.3.1.3) indicate midwives with two or more years' experience of working in the labour ward, aged 18 years and above. The reason for choosing midwives over 18 years of age is that they are old enough to be able to give consent to participate in the study. The findings in this study reveal that the majority of the participants were from 27 to 35 years of age. According to a study done in India, 34 participants who were interviewed aged between 46 and 83 years (Mayra, Matthews & Padmadas 2021:2).

6.3.1.3 Marital status (n=302)

According to Table 4.5, 87 out of 302 (28.81%; *f*=87) respondents were married/cohabiting (in a relationship) while 215 out of 302 (71.19%; *f*=215) were single. The majority of women (71%) were not in a relationship and this may reduce the likelihood of non-utilisation of birth companions. In contrast to this study, most women 72% in the study conducted in Cameroon were married (Bassah, Nkengbeza, Ambe & Ebob-Anya 2020:33).

6.3.1.4 Number of live children (n=304) and Number of deceased children (n=34)

All the respondents answered the question on number of live children (n=304). This question was developed to ascertain if the respondents received or had a chance to be given information on birth companionship from the health care professionals. The respondents were to indicate the number of live and deceased children they are having. Table 4.6 indicate that 116 out of 304 (35.16%; f=116) respondents had 1 child alive and 188 out of 304 (61.84%; f=188) had 2+ live children. Twenty-six 26 out of 34 (76.47%; f=26) postnatal women had 1 deceased child, 7 out of 34 (20.59%; f=7) had 2 children deceased and 1 out of 34 (2.94%; f=1) had three children who were deceased. The reasons behind the investigations of children who are alive and deceased was to find out if the women had a chance of being told about utilisation of birth companions to even those whose children has passed on. Most women 61.84% had more than 2 children which show that they had a chance to be told about birth companions. According to systematic qualitative evidence by Beake et al (2018:80) said that parity/ prior experience of labour had a positive influence of the woman's ability to cope with labour pains. According to the study done in Cameroon by Bassah et al (2020:33) like this research, indicate that the majority 91% of the women had between 1 to 3 pregnancies, while 93% had 1- 3 deliveries. The health care professionals offer health advice on pregnancy related topics/conditions to the pregnant women when they come for ANC. Birth companion topic can also be included in their health advices.

6.3.1.5 Employment status (n=299)

Sixty one (61) out of 299 (20.40%; *f*=61) respondents in this study were employed while 238 out of 299 (79.60%; *f*=238) were unemployed. The employment status also corresponds with the age of respondents as more than 84% women were young (between 18 to 35 years of age). The results reveal that the majority of the young women in this research were not working. This category of young women may be inexperienced on labour issues. In contrast to this study, 84.4% of North

Italian women were employed (Fumagalli, Colciago, Antolini et al 2021:157). Employed women may have access to technologies such as cell phones and data to be able to access the pregnancy related information. In addition, unemployed women rely on information given by health care providers. Health care providers should use every opportunity they meet with the women to provide them with pregnancy and labour related topics.

6.3.1.6 Participants years of experience of working in the labour ward

The midwives with two or more years' experience of working in the labour ward participated in this research. A midwife is regarded as experience when he/she has witnessed and assisted women delivering their babies, this means that she has been practising midwifery related procedures for some time. Table 5.2 display the duration in which the participants' have been working in the labour wards. The duration the midwives have been working in the labour ward ranged from 2 to 28 years of experience. According to Table 5.2, 9 out of 15 participants had more than 5 years' experience of working in the labour wards. This was adequate enough to be able to provide the researcher with the information needed for investigation. Mayra et al (2021:3) state that the participants who took part in their study had 24–60 years of general experience in nursing. The participants were knowledgeable of the labour wards procedures.

6.3.1.7 A person who is staying with the respondents (n=304)

According to Figure 4.4, 1 out 304 (0.33%; *f*=1) respondent was staying with no one, one out of 304 (0.33%; *f*=1) respondents was staying with a friend while 302 out of 304 (99.34%; *f*=302) respondents were staying with their family members. In the current research, majority of the respondents 99.34% were staying with their family members which makes the implementation of birth companionship more possible as there will be someone to support the woman whenever a need arises. Yildiz, Ayers and Phillips (2017:231), similar to this study, reported that one-fifth of women in their study indicated that they live with a relative.

6.3.2 Section B: Reproductive health information (ANC)

The following topics were analysed in this section:

Gestational age at first antenatal bookings, anyone who accompanied the respondent to the antenatal clinic, how many times did the respondent visit the antenatal clinic, if the respondent has received information on birth companion and who gave her the information. The reproductive health information during ANC will help the researcher to assess if the respondents' information is advantageous for the utilisation of birth companions.

6.3.2.1 Respondent's gestational age at first antenatal visit? (n=295)

Early antenatal booking is essential for identifying and managing pregnant women at risks to promote good outcomes. Based on Table 4.7, 134 out of 295 (45.42%; f=295) respondents attended first ANC visit while they were 1 to 3 months pregnant, 138 out of 295 (46.78%; f=138) were 4-6 months pregnant and 23 out of 295 (7.80%; f=23) respondents were 7 to 8 months pregnant. There were some respondents in this study 9 out 304 (2.96%; f=9) who never attended ANC clinic. About 7.80% postnatal women attended first ANC late (4-6 months) in their pregnancy which may not be ideal to arrange and prepare a birth companion. The researcher was interested in investigating if there will be enough time to negotiate and prepare the birth companions. According to NDH (2016:30), a woman should visit a health care professional as soon as she suspects pregnancy, as early as she misses her first menstrual period. The reasons for early booking are to assess the woman to establish baseline data before the pregnancy hormones can take its effects. Similar to this study, De Kock, van der Walt and Jones (2010:9-5) indicate that some women in South Africa, book late for ANC as they are afraid of jealousy from other women. According to a study done in Rwanda by Mukamurigo et al (2019:80) indicate that 6.5% of women visited ANC once during pregnancy, 21.1% twice in the current pregnancy, 36.7% had 3 ANC visits and 30.6% respondents had 4 ANC visits in the current pregnancy and 5.1% respondents had more than 4 visits. It appears that most women in this study do not adhere to a call that they should book their first antenatal visit early as soon as they suspect that they are pregnant. Early ANC attendants will provide the pregnant women with enough time to find a suitable birth companion and the companion to be taught their responsibilities.

6.3.2.2 A person who accompanied the respondent to the antenatal clinic visit (n=297)

Figure 4.5 illustrates anyone who accompanied the woman to antenatal clinic. Ninety-five (95) out 297 (31.99%; *f*=95) respondents said that they were accompanied by someone, 202 out of 297 (68.01%; *f*=202) had no one to accompany them while seven out of 304 (2.30%; *f*=7) did not indicate if someone accompanied them to the antenatal clinic. The aim of ANC is to provide the health information to pregnant women, families and communities (De Kock et al 2010:9-2). The family and community members need to understand the changes that occur on the pregnant women and be able to deal with the sudden changes so that they can help the pregnant women to cope with the pregnancy stressors. Taheri, Takian, Taghizadeh, Jafari and Sarafraz (2018:9) in a systematic review indicate that the "Ready for Child programme" showed that the women who attended the antenatal birth classes reported a more favourable childbirth experience. The study reveals that if you have somebody who accompanies you for the first ANC visit, you have possibility of finding a birth companion.

6.3.2.3 Number of respondent's antenatal clinic visit (n=293)

Nine (9) out of 293 (3.07%; *f*=9) respondents had one visit, 20 out of 293 (6.83%; *f*=20) had two visits, 30 out of 293 (10.24%; *f*=30) had three visits and 45 out 293 (15.36%; *f*=45) had four visits while 189 out of 293 (64.50%; *f*=189) respondents had five to 13 ANC visits. Eleven (11) out of 304 (3.61%; *f*=11) respondents did not indicate how many times they visited the clinic. The 3.61% of pregnant women who did not indicate the number of ANC visit may also include the ones who did not book for ANC. WHO (2016:32) highlights that ANC model recommends a minimum of eight contacts to reduce perinatal mortality and improve the women's experience of care. Following early booking, preferably before 12 weeks of

pregnancy, a return visit is scheduled for the following gestational period: 20, 26-28, 32-34, 38 and 41 weeks if still pregnant. This may not be applicable if it is high risks pregnancy whereby the return date will depend on the specific problems (NDH 2016:32). In the study conducted in Eastern Ethiopia similar to this study Bante, Teji, Seyoum and Mersha (2020:3) said that 303 (71%) of pregnant women had an ANC follow-up for the current pregnancy whereby 58% had four ANC visits and above. Attending the recommended ANC follow-up was linked with the women's pleasure. According to a study conducted in Damietta City indicated that the number of ANC visits was an independent positive predictor of the duration of the first stage of labour. This shows that the more frequent ANC visits predicts a longer duration of first stage of labour. It was revealed that more frequent ANC visits could be related to experience of more pregnancy related complaints or more apprehension (Eid et al 2020:235). The findings of this research correlate with the WHO (2016:32) finding as 64.50% respondents attended ANC more than five times during the current pregnancy.

6.3.2.4 Knowledge of a birth companion (Postnatal women) (n=304)

Figure 4.6: shows that the majority of postnatal women 245 out of 304 (80.59%; *f*=245) did not receive information on birth companion while 59 out of 304 (19.41%; *f*=59) received information on birth companions. According to WHO (2016:32), in contrast to this research, report that there is evidence that is supporting improved health system communication and support around pregnancy for women and their families. Empowering the pregnant woman, the family and community to take responsibility for her care by attending ANC and monitoring of herself for the presence of danger signs that should be reported immediately is the duty of a health care professional (De Kock et al 2010:9-2). Munkhondya et al (2020:305), in the study conducted in Malawi, assert that the primigravida women in their study received childbirth information mainly from elderly women, grandmothers, mothers and peers. Munkhondya et al (2020:8) maintain that if the primigravida may receive conflicting information on pregnancy and birth that may reduce their confidence in giving birth.

6.3.2.5 A person who gave you birth companion information (n=48)

The findings on Table 4.7 shows that two out of 48 (4.17%; f=2) respondents heard about birth companions from friends, 31 out of 48 (64.58%; f=31) from health care professionals, six out of 48 (12.50%; f=12) from social media, 5 out of 48 (10.42%; f= 5) from community members and 4 out of 48 (8.33%; f=4) from their family members. In a systematic review, Beake et al (2018:76) report that women wanted clear and consistent advice which could make them feel safe and more confident in their decision-making. More contact between pregnant women and respectful, knowledgeable health care professionals is more likely to lead to a positive pregnancy and birth experience (WHO 2016:32). According to this research, 64.58% respondents heard what a birth companion is from knowledgeable health professionals. The problem is when we do not give our community evidence-based information related to health matters; they will hear it from social media. Social media can sometimes disseminate information that is not evidenced base. Knowledge of birth companionship may be associated with the utilisation of birth companions. The next section will cover the physical factors during the labour period.

6.3.2.6 Theme 1: Description of the existing knowledge of a birth companion (Midwives)

The midwives like the postnatal women were asked about the knowledge of a birth companionship. The study findings reveal that participants (midwives) have knowledge of what a birth companion is. The participants' explanation of a birth companion was someone who accompanies a woman in labour and stay until she delivers the baby. Others indicated that a birth companion is a person/family member who comes and be with a woman in labour while others said that a birth companion as any other person that the woman feels comfortable to be with from active phase of labour until deliver of the baby. The preceding explanations denote that a birth companion as any person who comes and support the woman in labour and stay with her until she gives birth. A birth companion can be any person chosen by the woman to provide continuous support during labour and childbirth

example; a partner/husband, a female friend or relative, a health worker, a female community member, traditional birth attendant or doula (WHO 2018:1). In the study conducted in Southern Ethiopia Getahun, Ukke and Alemu (2020:5) indicate that 56 (13.8%) of women in labour utilised birth companions during delivery and 351 (86.2%) did not utilise companionship. The main reason mentioned for noutilisation of companions during delivery was provider denial (47.9%) and institution not allowing the woman to have a birth companion (21.1%). This is an indication that even though the woman may be willing to have a birth companion, the provider may not allow her to do so.

6.3.3 Section C: Physical factors (Labour period)

The following topics will be discussed in this section: If there was anyone who accompanied the respondents to the hospital, the reasons for not having a birth companion, whether the person who accompanied the respondent remained till discharge, mode of delivery, who provided the assisted birth, the period of pregnancy, the Apgar score in one and five minutes following birth, whether the respondents were given pain relief medication and treatment to augment (boost) labour progress, whether the woman had lacerations and if the midwife performed an episiotomy and the duration of labour. This information was needed to identify if the family and the community members are supporting pregnant women during labour which will enhance the utilisation of birth companions.

6.3.3.1 Anyone accompanied the respondents to the hospital n=302)

Figure 4.7 displays that three out of 302 (0.99%; f=3) respondents indicated that they came alone, 280 out of 302 (92.72%; f=280) came with their family members, 15 out of 302 (4.97%; f=15) were accompanied by friends, and four out of 302 (1.32%; f=4) were accompanied by neighbours. Two (2) out of 304 (0.66%; f=2) respondents did not answered this question. The results indicate that 99.01% respondents were accompanied by someone to the health care facility. Similar to this study, Bassah et al (2020:33; 34), in the study conducted in Cameroon indicated that 97% of respondents had someone who accompanied them to the

health care facility. In a systematic review, Taheri et al (2018:10) assert that labour support from a person in a close relationship with the childbearing woman rather than a hired companion was more effective in the promotion of a positive childbirth experience.

6.3.3.2 Theme 3: A person who is allowed to remain with the woman during labour (Midwives)

A question was raised for the midwives to indicate who is allowed to remain with the woman during labour. Before the arrival of modern medicine in South Africa, women were assisted by traditional birth attendance and supported by their family members such as mother/ mother in laws or elder sisters in their own home. The participants have shown to have knowledge of who is allowed to remain with the woman during labour in this study. The following people were mentioned: The woman's mother, midwives/health care professionals, husband/partner, relative, sister or whoever the woman chooses. The results reveal that anyone the woman has chosen to be her birth companion is allowed. Beake et al (2018:80) revealed that some women were satisfied with the support offered by a female relative like mother or sister. According to WHO (2018:6) the desired companion women preferred includes male partner/husband, mother, sister, mother-in-law, doula or different people. Although some of the participants indicated health care professionals as birth companions, a support person from their families is needed to offer advocacy to the woman.

6.3.3.3 The reasons that no one accompanied the respondents to the hospital (n=22)

A follow-up question was asked for the respondents to indicate the reasons why no one accompanied them to the hospital. Table 4.9 points out that ten out of 22 (45.46%; f=10) respondents were not aware that it is allowed to have a birth companion, eight out of 22 (36.36%; f=8) were admitted to the hospital for obstetrical reasons and four out of 22 (18.18%; f=4) women did not need a birth companion. The results indicate that 45.46% respondents were not aware that

they should have a birth companion. It is evident that birth companion information was not part of the ANC health advice during ANC. According to a study conducted in Ethiopia, four out of five women were allowed to have a companion during labour with no significant difference between health centres and hospitals (Sheferaw et al 2017:8). In the study conducted in Kenya, Mwanza, Mose and Owano (2019:37) report that the majority of the respondents concurred that they need birth companions' services 69.1%, while 31.9% do not need birth companions' services. The midwives seem to have knowledge of who can support the woman in labour and the respondents displayed that those people are accessible as the majority of women were accompanied by someone to the hospital. It is evident that if the women can be informed and be allowed to come with a birth companion, they can do so.

6.3.3.4 Did the person who accompanied you to the hospital remain after admission? (n=299)

The majority of women in this study indicate that they were accompanied by someone to the hospital. Table 4.8 asserts that 11 out of 299 (3.68%; f=11) respondents indicated that the person who accompanied them remained during admission while 288 out of 299 (96.12%; f=288) did not remain with the woman in labour. Five (5) out of 299 (1.67%; *f*=5) remained during labour while 294 (98.33%; f=294) did not remain during labour. Three (3) out of 299 (1.00%; f=3) remained during delivery while 296 out 299 (99.00%; f=3) did not remain during delivery of the baby. Furthermore, three out of 299 (99.00%; f=3) remained immediately postdelivery, while 296 out 299 (99.00%; f=296) did not remain immediately postdelivery. Zero (0) out of 299 (0.00%; f=0) reported that no rooming in nor ever present until discharge. A greater proportion 86.7% in the study conducted in Cameroon preferred to have someone other than the nurse or a midwife to be with them in the labour room and 81.1% during delivery. However, only 24.4% of women were allowed to have a companion during labour and 7.8% during delivery (Bassah et al 2020:33). In contrast from this study, Da Silva et al (2020:4) report that of the total number of women, 73.1% received guidance from professionals in the hospital regarding labour and delivery and 93.6% had the presence of a companion of their choice throughout the labour process. Malatji and Madiba (2020:8) found that the women desired to have companions during labour and delivery but were denied by the health care professionals. Lack of support during labour and delivery increased the feeling that the women were alone and abandoned. Balde et al (2020:3) further report that 47.3% birth companions in the study conducted in Ghana were available in any point during care in the facility, 12.7% in Guinea, 23.5% in Myanmar and 42.8% in Nigeria. The findings from these investigations show that most of the women 96.12% delivered their babies without birth companions.

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6.3.3.5 Method of childbirth (n=301)

The respondents in this study were to choose between vaginal (normally) or vacuum delivery (assisted). Figure 4.9 reveals that 299 (99.34%; *f*=299) respondents delivered normally while two out of 299 (0.66%; *f*=2) through assisted delivery and three out of 304 (0.99%; *f*=3) did not indicate. Bassah et al (2020:33) in the study conducted in Cameroon indicate that 68% of pregnant women delivered their babies vaginally, 31% Caesarean section and 01% forceps (assisted) delivery. Assisted delivery such as vacuum may be done to assist a woman who does not possess good effort to deliver the baby. A birth companion may provide emotional support to the woman with minimal procedures.

6.3.3.6 A health care professional who performed assisted birth? (n=2)

Some of the women experiences challenges when giving birth. Table 4.8 reports that 2 out of 2 (100%; *f*=2) health care professionals assisted the women giving birth through vacuum extraction were doctors. Taheri et al (2018:9) indicate that intrapartum care with minimal intervention was effective for creating a more positive birth experience. Midwives summon help from other health care professionals when there are challenges on the labour progress.

6.3.3.7 The period of pregnancy at birth (n=300)

Table 4.8 report that two out of 300 (0.67%; f=2) respondents were five months pregnant, 14 out of 300 (4.67%; f=14) were six months pregnant, 28 out of 300 (9.33%; f=28) were seven months pregnant, 32 out of 300 (10.66%; f=32) were eight months pregnant, 222 out of 300 (74.00% f=222) respondents were nine months pregnant while two out of 300 (0.67%; f=2) were ten months pregnant at the time of childbirth and four out of 304 (1.32%; f=4) did not answer this question.

The normal duration of pregnancy is nine months. In this study, the majority of babies 74.00% were born at nine months which is called term (37 to 40-weeks of pregnancy or inadvertently thought to be 41 completed weeks) (Davidson et al 2012:502). If the labour starts before term, the women deliver premature babies or after term the women deliver (post term babies). Delivering a premature/post term babies could be a problem as the babies may end up being admitted in neonatal care for further care/management.

6.3.3.8 The time it took the respondent's babies to cry following birth (Apgar score (n=289)

The results in Table 4.8 reveal that 279 out of 289 (96.54%; *f*=279) babies initiated their breathing within 1 minute following birth while ten out of 289 (3.46%; *f*=10) took ≥5 minutes to initiate their first breath and 15 out of 304 (4.93%; *f*=15) did not indicate how long their babies initiated first breath. The findings show that 96.54% infants initiated their first breath within one minute. Apgar score is a scoring system used to evaluate new-borns at one minute and five minutes after birth. The total score is achieved by assessing five signs: heart rate, respiratory effort, muscle tone, reflex irritability and colour. Each of the signs is assigned a score of 0, 1 or 2. The highest possible score is ten (Davidson et al 2014:664-665). WHO (2018:144) reports that their review found no evidence on Apgar scores less than five minutes.

6.3.3.9 The pain relief medication the respondents were given during labour (n=299)

The researcher needed to find out if pain relief medication was given to the respondents during labour and childbirth. Table 4.8 indicates that 76 out of 299 (25.42%; *f*=76) were given pain medication during labour and 223 out of 299 (74.58%; *f*=223) were not given pain medication during labour while five out of 304 (1.64%; *f*=5) did not respond to this question. The results show that 74.58% respondents were not given pain relief medication. The findings in the study conducted on Northern Italy by Fumagalli et al (2021:159) indicate that women who had epidural analgesia were less satisfied with their birth experiences, which

resulted in higher levels of stress. The women who are requesting epidural struggle to cope with their labour pains felt that they lost control over the birth process. This may increase their stress' level and thus affecting their personal satisfaction with their childbirth experience. Unlike the results in the current study, only around 3% of the women received pain relief medication during labour in the study done in Rwanda by (Mukamurigo et al 2019:81). There is certain pain medication which crosses the placental barrier and may interfere with the newborn's respiration following birth. Non-pharmacological methods provided by the birth companions may reduce side effects of pain relief medications.

6.3.3.10 The medication given to the respondents to speed-up labour (n=302)

Figure 4.11 displays that 46 out of 302 (15.23%; f=46) were given treatment to augment (speed-up) labour while 256 out of 302 (84.77%; f=256) were not given treatment to speed up labour and 2 out 304 (0.66%; f=2) did not answer the question. WHO (2018:4) indicates that there is low-certainty evidence that suggests that birth companionship has little or no effect on oxytocin augmentation of labour.

6.3.3.11 Did you sustain tears during delivery of the baby? (n=302)

Table 4.8 indicates that 83 out of 302 (27.48%; f=83) respondents sustained some lacerations (tears) during delivery of their babies, 219 out of 302 (72.52%; f=219) indicated that they did not sustain any tears during delivery of the baby and two out of 304 (0.66%; f=2) did not state if they sustained tears or not during delivery of the babies. In this research, most respondents (72.52%) reported that they did not sustain tears during childbirth. WHO (2018:143) asserts that warm compresses make little or no difference to having an intact perineum after giving birth.

6.3.3.12 Did the midwife/doctor cut your birth (vaginal) passage during delivery of the baby? (n=299)

The results in Table 4.8 show that 75 out of 299 (25.08%; f=75) postnatal women were performed an episiotomy (vaginal cut) during delivery of their babies, 224 out of 299 (74.92%; f=224) indicated that no vaginal cut was performed and five out of 304 (1.64%; f=5) did not indicate. The findings reveal that the majority of respondents (74.92%) were not performed an episiotomy (vaginal cut) during childbirth. In a study conducted in Northern Italy, an episiotomy, a relevant intrapartum care intervention was not associated with maternal birth satisfaction (Fumagalli et al 2021:159). Similar to this study, 18.6% of women in the study conducted in Rwanda by Mukamurigo et al (2019:82) underwent an episiotomy, 30% of these women were primigravida. An episiotomy should only be performed when it is absolutely necessary to prevent third degree tear of the perineum. Unlike in the study conducted in Northern Italy, Gashaye, Tsegaye, Shiferaw, Worku and Abebe (2019:12) in the study conducted in Northwest Ethiopia report that delivering vaginally by an episiotomy assisted procedure was found to be increasing satisfaction by 6.3%, as compared to vacuum and forceps. Episiotomies are performed to prevent 3rd degree tears and save the woman to develop complications of childbirth.

6.3.3.13 The duration of labour process (n=304)

In Table 4.8, 86 out of 304 (28.29%; f=86) respondents took more than three hours in labour, 107 out of 304 (35.20%; f=107) took more than eight hours in labour, 85 out 304 (27.96%; f=85) took more than 12 hours in labour, 18 out of 304 (5.92%; f=19) respondents took more than 24 hours in labour and eight out of 304 (2.63%; f=8) took more than two days in labour.

Davidson et al (2014:581), Dippenaar, da Serra and Nolte (2014:317) indicate that the total duration of a primigravida (a woman who is pregnant for the first time) woman is 19.8 hours while the duration of labour for a multigravida (a woman who has been pregnant more than once) is 12.30 minutes. Prolonged labour is defined

as labour that last for more than 24 hours. WHO (2018:4) asserts that there is moderate-certainty evidence that birth companion can reduce the length of labour. The findings in the study conducted in Damietta city by Eid et al (2020:235) revealed that there was shortening of the duration of labour for about one hour in stage 1 and about 15 minutes in stage 2. The postnatal information will be discussed in the next section.

6.3.4 Section D: Postnatal

Section D covered the following topics; The baby's birth weight, whether the baby was admitted in the neonatal unit after birth and the reasons for the admission to the neonatal unit, the infant feeding method the respondent has commenced with and the period the chosen method will be practised, and the relationship between the respondent and the baby.

6.3.4.1 The new-borns' birth weight (n=303)

The new-born's birth weight ranged from < 1000g to > 3500g while the average birth weight was 2250g. Eleven (11) out of 303 (3.63%; *f*=11) babies' birth weight was less than 1000g, 36 out of 303 (11.88%; *f*=36) birth weight was 1000g to 1800g, 41 out of 303 (13.53%; *f*=41) birth weight was 1900g to 2500g, 181 out of 303 (59.74%; *f*=181) birth weight was 2600g to 3500g, 2 out of 303 (0.66%; *f*=2) indicated that they do not know while 1 out of 304 (0.33%; *f*=1) did not indicate. The results show that 59.74% new-borns' weights were normal. According to Davidson et al (2014:846), the average weight of the baby is 3405g, range: 2500-4000g which is influenced by racial origin and maternal age and size. Gurgel et al (2020:19) found that the new-born's weight was a decisive factor of neonatal health status which was connected to the child morbidity and mortality, with the risk of 20 times higher in babies born <2500g in low and medium-income countries. The results of this study indicate that 59.74% of respondents' babies' birth weight was from 2600g to 3500g.

6.3.4.2 Was your baby admitted in neonatal intensive/neonatal care unit after birth? (n=304)

All the respondents answered this question whereby 100 out of 304 (32.89%; f=100) said that their babies were admitted in neonatal unit while 204 out of 304 (67.11%; f=204) reported that they were not admitted in neonatal unit. Table 4.10 shows that 32.89% new-born babies were admitted in neonatal intensive/neonatal unit immediately after birth. The majority of high risks women are referred from clinics, health centres and districts hospitals to deliver in regional and tertiary hospitals. Mukamurigo et al (2019:80) report that the babies born in a study conducted in Rwanda; a weight of < 2500 g was seen in 12.2% of the total group. The majority of the new-borns (88.5%) had a good health status at birth.

6.3.4.3 The reasons for the baby to be admitted in neonatal intensive/neonatal care unit (n=100)

Table 4.10 indicates the following reasons for admission in neonatal unit which were: Low Apgar score, difficulty in breathing, low birth weight/prematurity, meconium aspiration, congenital abnormalities and big babies for observations. Eleven (11) out of 100 (11.00%; f=100) babies were admitted in neonatal unit owing to low Apgar score, 22 out of 100 (22.00%; f=22) admitted with difficulty in breathing, 55 out of 100 (55.00%; f=55) with low birth weight/ prematurity, six out of 100 (6.00%; f=6) with meconium aspiration, five out of 100 (5.00%; f=5) with congenital abnormalities and one out of 100 (1.00%; f=1) admitted for observations. The study reveals that 55.00% of babies were admitted in neonatal unit owing to difficulty in breathing. According to a study conducted in South Africa by Rhoda, Velaphi, Gebhardt, Kauchali and Barron (2018:3) report that the causes of neonatal deaths weighing <500g, and ≥1000g were: intrapartum-related events, infections, prematurity and congenital abnormalities. Causes of neonatal deaths in babies >1kg were complications of preterm births, congenital abnormalities, intrapartum related events, miscellaneous and neonatal infections. The conditions in which the new-born babies succumbed to in the study by Rhoda et al (2018:3) are related to the conditions that led to the new-born babies been admitted to neonatal intensive/neonatal unit in the current study.

6.3.4.4 The baby's feeding method the respondents commenced (n=304)

The respondents were asked to indicate the method they have chosen to feed their babies between formula and breastfeeding. All the respondents answered this question stating that 200 out of 30 (66.66%; f=300) have commenced with breastfeeding and four out of 100 (1.32%; *f*=4) commenced with formula feeding. According to WHO (2020:2) report that early initiation of breastfeeding within one hour of birth, exclusive breastfeeding for the first 6 months of life and introduction of nutritionally-adequate milk is essential. The United Nations International Children's Emergency Fund (UNICEF) United Kingdom (2019:3) indicate that the new-borns should be given a first suitable infant formula for the first six months then the baby can stay on formula when a woman start to introduce solid foods at around six months and continue on it throughout the first year. When the baby is a year old, the infant can start to drink whole cow's milk. WHO (2018:5) reports that birth companions probably increase exclusive or any breastfeeding. It is commendable that higher proportion respondents in this research 67% stated that they have commenced with breastfeeding. The findings are supported by the employment status of the respondents in this study whereby 78.60% were unemployed. Formula milk is expensive, and for a woman to give her child, you need to have money to sustain it.

6.3.4.5 The duration the women will keep practising the chosen feeding method (n=291)

The duration the respondents will keep on practising the chosen feeding method ranges from less than a year to four years. Eighty-six (86) out of 291 (29.68%; f=86) respondents reported that they will feed their babies for less than one year, 200 out of 291 (68.73%; f=200) opted for 1 – 2 years, five out of 291 (1.72%; f=5) said 3-4 years and 13 out of 304 (4.28%; f=13) women did not indicate. Table 4.10 indicates that most of the respondents in this study 68.73% have chosen to feed

their babies for 1-2 years. Gluck, Pinchas-Cohen, Hiaev et al (2019:302) in the study conducted in Israel reveal that the availability of individual breastfeeding consultations about assistance and support, after childbirth have the most impact on the duration of breastfeeding. According to WHO (2020:2), the introduction of nutritionally-adequate and safe complementary (solid) foods together with continued breastfeeding up to two years of age and beyond were indicated as vital.

6.3.4.6 The relationship (bonding) between the women the new-born baby (n=304)

All the research respondents answered this question. Three (3) out of 304 (0.99%; f=3) reported that they were not sure of their boding status with their new-born baby, two out of 304 (0.66%; f=2) indicated that the bonding was fair and 299 out of 304 (98.35%; f=299) respondents said it was good. The findings in Table 4.10 show that (98.35%) of respondent's bonding status with their new-born babies was good. According to a study conducted in Israel by Gluck et al (2019:300) shows that pregnancy is associated with social and psychological changes in a woman's life. The primigravida has an additional stress of becoming first time mother and experiencing labour for the first time. A common problem which the nulliparous women experience during near term is fear of childbirth. This fear may complicate labour and lead to postpartum depression and difficulties in mother-infant relationship. Lack of bonding between the mother and infant is detrimental to the new-born who at this period needs the mother to survive (for example, the need to be breastfed). Section E will cover the psycho-social factors.

6.3.5 Section E: Psycho-social factors

Human beings thrive well in an environment where there is social cohesion. Table 4.11 presented the frequencies and percentages related to the importance of having a birth companion, the respondents' preferred birth companion, number of days admitted post-delivery, and if the woman suffered from depression after delivery. Roy's Adaptation Model postulates that human beings are adaptive systems, which can adapt to the physical, group identity, interdependence and role

function which enhance coping with environmental stimuli through adaptation (Polit & Beck 2017:134). The utilisation of birth companions will assist the pregnant women to adapt or cope with the labour challenges.

6.3.5.1 Do you think it is important to have a birth companion?

Forty four (44) out of 304 (14.47%; *f*=44) respondents reported that it is not important to have a birth companion while 260 out of 304 (85.53%; *f*=260) indicated that it is important to have a birth companion. The results show that (85.53%) of postnatal women agree that birth companionship is important. These results are vital for the implementation of birth companionship in health care facilities. Similar to a study done in South Africa, over (80%) of pregnant women who were encouraged to bring a birth companion, (49%) brought a companion during labour. There was small number of pregnant women who did not prefer to have a birth companion but indicated that they would recommend a birth companion to other women (Summerton & Mtileni 2020:150). Although women think it is important to have a birth companion, it may take time for them to practice birth companionship. Health care professionals should continue to motivate the women on the importance of birth companions.

6.3.5.1.1 The reasons the respondents think it is not important to have a birth companion

According to the recommendation made in South Africa by Summerton and Mtileni (2020:151), there was a need for health care researchers to explore the reasons why some of the women in rural Limpopo of South Africa were not happy about utilising the services of birth companions. Table 4.8 shows the reasons why the respondents think that it is not important to have a birth companion. The following reasons were cited by the respondents: 19 out of 40 (47.50%; *f*=19) indicated that it is not necessary to have a birth companions, 10 out of 40 (25.00%; *f*=10) were satisfied with the assistance from health care professionals. 1 out of 40 (2.50%; *f*=1) needed to keep secrets, 9 out of 40 (22.50%; *f*=9) thought that birth companions may not cope when there are complications and 1 out of 40 (2.50%;

f=1) does not trust birth companions. Maputle (2018:4) in the study done in South Africa concur with the findings in this study that (83%) of participants were continuously provided with maternal, labour progress and the well-being of the foetus by the midwives. In a systematic review by Hordin (2017:2), indicated that some women and their families from Ghana, Saudi Arabia and Zambia were reluctant to utilise lay birth companions from their communities because of potential social implications like stigma. The women in this study indicated that they do not trust birth companions. The women were concerned with the birth companions being privy to clinical information (Summerton & Mtileni 2020:151).

6.3.5.2 A person the respondents prefer to be their birth companion (n=265)

Each of the respondent indicated a person she prefers to be her birth companion: 252 out of 265 (95.09%; *f*=252) stated their family members, eight out of 265 (3.02%; *f*= 8) respondents indicated that they do not prefer anybody, five out of 265 (1.89%; *f*=5) respondents preferred friends and 39 out of 265 (2.83%; *f*=39) respondents did not indicate. Similar to the findings of this research, Parveen (2019:17) indicates that 88% of women in the study conducted in Saud Arabia opted for midwifery led home births. The most selected reasons 95% were presence of family companions, less feeling pain and less likely operative interventions. Many women in the systematic review indicated that they prefer their partners, friends, family members or any community member to be their birth companions (Hordin 2017:1). Similar to this research, the most common people 47.06% who are preferred by the postnatal women as a birth companion were family members except a study conducted in Nigeria where 47.9% was male partners (Balde et al 2020:3).

6.3.5.3 The rationales for the preferred person respondents have chosen (n=228)

A follow-up question was asked for the respondents to state the reasons for their preferred person. According to Table 4.12, 81 out of 228 (35.53%; *f*=81) of the postnatal women's reason for the choosing a husbands/partners as a birth

companion was to share responsibility of the pregnancy. The majority of the participants in the study conducted in Ethiopia stated that 39.7% of postnatal women would have preferred their husband to accompany them during labour because they wanted to share their pain with their partners (Gizachew, Bekele & Getinet 2019:8).

One hundred and one (101) out of 228 (44.29%; *f*=101) respondents chose their mothers as birth companions because of the mother's experience on childbirth. In the study conducted in Ethiopia, Gizachew et al (2019:8) report that the participants' mother was preferred by the women and indicated the reasons that they have been through labour; so, they understand and will help them better than others.

Aunts were preferred by respondents whereby two out of 228 (0.88%; f=2) selected aunts because they were primary caregivers in the respondents' family. Friends were also selected whereby five out of 228 (2.19%; f=5) by postnatal women because they have experience of giving birth. The reasons for the preference of siblings as indicated in Table 4.12 whereby 34 out of 228 (14.91%; *f*=34) respondents chose them as they feel comfortable when they are with them. Both parents were also preferred and two out of 228 (0.88%; f=2) respondents in this research for being available when they need assistance. Three (3) out of 228 (0.31%; f=3) preferred grandmothers as they are able to take care of the babies. Seventy six (76) out of 304 (25.00%; f= 76) did not answer the question. The results in Table 4.12 indicate that most women (44.29%) preferred their mothers, followed by 35.53% respondents who preferred their partners to be their birth companions. Salehi, Fahami and Beigi (2018:612) indicate that training the pregnant women's companion and explaining their roles at the time of delivery and the method of providing emotional support would improve the outcomes of deliveries. The results show that anyone the woman prefers, as long as he/she is taught, the roles to take during labour and child birth can be a companion.

6.3.5.4 Theme 2: Midwives' reaction to a woman who request to have a birth companion

The majority of participants as cited in Table 5.3.2, 13 out of 15 reported that they do not have a problem if a woman requests to have a birth companion. The majority of participants show that they are aware and ready to practice birth companionship and with proper guidance from the department of health through formulation of policies and guidelines, they may implement birth companionship. A total number of 93.6% of Brazilian women had a birth companion throughout labour process and 73.1% received guidance from health care professional regarding labour and delivery (da Silva et al 2020:5). This is an indication that the health care professionals do not have a problem with the availability of birth companions as the majority of the women had birth companions. Even though the majority of participants agree to allow birth companions in the labour ward, some health care professionals might find it difficult to accommodate the birth companions. It is the responsibility of the department of health to write policies and managers to make sure that health care professionals implement those policies.

Some of the participants were not yet ready to practice birth companionship even though they knew what a birth companion is. According to the study done by Maziero et al (2020:534) in North of Parana, the right to the presence of a birth companion was not guaranteed to the women admitted in maternity unit. The findings revealed that health care professionals demonstrated a perception which was not favourable for the presence of a birth companion. Similar to this study, a study which was conducted in Ghana by Mukamurigo et al (2019:81) found that it was rare for a companion to be present during labour and birth as the health care providers denied them.

6.3.5.5 Theme 4: Midwives perceptions of the presence of a birth companion

All the participants perceive the presence of birth companions as good, which imply that the midwives see the presence of birth companion as someone who will provide positive results on the labour processes. Maziero et al (2020:533) point

out that the health care professionals in North of Parana still resistant to the presence of birth companions, during normal delivery and caesarean section. The health care professionals in this research site responded that the birth companions interfere with professional's procedures because they do not understand what is happening.

6.3.5.6 Number of days the respondents admitted in the hospital postdelivery of the baby (n=290)

The respondents indicated that 213 out of 290 (73.45%; *f*=213) were admitted for 1 to 3 days after delivery, 52 out of 290 (17.93%; *f*=52) 4 to 10 days post-delivery, 19 out of 290 (6.55%; *f*=19) 11 to 20 days post-delivery, five out of 290 (1.72%; *f*=5) 21 to 30 days after childbirth, one out of 290 (0.35%; *f*=1) 31 to 60 days after delivery of the baby while 14 out of 304 (4.61%; *f*=14) respondents did not indicate. Admission of more than three days post-delivery may indicate that either the mother or the new-born baby needs attention of health care professionals. According to South African Nursing Council (Regulation R2488, 1990, Paragraph (8) (a)), during puerperium a registered midwife shall attend the mother and child at least once a day and shall discharge them from his care until such time as the condition of both is satisfactory. Admission of the woman post-delivery of more than three days indicates that the mother or the baby had challenges during pregnancy or birth.

6.3.5.7 Did you suffer from depression after delivery of the baby? (n=304)

All the respondents answered this question (n=304). The respondents were requested to answer using either "Yes" or "No". Two hundred and sixty-six (266) out of 304 (87.50%; *f*=566) respondents indicated that they did not suffer from depression post-delivery while 38 out of 304 (12.50%; *f*=38) respondents reported that they suffered from depression. Yildiz et al (2017:237) indicate that low social support may maintain or exacerbate postpartum stress symptoms in the long run. It is vital for the health care professionals to screen the women at risk of developing postpartum depression during ANC, childbirth and postnatal and

manage them appropriately. The management may include: having a companion of choice during antenatal period and childbirth.

6.3.6 RELATIONSHIP/CORRELATION/ASSOCIATION OF THE FOLLOWING: AGE, MARITAL STATUS, LIVE CHILDREN, GESTATIONAL AGE AT FIRST BOOKING, PAIN MEDICATION GIVEN AND KNOWLEDGE OF A BIRTH COMPANION (n=304)

6.3.6.1 The correlation between postnatal women's age and knowledge of birth companionship

Table 4.13 indicates that 16.12% of postnatal women aged between 18 and 35 years and 3.29% of respondents between 36 and 45 years know what a birth companions is, while 68.09% of between 18 and 25 years of age and 12.50% of respondents between 36 and 45 years do not know what a birth companion is. The chi-square (x²) of both age intervals is 0.06 and the p-value is between 0.90 and 0.75 (0.90<p<0.75). Therefore, the p-value is less than 0.05 (p<0.05). The p-value of 0.05 is used as a cut-off for significance. Since the p-values are < 0.05, there is sufficient evidence to reject the null hypothesis. The null hypothesis was that there is no difference between postnatal women's age and knowledge on birth companionship. The alternative hypothesis was that postnatal women's age influenced the knowledge of birth companionship. There was sufficient evidence to accept the alternative hypothesis that postnatal women's age influences the knowledge of birth companionship.

6.3.6.2 The correlation between postnatal women's marital status and knowledge of birth companionship

Table 4.13 reveals that 5.96% of postnatal women who were in a relationship (married/cohabiting) and 13.25% of those who were single know what a birth companion is while 12.85% respondents who were in a relationship and 57.94% of those who were single reported that they do not know a birth companion. The chi-square (x^2) of marital status interval is 0.14 and the p-value is between 0.75 and

0.5 (0.75<p<0.5). Therefore, the p-value is less than 0.05 (p<0.05). There is enough evidence to reject the null hypothesis. The null hypothesis was that there is no difference between postnatal women's marital status and knowledge of birth companionship. The alternative hypothesis was that postnatal women's marital status influences the knowledge of birth companionship. Therefore, there was sufficient evidence to accept the alternative hypothesis that postnatal women's marital status influences the knowledge of birth companionship.

6.3.6.3 The correlation between postnatal women's live children and knowledge of birth companionship

As indicated in Table 4.13, 6.91% of postnatal women who have one child alive and 15.13% of those who have two and more children alive know a birth companion while 31.25% of those who have one child alive and 46.71% women who have more than two children alive do not know what a birth companion is. The chi-square (x²) of the live children is 1.34 and the p-value is between 0.25 and 0.10 (0.25<p<0.10). Therefore, the p-value is less than 0.05 (p<0.05). That means p-values are < 0.05. Therefore, there is sufficient evidence to reject the null hypothesis. The null hypothesis was that there was no difference between postnatal women's live children and knowledge of birth companionship. The alternative hypothesis was that the postnatal women's live children influence the knowledge on birth companionship. Therefore, there was sufficient evidence to accept the alternative hypothesis that postnatal women's children influence the knowledge on birth companionship.

6.3.6.4 The correlation between postnatal women's gestational age at first ANC visit and knowledge of birth companionship

From Table 4.13, it is evident that 10.51% of respondents' whose gestational age at first ANC visit was between 1 to 3 months and 9.49% women's who were 4 to 8 months pregnant at first ANC visit know what a birth companion is while 28.81% women whose gestational age at first ANC visit was 1 to 3 months and 51.19% of those were 4 to 8 months pregnant at first ANC visit do not know a birth

companion. The chi-square (x^2) of the gestational age at first ANC visit is 1.22 and the p-value is between 0.50 and 0.25 (0.50<p<0.25). Therefore, the p-value is less than 0.05 (p<0.05). This means that all the p-values are < 0.05. Therefore, there is enough evidence to reject the null hypothesis. The null hypothesis was that there is no difference between the postnatal women's gestation age at first ANC visit and the knowledge of birth companionship. The alternative hypothesis was that postnatal women's gestational age at first ANC visit influenced the knowledge on birth companionship. Therefore, there was sufficient evidence to accept the alternative hypothesis that postnatal women's gestational age at first ANC visit influence the knowledge of birth companionship.

6.3.6.5 The correlation between postnatal women who were given pain medication and knowledge of birth companionship

Table 4.13 shows that 25.42% of respondents who were given pain medication know what a birth companion is and 74.58% respondents who were not given pain medication do not know a birth companion. The chi-square (x²) of the respondents who were given pain medication during labour is 223.27 and the p-value is between 0.025 and 0.010 (0.25<p<0.010). Therefore, the p-value is greater than 0.05 (p>0.05). The p-values were > 0.05. There is therefore, insufficient evidence to reject the null hypothesis. The null hypothesis was that the postnatal women who received pain medication during labour do not influence the knowledge on birth companionship. Therefore, there is no statistical significance between the postnatal women who received medication during labour and knowledge of birth companionship. Section F will discuss the enabling/motivating or modifying factors of birth companionship.

6.3.7 Section F: The motivating and enabling or modifying factors

6.3.7.1 The motivating factors for utilising birth companions (n=304)

Two hundred and sixteen (216) out of 265 (81.51%; f=215) agree that birth companion will remain with you throughout labour to help when in need while 44

out of 565 (16.60%; *f*=44) respondents disagree that a birth companion will remain with you throughout labour to help when in need. According to WHO (2019:2), a birth companion will provide the women with informational support; therefore, bridge the communication gap between the women and the health care professionals, provide practical support which include emotional and pain relief such as massage and act as an advocate for the woman.

These results correlate with 44 out of 304 (14.47%; *f*=44) respondents who indicated that a birth companion is not vital. Two hundred and fifty-two (252) out of 300 (84.00%; *f*=252) respondents agree that a birth companion will help you with basic needs while 44 out of 300 (14.67%; *f*=44) disagree that a birth companion will help you with basic needs. In congruence to this study, in a study conducted in Spain, women viewed the importance of having their partners as birth companions as they will actively provide the women during labour/birth with physical and emotional support (Pereda-Goikoetxea, Marin-Fernandez, Liceaga-Otazu & Elorza-Puyadena 2019:95).

Two hundred and fifty-four (254) out of 301(84.39%; *f*=254) respondents agree that a birth companion will help in taking care of the baby while the mother takes a nap and 43 out of 301 (14.29%; *f*=43) disagree that a birth companion will help in taking care of the baby while the mother takes a nap. Mazeiro et al (2020:534) in the study which was conducted in North of Parana reported that the Ministry of Health indicated that the health care professionals should utilise birth companions at all times regardless of gestational risks because studies indicate that there are benefits on both mother and new-born.

The study results reveal that 232 out of 302 (76.82%; *f*=232) respondents agreed that a companion will help the women in decision-making while 60 out of 302 (19.87%; *f*=60) disagree that a birth companion will help in decision-making. WHO (2018:4) indicates that some women had mixed perspective about having a male partner as a birth companion. Male partners felt that they were not well integrated into the care team or decision-making. According to the study conducted in rural Bangladesh by Perkins et al (2019:243), it is vital for the health care professionals

to consider the women's decision and choices in relation to issues that concern childbirth. The researchers indicated that in Bangladesh, the decisions are often made in consultation with the woman's family and close social network. The findings in this study show that postnatal women need to involve their companions in decision-making.

In this study, 255 out of 300 (85.00%; *f*=255) respondents agree that birth companions are important for mother and the baby while 43 out of 300 (14.33%; *f*=43) disagree that a birth companions are important for the mother and the baby. According to this study, the partner was valued as he provided the woman with the physical as well as the emotional support during labour and childbirth. According to Salehi et al (2018:611) in the study conducted in Iran, the presence of a trained husband beside the wife during childbirth decreased the level of anxiety which reduced stress on the woman and promoted good labour outcomes. It is evident that the majority (85.00%) of respondents recognise the importance of birth companions.

Two-hundred and thirty (230) out of 295 (77.97%; *f*=230) respondents agree that the relationship between the mother, partner and new born baby will be increased while 51 out of 295 (17.29%; *f*=51) disagree that the relation between the parents and the new born bay will be increased. Rossignac-Milon and Higgins (2018:69) in a study which was conducted in the USA indicate that relationships progress through four phases: shared feelings, shared practices, shared co-ordination, and shared identity. Each shared reality builds on the previous ones and continues to evolve throughout subsequent phases. Practices and both shared feelings and practices evolve with the formation of shared coordination. When a partner participates in the preparation of childbirth shared reality builds on until the baby is delivered whereby shared identity will evolve.

6.3.7.2 Any other factors that can motivate you to utilise a birth companion (n=24)

The respondents were requested to indicate any other factors that were not stated before that can motivate them to choose a birth companion. Twenty-four (24) out of 304 (7.89%; f=24) respondents answered this question whereby they repeated the information in Table 4.13 i.e. decision-making, physical, psychological and a sense of belonging (good relationship). Eleven (11) out of 24 (45.84%; f=11) respondents indicated physical help, eight out of 24 (33.33%; f=8) strong bond between mother, father and infant and five out of 24 (20.83%; f=5) stated psychological assistance from birth companions.

6.3.7.3 The benefits of having a birth companion (n=32)

Some people will participate in an intervention if they envisage the benefits thereof. According to Table 4.16, six out of 32 (18.75%; *f*=6) respondents' benefits of having a birth were good relationship with partner and baby, 19 out of 32 (59.37%; *f*=19) were psychological support, two out of 32 (6.25%; *f*=2) postnatal women indicated to be safe and five out of 32 (25.63%; *f*=5) reported to be physically supported. The majority of the respondents 59.37% who answered this question indicated that they will benefit from psychological support which will be provided by the birth companions. Martin and Filies (2018:51), in the study conducted in South Africa, concur with this investigation whereby all the participants were worried about the wellbeing of the pregnant women to deliver their babies safely. According to NDH (2015:1), every patient has the right to a healthy and safe environment that will ensure their physical and mental well-being. The health care professionals are responsible to provide the patients/clients with the safe environment as stipulated in the Patient Right charter.

6.3.7.4 Theme 5: The benefits of the presence of a birth companion to the woman (Midwives)

Participants showed their awareness of the importance of the presence of birth companions. This was cited by the participants indicating that birth companions will help the woman to relax and bring a sense of belonging. If a pregnant woman is supported by someone, she is familiar with during labour and childbirth, she will relax and she will be provided with an undivided attention. This was supported in a systematic review by Beake et al (2018: 82) which reported that birth companions were supportive and assisted the women to relax. In the study conducted in South Africa the researcher observed that women were offered limited emotional support as none of the women were encouraged to have a birth companion and integration of cultural and personal preferences during labour and childbirth was not attended to. Two (2) (17%) of the midwives were taking care of more than one woman during labour and 3 (25%) of midwives were provided with physical care such as touching, massaging/rubbing (Maputle 2018:6).

Participants also revealed that they know the benefits of birth companions as they explained that the women's anxiety will be allayed and psychological support will be offered. The international code of ethics for midwives (2008:2) which was adopted at Glasgow International Meeting stipulates that midwives should respond to the psychological, physical, emotional and spiritual needs of women seeking health care, whatever the circumstances.

The participants displayed that they have experience on birth companionship as they mentioned that the birth companions promote good labour progress. The statement reveals that the participants once witness the birth companionship, but failed to sustain the practice. World health organisation (2018:8) state that continuous support from someone other than health care professional has several benefits which includes: improved outcomes for the woman and the baby, increased spontaneous vaginal births, fewer babies with low Apgar score, shorter duration of labour, decreased negative feeling about labour and birth, and decreased medical interventions. According to a systematic review done by Scarf,

Rossiter, Vedam, Dahlen, Ellwood, Forster, Foureur, Maclachlan, Oats, Sibbritt, Thornton and Homer (2018:251) point out that the odds of severe perineal trauma were lower amongst planned home births regardless of study quality and among the higher study quality of births planned centres. Maternal data from selected research reported lower odds of intervention and maternal morbidity and higher odds of normal vaginal births among planned home births compared to hospital births. The above statement encourages midwives to utilise birth companions as good labour outcomes will be achieved.

The participants also show that they have knowledge on the benefits of the presence of birth companions. This was cited by the participants stating that birth companions provide physical support. Maputle (2018:8) in the study done in South Africa stated that 2 (17%) of the midwives were taking care of more than one woman in labour and 3 (25%) of midwives provided physical care such as touching, massaging/rubbing.

6.3.7.5 Theme 6: Factors that inhibit utilisation of birth companions

Some participants speculated that some women may be afraid to bring along their partner's as birth companions because they think that their partners will lose interest in them. The fear may be real as participants have experience of assisting women during labour/delivery and participants are also members of the community. This investigation supports the findings of the study by Fernandes, Kambarami, Dhlandhlara, Guramatunhu, Mudzingwa and Ray (2016:2) in which trained labour supports personnel and women relatives were preferred as birth companions than male partners.

Participants are responsible to disseminate information to the women and community at large on birth companions. The study findings reveal lack of information as one of the factors that inhibit utilisation of birth companions. The participants indicate that they have challenges with regard to providing information to the community and pregnant women on birth companionship. According to a qualitative systematic review in the sub-Saharan Africa by Bradley, McCourt,

Rayment and Parmar (2016:163) shows that midwives withhold information to the women about the progress of labour or the baby's health, with reports of women being scolded and threatened for asking questions. If the midwives are unable to inform the mother about the labour progress, they may also be unable to accommodate the birth companions. This may be reasons the midwives are unable to disseminate information related to birth companions.

Some participants reported factors that inhibit utilisation of birth companions as overcrowding of women in labour which leads to inadequate space, resources which compromises privacy in the labour rooms. The participants' findings may be real as some institutions labour wards were built more than thirty years back when the population was not the same as now. These research findings may provide the managers with ideas/factors that inhibit utilisation of birth companions to maximise the space, resources to accommodate the fast growing nation in order to be able to accommodate the birth companions in the labour wards. Midwives in a systematic review were sometimes unable to admit the woman in early labour due to lack of beds and staff shortages (Beake et al 2018:78). Gizachew, Getinet, Bekele (2021:10) indicated that the main set back in the implementation of birth companion in their health care facility as the issue of privacy. The participants in their study indicated that there will be multiple labouring women next to each other without proper screen in between. Similar to this study, Kabakian-Khasholian and Portela (2017:11) systematic review also indicate the barriers that affect implementation of birth companions that were identified as, allocation of resources/resource constrained environments related mainly to overcrowding and availability of space and privacy for the companions and the women. The cultural preference was cited also the challenges.

It is vital that midwives provide a culturally sensitive care to the woman in labour and her birth companion and support cultural differences. The participants showed that they have knowledge of the people they are serving as some participants cited the African cultural belief as one of the factors that inhibit utilisation of birth companions. According to the international code of ethics for midwives as adopted at the Glasgow international council meeting (2008:2) state that, midwives will

provide care for women and childbearing families with respect for cultural diversity while striving to eliminate harmful practices within those same cultures.

Participants revealed that they are conversant with contemporary issues that occur in the world today such as COVID-19 restrictions. Some participants indicated that now with COVID-19, birth companions are not allowed in their health care facility as a measure to minimise the infections. According to Barata, Neves and Santos (2020:2) in a study done in Portugal reported that the governmental Directorate-General of Health recommended that companions should not be allowed at perinatal appointments, labour and childbirth, postpartum, regardless of their or their partners' COVID-19 diagnosis. Their family members were also not allowed to be directly involved in the birth process which meant that the women were only left with the health care professionals. Mayopoulos et al (2020:14-15) in the study done in the United States of America (USA) found that 50% of suspected/confirmed COVID-19, 288 positive women reported significant acute stress symptoms at birth. This was attributed by the COVID-19 no visitor restriction policy the department of health has formulated in an effort to reduce the spread of infections.

6.3.8 The challenges/barriers of having a birth companion

6.3.8.1 Challenges of having a birth companion during labour

Table 4.17 indicates that the majority of respondents 226 out of 303 (74.19%; f=226) do not agree that birth companions will invade their privacy while 67 out of 303 (22.11%; f=67) agree that birth companions will invade their privacy. In contrast to this study, Gizachew et al (2019:8) report that the participants in their study did not want birth companions as they needed privacy. The participants also indicated religious restrictions and worry about overburdening their family with stress, worsening the already overcrowded environment and desire to go through the pain alone.

Seventy-eight (78) out of 297 (26.26%; *f*=78) respondents agree that their partners will faint during delivery of the baby while 187 out of 297 (62.96%; *f*=187) disagree that their partners will faint during the delivery of the baby. Similar to this study, fathers experience a turbulent feeling when witnessing complicated childbirth. When fathers perceive childbirth as negative or traumatic, they are at risk of developing postpartum health problem (Vallin, Nestander & Wells 2019:52).

Ninety-eight (98) out of 300 (32.67%; *f*=98) respondents agree that their partners work far from the place of residence while 193 out of 300 (64.33%; *f*=193) disagree that their partners work far. Seventy-nine (79) out of 282 (28.01%; *f*=79) respondents agreed that they are staying far from home. Therefore, they were not sure if their parents will come to support them during labour while 195 out of 282 (69.15%; *f*=195) disagree that are staying far from home; so, their parents will come to support them during labour. Similar to this research, mothers were the most birth companions that were available among the women who delivered in health care facilities in this study compared to 66% women who delivered their babies at home (Perkins et al 2019:8). Those women whose mother or partner is staying far from the respondent's home have a choice of requesting whoever they feel comfortable with to be their birth companion.

Seventy-two (72) out of 298 (24.16%; *f*=72) respondents agree that their relationship with their partners will be reduced if they become their birth companions while 212 out of 298 (71.14%; *f*=212) disagree that their relationship with their partners will be reduced if they become the respondents' birth companions. The results of this research are in contrast with the study conducted in Portugal whereby partners felt encouraged of the affective bonds, happy and fulfilled as they are promoted to parenthood (Coutinho, Antunes, Duarte et al 2016:438). It is important that partners be involved from the beginning of identification of pregnancy until delivery to promote good relationship with the partner and new-born baby.

Eighty-seven (87) out of 298 (29.19%; f=87) respondents agree that the birth companion will get tired if labour prolongs while 200 out of 298 (67.11%; f=200)

disagree that their birth companions will get tired if labour prolongs. De Mucio et al (2020:4) found that a companion was more frequent during vaginal delivery than in Caesarean section delivery. Companionship in some of the systematic review was infrequent but not continuous throughout labour. According to WHO (2016:2), birth companions will enhance labour progress; therefore, prolonged labour will be reduced.

6.3.8.2 Any other challenges/barriers that were not included in those mentioned above

The respondents were asked to indicate any other challenges that were not indicated. Fourteen (14) out of 304 (4.61%; f=14) respondents answered this question and their responses were grouped together. One out of 14 (7.14%; f=1) respondent indicated that COVID-19 restrictions as a challenge for availability of birth companions, ten out of 14 (71.43%; f=10) reported that their partners will be afraid of having another baby and three out of 14 (21.43%; f=3) reported that some birth companions may increase their anxieties. Mazeiro et al (2020:534) in the study conducted in North of Parana indicated that they did not allow the presence of a birth companion because the birth companions lack information about the physiological events of childbirth and the medical dynamics. They further indicated that the birth companions have limited understanding of the health professionals' conduct and this generates conflicts. According to a study conducted in the USA during the first wave of COVID-19 restrictions, it was discovered that COVID-19 positive women who did not have visitors reported significantly greater pain during delivery (Mayopoullos, Ein-Dor, Li, Chan & Dekel 2020:11). The NDH (2020:105-106) COVID-19 response guidelines indicate that a birth companion of a woman's choice is allowed in health care facilities because of the proven obstetric and mental benefits. The following conditions were to be evaluated first provided that the woman is not COVID-19 positive, the companion has been screened and is negative, the companion has been instructed about and is willing to comply with the infection prevention precautions, the infrastructure of the labour ward allows for the companion to avoid close contact with other patients in the ward. In their research, Vallin et al (2019:52) concur with the findings in this research that the women's partner had a major challenge in witnessing their partners in pain. Being helpless to relieve pain on the women gave rise to anxiety and a desire to make changes so that she would not suffer.

6.3.8.3 Theme 7: Critical challenges confronting the midwife for utilisation of birth companions

The majority of the participants who worked in the labour wards were females; therefore, female midwives are vulnerable as compared to their male counterpart. The labour ward needs to be safe for midwives to practice freely without fear of intimidations. Some of the participants reported that birth companions are not cooperative and confront the midwives. Labour and birth are stressful for both health care professional and the woman, for the midwives to think on the strategies to assist the woman in labour, birth companions should not interfere in the midwifery procedures. Spencer et al (2018:6) in the study done in South Africa reported that midwives raised a concern on the women and their families' attitudes to be challenging for providing continuous support during labour and childbirth. The bad attitude can however not benefit both women and the health care professional as negative effects can affect either of them. The health care professionals need to be re-orientated on their responsibilities towards birth companionship while the community need education on their responsibility towards supporting the woman during labour and childbirth.

South Africa has recently experienced an influx of people from African countries who are in the country for various reasons. This has contributed to the overcrowding of women in the labour wards which led to the inadequacy of space which makes it difficult to provide privacy. Maziero et al (2020:533) in the study done in North of Parana indicated that there was an inadequacy of the infrastructure which led to non-compliance with the companion law.

The participants also reported shortage of resources which put a strain on the provision of maternity services. According to a systematic review which was conducted by Kabakian-Khasholian and Portela (2017:10) stated that

overcrowded shared labour rooms was a concern in resource-constrained health care facilities. In the health care facilities were there was shortage of midwives, training of lay companions, hiring and training of unemployed or retired nurses/midwives were suggested in order to be able to provide women in labour with quality care.

When there is high volume of women in labour and inadequate health care professionals, incidence happens which may lead to lawsuits. One factor that inhibits utilisation of birth companions is the midwives' fear of lawsuits. Nowadays most people have information on law related issues; therefore, one can sue the department of health if a misshapen can occur. Mazeiro et al (2020:533) in the study done at University hospital in a municipality in the north of Parana found out that birth companions were not allowed, to save themselves from situations that can go beyond their control.

Limpopo Province is a gate way to the majority of African countries; some of the African people are unable to communicate in English and languages that are being used. The participants in the study done in South Africa raised a concern on communication barrier were the support person and the woman did not understand each other's languages (Spencer et al 2018.5). The midwives found it difficult to communicate with such people. These types of a situation need a birth companion who can at least interpret what the midwives are saying. Language barrier can hinder the woman from getting advice from the health care professionals. Technology can also assist to rescue the situation by using cell phones.

6.3.8.4 Theme 8: Strategies to improve the availability of birth companions

WHO (2016:3) shows that the absence of national or institutional policies to allow women to have a birth companion of choice during labour and childbirth was a barrier to implementation. Another barrier which was cited by WHO (2016:1) was limited knowledge among managers and health care professionals about the benefits of birth companions. The pregnant women need information on birth

companionship during ANC visits in order to strengthen the value of birth companions by the health care professionals. The community also need to be given information on birth companions to promote utilisation of birth companions in hospitals of Limpopo Province.

The findings in this research revealed that lack of information, misinformation received from the social environment due to ineffective perinatal care concerning pregnancy and childbirth was affecting the primigravida women to withstand the stress of giving birth. It is evident that childbirth preparation is important to improve the psychosocial well-being of the pregnant women to enhance their ability to give birth. Practical social support information during pregnancy is important to help the women approach childbirth positively (Munkhondya et al 2020:9).

If the health care professionals do not provide the community with information related to birth companionship, the social media will provide them with misinformation, which will not do well to the women in labour. Engaging with effective communication was identified as one of the domains in respectful maternity care in a mixed method review by (Chang, Coxon, Portela, Furuta & Bick 2018:14). Effective communication was assessed such talking and listening to women, practising and encouraging non-verbal communication skills, being honest, availability of interpreters due to language proficiency and cultural difference and providing empathy. The ineffective communication can be bridged by allowing the women to be assisted by their companion of choice who can be able to communicate with them and the health care professionals during labour. The health care professionals may also be given in-service education related to communication to remind them of their responsibilities and remedy the problem of poor communication skills.

As indicated in theme 9: that there is overcrowding and shortage of resources including health care professionals. The participants suggested that more staff to be hired so that the woman and the birth companions will be assisted. The community members may end up losing trust on the midwives owing to heavy load

and staff shortages, therefore it is vital for the managers to maximise workload and allocation of staff in maternity units (Spencer et al 2018:3).

Owing to overcrowding as cited in theme 9: the Department of Health in Limpopo Province should increase the space in the labour ward to accommodate companions. Spencer et al (2018:5) stated that women in labour and their birth companions need privacy. There is no space in an overcrowded unit; space is needed to reduce the rate of transmission of infections.

The women and community members expect a health service environment where quality care is provided and good health outcomes are achieved. The participants suggested that a workshop to be arranged on respectful maternity care. Successful implementation of the intervention can be achieved by influencing the health care professionals to change their attitudes towards birth companionship. Birth companionship implementation can be achieved through sensitisation activities such as provision of evidenced-based information through minimisation of system barriers like avoidance of overloading staff, provision of privacy and space and through sharing of women's positive experiences to motivate participation (Kabakian-Khasholian & Portela 2017:11). The health care managers need to acknowledge and address the barriers of utilisation of birth companions; otherwise the non-utilisation of birth companions will remain.

Theme 9 further indicated that there is shortage of staff, which may have been caused by overcrowding. According to South African National Council (SANC) regulation R2488; (7) (1) state that, a midwife shall not leave the woman alone without telling her where she is going in the second stage of labour. During the second stage of labour, labour contractions are strong and delivery is imminent, therefore taking care of more than one woman is a challenge. Spencer et al (2018:2) in the study done in South Africa found that the participants mentioned that there are staff shortages which limit the ability to provide continuous support during labour and childbirth. Some of the midwives in their research indicated that they are taking care of different types of maternity patients (labour patients, antenatal clients, post-natal deliveries, and post-Caesarean section, and

premature unit /neonatal and normal deliveries). The workload of midwives in this study is not normal, therefore action need to be taken by managers before the staff develops ill effects.

6.4 CONCLUSION

In order to implement birth companionship, the women and the health care professionals need to be engaged to assess if they can implement the suggested practice. A strategy needs to be developed by the department of health to address the health care providers' concerns. The findings and recommendations will be discussed in the next chapter.

The discussions of this research will be discussed based on the objectives which were met.

Objective one:

 To establish knowledge of postnatal women towards utilisation of birth companions in the public sector labour wards of Limpopo Province.

The findings on development of guidelines in utilising birth companions of women in Limpopo Province, South Africa were presented in this chapter. Most of the respondents 245 out of 304 (80.59%; f=245) indicated that they did not receive information on birth companionship while 59 out of 304 (19.41%; f=59) received information on birth companions. Two out of 48 (4.17%; f=2) respondents reported that they heard about birth companions from friends, 31 out of 48 (64.58%; f=31) from health care professionals, six out of 48 (12.50%; f=12) from social media, five out of 48 (10.42%; f=5) from community members and four out of 48 (8.33%; f=4) from their family members. The results reveal that 80.59% of postnatal women do not know what a birth companion is while 19.41% indicated that they know what a birth companion is.

The majority of respondents 299 out of 302 (99.01%; f=299) respondents were accompanied by someone to the health care facility and 22 out 299 (7.36%; f=22) respondents had a birth companion during labour. Ten out of 22 (45.46%; f=10) cited the reasons for not having a birth companions as lack of knowledge. The results show that even though a large number 99.01% of respondents were accompanied by someone during labour, only a few 7.36% remained to support the women post admission.

Seventy-six (76) out of 299 (25.42%; *f*=76) were given pain medication during labour and 8 out of 304 (8.55%; *f*=304) respondents took more than 24 hours in labour. Hundred (100) out of 304 (32.89%; *f*=100) said that their babies were admitted in neonatal unit and 40 out of 100 (40.00%; *f*=100) new-born babies were admitted in neonatal unit owing to labour related conditions. Some of the analgesics that are prescribed for women in labour cross the placental barrier and may suppress the new-born respiration after delivery. About 69% of respondents have chosen to breastfeed/formula feed their babies for 1-2 years. Roy's Adaptation Model postulates that human being can cope with change through adaptation. Although birth companionship is not practised in some of the health care facilities, health care professionals and the pregnant women can cope with the introduction of birth companionship.

Objective two

• To explore and describe the perceptions of postnatal women towards utilisation of birth companions (quantitative method).

It is important to consider the views of postnatal women regarding the utilisation of birth companions. The majority of respondents 260 out of 304 (85.53%; f=260) indicated that it is important to have a birth companion while 44 out of 304 (14.47%; f=44) respondents reported that it is not important to have a birth companion. Furthermore, 19 out of 40 (47.50%; f=19) respondents indicated that it is not necessary to have a birth companion and ten out of 40 (25.00%; f=10) were satisfied with the assistance from health care professionals. Two-hundred and fifty-two (252) respondents out of 265 (95.09%; f=252) stated that they prefer their

family members, five out of 265 (1.89%; f=5) respondents preferred friends and eight out of 265 (3.02%; f=8) respondents indicated that they do not prefer anybody. The following statements were stated as reasons for the chosen person: sharing responsibility with their partners, experience of their mothers, aunts as their primary caregivers, friends understanding the birth situation and grand-mothers assisting in child care. Even though the majority of respondents (86%) reported that it is important to have a birth companion, the health care professionals should encourage those who think it is not important to have a birth companion and tell them the importance of birth companionship.

Two-hundred and sixteen (216) out of 265 (81.51%; *f*=215) respondents agree that birth companion will remain with the women during labour to help when in need while 44 out of 265 (16.60%; *f*=44) respondents disagree that a birth companion will remain with you throughout labour to help when in need. Two-hundred and thirty (230) out of 295 (77.97%; *f*=230) postnatal women agree that the birth companionship will improve the relationship between the partners, mothers and new-born babies while 51 out of 295 (17.29%; *f*=51) did not agree that birth companionship will increase the relationship between the partners, mothers and new-born babies. The findings indicate the willingness of the respondents to utilise birth companionship. Two-hundred and fifty-six (256) out of 304 (84.21%; *f*=256) respondents in this research were 18 to 35 years old. The majority of women deliver their babies during this age group of 18 to 35 years. Therefore, there is a great possibility that some of the women may deliver again and utilise birth companions.

Most of the respondents 19 out of 32 (59.37%; *f*=19) who answered this question indicated the factors that can motivate the respondents to utilise birth companions as psychological support which will be provided by the birth companions. Roy's Adaptation Model postulates that the nursing/midwifery goal is to enhance the client/women's adaptation and regulates stimuli that affect adaptation. It is the responsibility of the health care professionals to identify factors that can inhibit utilisation of birth companions and develop strategies that will promote the utilisation of birth companions in health care facilities.

Seventy-two (72) out of 298 (24.16%; *f*=72) respondents indicated that their relationship with their partners will be reduced if their partners become their birth companions while 71% disagree that the relationship with their partners will be reduced if they become the respondents' birth companions. Ten out of 14 (71.43%; *f*=10) respondents argued that their partners will be afraid of having another baby if they witness the women giving birth. Although pregnancy and birth carry risks, it is a wish for most of the women to have children of their and enjoy experience. The findings of this study indicate that the majority of respondents 85.53% reported that birth companionship is important, which implies that most of the women are interested in being supported by someone other than the health care professionals.

Objective three:

 To explore and describe the perceptions of midwives towards utilisation of birth companions (qualitative method)

All the participants perceive the presence of birth companions as good, which imply that the midwives see the presence of a birth companion as someone who will provide positive results on the labour progress.

Objective four:

 What are the factors that inhibit utilisation of birth companions by both pregnant women and the midwives (qualitative method)?

Some participants speculated that some women may be afraid to bring along their partner's as birth companions because they think that their partners will lose interest in them. The study findings revealed lack of information as one of the factors that inhibit the utilisation of birth companions. Some participants reported factors that inhibit utilisation of birth companions as overcrowding of women in labour which leads to inadequate space and resources which compromise privacy in the labour rooms. African cultural beliefs are one of the factors that inhibit utilisation of birth companions in health care facilities. Some participants indicated that now with COVID-19, birth companions are not allowed in their health care

facility as a measure to minimise the infections. The midwives also reported that the birth companions are not cooperative and that they are afraid of lawsuits if unforeseen circumstances occur.

The health care professionals who are taking care of the pregnant women should instil a positive attitude on the women which will motivate them to utilise birth companions and enhance self-efficacy. According to Roy's Adaptation Model, the health care professionals need to create a positive climate that will promote the utilisation of birth companions. Pregnant women also need to have a desire or strategies to overcome their fears or challenges that can hinder them from utilising birth companions.

CHAPTER 7

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

According to WHO (2018:2), approximately 140 million women deliver their babies globally every year. In South Africa, 10009065 million live births were registered in 2018 whereby 946 546 were between 0 to 364 days and 62 519 were one and more years of age. Limpopo is the third province in South Africa with 13.3% of the total live birth registered in 2018 (Statistics South Africa 2019:5).

Most of the women who deliver their babies did not have identified risk factors for complications of themselves or their babies at the onset of labour. The risk of morbidity and mortality for the mother and the baby increased in situations where complications arise during labour (WHO 2018:2). WHO (2018:2) further maintains that above one third of maternal deaths and a proportion of life threatening pregnancy conditions arise during labour, childbirth or immediately post-delivery periods which results from haemorrhage, obstructed labour or sepsis. Similarly, approximately half of all stillbirths and a quarter of neonatal deaths results from complications which occurred during labour and childbirth.

Women have been encouraged to deliver their babies in health care facilities over the last two decades by skilled health care professionals. The prevailing intrapartum care model in many parts of the world enables the health care professionals to control the birthing process, which may expose women to unnecessary medical interventions that interfere with the physiological process of childbirths. Therefore, it is important for the health care professionals to facilitate the provision of quality care and a good experience for the women during childbirth (WHO 2018:2). The provisions of non-pharmacological pain relief methods by the women's birth companions could help to achieve the quality labour outcomes the women and health care professionals envisage.

Continuous birth support requires the presence of someone who is constantly with the woman at birth and who gives her emotional support, provides comfort, protects, informs, offers suggestions, and supports. The continuous support can be provided by a woman's family, a midwife, a nurse, a trained birth supporter, or anyone close to the woman. A supportive person can help the woman move, walk, change positions, and use breath awareness practices. Having someone next to the woman during birth has an immeasurable value as it makes her feel safe (Yazdkhasti, Hanjani & Tourzani 2018:2). The birth companion will distract the woman from labour pains, promote good labour process and reduce the need for interventions.

There are two factors that affect the woman's response to labour/childbirth pains namely; psychological and physical. The woman's birth environment, negative or positive support systems, past pain experiences, pain expectation, emotional stress, fatigue, sleep deprivation, cultural expectations and anxiety are some of the psychological causes of pain. The physical causes of labour pains include decreased tissue perfusion which results into hypoxia in the uterine muscle during contractions, labour pains due to cervical tension, pressure on the bladder, rectum, urethra and also pelvic muscles distension (de Kock, van der Walt & Jones 2010:12-5-12-11; Davidson, London & Ladewig 2012:549-550).

Health care professionals should teach birth companions their responsibilities in the labour rooms which include:

- Provision of continuous physical, emotional and spiritual support for a woman during labour and childbirth.
- Offer comfort measures and guidance to help the woman focus on the birth plan.
- Respect the woman's privacy.
- Support and help the woman to communicate her wishes with the health care professionals, ensure that the woman understands and is also understood (Mcleish & Redshaw 2017:10-11).

7.2 INTERVENTIONS THAT PROMOTE UTILISATION OF BIRTH COMPANIONS IN PUBLIC HEALTH CARE FACILITIES WERE DELIVERY OF BABIES IS TAKING PLACE IN LIMPOPO PROVINCE OF SOUTH AFRICA

The development of the guidelines was drawn from the findings of the study together with the theoretical framework. Some of the midwives in this research indicated that some birth companions are not cooperative. Birth companions should not do the following:

- Perform any massage on the perineum per vaginal examination and rupture membranes.
- Take temperature, blood pressure or check foetal heart rate.
- Give any form of treatment or herbal remedies such as essential oil diffusers, burning candles and heating pads.
- Disrupt the birthing process, staff or medical care.
- Make decisions for a pregnant woman in labour.
- Disagree with the hospital policies (Mcleish & Redshaw 2017:10-11).

7.2.1 The purpose of the guidelines was as follows:

• The promotion of birth companions in public health facilities where delivery of babies is taking place to improve labour outcomes.

7.2.2 The research objective was as follows:

 To develop guidelines on promotion of birth companions in public health facilities were delivery of babies is taking place to improve labour outcomes (quantitative/qualitative methods).

7.2.3 The research questions were as follows:

 Which knowledge do postnatal women have about the utilisation of birth companions during labour and childbirth in the public sector labour wards of Limpopo Province (quantitative method)?

- What are the perceptions of postnatal women towards utilisation of birth companions during labour and childbirth (quantitative method)?
- What are the perceptions of midwives towards utilisation of birth companions during labour and childbirth (qualitative method)?
- What are the factors that inhibit utilisation of birth companions by the midwives (qualitative methods)?

7.2.4 The assumptions of the guidelines

 The assumptions of the guidelines have been developed by applying the following concepts; by reviewing the relevant literature such as, the PICO model, Roy's adaptation model, the WHO, Respectful Maternity charter, Guidelines for Maternity Care in South Africa and Health Direct Australia.

7.3 DISCUSSION OF THE PROCESS OF GUIDELINE DEVELOPMENT

7.3.1 The strategy:

- The Limpopo Department of Health will be provided with relevant information that will be disseminated to the community members related to utilisation of birth companions.
- The developed guidelines will ensure uniform and standardised practice among health care professionals in health care facilities. Moreover, health care professionals will be able to use policies which were developed by the Limpopo Department of Health policy makers to adapt and develop protocols to suite their health care facilities.

7.3.2 The rationale for development of guidelines

The guidelines were developed for the health care professionals who are rendering midwifery/ obstetrics services to educate the women and birth companions on what should be done to utilise birth companions in Limpopo

Province. The guidelines were also developed to capacitate the women with knowledge of the benefits of birth companionship to improve the women's physical, psychological, emotional and spiritual well-being. The guidelines were developed for the midwives to facilitate the utilisation of birth companions to teach the mother of the non-pharmacological methods used to relief pain during labour/childbirth and to experience positive childbirth.

- During ANC, pregnant women should choose a person whom they are comfortable with, to be their birth companion.
- The names and contact number of the chosen person need to be recorded in an identified space in the ANC record so that they may be called when a need arise.
- The chosen person should be able to attend at least three or more antenatal visits with the pregnant woman whereby they will be taught the roles and responsibilities of birth companions.
- Training of birth companions is to be done at every heath care facility which conducts childbirths.
- The responsibilities of birth companions will include assisting the woman during ANC, labour, childbirth and post-delivery to empower/encourage the woman to focus on the birth plan.
- Post-delivery, a birth companion will assist the woman in the prevention of postpartum complications and taking care of the baby including breastfeeding.
- The women who do not need a birth companion will be assisted by the health care professionals.

7.4 THE PROCESS OF GUIDELINES DEVELOPMENT

The guidelines indicate the best treatment plan for patient care to promote quality health outcomes (Grove, Gray & Burns 2015:443).

The PICO format will be followed during the development of research guidelines:

- P-population or participants of interests
- I-intervention needed for practice
- C-comparison of intervention to determine the best practice
- O-outcomes needed for practice.

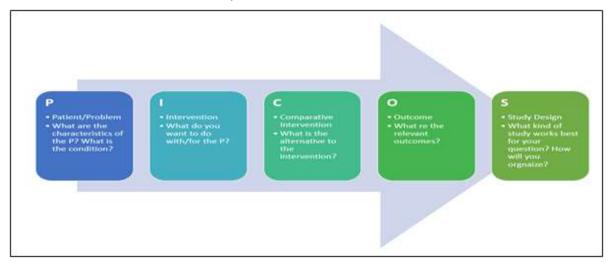


Figure 7.1: Conceptual model (libguides.murdoch.edu.au)

Prior to starting a clinical research, the researcher formulated questions which describes the four elements of the Pico format which are: The identification of the patient or population the researcher intended to study, the intervention or treatment the researcher want plan to use, the comparison of one intervention to another and the outcome we anticipate (Grove, Gray & Burns 2015:443). This will be applied throughout the presentation of the guidelines.

7.4.1 P-Population or participants of interests

The population of interest in this study were pregnant women who delivered their babies in public health care facilities and still admitted in postnatal unit and the midwives who rendered the childbirth services. The researcher used Roy's Adaptation Model which helps the women and health care professionals to adapt to the use of birth companions in public health care facilities of Limpopo Province, South Africa. The results of this investigation revealed that 81% respondents did not have information on birth companions and 96% were not having a birth

companion. The postnatal women in this research did not have information on utilisation of birth companions. Midwives who were interviewed knew what a birth companion is and the benefits of having a birth companion. Studies have indicated the importance of having a companion during labour and childbirth.

7.4.2 I-Intervention needed for practice (measures that a birth companion can employ to relieve labour and birth pain)

7.4.2.1 Hydrotherapy

This is the immersion of a woman in water during labour as a means of pain relief measure.

- Warm water relieves muscle spasm and increases relaxation, therefore pain and "hydrokiness" ameliorate the effects of gravity and also the discomfort and strain on the pelvis.
- Warm water also lowers blood pressure and increases diuresis which improves the process of birth pain.
- Immersion in water reduces the adrenaline hormone and helps to release endorphin and oxytocin thus slow and painful labour is enhanced (Davidson, London & Ladewig 2012:612; Başgöl & Koç 2020:2).

The women will receive less or no augmentation of labour with the use of oxytocic drugs, reduced analgesics usage and length of labour and experience lower incidence of genital trauma (Smith, Levett, Collins et al 2018:2; Başgöl & Koç 2020:2). Positive childbirth will be experienced by the mother post-delivery of the baby with the use of hydrotherapy.

7.4.2.2 Music therapy

Music assists women in labour to have reduced anxiety and helps the women to cope with pain and supports mother-baby relationship. The women develop courage and confidence and therefore remove unpleasant painful stimuli,

increasing the release of endorphins and initiating relaxation (Smith et al 2018:2; Başgöl & Koç 2020:3).

Birthing rooms are to be equipped with compact disc or radio apparatus to help the woman in labour/childbirth to be entertained, relaxed and find some form of distraction. Music provides an enabling effect and empowerment, and therefore provides a positive effect. Music helps to remove unpleasant stimuli, increases the release of endorphins and initiates relaxation (Smith et al 2018:2).

7.4.2.3 Distraction

The woman's attention to pain is taken off by letting her walk around talking to her. Some women may visualise exotic and beautiful places or occasions, while some may recite Bible verses or poems. The Lamaze method (the breathing technique) which is controlled to enhance relaxation and assist the woman to cope with labour pains based on stimulus condition can be practised. The woman can be taught to focus her eyes on a specific object during contractions, distracting her attention from the pain (Davidson et al 2012:610).

7.4.2.4 Relaxation

Relaxation relieves pain by loosening muscle tension, which causes pain and anxiety. Relaxation facilitates communication, reduces tension and fatigue during labour pains, preserves energy and accelerates blood flow which in turn promotes oxygenation to the foetus. The midwives should provide the women in labour with the following to promote relaxation: calm environment, provide comfortable clothes, encourage the woman to empty the bladder, listening to music, meditation, position changing or movement which will promote muscle relaxation (Smith et al 2018:2; Yazdkhasti et al 2018:2; Davidson et al 2012:610; Başgöl & Koç 2020:2).

7.4.2.5 Breathing method

Rhythmic moaning and breathing are comfort techniques that are used to relieve labour pains. The breathing method assists the woman to cope with the intensity of labour pains, helps her to relax, and improves utero-placental blood flow to the foetus (Yazdkhasti et al 2018:2; Davidson et al 2012:611; Başgöl & Koç 2020:4). The midwives should teach the women and the birth companions the following:

- To breathe more slowly, making a singing noise, and relax with each breath.
- The women should notice their normal breathing with few and shorts commands.
- To breathe more slowly if they feel pains and feels dizzy.
- At the end of the second stage of labour, the women should open their mouth to breathe, take two short breaths followed by a long breath out to prevent pushing. During delivery of the head, the women should push while breathing steadily (Yazdkhasti et al 2018:2; Davidson et al 2012:611; Başgöl & Koç 2020:4).

7.4.2.6 Superficial heat and cold

Hot compresses are applied on the groin, perineum, abdomen and back to relieve pain of the women during labour. Hot water bottles, heated socks filled with rice or heated bean bags, warm blankets and towel soaked in water may also be used. The hot compresses are used to relieve muscle spasm caused by stimulation of ischemia and large nerve endings thus reduce pain (Davidson et al 2012:609; Başgöl & Koç 2020:2).

Cold is applied to the women's back, chest and or face during labour. Ice block, frozen silica blocks, frozen gel packs, bottles filled with ice or wash cloths dipped in cold water can be used. A plastic rolling pin filled with ice or cool drink tin chilled in ice can be rolled on the lower back. Placing cooled cold water pads on the woman's forehead, sprinkling cold water on the woman's face and placing covered ice pieces on the woman's sacral area or keeping the woman's hands in cold

water can also relief pain. Cold compresses reduce skin sensitivity, prevents muscle spasm and relieves tension on joints (Smith et al 2018:2; Yazdkhasti et al 2018:2; Başgöl & Koç 2020:2).

7.4.2.7 Touch and massage

The midwife should ask permission before touching some of the women at certain times; they do not want to be touched. Touching someone conveys pain reducing messages. Different forms of massage/touch include vibration, stroking, kneading and continual steady pressure. The midwife may rub the woman's back between contractions. The nurse should use firm circulatory movements and the woman will indicate the most painful area. A quick rubbing action is however, ineffective and irritates the woman's skin (Yazdkhasti et al 2018:2; Davidson, London & Ladewig 2012:610; Başgöl & Koç 2020:4).

7.4.2.8 Hypnosis

Hypnosis is a state of deep relaxation in an alert mind during which the individual has increased suggestibility. Hypnosis for childbirth is almost always self-hypnosis. The hypnotherapist teaches the woman to induce hypnotic state in herself during labour in which a woman imagines that her hand is numb and that it can spread numbness to other areas by placing her hand on painful areas. Furthermore, the hypnotherapist can also teach the woman imaginative "transformation" in which pain is interpreted as benign and acceptable and contractions seen as surges of energy that cause a light pressure. Hypnosis can reduce the need for pharmacological pain relief during labour and childbirth, increase incidence of vaginal birth, reduce oxytocin augmentation and it does not have any adverse effects on the mother or the neonate. Hypnosis requires a series of training sessions with the hypnotist; therefore, it is time consuming (Yazdkhasti et al 2018:2; Başgöl & Koç 2020:3).

7.4.2.9 Aromatherapy

Aromatherapy is the use of essential oils to reduce pain and anxiety during labour. Midwives should use with caution the lowest dose possible on the least number of occasions. More herbs can be used in aromatherapy such as rose oil, lavender oil, sweet orange oil, jojoba oil, geranium, olive oil, salvia, jasmine, juniper, sandalwood, and eucalyptus. Lavender oil can also be used when massaging or adding to bath water. Lavender oil has a strong antiseptic feature. Aromatherapy has the following benefits, namely; reduces anxiety, maintenance of relaxation, and reduces fear, pain, nausea and vomiting. Roses, lavender, sage, neroli are applied in the form of inhalation or rubbing on the mother's skin during labour (Yazdkhasti et al 2018:2; Başgöl & Koç 2020:2).

7.4.2.10 Reflexology

This is the manual stimulation of the reflex points on the feet and hands corresponding to all parts, organs and systems of the body. Reflexology stimulates the nerves, blood circulation in the body which triggers the release of endorphins (natural pain relievers) and performs a holistic balancing treatment (Yazdkhasti et al 2018:2; Başgöl & Koç 2020:3).

7.4.2.11 Yoga

This is the merging of body, mind and soul with each other in harmony. Yoga is used as a relaxation method in pregnant women which promotes comfort, reduces birth pain and the duration of labour (Smith et al 2018:2; Yazdkhasti et al 2018:2; Başgöl & Koç 2020:3).

7.4.2.12 Focus your mind and dream

These pains relief method uses senses to focus on attention and dreaming. The woman can focus on auditory stimuli such as listening, music or verbal support, or tactile stimuli such as massage, touch or caress. The woman can also use visual

stimuli or mental activity such as prayer, song or counting down. Positive thinking, breathing, relaxation, and positive visualisation are effective in mother during labour and childbirth. The utilisation of these techniques prevents sensory impulses detected during contractions from reaching the pain centre in the cortex of the brain (Smith et al 2018:2; Davidson et al 2012:610; Başgöl & Koç 2020:3).

7.4.2.13 Maternal movement and position changing

Pregnant women feel less back and abdominal pain when they are in a standing or sitting position than lateral or flat lying position during labour. Moreover, pregnant women should avoid supine position because it reduces blood return to heart by causing pressure on the vena cava and therefore, slow the labour and birth progress. Position changing can help to speed up the progress of labour owing to positive effects of gravity and shape changes in the pelvis. Position changing like rocking, walking, swaying with rhythmic breathing improves labour progress and helps the foetus to take positions which are compatible with the mother's pelvis angle (Davidson et al 2012:609; Başgöl & Koç 2020:3).

It is important that health care professional allows the woman to choose a companion earlier in the pregnancy so that the woman and her companion can be taught the methods they can apply to reduce labour pains. The methods include caring for physical, psychological and emotional needs of the woman to assist her to experience a positive birth experience and good labour outcomes.

7.4.3 C-Comparison of intervention to determine the best practice

7.4.3.1 Values

The quantitative study explored the perceptions of postnatal women regarding birth companionship. The majority (85.53%) of postnatal women indicated that it is important to have birth companions and (13 out of 15) midwives also stated that they do not have problem in the utilisation of birth companions.

- The health care managers together with the health care professionals need to develop policies and protocols for the utilisation of birth companions.
- The health care managers need to develop strategies to empower the health care professionals with information regarding birth companions such as in-service education.
- The reproductive unit managers need to monitor the implementation of birth companionship in the obstetrics units so as to be able to ensure that all pregnant women in labour receive quality care from health care professionals.

7.4.3.2 Equity

Companionship for a woman could increase equity through reduction of medicalisation of childbirth such as augmentation of labour and application of pharmacological methods of pain relief. The health care professionals should apply respectful maternity care guidelines, which require that, every pregnant woman to have a birth companion in accordance with the human right-based approach (WHO 2018:16).

The health care managers to draw policies and protocols for health care professionals to practice birth companionship so that the pregnant women should receive quality care. The reproductive health unit managers should regularly support, supervise and monitor the implementation of the birth companionship through multidisciplinary meetings.

7.4.3.3 Acceptability

According to the respondents in this research, most women indicated that they need their mother, husband/partner, mother in law, sister or friend to be their birth companions. The difference of choosing birth companions in this study among postnatal women indicates the importance of giving women an opportunity to choose their birth companion.

7.4.3.4 Feasibility

The barriers of practising birth companions in this study were explored whereby shortage of resources (human, material and infrastructural) was cited by the midwives. The midwives also indicated that there are COVID-19 restrictions and lack of co-operation by some birth companions.

- The health care managers need to make provision for resource generation and budget to address the shortage of resources to be able to implement birth companionship.
- In-service training should be done to strengthen good quality maternity services.
- The health care managers to facilitate behavioural changes strategies aimed at health care professionals, to adapt to utilisation of birth companions.

7.5 O-OUTCOMES

The outcomes of utilising birth companions may include the following:

- The women will receive respectful quality care from the health care professionals during labour and childbirth.
- The pregnant women will have good childbirth experience, birth outcomes for mother and new-born baby.
- The health care professionals will experience less stress which emanates from labour and childbirth complications.
- The Department of Health will have enough capital to render quality obstetrics health care services, which is consumed by social grants/law suits from labour and childbirth related complications.

7.6 SENSITISATION OF COMMUNITY

The health care professionals should initiate strategies that are needed to disseminate information to the community. The results of this study show that the

majority of postnatal women (80.59%) did not receive information on birth companionship.

- The health care professionals need to provide community members with information related to birth companionship through the use of flyers, posters, leaflets, internet, radio, television, print and social media to provide an opportunity to the pregnant women to make informed choice on the use of birth companions.
- The health care professionals need to educate the communities about the benefits of birth companions to achieve good labour outcomes on the mother and neonate by the utilisation of community leaders like politicians and chiefs.
- The health care professionals should refer postnatal women to community service workers to assist women with neonatal challenges like difficulty in breastfeeding.
- The pregnant women should be encouraged to attend ANC early in their pregnancy so that the health care professionals should be able to provide them with birth companion information. The chi-square (x²) of the gestational age at first ANC visit was 1.22 and the p-value is between 0.50 and 0.25 (0.50<p<0.25). Therefore, the p-value is less than 0.05 (p<0.05). This means that all the p-values are < 0.05; therefore, there is enough evidence to reject the null hypothesis. The null hypothesis was that there is no difference between the postnatal women's gestation age at first ANC visit and the knowledge of birth companionship. The alternative hypothesis was that postnatal women's gestational age at first ANC visit influenced the knowledge on birth companionship. There was sufficient evidence to accept the alternative hypothesis that postnatal women's gestational age at first ANC visit influences the knowledge of birth companionship.
- The health care professionals should enhance self-efficacy on the pregnant women to be able to utilise birth companions.

7.7 LIMITATIONS

Polit and Beck (2017:12) assert that a study that uses human beings as instruments through which data is gathered have several limitations. Humans are extremely intelligent and sensitive, but fallible tools. The majority of respondents did not have knowledge on birth companions. Therefore, they were unable to give information on some of the questions that were asked such as the challenges of utilisations of birth companions. The researcher collected data from the postnatal women who were in labour for more than three hours. The views of the women who underwent elective Caesarean section and those with precipitous labour were not included. The investigator could not enquire about the nature of assistance and the experiences of the respondents who indicated that they had birth companions. The guidelines will be developed to promote utilisation of birth companions in public health care facilities were delivery of babies is taking place to improve labour outcomes

7.8 FUTURE RESEARCH CONTRIBUTIONS

- The same study can be conducted nationally across South Africa to develop guidelines that would be generalised to the whole population of South Africa.
- Postnatal women were not asked if they were satisfied with the care they
 received from health care professionals in the absence of birth companions
 therefore this can be investigated.
- The respondents need to be asked about the nature of support they received from birth companions during labour and childbirth.
- The postnatal women should have been asked the reasons for not having a birth companion.

7.9 CONCLUSION

Guidelines were developed for health care professionals who are rendering obstetric services to educate the women and birth companions on what should be done to utilise birth companions in Limpopo Province. The development of guidelines in utilising birth companions by women in Limpopo Province was presented, explored and analysed. The aim of the study was to investigate the utilisation of birth companions by women in the public sector labour wards of Limpopo Province, South Africa, in order to develop guidelines for implementation of birth companions. Birth companions' utilisation can be facilitated by the managers of the Department of Health whereby policies, guidelines and protocols drawn that support the availability of birth companions in the labour wards. The community members may be taught about the importance and responsibilities of birth companions to foster efficacy on the pregnant women. A mixed methods research design was used whereby a questionnaire was developed to obtain data from postnatal women and a semi-structured interview guide was used to obtain qualitative data. A non-probability (convenience and purposive) sampling was used to select the participants/respondents.

The results of the investigation revealed that even though the midwives know what a birth companion is, the majority of the postnatal women did not know and utilise birth companions. Health care professionals have a responsibility of giving information to the people of Limpopo Province on birth companionship and invite the chosen companions to accompany the women to the ANC clinic to help the women to have good labour and neonatal outcomes. Education and training of birth companions can improve the woman's birth experiences and ensure that the women receive respectful maternity health care services they envisage.

Health care professionals have a duty to disseminate birth companions' messages to the entire community to enable them to cooperate when they are chosen by the women to be their birth companions. Women are the ones who are responsible for bringing babies to the community; therefore, it is the responsibility of the community to support them in this challenging situation.

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ANNEXURE A: LETTER OF SEEKING CONSENT FROM THE DEPARTMENT
OF HEALTH: LIMPOPO PROVINCE

Eng: Seroto M. E P. O Box 284

Student N0:33878560 Lenyenye

Cell N0: 08 297 3267 0857

Head of Department

Limpopo department of Health

Sir/Madam

Re: request for the use of postnatal women and midwives to collect data (PHD in Nursing Science).

1. The above matters refers

2. Mapula Ennia Seroto student NO: 33878560, is conducting academic research study and is attached to the University of South Africa. The research study is for PHD in Nursing Science.

3. The title of the research study is "Development of guidelines in utilising birth companions of women in Limpopo Province, South Africa".

4. Kindly we are requesting the Department of Health to allow Mapula to collect data from postnatal women and midwives within Mankweng, Lebowakgomo, Letaba, Mokopane and St. Ritas hospitals.

5. To verify and/or confirm the details kindly contact my supervisor of this research as follows: Prof. LM Modiba. Tel NO: 012 429 6337, Email address: Modiblm@unisa.ac.za.

Your approval to conduct this study will be greatly appreciated.

Yours faithfully

Seroto Mapula Ennia

ANNEXURE B: UNISA ETHICAL CLEARANCE



should be communicated in writing to the Research Ethics Review Committee, Department of Health Studies. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.

- The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.
- 4) You are required to submit an annual report by 30 January of each year that indicates that the study is active, Reports should be submitted to the administrator <u>HSREC@unisa.ac.za.</u> Should the reports not be forthcoming the ethical permission might be revoked until such time as the reports are presented.

Note:

The reference numbers [top middle and right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the Research Ethics Committee: Department of Health Studies.

Kind regards,

Prof JM Mathibe-Neke CHAIRPERSON mathijm@unisa.ac.za Prof KM Masemola DEAN OF COLLEGE OF HUMAN SCIENCES

ANNEXURE C: ETHICAL CLEARANCE FROM LIMPOPO DEPARTMENT OF **HEALTH**



DEPARTMENT OF HEALTH

Ref Enquires Te Email

LP-2020-07-003 K. Letseparela 015-293 8028 Kurhula Hlomane@dhsd.limpopo.gov.za

Seroto Mapula Ennia

PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

Development of guidelines in utilizing birth companions of women in Limpopo Province,

- 1. Permission to conduct research study as per your research proposal is hereby Granted.
- 2. Kindly note the following:
 - a. Present this letter of permission to the institution supervisor/s a week before the study is conducted.
 - b. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
 - c. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
 - d. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
 - e. The approval is only valid for a 1-year period.
 - f. If the proposal has been amended, a new approval should be sought from the Department of Health
 - g. Kindly note that, the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated

Head of Department

Date

24/07/2020

Private Bag X9302 Polokwane Fidel Castro Ruz House, 18 College Street. Polokwane 0700. Tel; 015 293 6000/12. Fax: 015 293 6211. Website: http://www.limpopo.gov.za

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ANNEXURE D: PERMISSION TO CONDUCT THE STUDY



DEPARTMENT OF HEALTH

Enquires Email

LP-2020-07-003 K. Letseparela

015-293 6028 Kurhula.Hlomane@dhsd.limpopo.gov.za

Seroto Mapula Ennia

PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

Development of guidelines in utilizing birth companions of women in Limpopo Province,

- 1. Permission to conduct research study as per your research proposal is hereby Granted.
- 2. Kindly nate the following:
 - a. Present this letter of permission to the institution supervisor/s a week before the study is conducted.
 - b. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
 - c. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
 - d. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
 - e. The approval is only valid for a 1-year period.
 - f. If the proposal has been amended, a new approval should be sought from the Department of Health
 - g. Kindly note that, the Department can withdraw the approval at any time.

fation will be right appreciated

Head of Department

24 07 3030

Private Bag X3302 Polokwane Fidel Castro Ruz House, 18 College Street. Polokwane 0700. Tel: 015 293 6000/12. Fax: 015 293 6211. Website: http://www.limpopo.gov.za

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ANNEXURE E: DATA COLLECTION INSTRUMENT (PILOT TEST)

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Please answer the following questions by placing an (x) on the relevant block. Alternatively fill in the block. Mark one item per question.

1.	. How old ar	e you?									
2.	. What is yo	ur marita	l statu:	s?							
	Married	Single	Sepa	rated	Divord	ced	Wido	wed	Cohabi	ting	polygamy
3.	. How many	children	do yoı	u have	? (Plea	se ii	ndicate	e in th	ne box)		
	Alive				De	cea	sed				
4.	. How far pre	egnant a	re you								
	≥ 3months			4 –	6 mont	ths			6 months+		
5.	. What is yo	ur emplo	yment	status	?						
	Employed	Self-e	employ	/ed	Full tii	me		Part	time	Une	employed
6.	. Who is sta	ying with	you?								
	Father	Moth	er	Broth	er	Sis	ter	H	usband	F	riend
S	ECTION E	3: REP PER		ICTIVE	E HE/	ALT	H INI	FORI	MATION	(A	ANTENATAL
	lease answ lock. Altern										the relevant
7.	. How long (in month	s/weel	ks) ago	o were	you	able to	atte	nd first a	ınten	atal visit?

Γ	Did anyor		, ,				
L	Yes				No		
9.	How many	y times did	you visit a	ntenata	ll care (ANC) o	clinic?	
10	Did you	receive info	ormation o	n birth o	companion?		
	Yes				No		
11	. Who gav	e you the	information	on birt	h companion?		
SE	ECTION C	: PHYSIC	AL FACTO	RS (LA	BOUR PERIC	DD)	
12	. Who acc	ompanied	you to the	hospita	l?		
	Father	Mother	Brother	Sister	Husband	Friend	None
ı							
					ing a birth com		ick with an X)
							ick with an X)
		erson who				al remain? (T	
	B. Did the p	erson who				al remain? (T	
	B. Did the p	erson who				al remain? (T	
	After adr Labour Delivery	erson who	accompai			al remain? (T	
	After adr Labour Delivery	nission te post del	accompai			al remain? (T	
	After adr Labour Delivery Immedia	nission te post del	ivery			al remain? (T	
13	After adr Labour Delivery Immedia Rooming	nission te post del	ivery	nied yo		al remain? (T	

15 Who provided the assisted birth? (if	the midwife has advanced midwifery)
Midwife	Doctor
16. What was the period of pregnancy a	at birth?
17. After how long did it took your baby	to cry following birth
1 minute	5 minutes
18. Were you given pain medication du	ring labour?
Yes	No
19. Were you given any medication dur	
Yes	No
20. Did you sustain any tears during de	· · · · · · · · · · · · · · · · · · ·
Yes	No
21 Did the midwife out your hirth (year	nally passage during delivery of the haby?
Yes	nal) passage during delivery of the baby?
res	NO
22. How long did the labour process tal	ke?
Less than three hours	
More than 8 hours	
More than 12 hours	
More than 24 hours	
More than 2 days	

SECTION D: POSTNATAL

23	. What wa	as the birt	h weight of	the bab	y?				
	Less tha	n 1000g							
	1000 to	1800g							
	1800 to 2	2500g							
	2500 to	3500g							
	More tha	an 3500g							
	I do not	know							
24	. Was you	ır baby ad	dmitted in in	tensive	care unit aft	er birth?	?		
	Yes				No				
25	. Which fe		ethod did yo	u comr	nence with?	eding			
26	. How lon	g will you	keep practi	sing the	e feeding me	thod co	mmer	nced wit	h?
27	. Can you	relate yo	ur relations	hip (bo	nding) with th	ne new-l	-	oaby?	
							SI	ure	
			O-SOCIAL			onion du	win or la	2س ماد	
∠8	Yes	THINK IT IS I	inportant to	nave a	h birth compa No	union au	iiig la	JUOUI ?	
	169				INU				

If N	If No, indicate the reason why you think it is not important for a pregnant woman											
not	not to have a birth companion:											
29.	. Who do pi	refer to be your	birth compa	nion?								
Father Mother Brother Sister Husband Friend												
20	Mby do yo	ou profor the pe	roon vou ho	o obocon?								
30.	. Writy do yc	ou prefer the pe	rson you nav	ve chosen?								
21	How many	, days were yo	u admitted in	the hospital	after delivery o	f the haby?						
J 1	. How many	days were you	u aumitteu m	the hospital	arter delivery o	Title baby:						
ı												
					-							
32.	. Did you su	uffer from depre	ession after d	lelivery of the	baby?							
	Yes		N	No								

SECTION F: THE MOTIVATING AND ENABLING OR MODIFYING FACTORS:

33. Indicate the motivating and enabling or modifying factors of the availability of a birth companions by stating if you strongly agree, agree, uncertain, disagree or strongly disagree.

Key: SA = Strongly Agree, A = Agree, U = Uncertain, D = Disagree,

SD = **Strongly Disagree**.

The motivating factors utilising birth companions	SA	Α	U	D	SD
A birth companion will remain with you throughout labour to help when in need.					
A birth companion will help you with basic needs.					
A birth companion will help in taking care of the baby while I take a nap.					

A birth companion will help you in decision making.			
A birth companion is important to you and the baby.			
The relationship between you, your partner and the new-born baby will be increased.			

34.	Please	indicate	any	other	factors	that	motivated	you	to	choose	а	birth
com	panion?	•										
35.	What are	e the ben	efits c	of havii	ng a birtl	n com	panion dur	ing la	ιbοι	ır?		
											• • • •	

SECTION F: THE CHALLENGES/BARRIERS

36. Indicate to what extend you agree/disagree with challenges (barriers) of having a birth companion during labour. Tick in the table below if you strongly agree, agree, uncertain, disagree or strongly d

Key: SA = Strongly Agree, A = Agree, U = Uncertain, D = Disagree, SD = Strongly Disagree.

Challenges of having a birth companion during labour	SA	Α	U	D	AD
I am afraid she/he will invade my privacy.					
I am afraid that my partner will faint during delivery.					
My partner works far.					
I am staying far from home, so I am not sure if my parents can be able to come to support me during labour.					

My relationship with my partner will be reduced.					
The birth companion will get tired if labour prolong.					
37. Please indicate any other challenges/barriers that v	vere i	not in	clude	d in	those

mentioned above:		

Thank you for your time and effort.

ANNEXURE F: QUESTIONNAIRE: FINAL DATA COLLECTION INSTRUMENT

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Please answer the following questions by placing an (x) on the relevant block. Alternatively fill in the block. Mark one item per question.

1. How old are you?													
2.	2. What is your marital status?												
	Married	Single	Sepai	rated	Divor	ced	Widow	ed	Cohabit	ting	polygamy		
3.	s. How many children do you have? (Please indicate in the box)												
	Alive				Deceased								
4.	How far pre	egnant aı	re you?	,									
	≥ 3months			4 –	4 – 6 months				7 months+				
5.	What is you	ur emplo	yment	status	?								
	Employed	Self-e	employ	ed	Full ti	me		Part	time	Une	employed		
6.	Who is stay	ying with	you?										
Father Mother Brother							ter	Ηι	usband	F	riend		

SECTION B: REPRODUCTIVE HEALTH INFORMATION (ANTENATAL PERIOD)

Please answer the following questions by placing an (x) on the relevant block. Alternatively fill in the block. Mark one item per question.

7. How long (in months/weeks) ago were yo	ou able to atte	nd first ante	natal visit?
8. Did anyone accompany you to the anten	atal clinic visit	?	
Yes	No		
9. How many times did you visit antenatal c	are (ANC) clir	nic?	
10. Did you receive information on birth cor	npanion?		
Yes	No		
11. Who gave you the information on birth o	companion?		
SECTION C: PHYSICAL FACTORS (LAB	OUR PERIOD)	
12. Who accompanied you to the hospital?			
Father Mother Brother Sister	Husband	Friend	None
If none, what are the reasons for not having	a birth compa	anion?	

13.	Did the person	who accompanied y	ou to the hospital re	emain? (Ti	ck with an X)		
				Yes	No		
	After admission						
	Labour						
	Delivery						
	Immediate post	delivery					
	Rooming in						
	Ever present till	discharge					
14.	. How did you de	liver your baby?					
	Vaginal (Norma	lly)	Vacuum delivery	(Assisted)			
15	15 Who provided the assisted birth? (if the midwife has advanced midwifery) Midwife Doctor						
16.	. What was the p	eriod of pregnancy a	at birth?				
17.	. After how long o	did it took your baby	to cry following bir	th			
	1 minute		5 minutes				
18.	. Were you given	pain medication du	ring labour?				
	Yes		No				
19.	. Were you given	any medication dur	ing labour? (to spe	ed-up labo	ur)		
	Yes		No				
20.	. Did you sustain	any tears during de	livery of the baby?				
	Yes		No				
L			1				

21.	Dia the midwife of	out your birth (vaging	al) passage during d	elivery of the baby?					
	Yes		No						
22	22. How long did the labour process take?								
	More than three	hours							
	More than 8 hour	rs							
	More than 12 hou	urs							
	More than 24 hou	urs							
	More than 2 days	3							
	CTION D: POSTI	NATAL th weight of the bab	oy?						
	Less than 1000g								
	1000 to 1800g								
	1800 to 2500g								
	2500 to 3500g								
	More than 3500g	ı							
	I do not know								
24.	Was your baby a	dmitted in intensive	care unit after birth?	•					
	Yes		No						
If t	ne answer is "yes'	', what was the reas	son for admission in i	ntensive care unit?					
25.	Which feeding m	ethod did you comn	nence with?						
	Breastfeeding		Formula feeding						

26. I	How long	g will you	ı keep pr	actising th	e feeding m	nethod co	mmence	d with?
27.	. Can you	relate y	our relation	onship (bo	nding) with	the new-	born bab	y?
	Good		Bad		Fair		Not sure	
SE	CTION E	: PSYCI	10-SOCI	AL FACTO	ORS			
28.	. Do you t	hink it is	importar	nt to have a	a birth comp	oanion du	ıring labo	ur?
	Yes				No			
not	to have a	a birth co	ompanion	n: 	companion?			gnant woman
	Father	Mothe	ər	Brother	Sister	Hust	and	Friend
					ave chosen		delivery	of the baby?
32.	. Did you	suffer fro	om depre	ssion after	delivery of	the baby	?	
	Yes				No			

SECTION F: THE MOTIVATING AND ENABLING OR MODIFYING FACTORS:

33. Indicate the motivating and enabling or modifying factors of the availability of a birth companions by stating if you strongly agree, agree, uncertain, disagree or strongly disagree.

Key: SA = Strongly Agree, A = Agree, U = Uncertain, D = Disagree,

SD = Strongly Disagree

The motivating factors utilising birth companions	SA	A	U	D	SD
A birth companion will remain with you throughout labour to help when in need.					
A birth companion will help you with basic needs.					
A birth companion will help in taking care of the baby while I take a nap.					
A birth companion will help you in decision-making.					
A birth companion is important to you and the baby.					
The relationship between you, your partner and the new-born baby will be increased					

34.	Please	indicate	any	other	factors	that	motivated	you	to	choose	а	birth
com	panion?	•										
35. \	What are	e the ben	efits c	of havii	ng a birtl	n com	npanion dur	ing la	ıboı	ır?		

SECTION F: THE CHALLENGES/BARRIERS

36. Indicate the extent to which you agree/disagree with challenges (barriers) of having a birth companion during labour. Tick in the table below if you strongly agree, agree, uncertain, disagree or strongly disagree.

Key: SA = Strongly Agree, A = Agree, U = Uncertain, D = Disagree, SD = Strongly Disagree.

Challenges of having a birth companion during labour	SA	Α	U	D	AD
I am afraid she/he will invade my privacy.					
I am afraid that my partner will faint during delivery.					
My partner works far.					
I am staying far from home, so I am not sure if my parents can be able to come to support me during labour.					
My relationship with my partner will be reduced.					
The birth companion will get tired if labour prolong.					

37. Please indicate any other challenges/barriers that were not included in those
mentioned above:

Thank you for your time and effort.

ANNEXURE G: INTERVIEW GUIDE

INTERVIEW GUIDE FOR THE MIDWIVES

- 1. How old are you?
- 2. How long were you working in the labour ward?
- 3. Can you explain what a birth companion is?
- 4. If a woman requests to have a birth companion how will you react to the request?
- 5. Who is allowed to remain with the woman during labour?
- 6. How do you perceive the presence of birth companions in Limpopo Province?
- 7. How will the presence of a birth companion be beneficial to the woman?
- 8. What are the factors that inhibit non-utilisation of birth companions?
- 9. What are the critical challenges confronting you when it comes to the utilisation of birth companions?
- 10. What can be done to improve the availability of birth companions in health care facilities?

ANNEXURE H: INFORMATION LEAFLET AND CONSENT FORM

Title of the study: Development of guidelines in utilising birth companions of women in Limpopo Province, South Africa". I Mapula Seroto, student at UNISA am interested in investigating the Development of guidelines in utilising birth companions of women in Limpopo Province, South Africa". The aim of the study is to investigate the utilisation of birth companions by women in the public sector labour wards of Limpopo Province, South Africa, in order to develop guidelines for implementation of birth companions.

The researcher is interested in postnatal women in the age range 18-45 years who were in labour for more than three hours, delivered normally a live infant(s) and still admitted in the hospital, and midwives who work(ed) in the labour ward with at least two years and above experience. A self-administered questionnaire will be completed by the women, which might take 20 to 35, while the midwives will be interviewed for 15 to 20 minutes. An audio recorder will be used during an interview and field notes will be taken in a private room. No risks are involved in this study, however if the respondent/participants feel emotionally upset, she/he can be referred to a psychologist for free counselling in the institution were data is collected. Pregnant women will be provided with psychosocial and physical support by their companions of choice during labour in the subsequent births which will lead to satisfaction and good labour outcomes.

The information the respondent/participant provided will remain confidential and her name or that of the institution will not be disclosed at any time. Participation in the study is voluntary and no remuneration or incentives will be provided. The findings from the study would be published in national and/ or international journals to create awareness of this topic. The respondents/participants may contact the researcher if there are further questions: Mapula Seroto, Nursing Sciences student. Cell Nr: 0832973267 and the supervisor Prof Modiba contact Nr 0124296337.

Researcher's signature:	Date:
-------------------------	-------

ANNEXURE I: CONSENT FORM TO PARTICIPATE IN THE STUDY

	(participant name), confirm that the person asking my coarch has told me about the nature, procedure, potential beneance of participation.	
I have read (or had information sheet.	explained to me) and understood the study as explained	d in the
I have had sufficient of study.	opportunity to ask questions and am prepared to participat	e in the
I understand that my pwithout penalty.	participation is voluntary and that I am free to withdraw at a	any time
	ndings of this study will be processed into a research report onference proceedings, but that my participation will be nerwise specified.	•
I agree to the recording	ng of the face to face interview.	
I have received a signe	ed copy of the informed consent agreement.	
Participant Name & Su	urname	
Participant Signature	Date	
Researcher's Name &	Surname: Mapula Ennia Seroto	
Researcher's signature	reDate	

ANNEXURE J: LANGUAGE EDITING CERTIFICATE

EDITING AND PROOFREADING CERTIFICATE

7542 Galangal Street

Lotus Gardens

Pretoria

8000

08 July 2022

TO WHOM IT MAY CONCERN

This certificate serves to confirm that I have language edited the ME Seroto's thesis entitled, "DEVELOPMENT OF GUIDELINES IN UTILISING BIRTH COMPANIONS OF WOMEN IN LIMPOPO PROVINCE, SOUTH AFRICA."

I found the work easy and intriguing to read. Much of my editing basically dealt with obstructionist technical aspects of language, which could have otherwise compromised smooth reading as well as the sense of the information being conveyed. I hope that the work will be found to be of an acceptable standard. I am a member of Professional Editors' Guild.

Hereunder are my contact details:



Jack Chokwe (Mr)

Contact numbers: 072 214 5489

jackchokwe@gmail.com



Jack Chokwe Associate Member

Membership number: CHO001 Membership year: March 2022 to February 2023

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ANNEXURE K: TURNITIN RECEIPT AND REPORT

Development of guidelines in utilising birth companions of women in Limpopo Province, South Africa

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