

UNIVERSITY OF THE FREE STATE



SCHOOL OF NURSING

MATERNAL KNOWLEDGE, ATTITUDE AND PRACTICES
WITH REGARD TO POSTNATAL CARE SERVICES IN A
FREE STATE RURAL HOSPITAL

*A dissertation submitted in fulfilment of the requirements
in respect of the degree
Master of Social Science in Nursing in the School of Nursing
in the Faculty of Health Sciences
at the University of the Free State*

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Date: January 2019

SUMMARY

Mothers and newborn are vulnerable to illness during the postnatal period. In Africa, half of the mortalities during the postnatal period occur during the first week after delivery, and most of these deaths are preventable. To overcome this burden of disease South Africa implemented the guidelines for maternity care to encourage mothers and newborns to attend to their clinic within three to six days. Unfortunately, the utilisation of these services in South Africa, but more especially, Ladybrand is neglected and the maternal- and neonatal mortality and morbidity rate remains high.

A study to assess the maternal knowledge, attitude and practices with regard to postnatal care services in a Free State rural hospital, was thought to be the best strategy to identify the barriers that ultimately prevent the mothers from utilising these services. The aim of the study were to describe the maternal knowledge, attitudes and practices (KAP) with regard to postnatal care services in a Free State rural hospital.

Considering the nature of KAP studies, a quantitative, descriptive, cross-sectional design was used to address the domain investigated. The research question addressed was what are the maternal knowledge, attitude and practice with regard to postnatal care services in a Free State rural hospital?

The theory of planned behaviour together with knowledge, attitude and practices were used as guidelines to design a structured questionnaire as data collection tool. Ethics approval was obtained from the Health Science Research Ethics Committee, University of the Free State, and the three principles of the Belmont report were continuously implemented throughout the course of the study. The questionnaire was piloted on a sample of four respondents who gave birth in Senorita Nhlabathi hospital. The pilot study was implemented before the actual data collection to identify any unforeseen problems that may affect the validity and reliability of the study. No problems were identified during the pilot study and the data was included in the main study.

The data collection took place in the maternity ward at Senorita Nhlabathi hospital, and included a sample of 110 respondents who delivered babies during July to October 2017.

One hundred and ten questionnaires were completed and almost all of the respondents were Sesotho speaking women with a mean education level of grade 11. The respondents had a mean age of 28 years, with the youngest participant 18 years and the oldest 47 years of age. The majority (79.1%) of the respondents were unemployed and living in an informal type of dwelling (76.4%). More than half of the respondents (57.7%) lived less than two kilometres from the nearest clinic and all of the respondents had access to primary healthcare services.

With regard to the results pertaining the theory of planned behaviour and knowledge attitude and practice, the knowledge of the respondents were found inadequate with an average between 50-70% (behavioural beliefs, normative beliefs, subjective norms, control beliefs and perceived behaviour control).

The attitude of mothers towards postnatal care services was found to be negative (44.6%, $n=49$). The worst performing statements with regard to attitude included long waiting times at the clinic (73.6%) and the respondents showed signs of postpartum depression during their previous pregnancies (74.6%).

The practice (intention, 93.6%; actual behaviour control, 81.8%; and behaviour, 82.7%) performed overwhelmingly well, although the statement that underperformed in all three sections was related to the utilisation of postnatal care services.

Poor maternal knowledge, attitude and practice were found with regard to postnatal care services in a Free State rural hospital. The awareness and attitude of the mothers towards postnatal care services should be addressed through health education throughout the antenatal care period and before discharge from the hospital, and thereby decreasing the maternal and newborn morbidity and mortality.

DECLARATION

I, Daleen de Klerk, declare that this Master's research dissertation that I herewith submit at the University of the Free State, is my own, independent work and that I have not previously submitted it for a qualification at another institution of higher education.

I, Daleen de Klerk, declare that I am aware that the copyright is vested in the University of the Free State.

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Daleen de Klerk

31 January 2019

Date

ACKNOWLEDGMENTS

My sincerest thanks to the following:

- My Supervisor, Prof Annemarie Joubert, for her patience, guidance and her wisdom, thank you for pushing me further than I ever thought I can go;
- R. Nel from the Department of Biostatistics, University of the Free State, for her valuable input regarding statistical analysis of the data;
- Janet Venter for the language and technical editing;
- The fieldworkers assisting with the data collection;
- The respondents taking part in the study;
- My husband, Derick Schutte, whom became my fiancé and husband during this period. Thank you for your love, support and coffee breaks. Thank you for carrying me when I needed you.
- My friends and family for their support and motivation.
- Thank you to our Heavenly Father, for courage and wisdom to complete my dream. Thank you for holding my hand and walking the path with me.

LIST OF ABBREVIATIONS

ANC	Antenatal care
ARV	Anti-retroviral treatment
BBA	Born before arrival
CHW	Community healthcare workers
CD	Caesarean delivery
HIV	Human immunodeficiency virus
IUD	Intra-uterine death
KAP	Knowledge, attitude and practices
MMR	Maternal mortality ratio
NMR	Neonatal mortality ratio
NVD	Normal vaginal delivery
PCR	Polymerase chain reaction
PHC	Primary healthcare
PMTCT	Prevention of mother to child transmission
PNC	Postnatal care
TPB	Theory of planned behaviour
WHO	World Health Organization

CONCEPT CLARIFICATION

Attitude: Attitude is part of an individual's character that reacts favourably or unfavourably to an object, person, subject or event. It is determined by an individual's perspective about the outcome of the performed behaviour (Glanz, Rimer & Viswanath, 2015: 97). The attitude of the respondents are measured as either favourable or unfavourable by means of a structured questionnaire designed to determine maternal knowledge, attitude and practices (KAP) with regard to postnatal care services in a Free State rural hospital.

Knowledge: The capability to obtain, retain and utilise information. Understanding, experience, recognition and skill contribute to knowledge. Knowledge may optimize health behaviour, but it is not a given that the behaviour will be followed through (ISSUU, 2015: 5). Maternal knowledge (behavioural beliefs, normative beliefs, subjective norms, control beliefs and perceived behaviour control), with regard to postnatal care services was described by means of a structured questionnaire. The structured questionnaire was designed to determine the maternal knowledge, attitude and practice (KAP) relating to the postnatal care services in a Free State rural hospital.

Postnatal period and mothers:

The postnatal period is the first six to eight weeks after birth, which include both the mother and child's healthcare (Edmonds, Lees & Bourne, 2018: 431). Mothers receive postnatal care in a healthcare facility after giving birth (WHO 2013: 3).

The mothers in the study will include females who gave live birth at the Senorita Nhlabathi hospital in Ladybrand during a three month data collection period.

Postnatal care services: Preventative care practices and routine examinations done to identify and manage any complications for both mother and baby within six weeks after delivery, such as: emotional assessment, nutritional assessment, family planning counselling, and assessment of danger signs (Jordan, Forley & Grace, 2019: 402).

Practice: Applying acquired knowledge, and rules that lead to a specific action or behaviour (ISSUU, 2015: 5). Practice in this study refers to the respondents' intention to perform a specific behaviour or task, like utilising the postnatal services at the local clinic in Ladybrand, Free State. The intention was measured by means of a structured questionnaire designed to determine maternal knowledge, attitude and practice (KAP).

STUDY CONTEXT

Free State Province, Mantsopa sub-district: Mantsopa Local Municipality forms part of the Eastern Free State and falls within the Thabo Mofutsanyana District Municipality. It borders the Kingdom of Lesotho in the east. The municipality incorporates five small towns: Excelsior, Tweespruit, Borwa, Hobhouse, Thaba Phatswa and Ladybrand. These small towns and the surrounding rural community are served by nine primary health care clinics and five mobile clinics. Senorita Nhlabathi hospital is the core district hospital that serves the above mentioned clinics and rural community.

The estimated population in Ladybrand, as recorded in the last South African census held in 2011, was 4 218 people, with 69.8% of the population between 15 – 64 years of age (Statistics SA, 2011: online). According to the GeoNames geographical database, the estimated population of Ladybrand is 17 228 (2012: Online). The unemployment rate is at 29.20% of the total population and 22.90% residents matriculated (Statistics SA, 2011: online). Statistics SA (2011: Online) also shows that 40.9% of the population in Ladybrand is Afrikaans speaking, 20.4% is English speaking and 31.1% is Sesotho speaking. The next South African census will be held in 2021.

There are four primary healthcare (PHC) facilities in Ladybrand that provide antenatal care (ANC) and postnatal care services to the Mantsopa population, rural surrounding farms, as well as some of the Lesotho population.

The Senorita Nhlabathi Hospital, where the study was conducted, is situated in the town Ladybrand and forms part of the sub-district Mantsopa in the Free State. The hospital is the only facility in the Mantsopa area that provides maternity delivery services to the antenatal patients. The hospital is equipped with a theatre to perform selective caesarean sections; however, the theatre is no longer operational due to a deficit of resources. The maternity ward conducts normal vaginal deliveries (NVD). Patients with complications are transferred to Dr. J.S. Moroka hospital or Pelonomi for further management.

The four clinics and hospital in the Ladybrand area are located on the map below (adapted from Google maps, 2018). Refer to figure 1.1.



Figure 1.1 Location of healthcare facilities in Ladybrand, Free State province.

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CHAPTER I

1.1 INTRODUCTION

The postnatal period is one of the most crucial stages in the life of a mother and her newborn baby. The mother and newborn are both in a fragile state during the first six to eight weeks after birth, or postnatal period, and serious complications can occur, such as haemorrhage, sepsis, hypertension and infection that can cause permanent physical damage or even death to the mother (Jordan, Forley & Grace, 2019: 400-402; NDOH, 2018:12). In Africa 50% of all postnatal maternal deaths occur during the first week after birth, where 75% of those deaths account for haemorrhage, hypertension, complications from child birth and unsafe abortions resulting in infection. The remaining 25% are related to other causes such as HIV, non-pregnancy related infections and complications from delivery (NDOH, 2015: 1; WHO, 2018: online).

Attempts are made globally to reduce developing countries' unacceptably high mortality rates during the postnatal period (NDOH, 2018: 9). The National Department of Health (2015: 19-20) proposes quality of healthcare through the delegation of responsibilities between healthcare facilities, outreach services and home visits by community healthcare workers (CHW). Patient education during antenatal care as along with sufficient support and quality of care during childbirth and the weeks following delivery are crucial in reducing the high mortality rates (WHO, 2015: 5).

Guidelines for maternity healthcare in South Africa state that all mothers and newborns should attend their nearest clinic within three to six days after discharge from the hospital for assessment of their condition (National Department of Health, 2015:164). During the postnatal visit important health promotion, a physical inspection and patient education should take place (Jordan, Forley & Grace, 2019: 401).

Unfortunately, postnatal care is a neglected aspect of a woman's health (Edmonds, Lees & Bourne, 2018: 433). Missed opportunities to enhance the postnatal care of mothers occur within the scope of routine postnatal care. Barriers that prevent access to quality postnatal care must be identified and addressed. Mothers and

nurses have different perceptions of what maternal needs entail, and therefore contribute to a gap in the healthcare that is given (WHO, 2018: online).

Research conducted in the field of postnatal care in South Africa includes a study concerning the predictors of early postnatal follow-up care in South Africa (Larsen *et al.*, 2018: 1). The aim of the study was to analyse the number of infants receiving the WHO's recommended three PNC visits in South Africa, within six weeks after delivery. Data analysis of surveys conducted between the years 2010 and 2013 was done. The study concluded that 40% of neonates did not attend all three postnatal care visits.

Williams and Brysiewicz (2017: 1) conducted a study in KwaZulu-Natal regarding women's perceptions toward hospital-based postnatal care. A qualitative study with semi-structured interviews was conducted and the researcher confirmed that there is a need for further research in the postnatal care field to ensure comprehensive patient care in the hospital and also post-discharge.

A study conducted in Limpopo Province emphasized the need to incorporate indigenous postnatal care practices in the Department of Health, either by training western midwives in cultural beliefs and practices, or involving traditional birth attendants in the postnatal care period (Ngunyulu, 2014: 685).

Through the proposed study the researcher addressed the gap in the maternal knowledge, attitude and practices with regard to postnatal care services, in a Free State rural hospital. A knowledge, attitude and practice (KAP) study, that is quantitative in nature, was conducted.

Ultimately, a better understanding of the maternal knowledge, attitude and practices with regard to postnatal care services in a Free State rural hospital could assist in reaching the target of the sustainable development goals, to reduce the maternal mortality ratio to less than 70 per 100 000 and end preventable deaths of newborns by 2030 (WHO, 2018: online).

1.2 BACKGROUND

The Millennium Development Goals reported that maternal and infant mortality rates are at its highest during the postnatal period with global statistics recording maternal mortality ratio (MMR) at 216 deaths per 100 000 live births (WHO, 2015:18) and the neonatal mortality ratio (NMR) at 19 deaths per 1 000 live births (UNICEF, 2015: 7). The first week of life claims the highest rate of neonatal deaths, with 75% of all newborn deaths occurring during this period. The statistics for Sub-Saharan Africa shows that the maternal mortality ratio is 546 deaths per 100 000 live births (WHO, 2015: 18) and the neonatal mortality rate 29 deaths per 1000 live births (UNICEF, 2015: 7). The maternal mortality rate for South Africa was reported in 2015 (Dorrington *et al.*, 2016: 9) as 138 deaths per 100 000 live births and neonatal mortality rate as twelve deaths per 1000 live births. Refer to table 1.1.

Table 1.1 Maternal mortality rate (MMR) and neonatal mortality rate (NMR) comparison for 2015

	Number of annual live births	MMR (deaths per 100 000 live births)	NMR (deaths per 1000 live births)
Global	128 845 000	216	19
Sub-Saharan Africa	3 199 617	546	29
South Africa	1 161 159	138	12

The strategic development goals (SDG) set targets to reduce global and national MMR and NMR. The aim is to implement strategies to reduce or eliminate the MMR to less than 70 deaths per 100 000 live births globally. National targets are set per country and are calculated by reducing the MMR to less than two-thirds of the country's 2010 baseline (Boldosser-Boesch *et al.*, 2017: 696). The MMR in 2010 for South Africa was 270 deaths per 100 000 live births (NDOH, 2015: 7).

The WHO defines the postnatal period as the first six to eight weeks after birth and includes the mother and newborn (Edmonds, Lees & Bourne, 2018: 431). A global guideline in perinatal care is to discharge both the mother and newborn after 24

hours if an uncomplicated normal vaginal delivery took place. A follow-up by a healthcare worker should happen after six weeks postpartum for the first immunisation visit (WHO, 2018: 8). However, the guidelines for maternity care in South Africa state that all mothers and newborns should attend their nearest clinic within three to six days after discharge from the hospital for an assessment of their condition (NDOH, 2015: 164). If crucial routine postnatal care is absent during the postnatal period, the risk of mortality or disability increases for both the mother and newborn (WHO, 2018: 1).

In pursuit of the SDG's target to reduce the global MMR to less than seventy per 100,000 and NMR to less than 12 per 1 000 live births by 2030, each healthcare facility must set high standards for quality care in accordance with the sustainable developmental goals, including prompt treatment of complications of new-borns, integrated management of childhood illness for every child under five years and infant nutrition (Sustainable Developmental Goals, 2016: online).

Yet despite these high standards, the quality of care, particularly postnatal care, is still neglected (WHO, 2015: 1; Wontumi, 2017: online).

1.3 PROBLEM STATEMENT

Nearly all maternal deaths and complications can be prevented with the appropriate interventions and treatment at healthcare facilities, which could save the lives of both the mother and newborn (WHO, 2018: online).

In the South African maternal mortality report for 2011-2013 stated that 4452 maternal deaths were entered over a period of three years (NDOH 2014: 1). There has been a decline of 12.5% in maternal mortality deaths from 2011-2013 to 2014-2016, yet this reduction is not yet satisfactory and still raises a concern (NDOH, 2018: 2). The primary causes of maternal deaths, which account for 70% of total maternal deaths, are: non-pregnancy related infections, obstetric haemorrhage and hypertension. It is also reported in the 2014-2016 triennial report that 83.3 deaths that occurred per 100 000 live births could possibly have been prevented (NDOH, 2018: 2)

The National Department of Health (2018:13) suggested that the primary causes of maternal deaths in South Africa are related to the quality of healthcare rendered in clinics by healthcare personnel, the inability of mothers to use healthcare facilities due to personal or economic circumstances, and the inadequacy of services delivered due to understaffed clinics and the resulting work overload.

The researcher realised that despite the fact that interventions to address postnatal care are stipulated (NDOH, 2015: 164; Sustainable Developmental Goals, 2016: online) the attendance of these services in Ladybrand clinics are not satisfactory. The gap between the attendance of antenatal and postnatal services is indicated in table 1.2. Only 58.4% of the mothers who attended antenatal clinics also attended postnatal clinics (refer to table 1.2).

Table 1.2 Mother attendance of ante- and postnatal care services rendered at Ladybrand clinics (adapted from National Department of Health DHIS, 2015: online).

CLINIC	ANC 1 st visit clinic attendance	PHC attendance by mothers		PHC attendance by babies	
	Frequency	<i>n</i>	%	<i>n</i>	%
Ikaheng	164	95	57.9	98	59.8
Manyatseng	209	82	39.2	86	41.1
Ladybrand	136	116	85.3	117	86
Mauersnek	126	78	61.9	76	60.3
Total	635	371	58.4	377	59.4

To investigate this proposed gap, the researcher performed an extensive literature search through the EBSCO Host interface. More specifically, the researcher wanted to establish if any studies that address maternal knowledge, attitude and practices (KAP) with regard to postnatal care services in a rural Free State hospital has been done.

Although the search included sixteen databases, no studies relating to the search could be located, thus strengthening the researcher's view that further research to investigate utilisation of postnatal services need to be conducted. Therefore, a KAP quantitative, cross-sectional and descriptive study to address maternal knowledge, attitude and practices with regard to postnatal care services in a Free State rural hospital was conducted.

1.4 RESEARCH QUESTION

What is the maternal knowledge, attitudes and practices (KAP) with regard to postnatal care services in a Free State rural hospital?

1.5 AIM AND OBJECTIVES

AIM

The aim of the study was to describe the maternal knowledge, attitude and practices (KAP) with regard to postnatal care services in a Free State Rural Hospital.

OBJECTIVES

1. Describe the socio-demographic variables of the mothers with regard to postnatal care services.
2. Determine the maternal knowledge, attitude and practice with regard to postnatal care services in a Free State rural hospital.
3. Describe the maternal knowledge, attitude and practice with regard to postnatal care services in a Free State rural hospital.
4. Describe the association between the variables.
5. Provide recommendations in relation to the maternal knowledge, attitude and practice with regard to postnatal care services in a Free State rural hospital.

1.6 THEORY OF PLANNED BEHAVIOUR

The theory of planned behaviour (TPB) was established to better understand why individuals behave in a certain manner. In predicting human behaviour, the TPB is recognised as one of the best-supported social psychology theories (Ajzen, 2011: 1113-1127; Rav-Marathe, Wan & Marathe, 2016: 4; ISSU, 2015: 2).

The TPB is based on the assumption that humans normally behave in a reasonable way, while processing all available information, ideally, they will contemplate the repercussions of their actions. Furthermore, the TPB emphasise the fact that one's intention to perform or not perform certain behaviour is the most direct determinant of an action (LaMorte, 2018: online; Montano & Kasprzyk: 2015: 95).

Knowledge, as described in the KAP method, links with the three constructs that guide behaviour in TPB. Beliefs regarding the outcome or consequence of behaviour (behaviour beliefs), beliefs about the expectations of others (normative beliefs) and

beliefs regarding factors that may hinder or facilitate the behaviour (control beliefs) all respectively have an impact on attitude (Alzghoul & Abdullah, 2015: 62; LaMorte, 2018: online).

Attitude is one of three constructs that leads to behavioural intention, subjective norms and perceived behavioural control completes the constructs that will ultimately guide intention (Hasbullah *et al.*, 2014: 143; ISSUU, 2015: 5; Shaw, 2013: online).

Attitude describes an individual's feeling about the behaviour in question. It measures the degree to which a person has a negative or positive evaluation towards his/her performance of the behaviour. The more positive the evaluation, the more likely the behaviour will take place. Behaviour may originate from attitude but does not form part of attitude, yet attitude may be the primary determinant of intentions (ISSU, 2015: 5; Hasbullah *et al.*, 2014: 143; Shaw, 2013: online; Glanz, Rimer & Viswanath, 2015: 97). The factors predicting the attitude in the TPB is similar to those of attitude in a KAP study.

Subjective norms describe the effect of social pressure and key social references on the commitment of an individual to engage in the required behavioural change. The contention whether or not the key-role players would approve of this particular behaviour will affect the outcome of the behaviour itself (Glanz, Rimer & Viswanath, 2015: 97; Shaw, 2013: online; Alzghoul & Abdullah, 2015: 62).

Perceived behavioural control describes the individual's ability and confidence to perform the behavioural change; along with intention it will ultimately predict behaviour. The key hurdles, level of difficulty at hand, available resources and motivation will be considered before making a decision, (Glanz, Rimer & Viswanath, 2015: 62; LaMorte, 2018: online).

Perceived behavioural control can be linked to aspects such as the socio-economic status, demographic variables, personality, moods, emotions, exposure to media and personal circumstances, all of which can hinder the final outcome of decision making. The key is to establish which of the above-mentioned factors play the most significant role in decision making.

Behaviour is the display of an observable response to a specific situation, guided by intention and perceived behavioural control (Glanz, Rimer & Viswanath, 2015: 97).

Behaviour relates to practice in KAP with regard to the intention to carry out certain behaviour such as the respondent's intention to utilise postnatal services.

By integrating the KAP method and TPB, two ways have been created to exemplify and epitomise specific beliefs that need to be addressed in order to change or maintain behaviour. It optimises identification of variables that affect intention in order to perform a health-protective behaviour. For this integration to be successful a common goal, target population and outcome must be shared. The similarities in KAP en TPB are shown in the figure below. The implication is that different types of interventions must be suggested for respondents who are unable to act on their intention (Fishbein & Yzer, 2003: 164).

The concepts depicted in the Theory of Planned Behaviour and Knowledge, Attitude and Practice was used to construct the questionnaire. A comprehensive discussion of the model will be given in chapter two.

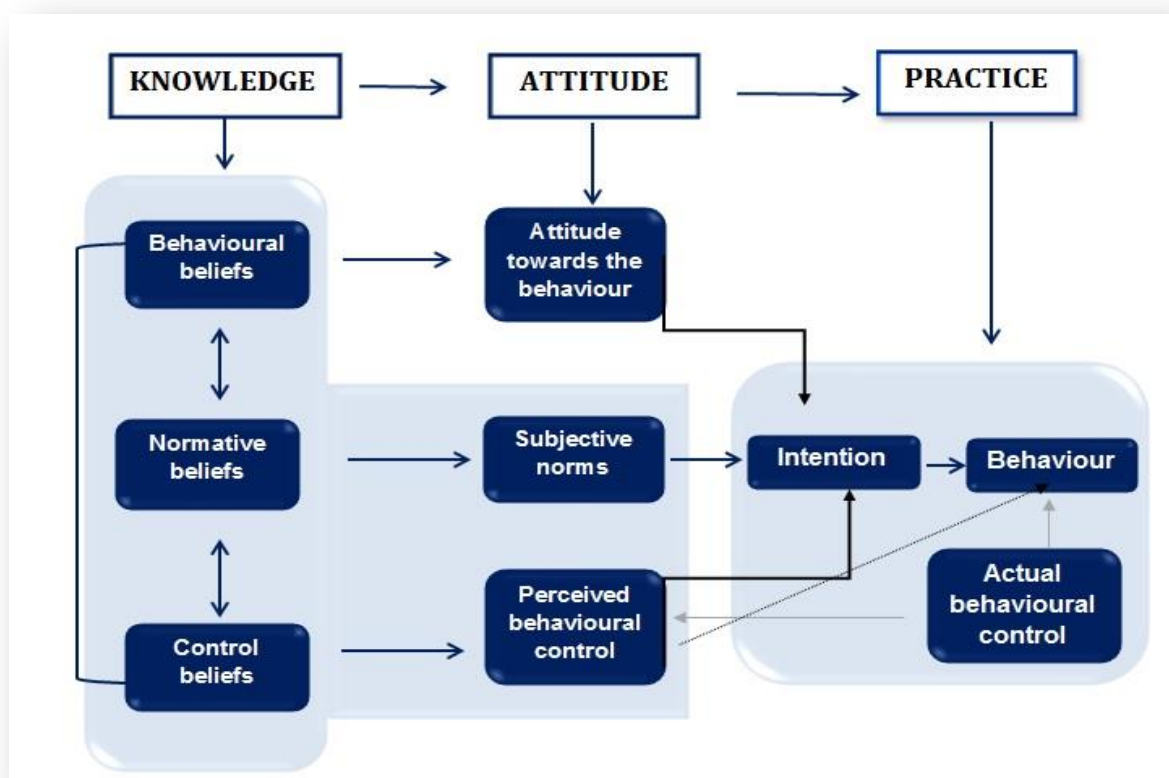


Figure: 1.2: A Conceptual framework depicting the Theory of Planned Behaviour (TPB) (LaMorte, 2018: online) and Knowledge, Attitude and Practice (KAP) (Alzghoul & Abdullah, 2015: 6)

1.7 RESEARCH DESIGN

Knowledge, Attitude and Practice (KAP) studies are quantitative in nature, and are used to uncover misapprehensions and misconceptions that could create obstacles to the nature of behavioural change (ISSUU, 2015: online). KAP surveys reflect the opinion and insight of respondents to identify the gap between the intention of the respondent and the actual actions taken. Surveys can be implemented to assess the respondents' knowledge about a certain health issue or disease. The respondents' beliefs and feelings towards the same health issue or disease will reflect their attitude, and practice can be measured through the preventative behaviour taken to avoid the health problem or disease (Rav-Marathe, Wan & Marathe, 2016: 4).

Considering the nature of KAP studies, a quantitative, cross-sectional design was used to address the domain investigated.

A quantitative approach was suitable to investigate a well-defined population, specifically with regard to the defined populations' knowledge, attitude and practises with regard to postnatal services in a Free State rural hospital.

Lastly, a *cross-sectional design* was implemented in the study since it provides an accurate portrayal of the characteristics of a particular group, situation or individuals. Cross-sectional studies involve data gathering at one point, with a description of the relationship between the variables, or in this case the relationship between maternal knowledge, attitude and practice with regard to postnatal care services (Cherry, 2018: online).

Furthermore, descriptive studies provide a tool for establishing new meaning, defining what already exists, establishing the frequency of specific occurrences, and categorising information (Miksza & Elpus, 2018: 7; Nardi, 2018: 10).

An in-depth discussion will follow in chapter three regarding the research design.

1.7.1 STRUCTURE OF QUESTIONNAIRE

A structured questionnaire was regarded a suitable technique to gather the information concerning the variables, knowledge, attitude, practices and utilisation relating to the study. Structured questionnaires aim to collect information/data from specific individuals and usually consist of fixed questions with multiple options to answer and code (Nardi, 2018: 71). In this KAP study, information was obtained from postnatal mothers. The theory of planned behaviour, developed by Ajzen (2011), and an extensive literature study was used as a guide to develop the structured questionnaire. (Refer to Annexure A).

The structure of each section in the structured questionnaire, including answering options, is described below:

PART ONE: RESPONDENT PROFILE

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

The socio-demographic data was obtained through nine questions regarding the age, marital status, level of education and employment status to assist in developing a profile of the respondent (refer to question one to nine).

SECTION B: BIOGRAPHICAL INFORMATION

The biographical data describes the respondent's obstetrical gestational history and experience through five questions, relating to the respondent's antenatal care, including utilisation of the antenatal clinic and information sources concerning postnatal care (refer to questions ten to fourteen).

PART TWO: KNOWLEDGE REGARDING POSTNATAL CARE

The knowledge of the respondents were assessed in the second section of the structured questionnaire through an evaluation of their behavioural beliefs, normative beliefs, subjective norms, control beliefs and perceived behaviour control, as stated in the TPB and KAP study (ISSUU, 2015: online; LaMorte, 2018: online).

SECTION C: BEHAVIOURAL BELIEFS

The behavioural beliefs aimed to measure the respondents' beliefs regarding the outcome or consequence of their behaviour during the postnatal period (LaMorte, 2018: online). This section consisted of eight *True*, *False* or *Unsure* statements (refer to statements fifteen to 22).

SECTION D: NORMATIVE BELIEFS

Section D aimed to assess the respondents' beliefs regarding the expectations of their friends, neighbours or church community and their understanding of postnatal care. This section consisted of eight *True*, *False* or *Unsure* statements (refer to statements 23 to 30).

SECTION E: SUBJECTIVE NORMS

Section E assessed the role and impact of key-role players, in this instance the respondent's family, on the decision-making process of the respondent (Glanz, Rimer & Viswanath, 2015: 97). This section consisted of eight *True*, *False* or *Unsure* statements (refer to statements 31 to 38).

SECTION F: CONTROL BELIEFS

Section F aimed to indicate what factors may hinder or facilitate the behaviour of the respondent (LaMorte, 2018: online). This section consisted of eight *True*, *False* or *Unsure* statements (refer to statements 39 to 46).

SECTION G: PERCEIVED BEHAVIOURAL CONTROL

Section G aimed to describe the respondent's ability and level of confidence to perform the behavioural change during the postnatal period (Glanz, Rimer & Viswanath, 2015: 62). This section consisted of five *True*, *False* or *Unsure* statements (refer to statements 47 to 51).

PART THREE: ATTITUDE

SECTION H: ATTITUDE TOWARDS POSTNATAL CARE SERVICES

Section H intended to describe the respondent's feelings regarding postnatal care services. This section consisted of eight *True*, *False* or *Unsure* statements (refer to statements 52 to 59).

PART FOUR: PRACTICES

SECTION I: INTENTION

In section I the respondents had to indicate their intention to carry out the expected behaviour during the postnatal period. Nine statements were stated in this section (refer to statements 60 to 68).

SECTION J: ACTUAL BEHAVIOURAL CONTROL

Actual behavioural control referred to the respondent's practical means to perform the expected behaviour during the postnatal period. This section aimed to measure the respondent's physical intention to carry out the expected behaviour through ten *True*, *False* or *Unsure* statements (refer to statements 69 to 77).

SECTION K: BEHAVIOUR

Section K aimed to measure the respondents' past behaviour with regard to postnatal care. This section consisted of ten *True*, *False* or *Unsure* statements (refer to statements 78 to 86).

The structured questionnaire was translated into Afrikaans and Sesotho after approval was obtained from the Health Science Research Ethics Committee (UFS).

1.8 POPULATION AND SAMPLE

A population consists of all units of the universe, including people, objects or a group of individuals who have one or more characteristics in common. The group of people that a researcher was able to gain access to, within the population, is referred to as a sample (Leavy, 2017: 76).

The population identified for the current study consisted of mothers who delivered babies at Senorita Nhlabathi hospital, Free State Province, during July to October 2017 (refer to context). The number of deliveries estimated over the same period in 2016 was 167 live births and a total of eight still births or intra-uterine deaths. The sample size for the study was 110 respondents.

The hospital is centrally situated in the town and is the only hospital in the sub-district, Mantsopa. Since 2017, only normal vaginal deliveries have been performed at the hospital. The amount of deliveries recorded at the Senorita Nhlabathi hospital for April to June 2016 was 175 (refer to Table 1.3 below). Based on this information the researcher estimated the accessible population for this study as an average of 40 deliveries per month and a minimum of 120 deliveries during the months of April, May and June 2017.

Table 1.3 Number of deliveries at the Senorita Nhlabathi hospital, April, May and June 2016 (Senorita Nhlabathi Hospital, 2016).

Month	Number normal vaginal deliveries	Number of intra-uterine deaths
April 2016	61	3
May 2016	63	3
June 2016	51	2
TOTAL	175*	8

***Number of live births= 167 (NVD-IUD)**

Quantitative research requires that a representative sample is drawn (Leavy, 2017: 76). Purposive sampling was used to identify a suitable sample for data collection (Leavy, 2017: 78).

1.9 PILOT STUDY

The aim of the pilot study was to have a trial run to prepare for the actual study and to identify any flaws in the structured questionnaire (Leavy, 2017: 29).

The effectiveness of the questions was assessed in order to improve validity, reliability and to ensure that the structured questionnaire facilitated the retrieval of optimal data.

The pilot study took place after the Health Sciences Research Ethics Committee (UFS) approved a research proposal that included the questionnaire, and the Free State Department of Health granted permission.

Accesses to the respondents were gained, in collaboration with the Nursing Service Manager (Matron) of the Senorita Nhlabathi hospital. The researcher trained four nursing staff that did not work in the maternity ward as fieldworkers (refer to data collection).

The collected data obtained from the pilot study formed part of the main data collected. No modification has been made to the original structured questionnaire.

1.10 TECHNIQUES AND DATA COLLECTION

Permission was first obtained from the Health Sciences Research Ethics Committee (UFS) and other important stakeholders to conduct this study (refer to Ethical Considerations). The Nursing Service Manager of the hospital acted as gatekeeper during the data collection process. Data collection took place on a daily basis over a period of four months (July, August, September and October 2017), which provided a total of 110 respondents.

1.11 VALIDITY, RELIABILITY AND GENERALISATION

Validity refers to the degree of which a tool measures the true value of data. There are different aspects to consider in order to achieve maximum validity in a study (Leavy, 2017:114).

- Face validity: In order for face validity to be effective, the questionnaire should measure the appropriate information it aims to measure (Trochim, Donnelly & Arora, 2016: 130). In this case, the questionnaire reflected the TPB and KAP model. The questions were phrased appropriately in the language of preference and the answers matched the questions. The researcher ensured that the questionnaire met the stated criteria. The feedback of the biostatistician was included to improve the design of the questionnaire.
- Content validity: This occurs when the structured questionnaire covers the content of the entire construct (Trochim, Donnelly & Arora, 2016: 131). The questions in the structured questionnaire aligned the literature with the TPB and KAP model. Input from the supervisor and experts on the specified field were

obtained, ensuring that the content of the structured questionnaire was valid and compiled according to relevant literature.

Reliability: Similar results were retrieved from different respondents with the same structured questionnaire. The same structured questionnaire was repeated throughout the study (Trochim, Donnely & Arora, 2016: 115).

In order to achieve validity and reliability the same structured questionnaire was used to retrieve data on the same topic or purpose. The researcher did not deviate from the initial plan (Leavy, 2017:117).

Generalisation: If the structured questionnaire is applied to a study population with the same characteristics and under the same conditions, the results should be similar (Allen, 2017: online).

1.12 DATA ANALYSIS

Various descriptive statistics were used to calculate frequencies and percentages for categorical data and means and standard deviations or percentiles for continuous data. A 95% confidence interval was applied where applicable.

1.13 ETHICAL CONSIDERATIONS

The Health Sciences Research Ethics Committee (UFS) approved the study. Ethical principles were applied throughout the study (Salganik, 2014: online).

1.14 VALUE OF STUDY

Conceptualising the knowledge, attitude and practices of mothers towards the utilisation of postnatal services in a Free State rural hospital, will rationalise the substandard statistics of postnatal care attendance.

The data collected could aid the Department of Health (DOH) in behavioural change programmes to promote education regarding the benefits and importance of postnatal clinic attendance. When the right approach is implemented to motivate the

new mothers, maternal and neonatal deaths will potentially decrease, and new relationships will be established between healthcare providers and the community of postnatal mothers.

With regard to the nursing profession, the publication of results on different academic platforms and contribution to the body of knowledge could aid in breaching the gap in postnatal care services and add value to service delivery.

Value could also be added for nurse training institutes through the implementation of content in curricular/relevant training of nurses

1.15 CONCLUSION

The chapter provided an overview of the study, including the background, problem statement, research question as well as the aim and objectives of the study.

The researcher outlined the need and importance for mothers and their newborn babies to attend their nearest clinic within three to six days after discharge from the hospital for assessment of their condition to ultimately decrease mortality or disability during the postnatal period as recommended by the National Department of Health. The maternal and neonatal mortality rate in South Africa is unacceptably high, and an intervention to better understand the origin of the inadequate maternal utilisation of postnatal care services in a rural Free State hospital is vital.

Therefore, a KAP quantitative, cross-sectional and descriptive study to address the utilisation of postnatal care amongst postnatal mothers in a Free State rural hospital was done to describe the maternal KAP. An in-depth discussion will follow in chapter two.

1.16 CHAPTER LAYOUT

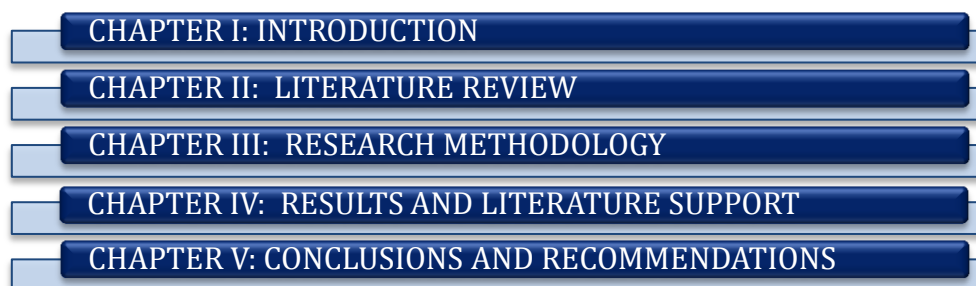


Figure 1.3: Chapter Layout.

CHAPTER II

LITERATURE REVIEW

2.1 INTRODUCTION

In Chapter One, the researcher introduced the background, problem statement, research question, and also the aim and objectives of the study. The aim of the study is to describe the maternal knowledge, attitudes and practices (KAP) with regard to postnatal care services. The study was conducted in a Free State rural hospital.

In Chapter Two the researcher firstly elaborates on the essential processes implicating postnatal care in a hospital and primary health care setting to provide a conceptual map of services delivered. The chapter proceeds with a comprehensive discussion regarding the key concepts related to the aim of the study as well as literature supporting the questionnaire of the study. The main concept includes:

1. Factors influencing the utilisation of postnatal care services.
2. Maternal knowledge, attitude and practice.
3. Planned behavioural model.

The second half of the chapter will include a discussion concerning the Theory of Planned Behaviour.

2.2 Postnatal period

The postnatal period, that is, the day of birth and six to eight weeks thereafter, are crucial for a child and mother's health and survival (WHO, 2017). The extensive physiological changes occurring throughout this period, ultimately determine the well-being for both mother and the newborn (WHO, 2015). The main purpose of the hormonal and physiological changes that take place in the mother after the birth of a child is to guide the female body to return to its pre-pregnancy state. Some of these changes form part of the normal biochemical process and other symptoms may present itself as medical conditions or disease. It is important for the mother to be able to differentiate between the normal physiological processes and possible complications (Soma-Pillay *et al.*, 2016: 89-94).

2.2.1 Postnatal care

Postnatal and postpartum care is predominantly about the management of the physiological and psychological changes of the mother and newborn during the first six to eight weeks after birth and to create a supportive environment where the needs of the mother and newborn are met (NDOH, 2016: 135).

The terms “postpartum” and “postnatal” periods were considered as two different terms. The term “postpartum” was preferred when addressing issues concerning the mother. “Postnatal”, on the other hand, referred to issues pertaining to the newborn. According to the WHO (2015) the term ‘postnatal care’ was adopted to refer to care received after childbirth for all issues implicating both the mother and newborn baby.

2.2.2 Postnatal care services

The first postnatal care service takes place immediately after an uncomplicated delivery in the health facility (WHO, 2013. Updated 2017). The newly born baby receives a comprehensive clinical examination in the delivery room and once more before discharge. The mother is monitored throughout the rest of her stay in the health facility, until the time of discharge (WHO. UNFPA. UNICEF, 2015; WHO, 2018). The timing of discharge will be determined by the state of health of the mother and newborn and also the country where the delivery took place (Benahmed, 2017:2; WHO, 2018: online).

The WHO published guidelines regarding postnatal care with the objective to reduce maternal and neonatal mortality and morbidity (WHO, 2015: 4). The first recommendation set was concerned with the timing of discharge from a health facility after birth (WHO, 2015: 3; WHO, 2018: 163). The WHO recommends that a healthy mother and newborn should receive care at the facility for at least 24 hours after an uncomplicated vaginal birth and before discharge (WHO, 2017). In the instance of home delivery, the first postnatal care contact should take place within the first 24 hours at a healthcare facility. In both instances, three additional postnatal care contacts are recommended: day three, day seven to fourteen and six weeks after birth (WHO, 2013. Updated 2017). South Africa committed to the implementation of a different discharge policy.

The South African National Department of Health's maternity guidelines states that discharge from a health facility is acceptable six hours after delivery, if the mother and newborn is in a stable and in a healthy condition (NDOH, 2016). Routine postnatal care should take place at a primary healthcare facility (PHC) within three to six days after delivery and thereafter six weeks for normal routine follow-up and immunisations. Babies with a birth weight under two kilogram should be followed up at the PHC facility until a weight of two and a half kilogram is reached (NDOH, 2014; NDOH, 2016).

South Africa's shortened postpartum length of stay may appear relentless in comparison to the favoured recommendation of the WHO, yet significant gaps have been identified regarding the quality of evidence available that determined the recommendation on timing of discharge (WHO, 2013: 34). The WHO reported that there is a need for further research to find the optimal timing of discharge of mothers and babies from facilities in low to medium income countries (WHO, 2013: 34). Since the publication of the recommendation, research in this matter has been undertaken.

A systematic literature review was done by Benahmed *et al.* (2017) regarding the effect of early hospital discharge on the outcome of the mother and child. The study highlights the international trend to shorten the length of stay in hospital to promote a family-centred approach to birth, to reduce conflicting advice on breastfeeding, improve rest and allow engagement of the fathers. After a comprehensive literature review it was found that the current literature does not provide enough evidence to implement recommendations on discharge, since the data neither support nor discourages early postpartum discharge (Benahmed *et al.*, 2017: 12).

Purpose of postnatal care services

The main purpose of postnatal care is to respond to the special needs of the mother and baby during this critical period. Care should include prevention, early detection and treatment of complications and disease and to see to their physical and psychological needs that may impact their well-being (WHO, 2013). The care provided during the postnatal care visits should not only include clinical examinations, but should also provide support and essential education regarding home care for the baby as well as self-care. The midwife conducting the postnatal

care should be able to evaluate, interpret and intervene appropriately if any deviation occurs (WHO, 2014: 4).

Postnatal care recommendations for the baby

In the Integrated Management of Childhood Illnesses (IMCI), provided by the National Department of health (2014:2), instructions are listed for the routine postnatal care visit for the baby:

1. Complete the young infant assessment provided in the guidelines, including the assessment and classification of possible serious bacterial infection (p. 4).
2. Counsel the caregiver on home care for the baby and when to return (p.15).
3. Assess the breastfeeding and provide support for successful breastfeeding (p.20-22).

A full examination of the baby will be conducted and findings will be recorded in the Road to Health chart provided to each baby by the postpartum ward after delivery. If any abnormalities are found, interventions should take place and referral to appropriate channels should be made (NHS, 2015: 3). The current assessments utilised in primary health care facilities in South Africa is illustrated in table 2.1

Table 2.1: Assessment after birth of young infant (NDOH, 2014:6-9).

Assessment for congenital problems	- Measurement of head circumference for identification of macrocephaly (>39cm) or microcephaly (<32cm).	
	Identify any priority signs:	
	- Cleft palate/lip.	- Imperforated anus.
	- Nose not patent.	- Macrocephaly.
	- Ambiguous genitalia.	- Abdominal distension.
	- Presence of a very low birth weight, weight below two kilograms.	
Assessment of head and neck	- Identification of microcephaly.	- Assess fontanelles and sutures.
	- Any swelling of scalp and assessment of shape of head.	- Any neck swelling or webbing?
	- Any abnormalities with face, eyes, mouth or nose?	- Any unusual appearances?
Assessment of feeding and growth	Ask the mother:	Observe, listen and feel:
	<ul style="list-style-type: none"> - Is the breastfeeding going well? - How often does she breastfeed in a day? - Is the baby receiving any other form of feeding? If yes what and how often? 	<ul style="list-style-type: none"> - Plot the weight of the baby on the Road to Health chart to interpret the ideal weight for the age. - Has the baby lost more than the expected weight? - Inspect the mouth for thrush infection. - Assess attachment and suckling of the baby while being breast fed.

Different guidelines are currently implemented in other countries. See below a comparison between national and international guidelines and the core elements to be assessed during a postnatal care visit. The highlighted column indicates guidelines currently utilised in the South African government health sector.

Table 2.2: Comparison between guidelines for assessment of babies during postnatal care visit.

Assessment:	(WHO, 2013)¹	(WHO. UNFPA. UNICEF, 2015)²	(NDOH, 2014)³	(NHS. Royal Berkshire., 2015)⁴
Weight	✓	✓	✓	✓
Feeding	✓	✓	✓	✓
History of convulsions	✓	✓	✓	
Assess breathing	✓	✓	✓	
Chest in drawing	✓	✓	✓	
Lethargy	✓	✓		✓
Temperature	✓	✓	✓	✓
Jaundice	✓	✓	✓	✓
Umbilical cord care	✓	✓	✓	✓
HIV exposure/PMTCT		✓	✓	
Assess eyes for infection	✓	✓	✓	
Paleness of skin (Pallor)		✓		✓
Assess for birth injuries (bruises, swollen head, abnormal position of legs, club foot, and cleft palate).		✓	✓	
Passing of urine and bowel movements.				✓

¹Postnatal Care for Mothers and Newborns: Highlights from the World Health Organization 2013 Guidelines.

²Integrated Management of Pregnancy and Childbirth: Pregnancy, Childbirth, Postpartum and Newborn Care.

³Newborn Care Charts: Routine Care at Birth and Management of the Sick and Small Newborn in Hospital.

⁴Postnatal Care Guideline (GL890).

Postnatal care for the mother

As indicated by the Guidelines for Maternal care, all mothers should attend their nearest clinic within three to six days after a normal delivery for examination of themselves and their babies (2015: 136). Internationally there are a number of guidelines with recommendations on the assessment of mothers during the postnatal care visit. The table below shows the differences in recommendations regarding the assessment of the mother during postnatal care visit.

Table 2.3 Comparison between national and international guidelines for the postnatal care assessment of a mother.

Essential elements for assessment	Guidelines for Maternity care in South Africa, 2016	Adult Primary Care, 2016/2017	WHO Postnatal care for mothers and newborns, 2013	WHO integrated management of pregnancy and childhood, 2015
Special instructions on discharge summary from doctor or midwife	✓			
Temperature	✓		✓	✓
Heart rate	✓			
Blood pressure	✓	✓	✓	✓
Haemoglobin (Hb)	✓			✓
Body Mass Index (BMI), refer for nutritional support if under 18.5		✓	✓	
Respiratory rate	✓			
Uterus for tenderness	✓	✓	✓	✓
Legs for thrombosis	✓	✓		✓
Vaginal bleeding	✓		✓	✓
Offensive vaginal discharge	✓	✓		

Essential elements for assessment	Guidelines for Maternity care in South Africa, 2016	Adult Primary Care, 2016/2017	WHO Postnatal care for mothers and newborns, 2013	WHO integrated management of pregnancy and childhood, 2015
Breasts and nipples	✓		✓	✓
Baby's condition	✓			
Mental health	✓	✓	✓	✓
Family planning needs	✓	✓	✓	✓
Spacing of pregnancies			✓	
Infant feeding (attachment, or correct methods for formula feeding)	✓	✓	✓	✓
HIV test in mother	✓	✓		✓
HIV viral load in HIV positive mother already on treatment		✓		
Syphilis (if not done during pregnancy)	✓	✓		
Pap smear at 6 weeks		✓		
Bladder function	✓		✓	✓
Bowel function			✓	
Perineal wound	✓	✓	✓	✓
Headache			✓	✓
Smoking while breastfeeding				✓
Iron and folic acid supplements		✓		✓

2.3 FACTORS INFLUENCING UTILISATION OF POSTNATAL CARE

2.3.1 Socio-demographic variables

In a Nigerian study (Ononokpone *et al.*, 2014: 950) that aimed to analyse the influence of community factors with regard to the acceptance of postnatal care in Nigeria and the association with individual factors, it was found that health care behaviour is influenced by the community in their area of residence. Community variables considered in the study included area of residence, delivery in a community based health centre, the level of education of women in the community and ethnic diversity. A multilevel logistic regression analysis was done to identify community factors related to postnatal care in women aged 15-49 years. The authors concluded that the level of education within a community that the mother resides in has a direct impact on the individual likelihood of attending postnatal care. Communities with a higher level of education are more likely to attend postnatal care than disadvantaged communities, and the implementation of region-specific interventions, targeting disadvantaged individuals and communities, may improve postnatal care services.

A structured questionnaire was used to evaluate the knowledge and awareness of postnatal care of mothers in India. Interestingly this study found that community factors (place of residence, ecological region), socio-demographic factors (wealth status, religion, education, maternal occupation) and proximate factors (utilisation of antenatal care (ANC) services, place of delivery, skilled health practitioners) were key to the utilisation of postnatal care services. The study concluded that mothers with higher level of education were more likely to be informed regarding health danger signs and quality service demand, and has easier access to health facilities (Purani *et al.*, 2015: 83-85).

Belemsaga *et al.* (2015: 83-99) stated that the mother's education, occupation, income and access to information are factors influencing utilisation of postnatal care. The researcher found that the age of the mother has an impact on utilisation, since younger mothers tend to utilise maternal services more frequently than older women.

2.3.2 Maternal Knowledge, Attitude and Practice

Appropriate care for the mother and newborn during the postnatal period is important in preventing mortality and morbidity after delivery. It is the time to improve the health and survival of both the mother and baby. The responsibility to inform the mothers about the importance of postnatal care (PNC) and where to access PNC services lies with the midwives during the antenatal period as well as the midwives in the postpartum ward before discharge from the hospital (NDOH, 2015: 32,136).

The essential information on newborn and infant care provided during the antenatal visits given by midwives in the government sector includes (NDOH, 2015: 32):

- Infant feeding options.
- Follow-up care: where to go for immunisations.
- Management of future pregnancies and contraception.
- Information regarding possible genetic defects and disorders.
- Availability of contraception after pregnancy.

A study regarding the “Adequacy of Postnatal care Education given to Mothers pre-discharge in Health facilities” was conducted in a Nairobi county. The components of PNC education evaluated included breastfeeding, danger signs for the mother, self-care components for the mother, baby care components and danger signs for the baby. The study found that only 49% of the mothers had adequate knowledge regarding the components of postnatal care; knowledge regarding breastfeeding scored the highest (74.8%) and knowledge regarding components of baby care was the lowest (54%) (Kamau, Njoroge, Olenja & Wakoli, 2016: 1).

Authors Timilsina and Dhakal (2015: 87-92) disagree with the areas of knowledge that need intervention during postnatal care. Their study assessed the level of knowledge of mothers during the postnatal period in Nepal and found that the highest level of knowledge was concerned with the mother and newborn danger signs, whereas information regarding family planning was the least known. The study revealed that demographic variables, level of education and occupation influenced the prevalence of postnatal care utilisation.

The timing of the patient education is also a contributing factor regarding utilisation of postnatal care.

A study conducted by Phiri, Rattanapan and Mongkolchat (2015: 493-499) analyse the predisposing and enabling factors contributing to the utilisation of postnatal care services in Malawi. The findings of the study were threefold: comprehensive education to the mothers after delivery, together with effective and professional performance of midwives during labour will likely increase the probability of postnatal care utilisation. The attitude of health care providers during and after delivery will more likely increase the satisfaction of the mother and encourage utilisation of postnatal care. Lastly mothers who receive additional support and home care after delivery are less motivated to attend postnatal care than mothers without such care.

Advice and provision of family planning

The provision of contraceptive advice is mostly offered at the hospital or birthing centre before discharge from the hospital.

A study was conducted regarding the timing of advice and provision of family planning during the postpartum period to assess the utilisation of contraception and number of unplanned pregnancies. Contraceptive counselling during the postpartum period was compared to no counselling and counselling at six months after delivery. The study concluded that postpartum education with respect to contraception increases contraception utilisation and prevents unplanned pregnancies (Salam, Mansoor, Mallick, Lassi, Das & Bhutta, 2014: 8).

With reference to the attitude of mothers towards utilisation of postnatal care, a study in Ethiopia collected data through structured questionnaires and found that the majority of the mothers included in the study considered postnatal care attendance important and had a positive response towards the services rendered at PNC (Tsefahu, Worku, Mazengiye & Kifle, 2014: 2343). A study in Malawi established that there is a link between patient satisfaction and the performance of the healthcare providers during the antenatal period throughout delivery and the utilisation of postnatal care. This study suggests that adequate health care service may improve the utilisation of postnatal care services (Phiri, Rattanapan & Mongkolchat, 2015: 493).

2.4 PLANNED BEHAVIOURAL MODEL

Health programs with the aim to guide individuals or communities through health behaviour, including health promotion and education programmes, are more likely to succeed when guided by a theory, or theories, of health behaviour. Theories of health behaviour outlines the factors influencing certain health behaviours, and assist program coordinators with identifying key targets for behaviour change and means to achieve these changes (Glanz, Rimer & Viswanath, 2015: 1).

The public health sector's goals are to prevent morbidity and mortality, improve quality of life and create healthy environmental conditions in the healthcare facility and communities. Public health problems need to be accurately identified, together with the cause of the problems, in order to develop and implement theory- and evidence-based interventions. In order to reach these goals, the healthcare practitioner must understand theories implemented in social and behavioural science in order to determine the cause of the identified problems and to develop interventions to eliminate those problems (LaMorte, 2018: online).

There are two behavioural theories that focus on factors influencing individual's motivation to determine the probability of executing specific behaviours. The Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB) both support the belief that intention is the most accurate predictor of behaviour. Behaviour on the other hand is directly influenced by attitude toward the specific behaviour as well as social normative perceptions. Refer to figure 2.1.

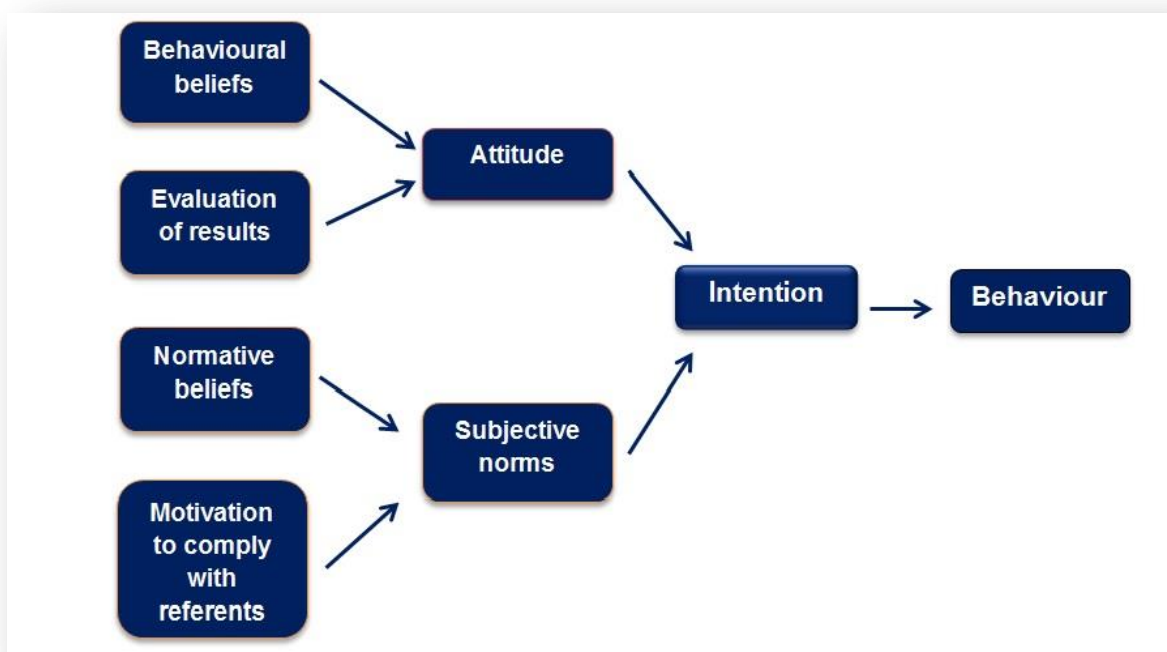


Figure 2.1: Theory of reasoned action (Fishbein & Ajzen, 2010)

The Theory of Planned Behaviour is an extension of the Theory of Reasoned Action and is distinguishable by an additional component; the perceived control of an individual over the execution of the behaviour (Montano & Kasprzyk, 2015: 95). The TRA argues that the key determinant of behaviour is behavioural intention.

The TPB evolved from the Theory of Reasoned Action by including an individual's attitude towards *perceived behavioural control* together with *subjective norms* to determine behavioural intentions. An individual's beliefs regarding the outcome of performing behaviour (behavioural beliefs) directly influences attitude, for instance a positive behavioural belief regarding the outcome of the behaviour will result in a positive attitude towards the behaviour (Montano & Kasprzyk, 2015: 97).

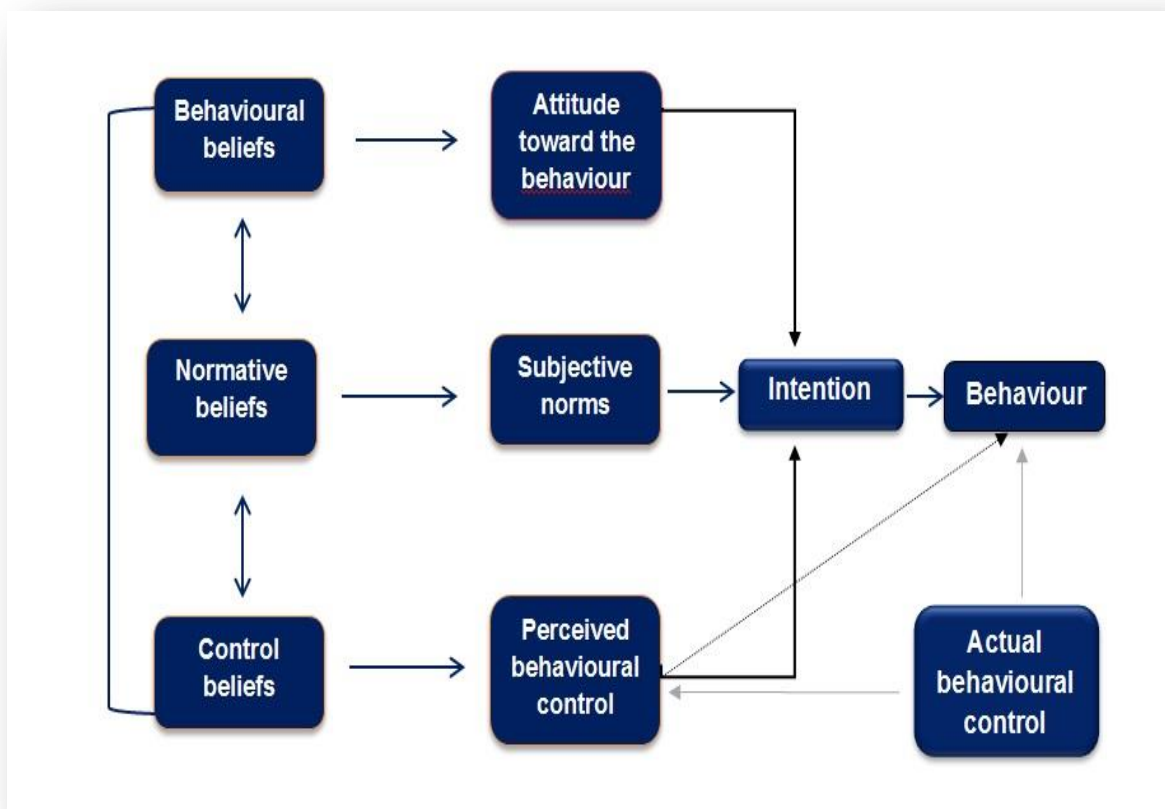


Figure 2.2: Theory of Planned Behaviour (Ajzen, 1991).

The Theory of Planned Behaviour describes the impact that important characters or individuals have on another individual's performance or behaviour, implying an individual's *subjective* norms is influenced by their *normative beliefs*. Individuals' perceptions regarding the approval of key-role players and the motivation to meet their expectations will predominantly lead to positive subjective norms (Montanta & Kasprzyk, 2015: 97).

The Theory of Planned Behaviour promotes the idea that 'past behaviour is the best predictor of future behaviour'. The association between past and future behaviour results in certain stability in the behaviour and allows the prediction of future behaviour by calculating the contributors to the past behaviour (Ajzen, 2011: 1120). Ajzen argues that the outcome of the past behaviour is not a good predictor on the impact on an individual's present intention; instead the strength of habit will increase in the presence of past behaviour. The more frequent a positive outcome has been obtained in the past, the more likely behaviour will be repeated (Ajzen, 2011: 1120).

In the Theory of Planned Behaviour, the most essential information regarding the determinants of behaviour is found in an individual's control, normative and behavioural beliefs. The origin of the beliefs is not important in this theory, but rather the possible background factors that have an impact on an individual's beliefs like personality, values, demographic variables (education, age, gender, income) and exposure to information. These factors indirectly have an impact on intention and behaviour, and contribute to studies either through control variables when only a few demographic factors are observed or for theoretical reasons when background factor may be considered crucial to the behaviour studied (Ajzen, 2011: 1123).

The Theory of Planned Behaviour observed that the evaluation of past behaviour is an independent contributor to the prediction of intention, more so than attitude, subjective norms or perceived behavioural control. It states that secondary variables, together with attitude, norms and perceived control present in past behaviour, may determine future intentions (Ajzen, 2011:1121).

The intent for health service utilisation for instance, can be better predicted through the implementation of the TPB by explaining the difference in intention to predict different health behaviour outcomes (Montano & Kasprzyk, 2015: 95).

The TPB has added more value in the public health sector than the TRA yet the model does not take into account environmental and economic factors that influence the individual's intention to perform the behaviour. (LaMorte, 2018: online). Other limitations of the TPB include:

- It presumes that the individual has obtained all the necessary resources and opportunities to execute the behaviour, despite the individual's intention.
- Additional variables that may influence the behavioural intention and motivation are not taken into account, like for instance: anxiety, threat, emotional status or past experience.
- It assumes that the behavioural decision-making is a linear process, even though the behaviour is not set and can change in the future.
- Perceived behavioural control was a valuable inclusion to the theory, yet actual control over the behaviour is not factored in.
- There is no indication concerning the time passed between intention and the behaviour action taken.

In response to some of the limitations to the TPB, researchers have included constructs of other available behavioural theory models to form a more integrated model to address public health issues (LaMorte, 2018: online).

A new behavioural theory has recently been proposed by expanding the TRA and TPB by combining constructs from different influential behavioural theories to develop an Integrated Behavioural Model (IBM) (Montano & Kasprzyk, 2015: 95).

The Theory of Planned Behaviour was considered best suited for this study since success rate in predicting and explaining health behaviours like the utilisation of health services has been undeniable (LaMorte, 2018: online).

2.5 KNOWLEDGE, ATTITUDES AND PRACTICES AND THE THEORY OF PLANNED BEHAVIOR

The origin of knowledge, attitude and practice studies emerged as a new genre of social and behavioural research, focusing on the merging of social determinants of fertility and family planning, and became known as family planning KAP studies. This KAP method became so popular that by the end of the 1970s at least 400 KAP studies were implemented in 72 nations. The main reason for its popularity is the fact that a KAP study provides basic factual data on existing knowledge, attitude and practices at a particular point in time and also includes past behavioural practices (Kar, 2018: 98).



Figure 2.3: Knowledge, Attitude and Practice (KAP) model (Alzghoul & Abdullah, 2015: 62)

While the quantity of family planning KAP studies increased, so did the criticism. The foremost concern was the lack of regularity between the individuals' response to the questions on family planning attitude and the actual use of contraceptives in the future (Kar, 2018: 98). The valuable lessons learned from these studies include (Kar, 2018: 99):

1. Theoretical: A generalised attitude estimate is not an accurate predictor for a specific behaviour in actual behavioural circumstances. For instance, the

individual may think that good health is important (as a generalised goal), but there is no guarantee that the individual will practice the behaviour to achieve good health as a specific action. Comparably, a respondent may have a positive attitude toward family planning, but the knowledge does not enable the researcher to make an accurate prediction of a specific contraception use by a respondent in the future. To accurately predict attitude, the intention to perform a specific behaviour should be assessed.

2. Methodological: weakness and limitations include: measurement, sampling, and statistical procedures utilised.

In response to the criticism stated, Fishbein proposed his “Behavioural Intention” theory with the assumption that the best predictor for behaviour is intention (Glanz, Rimer & Viswanath, 2015: 95; Kar, 2018: 100). These and interchangeable discoveries from various family planning KAP studies support the importance of integrating a multilevel model for studying the determinants of health behaviour for effective policy and prevention interventions (Kar, 2018: 100). Determining respondents’ attitudes and beliefs, relating to specific behaviour, will assist researchers in identifying predictors of behavioural intention and behavioural change studies (De Pretto, *et al.*, 2015: 2; Knowles *et al.*, 2015: 2).

In more recent studies, the integration between the TPB and KAP has been proven valuable. Semungus, Tafese and Semella (2017: 1-9) applied these theories to assess the determinants of HIV/AIDS risk among high school learners in Ethiopia. The researchers utilised an extended form of the TPB by adjusting the model for the intended purpose of the study. The researchers attached knowledge as an additional variable to the model, in order to visualise the perceived behaviour control. The learners’ socio-demographic status and demographic variables were compared to the subjective norm and perceived behaviour control. Ultimately, the learners’ attitude and knowledge directly influences their behaviour and actions. The researchers found that studies on KAP regarding HIV/AIDS among adolescents in Ethiopia are insufficient and a clear understanding by combining the theories is essential to reach the aim of the study.

Knowledge, as described in the KAP method, links with the three constructs that guide behaviour in TPB. Beliefs regarding the outcome or consequence of behaviour

(behaviour beliefs), beliefs about the expectations of others (normative beliefs) and beliefs regarding factors that may hinder or facilitate the behaviour (control beliefs) all respectively have an impact on attitude (Ajzen, 2005:1).

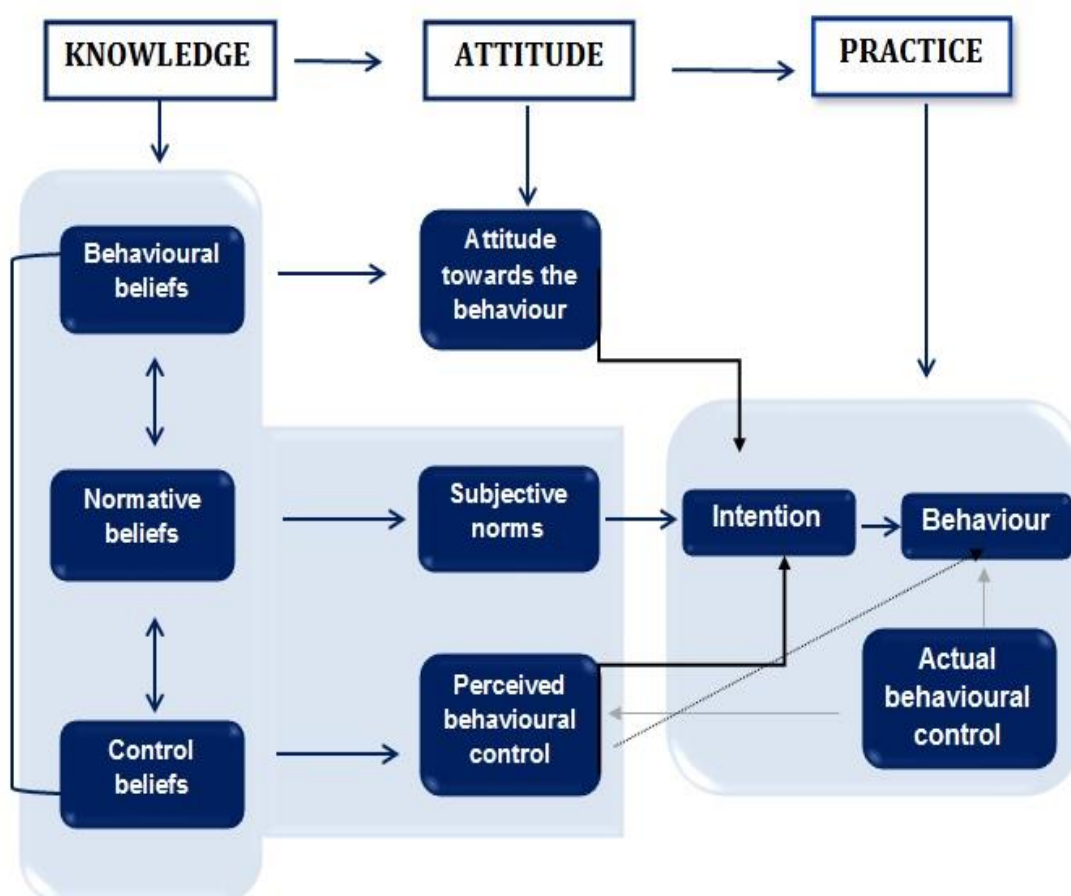


Figure 2.4: The Theory of Planned Behaviour (TPB) (LaMorte, 2018: online) and Knowledge, Attitude and Practice (KAP) (Alzghoul & Abdullah, 2015: 62).

Behavioural beliefs, referring to the factors that motivate the behaviour, indicate that the stronger the intention to perform the behaviour the more likely the outcome of the behaviour will be (LaMorte, 2018: online). A study conducted in Ethiopia aimed to assess the postnatal care utilisation and the associated factors regarding utilisation among mothers. The authors conducted a community based cross-sectional study and implemented focus group discussions through a structured questionnaire. The results from the focus groups indicated that mothers with knowledge on postnatal danger signs and symptoms were more likely to attend postnatal care services. Antenatal care utilisation before delivery of the newborn and the presence of complications during the antenatal period served as a motivator to attend healthcare

facilities after delivery, along with obtaining immunisations for the baby. Maternal knowledge on postnatal danger signs, past experience of obstetric complications, antenatal care service attendance, place of delivery and cultural practices all serve as independent predictors for utilisation. The main reason for not utilising postnatal care services is the lack of knowledge regarding the timing of postnatal care (Belachew, Taye & Belachew, 2016:1-7).

Normative beliefs describe an individual's perception regarding important figures or key-role players that influence his or her life, and whether they will approve or motivate the intended behaviour. In the incidence where the individual believes that the key-role player will encourage the intended behaviour, and where the individual is motivated to meet the expectation, a positive norm will result (Montano & Kasprzyk, 2015: 97).

A study conducted in South Africa on the experience of postnatal patients regarding postnatal care, supports the above-mentioned statement. Participants in the study raised challenges during a semi-structured interview in a focus group setting. Their main concern was that they received conflicting advice during the postnatal period from the midwife during discharge and the traditional birth attendants at home which hampers their decision-making skills. The participants felt that there is a lack of openness and transparency between the midwives and the traditional attendants. They are more likely to follow the advice of a family member or traditional birth attendant since they spend most of their time with them at home. The participants suggested that family members and traditional birth attendants should be involved in the postnatal care practices to enhance teamwork and to ensure continuity of care during the postnatal care period (Ngunyulu, 2014: 685-697).

Control beliefs are an individual's perceived amount of control over behavioural performance. It refers to an individual's perception regarding environmental factors and the role they play in performing the behaviour. The environmental factors can either help or hinder the behavioural process (LaMorte, 2018: online).

The most prominent factors contributing to poor utilisation of postnatal care services by mothers and newborns in Ethiopia was a lack of time to attend the clinic, the distance to the health facility, a lack of guardians to look after children at home and a lack of quality service at the health facility. These results were found in a cross-

sectional study conducted in Gondar Zuria District, Ethiopia. The data was collected with a structured questionnaire through an interview. The study also found that urban mothers had a higher utilisation rate than mothers in rural areas due to either an increase of availability of information regarding postnatal care, or easier access to health facilities. The author suggests that the performance of healthcare providers during delivery, together with effective health education the utilisation of postnatal services, may increase (Tesfahun, Worku, Mazengiye & Kifle, 2014: 2341-2351).

Other environmental factors that hinder the utilisation of postnatal care services in India and Africa included the level of education of parents, beliefs, cultural and religious practices, inadequate financial and material resources, the place of delivery and maternal occupation (Belemsaga *et al.*, 2015: 83-105; Purani *et al.*, 2015: 83-85)

Behaviour is the display of observable response to a specific situation, guided by intention and perceived behavioural control (Ajzen, 2005: 11; LaMorte, 2018: online). Behaviour relates to practice in KAP, with regard to the intention to carry out certain behaviour, such as the respondent's intention to utilise postnatal services.

By integrating the KAP method and TPB, two ways have been created to exemplify and epitomise specific beliefs that need to be addressed in order to change or maintain behaviour. It optimises identification of variables that affects intention in order to perform a health-protective behaviour. For this integration to be successful a common goal, target population and outcome must be shared. The implication of this behavioural model suggests that different types of interventions must be suggested for respondents who are unable to act on their intention (Fishbein & Yzer, 2003: 164).

The concepts depicted in the Theory of Planned Behaviour and Knowledge, Attitude and Practice (Ajzen, 1991: 188; Fishbein & Yzer, 2003: 167) have been indispensable in the development of the questionnaire. Refer to annexure A for the structured questionnaire.

2.6 CONCLUSION

Postnatal care is among the main recommended interventions to reduce maternal and newborn deaths worldwide. Addressing neonatal mortality requires links within the continuum of care from maternal health through pregnancy, childbirth and early neonatal care, and into child health programs. Investing in maternal, neonatal and

child health services will improve the survival of newborns and reduce maternal and child deaths (Ononokopon *et al.*, 2013: 951).

The National Department of Health encourage that the first postnatal care assessment should take place in the delivery facility before discharge and thereafter three to six days after discharge from the facility for assessment of the mother and newborn (NDOH, 2016).

After an extensive literature review regarding different factors influencing the utilisation of postnatal care, it was made clear that there are a few factors that repeat in many studies like the level of education of the mother, the distance to the facility, the knowledge regarding postnatal care and the place of delivery (Phiri *et al.*, 2015: 493; Tesfahun, Worku, Mazengiye & Kifle, 2014: 2341; Belemsaga *et al.*, 2015: 83; Belaclew, Taye & Belachew, 2016: 1).

After reviewing the relevant literature, it was decided that the Theory of Planned Behaviour and Knowledge, Attitude and Practice model will be best suited achieve the aims and objectives of this study.

CHAPTER III

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In Chapter One, the researcher introduced the background, problem statement, research question, and also the aim and objectives of the study. The aim of the study is to describe the maternal knowledge, attitude and practices (KAP) with regard to postnatal care services. The study was conducted in a Free State rural hospital.

In Chapter Two the researcher firstly elaborated on the essential processes implicating postnatal care in a hospital and primary health care setting and provided a conceptual map of services delivered. The chapter proceeded with a comprehensive discussion regarding the key concepts related to the aim of the study as well as literature supporting the questionnaire of the study. The chapter concluded with a discussion concerning the Theory of Planned Behaviour.

Chapter Three predominantly describes the process followed to develop a research plan that addressed the research question, aim and objectives of the study. The methodology of the study will discuss the research design, population, structured questionnaire, validity and reliability, pilot study, and ethical considerations extensively. The research question, aim and objectives are illustrated in figure 3.1 below.

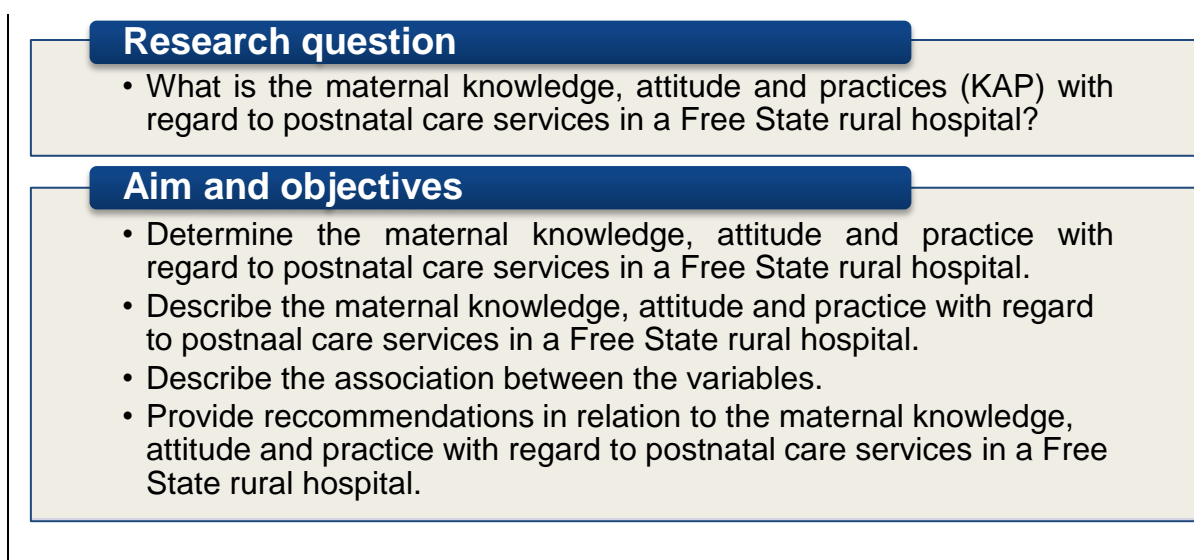


Figure 3.1: Research question and objectives

3.2 RESEARCH DESIGN

A research design is the arrangement of data to ultimately support the problem identified through the collection of data and definitive conclusions (Coe, Waring, Hedges & Arthur, 2017: 127). Leavy (2017: 8) describes a research design as the undertaking of conducting a plan or blue print for a research project. It forms the strategy in which the research aims, objectives and questions will be answered (Moule, Aveyard & Goodman, 2017: 151). The research design mainly focuses on implementing the best design to address the research question or problem, as well as determining the what, where, when, how much and how the research aim and objectives will be reached (Coe *et al.*, 2017: 127; Devi, 2017: 52).

Many types of research designs available and are implemented for different type of studies or research problems (Moule, Aveyard & Goodman, 2017: 151). The two main research designs available are qualitative and quantitative research (Fain, 2017:3). Qualitative research will be discussed first, followed by quantitative.

QUALITATIVE RESEARCH

Qualitative research emphasises the respondent's perspective regarding a specified occurrence in time. The participant's perspective is obtained through their verbal descriptions of the value of the experience (Fain, 2017: 7; Lobiando-wood & Hober, 2018: 8). Qualitative research is utilised by researchers when the aim is to explore, vigorously investigate or inquire about an occurrence, and often gather data from a relatively small sample of people (Leavy, 2017: 9). Traditionally the tools that can be utilised to gather new knowledge are the participant's perspective, in-depth interviews, case studies, ethnographies and narrative analysis (Fain, 2017: 7). The advantage of qualitative research is the collection of valuable data that can describe and explain the research problem in an effective manner (Leavy, 2017:19). Other advantages and limitations of qualitative research include the following: Refer to table 3.1.

Table 3.1: Advantages and limitations of qualitative research (Lancaster, 2016: online; Chetty, 2016: online).

ADVANTAGES	LIMITATIONS
Copious, comprehensive detail is obtained.	Can be a time consuming process.
The “human factor” is taken into account since the perceptions of the respondents are observed.	Qualitative research is mostly open-ended, thus the results cannot be verified by the researcher objectively.
Valuable for studies that need in-depth detail and understanding.	The categorisation and recording of the study requires a labour intensive analysis.
Events are observed in their natural, holistic context.	Researchers struggle to explain the difference in quality and quantity of the information obtained, since different conclusions can be derived from respondents.

QUANTITATIVE RESEARCH

Quantitative research, also known as scientific inquiry, can be defined as the process where knowledge is obtained through the process of determining the extent of certain behaviour, characteristic, or occurrence, that can generate numerical data to be analysed using statistics (Fain, 2017: 7; Moule, Aveyard & Goodmen, 2017: 151). Leavy (2017: 9) emphasises the aim of quantitative research, that is, to measure and identify relationships between the variables to unveil patterns, associations and causal relationships. Quantitative research traditionally utilise quantitative tools such as experiments, questionnaires, and surveys to advance nursing research (Fain, 2017: 7).

Quantitative research has shown promising development in nursing research over the years and has been effectively implemented in this field (Fain, 2017: 7). An advantage of quantitative research is the collection of extensive data from a large group of respondents, which allows the researcher to describe the extensiveness of

the phenomenon (Leavy, 2017: 19). The advantages and limitations of quantitative research are discussed in table 3.2.

Table 3.2: Advantages and limitations of quantitative research (Leavy, 2017: 19).

ADVANTAGES	LIMITATIONS
A large sample group increases the amount of data collected to generate more valuable results.	Faulty data analysis might occur due to the researcher not receiving training on statistical analysis, or the unavailability of a biostatistician
Data analysis is considered reliable due to statistical methods implemented.	Researchers may struggle with an availability of resources due to a large sample size.
Valuable in research where systematic, standardised comparisons are required.	Environmental factors may hinder data gathering since the respondents need to be at a specific place at a specific time.

Taking the aim and objectives of this study in to account, a quantitative approach is best suited to describe an occurrence such as maternal knowledge, attitude and practice with regard to postnatal care services in a Free State rural hospital (Moule, Avegard & Goodman, 2017: 158). A quantitative approach best accommodate a structured questionnaire as data collecting tool to measure and identify relationships between knowledge, attitude and practice amongst mothers in the postnatal period (Fain, 2017: 7).

Descriptive design

There are four sub-divisions of quantitative designs, namely: experimental, quasi-experimental, correlational, and descriptive research (Sutherland, 2016:192). For the purpose of this study, a descriptive design was chosen since it is the best design to answer a research question containing “what is?” or “to what extend?” (Sutherland, 2016:200). The study aimed to describe the maternal knowledge, attitude and practices with regard to postnatal care services in a Free State hospital and the association between the socio-demographic variables

A descriptive design can be defined as the systematic gathering of information through observation and describing the variations that exist in the phenomena explored (Miksza & Elpus, 2018: 13). It strives to describe the social circumstances of the respondents from their own perspective through implementing questionnaires, surveys, interviews or observations to collect data (Fain, 2017: 25; Leavy, 2017: 5). Furthermore, descriptive designs provide a tool for establishing new meaning, defining what already exists, establishing the frequency of specific occurrences, and categorising information (Miksza & Elpus, 2018:17; Nardi, 2018:10). The advantages and limitations of descriptive design are described in the table 3.3.

Table 3.3: Advantages and limitations of a descriptive design (Sumeracki, 2018: online).

ADVANTAGES	LIMITATIONS
Provide in-depth, valuable view of a research topic.	A cause and effect relationship cannot be determined.
New valuable data that was not initially intended can be revealed.	Participants can provide desirable responses to please the researcher during a survey.
New research questions, hypotheses regarding cause and effect relationships can be created.	With observational descriptive research, the respondent may change their behaviour if they are aware of the observation.

Knowledge, Attitude and Practice (KAP) studies are quantitative in nature, and are used to uncover misapprehensions and misconceptions that could create obstacles to behaviour change nature (ISSUU, 2015: online). KAP surveys reflect the opinion and insight of respondents to identify the gap between the intention of the respondent and the actual actions taken. Surveys can be implemented to assess the knowledge of the respondents towards a certain health issue or disease (Rav-Marathe, Wan & Marathe, 2016: 4).

Cross-sectional design

Considering the nature of KAP studies, a quantitative, cross-sectional design was used to address the domain investigated. Cross-sectional designs pay particular

attention to the measurement of elements collected at a specific time or multiple times within a short time frame with no follow-up needed. It emphasizes that the measurement represents data applicable at the present moment, and changes over an extended timeframe is not observed (Fain, 2017: 26). It is classified as a non-experimental design and is more commonly implemented than the other non-experimental designs available, that is, longitudinal and retrospective research (Harvey & Land, 2017:152).

Some of the advantages of using a cross-sectional design include (Harvey & Land, 2017:157):

- It is considered economical with relevance to time, resources, effort and cost.
- The commitment required from the respondents are not continuous, participation is mostly only required once.
- Findings are available immediately after the data is collected.
- Large sample groups can be accommodated.

The limitations of a cross-sectional design may include (Harvey & Land, 2017: 157):

- A low response rate that may negatively affect the outcome of the study.
- There is a risk that valuable discoveries can be concealed when results are described as averages.
- The data might be perceived as superficial.

For both the advantages and limitation of a cross-sectional study, the type of method implemented must be taken into account. Not all the advantages or limitation may apply to a study (Harvey & Land, 2017: 157).

A longitudinal design is used to collect data at different intervals over a timeframe from subjects with shared characteristics. The advantage of utilising longitudinal research is the ability to collect data from the same respondents over a longer period; however the disadvantage is that the respondents may be lost at any point during the study (Fain, 2017:28). Retrospective research, on the other hand, is when the outcome of an interest has already occurred during the implementation of the study. The pre-existing data is analysed and the results explored and explained (Coe, Waning, Hedges & Arthur, 2017: 27). The advantage of retrospective studies

includes cost-effectiveness and being time effective. The respondents are less likely to be lost to follow-up. Some of the limitations that may occur are: the cause cannot be determined, only associations can be made, larger samples are needed if outcomes are insufficient and some of the key data cannot be measured (Nickson, 2018: online).

Considering the nature of KAP studies, a quantitative, cross-sectional descriptive design was used to address the research question, aim and objectives of this study.

3.3 STRUCTURE OF QUESTIONNAIRE

Data can be quantified and converted into numerical form, to be processed into valuable mathematical statistics. Unlike qualitative methods, quantitative techniques can include larger sample sizes due to its numerical nature (Thompson, 2018: online).

Data collection tools available for a quantitative research design include (Fain, 2017: 7; Thompson, 2018: online; Grove, Gray & Burns, 2016: 302):

- quantitative surveys
- questionnaires
- structured interviews
- quantitative observation
- experiments

A structured questionnaire was considered to be a suitable technique to collect information regarding the variables, knowledge, attitude, practices and utilisation related to the study. Questionnaires aim to collect information/data from specific individuals and usually consist of fixed questions with multiple options to answer and code (Nardi, 2018: 71). In this KAP study information was obtained from postnatal mothers. The theory of planned behaviour, developed by Ajzen (2011), available guidelines and policies related to PNC services and an extensive literature study were used as a guide to develop the questionnaire (refer to Annexure A).

The advantages and limitations of a questionnaire are stated below in table 3.4.

Table 3.4: Advantages and limitations of a questionnaire data collection tool (Debois, 2016: online).

ADVANTAGES	LIMITATIONS	HOW LIMITATIONS WERE ADDRESSED
Can include a large sample.	If not administered face-to-face a low response rate is possible.	Fieldworkers distributed the structured questionnaire to all respondents that qualify to partake in the study, thus ensuring a high response rate.
Results can be obtained quickly.	Questions can be unclear and misinterpretations can affect the results.	The structured questionnaire was translated in to three languages to best suit the respondents preferred language.
Respondents can process and consider questions before answering.	The questionnaire does not include the reason or meaning behind the response given.	The questions were structured according to relevant literature to ensure that the intentions of the respondents are clear.
Questionnaire responses are highly structured and easily coded.	Likelihood of desirable responses to please the researcher.	The researcher was not present during data collection to ensure no altered responses.
	Incomplete questionnaires can occur.	The structured questionnaires were checked by the fieldworker after completion for completeness and again by researcher on collection.

In quantitative research, interviews are considered more structured than in qualitative research. During a structured interview, the researcher asks a standard set of questions without any deviation from the questions (Grove, Gray & Burns, 2016: 302).

The structure of each section in the structured questionnaire including answering options is described below:

PART ONE: RESPONDENT PROFILE

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

The socio-demographic data is obtained through nine questions regarding the age, marital status, level of education and employment status to assist in developing a profile of the respondent (refer to questions one to nine).

SECTION B: BIOGRAPHICAL INFORMATION

The biographical data describes the respondents' obstetric gestational history and experience through five questions related to the respondents' antenatal care, including utilisation of the antenatal clinic and source of information regarding postnatal care (refer to questions ten to fourteen).

PART TWO: KNOWLEDGE REGARDING POSTNATAL CARE

The knowledge of the respondents were assessed in the second section of the structured questionnaire through evaluation of their behavioural beliefs, normative beliefs, subjective norms, control beliefs and perceived behaviour control, as stated in the TPB and KAP study (ISSUU, 2015: online; LaMorte, 2018: online).

SECTION C: BEHAVIOURAL BELIEFS

The behavioural beliefs aimed to measure the respondents' beliefs regarding the outcome or consequence of their behaviour during the postnatal period (LaMorte, 2018: online). More specifically the respondents' knowledge relating to postnatal care was assessed. This section consisted of eight True, False or Unsure Statements (refer to Statements fifteen to 22).

SECTION D: NORMATIVE BELIEFS

This section aimed to assess the respondents' beliefs regarding the expectations of their friends, neighbours or church community and their understanding of postnatal care. The same statements that were stated in the previous section were repeated, but the respondents had to indicate what they believe these people understand regarding the postnatal period. This section consisted of eight True, False or Unsure statements (refer to statements 23 to 30).

SECTION E: SUBJECTIVE NORMS

This section assessed the role and impact of key-role players, in this instance the respondents' family, on the decision making process of the respondents (Glanz, Rimer & Viswanath, 2015: 97). The same statements of section C and D were repeated and the respondents had to indicate what they think their family (mother, sisters, or grandmothers) understand and believe regarding the postnatal period. This section consisted of eight True, False or Unsure statements (refer to statements 31 to 38).

SECTION F: CONTROL BELIEFS

This section aimed to indicate what factors may hinder or facilitate the behaviour of the respondent (LaMorte, 2018: online). These statements related to possible factors at home and at the clinic that might have a positive or negative impact on their attitude towards postnatal care services. This section consisted of eight True, False or Unsure statements (refer to statements 39 to 46).

SECTION G: PERCEIVED BEHAVIOURAL CONTROL

This section aimed to describe the respondents' ability and level of confidence to perform the behavioural change during the postnatal period (Glanz, Rimer & Viswanath, 2015: 62). The key is to establish which of these factors plays the most significant role in the decision making of the respondents. The section consisted of five True, False or Unsure statements (refer to statements 47 to 51).

PART THREE: ATTITUDE

SECTION H: ATTITUDE TOWARDS POSTNATAL CARE SERVICES

This section intended to describe the respondents' feelings regarding postnatal care services and consisted of eight True, False or Unsure statements (refer to statements 52 to 59).

PART FOUR: PRACTICES

SECTION I: INTENTION

In this section the respondents had to indicate their intention to carry out the expected behaviour during the postnatal period. Nine statements were stated in this section regarding information that was supposed to be given to them during the antenatal care period and before discharge from the hospital. The respondents had

to indicate whether they plan to perform the specified behaviour (refer to statements 60 to 68).

SECTION J: ACTUAL BEHAVIOURAL CONTROL

Actual behavioural control referred to the respondents' practical means to perform the expected behaviour during the postnatal period. The same statements as the previous section were repeated. The section aimed to measure the respondents' physical intention to carry out the expected behaviour through ten True, False or Unsure statements (refer to statements 69 to 77).

SECTION K: BEHAVIOUR

This section aimed to measure the respondents' past behaviour with regard to postnatal care. The same statements as the previous two sections were repeated and the respondents were asked to indicate whether they were able to carry out the expected behaviour in the past. The section consisted of ten True; False or Unsure statements (refer to statements 78 to 86).

The structured questionnaire was translated from English into Afrikaans and Sesotho after approval from the Health Science Research Ethics Committee (UFS) was obtained.

3.4 POPULATION AND SAMPLE

The general population is identified by the researcher and has to be specified by a target and accessible population in order to have value. Respondents of a general population must have at least one trade or characteristic in common, for instance 'health workers' share the basic element, that is, working in health institutions (Asiamah, Mensah & Oteng-Abyaie. 2017: 1610).

A target population is considered a refinement from the general population and includes a group of individuals or respondents with specific contributions of interest and relevance. It is considered more specific and refined than the general population. To obtain the target population a set of inclusion criteria should be set by the researcher and applied to the general population (Asiamah, Mensah & Oteng-Abyaie, 2017:1612; Moule, Aveyard & Goodman, 2017: 166).

The accessible population remain after all the respondents that do not want to participate, or cannot be accessed during the study period, is removed from the target population and is considered the final group of respondents from which a data sample will be drawn. With regard to the population refinement process, the target population consists of implementing inclusion criteria to uncover the best possible respondents and quality of data (Asiamah, Mensah & Oteng-Abyaie, 2017: 1613).

A population consists of all units or the universe including people, or a group of individuals, who have one or more characteristic in common. The group of people that a researcher have access to within the population are referred to as a sample (Leavy, 2017:76; Moule, Aveyard & Goodman, 2017: 166). The researcher conducting quantitative research must establish the sample size required to ensure that statistical deviations between groups in intervention and comparison studies are shown (Moule, Aveyard & Goodmen, 2017: 167).

The population identified for the current study included mothers who all delivered babies at Senorita Nhlabathi hospital, Free State Province, during July to October 2017 (refer to context). The sample size for the study was 110 respondents.

The hospital is easily accessible to all residents in Ladybrand and is the only hospital in the sub-district, Mantsopa. The maternity ward only includes normal vaginal deliveries, and the number of deliveries for April to June 2016 was 175. Refer to table 1.3 in Chapter I.

The Researcher estimated the possible population to be an average 40 deliveries per month resulting in a minimum of 120 deliveries for April, May and June 2017.

Inclusion and exclusion criteria were applied in this study to select the respondents.

The inclusion criteria consisted of postnatal mothers who:

- Had at least one previous birth, excluding the current delivery.
- Older than 18 years.
- Understood Afrikaans, English or Sesotho.
- Gave live birth at Senorita Nhlabathi hospital.

Born before arrival cases, where the mother was admitted for postpartum evaluation at Senorita Nhlabathi hospital, were also included.

Multigravida or mothers who had delivered one or more baby in the past (excluding the current delivery) was considered most suitable for the study, since past behaviour is measured in the questionnaire regarding postnatal care services. Since these mothers had already attended or refrained from attending postnatal services after their previous deliveries, it was more effective to measure the behaviour and actions contributing to the behaviour in the questionnaire. Primigravida or mothers who were pregnant for the first time have not yet exhibited past behaviour towards postnatal services.

The exclusion criteria consisted of postnatal mothers who:

- Were admitted to the maternity ward, but gave birth to a still born baby.
- Were diagnosed with a mental illness and unable to understand the question in any language.
- Were younger than 18 years.
- Gave birth for the first time during the course of the data collection.
- Were not willing to participate.
- Gave birth outside the three months stipulated for data collection.

- Were participating in an adoption process.

In order to make a research project more manageable, the researcher needs to implement a sampling technique. The sample selection process is vital in the research process since poor sampling techniques can ultimately compromise the research findings (Moule, Avegard & Goodman, 2017: 167). Quantitative research requires that a representative sample is drawn (Leavy, 2017: 76). There are different sampling techniques available, including: random (simple, systematic, stratified and cluster), non-probability, convenience, quota, purposive, and network (snowball) sampling (Moule, Avegard & Goodman, 2017: 168).

Purposive sampling was used to identify a suitable sample for data collection. A Purposive sample forms part of the non-probability sampling technique and consist of respondents who can be easily approached and share spesific characteristics (Trochim, Donnelly & Arora, 2016: 87). By implementing this technique the researcher can more easily access the sample through predetermined criteria, that is, women who gave live birth at Senorita Nhlabathi hospital during the data collection period who met the inclusion criteria set by the researcher were selected as the study sample. (Trochim, Donnelly & Arora, 2016: 87).

3.5 PILOT STUDY

A pilot study is a small sample study conducted ahead of the main research through implementing similar methods and procedures to obtain preliminary data. The aim of the pilot study is to establish the feasibility of implementing a larger scale study, to identify any unforeseen problems that may affect the feasibility, validity and reliability of the study and to establish that sufficient scientific results are generated (Lobiondo-Wood & Haber, 2018: 225; Miksza & Elpus, 2018: 21). In addition, a pilot study indicates whether accurate and reliable data can be obtained during the implementation of the research tool, which in this study, was a structured questionnaire (Miksza & Elpus, 2018: 21).

The pilot study took place after the Health Sciences Research Ethics Committee (UFS) approved a research proposal that included the questionnaire. The Free State Department of Health also granted the necessary permission to conduct the study.

Access to the setting and the respondents was arranged in collaboration with the Nursing Service Manager (Matron) of the Senorita Nhlabathi hospital. The researcher trained four nursing staff, who were not working in the maternity ward, as fieldworkers (refer to data collection). Using healthcare providers that were not part of the maternity ward could have reduced bias on the side of the fieldworker and could have limited pressure on postnatal mothers to participate in the study. The fieldworkers received compensation in the form of gift vouchers for their participation during the data collection process.

The fieldworkers received training on how to conduct a structured interview and how to complete the structured questionnaire. However, the respondents were also allowed to complete the structured questionnaire on their own if they opted to do so, in both cases the fieldworkers were present to provide support and to ensure that each question was completed.

One respondent for each fieldworker from the study population, that had the same characteristics as the respondents in the main study, was asked to take part in the pilot study (refer to population and sampling). The pilot study took place in July 2017. The researcher observed each fieldworker and ensured that they were competent to obtain the data required for the main study. The pilot study data formed part of the main study data. No modification has been made to the original structured questionnaire. The structured questionnaire was translated to Afrikaans, English and Sesotho.

3.6 DATA COLLECTION

Permission was obtained from the Health Sciences Research Ethics Committee (UFS) and other important stakeholders to conduct this study (refer to Ethical Considerations). The Nursing service manager of the hospital acted as gatekeeper during the data collection process. Data collection took place on a daily basis over a period of four months (July, August, September and October 2017,) and included a total of 110 respondents.

The fieldworkers approached the representative sample in the maternity ward after delivery and before discharge. Respondents had the option to complete the structured questionnaire on their own, or to request the fieldworker to assist them

when necessary. The response rate increased due to the fact that all sections of the structured questionnaire were completed (Polit & Beck, 2014: 186).

A brief explanation regarding the aim of the study and the role the respondents played was given in the form of an information leaflet (refer to Annexure B). The fieldworkers then obtained informed consent from respondents by means of a consent form that was signed by the respondents (refer to Annexure C). Data collection took place in a private room in the postpartum maternity ward at the Senorita Nhlabathi hospital. The average time that it took to complete a questionnaire was 25 minutes.

Daily, the researcher individually packed and delivered structured questionnaires to the fieldworkers who then distributed it to the respondents. After completion of a structured questionnaire, the fieldworker sealed it in the same individual envelope. The researcher was not present when the data was collected, but did collect the sealed envelopes afterwards. On collection, the envelope was coded by the researcher and placed in a cabinet in the researcher's office at home. The coding of the envelope ensured that the identities of the respondents remained confidential.

3.7 VALIDITY, RELIABILITY AND GENERALISATION

Validity refers to the degree to which a tool measures the true value of data. There are different aspects to consider in order to achieve maximum validity in a study (Leavy, 2017: 114; Moule, Aveyard & Goodman, 2017: 178). Two types of validity will be discussed:

- **Face validity:** In order for face validity to be effective, the questionnaire should measure the appropriate information it's supposed to measure (Trochim, Donnelly & Arora, 2016: 30). The questionnaire should be reviewed by someone that is not necessarily an expert in the field to establish if the questions are clear and understandable (Moule, Aveyard & Goodman, 2017: 179). The questions in the study were phrased appropriately in the language of preference and the answers matched the questions. The researcher ensured that the structured questionnaire met the stated criteria. The feedback of the biostatistician was included to improve the design of the questionnaire.

- **Content validity:** The ability of the questionnaire questions to measure the research problem at hand (Trochim, Donnelly & Arora, 2016: 130). Unfortunately, content validity cannot be measured in a pilot study, thus experts in the field should be approached to get an expert opinion before data collection (Moule, Aveyard & Goodman, 2017: 176). The questions in the structured questionnaire were aligned with existing literature on postnatal care, and with literature related to the TPB and KAP model. Input from the supervisor and experts on the specified field were obtained, that ensured that the content of the structured questionnaire was valid and compiled according to relevant literature.

Reliability: Similar results should be retrieved from different respondents with the same structured questionnaire. The same structured questionnaire should be repeated throughout the study (Trochim, Donnelly & Arora, 2016: 115). Within the scope of nursing practice, the instruments utilised should not only be valid in their readings, but also reliable (Moule, Aveyard & Goodman, 2018: 180). Reliability can further be divided into three aspects, namely: stability of a measure, internal consistency and equivalence. Stability assists the researcher to confirm that the results received contain the same results when used on the same person at different periods of time. Internal consistency is implemented when a questionnaire has a total score to measure a specific criterion, and the most convenient way to test this is to hand the questionnaire to two different groups and to evaluate the results to assess whether they are similar. Equivalence is applied in observational research when different researchers are using a schedule to collect data (Moule, Aveyard & Goodman, 2017: 180).

In order to achieve validity and reliability the researcher:

- Defined concepts related to the study and structured the questionnaire based on an in-depth understanding of these concepts;
- Piloted the structured questionnaire in order to refine the questions that were posed;
- Used the same structured questionnaire to retrieve data on the same topic or purpose
- Did not deviate from the initial plan (Leavy, 2017: 117).

Generalisation: Generalisation and reliability are closely related. According to Du Plooy *et al.* (2014: 254) reliability is the extent to which the same results will be obtained in similar situations. Therefore, if the structured questionnaire is applied to a study population with the same characteristics and under the same conditions, the results should be similar (Allen, 2017: online).

The following table represents possible methodological and measurement errors that may have occurred during the course of the study and the actions that were taken to enhance validity and reliability: Refer to table 3.6.

Table 3.5: Methodological and measurement errors with actions to avoid errors.

POSSIBLE ERRORS		ACTIONS TO AVOID ERRORS
1.	Irrelevant questions	<ul style="list-style-type: none"> - The structured questionnaire was compiled according to relevant literature, policies and guidelines applicable to postnatal care and the Theory of Planned Behaviour to ensure accurate and effective questions and answers to contribute to the value of the study.
2.	Communication error	<ul style="list-style-type: none"> - The structured questionnaire was translated into three languages to accommodate the respondents. - Fieldworkers were available to assist in the form of a structure interview if the respondent were in need of aid to avoid any misconceptions or communication errors.
3.	Confidentiality breach	<ul style="list-style-type: none"> - The respondents were ensured that confidentiality formed a very important part of the study and that their names would not appear on the structured questionnaires, only a code that cannot be traced back to them.
4.	Sampling error	<ul style="list-style-type: none"> - Only postnatal women who delivered at Senorita Nhlabathi hospital were included in the study. - Inclusion and exclusion criteria were considered before completing a structured questionnaire.
5.	Exclusion error	<ul style="list-style-type: none"> - The inclusion and exclusion criteria were established before data collection to ensure only qualifying respondents took part in the study.
6.	Data collection	<ul style="list-style-type: none"> - Fieldworkers made sure that a structured questionnaire was completed as soon as the respondent returned it.
7.	Missing patients	<ul style="list-style-type: none"> - Fieldworkers visited the maternity ward on a regular basis, after working hours, to see if there were any new qualifying respondents.
8.	Coding error	<ul style="list-style-type: none"> - The coding of data was validated by re-checking the data by the researcher.
9.	Data capturing	<ul style="list-style-type: none"> - The researcher ensured accurate data capturing through clean-up and back-up of data electronically on a Microsoft® Excel spread sheet to ensure accuracy and reliability.

3.8 DATA ANALYSIS

Descriptive statistics, namely frequencies and percentages for categorical data and means and standard deviations or percentiles for continuous data, were calculated for each component of the KAP. These components were compared by means of 95% confidence intervals. The analysis was be done by a biostatistician, Department of Biostatistics.

3.9 ETHICAL CONSIDERATIONS

Approval to conduct the study was obtained from the Health Sciences Research Ethics Committee (UFS). Three ethical principles namely, beneficence, respect for human dignity and justice stated in the Belmont Report were applied throughout the study (Salganik, 2014: online).

Beneficence is one of the most fundamental ethical principles which emphasize two general rules namely, to minimise harm and maximising possible benefits. Beneficence furthermore defines acts of kindness and goodness beyond what is often expected (LoBiondo-Wood & Haber, 2018:245). The respondents' decisions were respected at all times and their well-being was considered a priority.

The right to full disclosure or informed consent imply that the aim and purpose of the study must be discussed with the respondents using lay terms and emphasising their right to decline participation, their role and that of the researcher as well as possible risks and advantages related to the study (LoBiondo-Wood & Haber, 2018:245).

The consent form contained all the information explained to the respondents and were only signed after the right to full disclosure was acknowledged (refer to Annexure C). The consent form did not constitute a binding contract between the researcher and a respondent. If a respondent, for any reason, opted to withdraw from the study the quality of postnatal care rendered to that respondent was not jeopardised (Trochim, Donnelly & Arora, 2016: 40).

Another important concern for many respondents was the protection of their identity and personal information considered to be valuable to them (LoBiondo-Wood &

Haber, 2018: 239; Du Plooy-Cilliers, Davis & Bezuidenhout, 2014:267). With regard to the study, the structured questionnaires included a coding system and no personal information appeared on this data collection tool, thus ensuring confidentiality.

Confidentiality refers to the handling of information in a confidential manner, in other words the researcher made all attempts to remove any detail that can trace the data back to the identity of the respondent (LoBiondo-Wood & Haber, 2018: 139). The information is only known to the researcher and the fieldworkers.

The last principle discussed in the Belmont Report is Justice. It signifies the right to be treated fairly. All respondents were selected in the same manner and treated in the same fair way (Trochim, Donnelly & Arora, 2016: 41). All of the respondents who delivered at Senorita Nhlabathi hospital during the data gathering period were given the same information in the consent form and the same structured questionnaire.

Taken the above principles into consideration, the researcher was obliged to address justice, beneficence and respect for human dignity, during and after the course of the study towards all the respondents.

3.10 VALUE OF STUDY

Conceptualising the maternal knowledge, attitude and practices with regard to postnatal services in a Free State rural hospital, will rationalise the substandard statistics of postnatal care attendance.

The results could aid the Department of Health (DOH) in the development of behavioural change programmes aimed at promoting health education regarding the benefits and importance of postnatal clinic attendance. Implementing strategies to motivate the new mothers, could contribute to a decrease in maternal and neonatal mortality rate, to assist in reaching the 2030 strategic development goals set the establishment of trust and improve the relationships between healthcare providers and the community of postnatal mothers.

The nursing profession will benefit from the publication of results on different academic platforms. A contribution to the body of knowledge could aid in breaching the gap in postnatal care services and add value to service delivery.

Value could also be added if nurse training institutions align curriculum content to best practices related to postnatal care established by current research results.

3.11 CONCLUSION

The chapter provided an overview of the steps taken during the research process, including the research design, structure of the questionnaire, population and sample, pilot study, data collection and data analysis. The chapter also discussed validity, reliability and generalisation along with ethical considerations.

After considering all available options through literature research, a quantitative, cross-sectional descriptive design was considered best suited to address the domain investigated. A structured questionnaire was considered to be a suitable technique to gather the information regarding the variables, knowledge, attitude, practices and utilisation related to the study.

As for the population and sample, the population identified for the current study included all mothers who delivered babies at Senorita Nhlabathi hospital, Free State Province, during July to October 2017. The sample size consisted of 110 respondents.

The importance of validity, reliability and generalisation, along with ethical considerations, was discussed in the second half of Chapter Three. The chapter concluded with the value of the study.

Chapter four will follow with the interpretations, literature support and results.

CHAPTER IV

RESULTS AND LITERATURE SUPPORT

4.1 INTRODUCTION

Chapter III provided an overview of steps taken during the research process. After considering all available literature, a quantitative, cross-sectional design to address the domain investigated was implemented. A structured questionnaire was constructed as a research tool to gather information regarding the variables, knowledge, attitude, practices and the utilisation of postnatal care services. The sample was selected by means of a purposive sampling technique and included mothers who delivered at Senorita Nhlabathi hospital, Free State Province, during July to October 2017 and who met the inclusion criteria.

Chapter IV is aligned with the aim and objectives of the study as well as the methodology discussed in chapter three and presents reliable and valuable results. The chapter contains the results obtained from the respondents during the data collection period and will be interpreted, discussed and supported by literature after each component. The results are illustrated in the form of tables. The following symbols were used to refer to respondents:

Total number of respondents in the study

N= The sample size in this study included N=110 respondents

Where applicable, changes in the N= value will be indicated

n= Indicates the number of respondents that responded to a specific question or statement

f= Frequency

4.2 DESCRIPTION OF STATISTICAL ANALYSIS AND INTERPRETATION OF RESULTS.

The data was analysed by a biostatistician from the Department of Biostatistics using descriptive statistics namely frequencies and percentages for categorical data and medians and percentiles for continuous data to calculate each component of knowledge, attitude and practices (KAP) and the theory of planned behaviour (TPB). The researcher and the supervisor attended several sessions with the biostatistician in order to discuss and confirm the interpretation of results.

The results will be discussed under the respective headings of the structured questionnaire, which includes, four parts representing the respondents profile, knowledge, attitude and practices and consist of eleven sections.

The results of knowledge, attitude and practice include the respective constructs of the theory of planned behaviour, as discussed in chapter II. Knowledge consists of behavioural beliefs, normative beliefs, control beliefs, subjective norms and perceived behavioural control. Attitude stands alone and practice includes the intention, behaviour and actual behavioural control.

Sections A and B represent the socio-demographic- and biographical data. Medians were used where the distribution of the results were skewed. Frequencies and percentiles were applied in the rest of the chapter for continuous data. Section C to K was scored as either: true (1), false (2) or unsure (3) by the respondents.

The results discussed and supported by literature include only those that were considered most relevant by the researcher to reflect the aim and objectives of the study. Where applicable, the percentages were converted to the first decimal point

4.2.1 PART I: RESPONDENT PROFILE

The respondent profile included nine aspects namely: age, marital status, religion, highest level of education, home language, employment status, type of grant, type of house and distance to nearest clinic. The researcher considered the results as important to determine factors that could contribute to PNC attendance by postnatal mothers.

Section A: Socio-demographic information

The median age of the respondents was 28 years. The youngest respondent was 18 years and the oldest respondent 47 years. The distribution of the age of the respondents is considered normal, since statistics South Africa reported that during 2017 the youngest mothers whom gave birth in South Africa was between the ages ten to fourteen years and accounted for 1 302 annual births, the oldest mothers who gave birth were between 50-54 years old with 155 annual births (Statistics South Africa, 2017: online). Refer to Table 4.1.

Two studies that compared the different age of mothers to the utilisation of PNC services found that mothers aged 25 years and above are more likely to attend PNC services than adolescent mothers. The literature regarding the relationship between maternal age and healthcare practices found that younger women are less experienced and less likely to adhere to healthcare recommendations and responsibilities (Somefun & Ibisomi, 2016: 5; Larsen *et al.*, 2017: 11). With the median age being 28 in this study, 85 of the respondents were older than 25 years, therefor the utilisation of PNC services may be favourable.

The level of education was entered by indicating the highest grade completed in school, with an option for tertiary qualification and/or higher. The lowest grade completed was Gr. 4, and 11 respondents obtained a tertiary qualification. Refer to Table 4.1. The literacy level for South Africa, that is, the percentage of people that can read and write was recorded as 94.37% in 2015. The main reasons stated by men and women aged seven to eighteen years for not attending school include: lack of money, poor academic performance, family commitments (marriage, pregnancy) and education is considered a waste of time (Statistics South Africa, 2017: online).

A recent study conducted in South Africa stated that mothers with a high level of education, that is, tertiary or higher were less likely to seek postnatal care services (Larsen *et al.*, 2017: 10). The reasons being that they may have a more confident approach to health related issues and are more likely to be full-time employed, leaving less time to attend PNC services. Arguably, mothers with a lower level of education may demonstrate a lower level of understanding related to health issues and can presumably perceive disease related symptoms as high risk resulting in health seeking behaviour. Thus education can emerge as an important determinant of PNC utilisation, since the argument remains that more educated women understand the importance of PNC and are more likely to utilise and benefit from the services (Somefun & Ibisome, 2016: 7). Education is considered a motivater for mothers to seek health promotion messages, information where to obtain services and the importance of available services. Compared to the current study, with a Gr. 11 being the median highest level of qualification achieved, PNC service attendance are likely to occur due to the low literacy level and an increase in health seeking behaviour.

TABLE 4.1: SOCIO-DEMOGRAPHIC INFORMATION, MEDIAN RESULTS

QUESTION	CHARACTERISTIC	MEDIAN	Frequency = <i>f</i>	%
Q1	Age in years	28	9	8.2
Q3	Highest level/grade of education achieved	11	16	14.5
Q8	Adults	2	50	45.5
	Children <5	1	40	36.4
	Children >5	2	67	60.9
	Total			
	Number of people living in a house	5	20	18.2
	number of people			

The number of adults, children under five years of age, children above five years of age and total number of people living in the house indicated the total number of people sharing the house with the respondent. The median for the total number of people living in a house was five. This total is considered high, since the reported

average household size for South Africa (2018) and Mantsopa (2015) were both 3.3 people per household (Bauer, 2018: online; Mantsopa Local Municipality, 2015: 16). The high average number of people per household may be due to all respondents included in the study have a minimum of two children at the time of data collection, that brings the minimum total to three people per household, including the mothers. Refer to table 4.1.

In reference to their marital status, the majority of the respondents 81.8% ($n=90$) were single. A high percentage 97.3% ($n=107$) indicated that they were Sesotho speaking. A high unemployment rate was noticed at 79.0% ($n=87$), and 75.5% of the respondents received a child support grant ($n=83$). Concerning the type of house and distance from the nearest clinic, 76.4% ($n=84$) of the respondents were residing in an informal dwelling with 57.3 % ($n=63$) of the respondents staying less than two kilometres from the nearest clinic). Refer to Table 4.2.

TABLE 4.2: SOCIO-DEMOGRAPHIC RESULTS CONTINUED

CHARACTERISTICS		<i>f</i>	%	
Q2	Marital status	Single	90	81.8
		Married	19	17.3
		Divorced	1	0.9
Q4	Home language	Sesotho	107	97.3
		English	1	0.9
		Afrikaans	2	1.8
Q5	Employment status	Unemployed	87	79.0
		Formally employed	11	10.0
		Part-time	6	5.5
		Self-employed	6	5.5
Q6	Receive grant	Yes	83	75.4
		No	27	24.6
	Type of grant	Child support grant	83	100
Q7	Type of dwelling	Formal	26	23.6
		Informal	84	76.4
Q9	Distance to clinic	< 2 km	63	57.3
		3-5 km	21	19.1
		6-10 km	3	2.7
		>11 km	23	20.9

A study assessing the factors affecting the utilisation of PNC services in Kenya (Kinuthia, 2014: 513) stated that single women were more likely to attend PNC services compared to married women. The majority (89.1 %) of married women did not attend PNC services, whereas 72.2 % of single women attended PNC services with possible reasons being that the husband is considered head of the house and has the final say in decisions made regarding healthcare service attendance, and an increase of responsibilities at home might also limit their time to utilise healthcare services (Kinuthia, 2014:523). Another study conducted in Ethiopia agrees with the above mentioned statement indicating that 80% of men influenced the health seeking decision making followed by 16% of the respondents or mother-in-law's who have a say (Belaclew, Taye & Belaclew, 2016:4).

Almost 76% (n=83) the respondents received child support grant, which is considered a high number. According to the South African government (South African Social Security Agency), the grant payable as from 1 October 2018 is R410 per child will only be issued to a total of four children per mother (Sassa, 2018: online). The child support grant can improve access to healthcare facilities since it can be used to pay for transport, thus increasing the PNC service attendance (Byukusenge, 2016:91).

The majority of respondents in this study (57.3%, n=63), stayed less than two kilometres from the nearest healthcare facility. The association between distance and utilisation of health care facilities have brought forth conflicting conclusions. Kinuthia's (2014: 514) study on factors affecting the utilisation of PNC in Kenya, reported that women residing five to ten kilometres from a clinic had the highest prevalence to attend PNC services (17.6%), even more so than mothers who resided zero to five kilometres from a clinic (15.3%). Further than ten kilometres showed a 7.1% prevalence to attend PNC services. Most of the respondents in the current study stayed less than two kilometres from the nearest healthcare facility (57.3%, n= 63), implying that the attendance of PNC could be lower.

Section B: Biographical information

The median for the number of pregnancies (n=58) and live births (n=60) were both two. Since only multi-gravida women were included in the study, the lowest number of pregnancies were two accounting for 58 (52.7%) of the respondents and the highest number of pregnancies was five for six (5.5%) respondents. Refer to Table 4.3.

TABLE 4.3: BIOGRAPHICAL INFORMATION, MEDIAN RESULTS

	CHARACTERISTIC	MEDIAN	f	%
Q10	Number of pregnancies (Gravida)	2	58	52.7
Q11	Number of times a women has given birth to a viable fetus, be it alive or still (Parity)	2	60	54.5

A study regarding the association between a woman's parity and the utilisation of postnatal care services found that women with a parity above five were 1.2 time less

likely to utilise PNC services (Somefun & Ibisomi, 2016: 5). Kinuthia (2014: 513) also found that a higher parity in women resulted in a lower PNC utilisation rate. Possible reasons for the poor attendance could be associated with an increase of births/children and could result in more experience and exposure to PNC related activities, thus increasing the confidence of the mother. In the current study, the researcher considered the median of 2 live births not to be high. The healthcare seeking behaviour may still be present, thus increasing the probability of PNC attendance.

The majority of the respondents, 85.5% ($n=94$), did not experience any problems during the course of their pregnancies. The type of problems experienced by 14.5% ($n=16$) of the respondents included a previous miscarriage (43.8%, $n=7$), baby born before arrival (43.8%, $n=7$) and pre-eclampsia (12.5%, $n=2$). Interestingly enough, the seven respondents who indicated that their babies were born before arrival, had their distance from the nearest clinic cross-referenced by the biostatistician. All seven of the respondents resided less than five kilometres from the nearest clinic.

Out of all the respondents, 87.2% ($n=96$) attended antenatal care clinic during the course of their pregnancy. The main reason for 42.9% ($n=6$) of the respondents not attending ANC was that they were unaware of being pregnant.

Respondents were given the option to mark multiple sources of information on the structured questionnaire. The majority of respondents (57.3%, $n=63$) received their information regarding PNC during their antenatal care visits to the clinics. The hospital as source of information were rated second for 16.4% ($n=18$) of the respondents and 16 (14.6%) of the respondents did not receive any information regarding PNC services. Refer to Table 4.4. According to the maternity guidelines, health promotion for postnatal care attendance should take place during the antenatal care visits as well as during the postpartum period in the hospital before discharge (NDOH, 2015: 136).

TABLE 4.4: BIOGRAPHICAL INFORMATION CONTINUED

CHARACTERISTICS			FREQUENCY=	
			<i>f</i>	%
Q12	Problems during pregnancies	Yes	16	14.5
		No	94	85.5
	Type of problems	Previous miscarriage	7	43.8
		Baby born before arrival	7	43.8
		Pre-eclampsia	2	12.5
Q13	Attended ANC during pregnancy	Yes	96	87.2
		No	14	12.7
	Reason for not attending	Staff at clinic rude	1	7.1
		Did not know she was pregnant	6	42.9
		Did not know about ANC	3	21.4
Q14	Source of information regarding PNC	Did not have problems during pregnancy	4	28.6
		Radio	0	0.0
		Antenatal care visits	63	57.3
		Hospital	18	16.4
		Friends/family	13	11.8
	Pamphlet/books	0	0.0	
	Did not receive information	16	14.5	

ANC attendance has been reported to be an important indicator for PNC utilisation. Studies have found a positive influence on the attendance of PNC services since the prevalence of utilisation increased with utilisation of ANC (Somefun & Ibisomi, 2016:5; Belaclew, Taye & Belaclew, 2016:5). The information related to PNC care and the experience of the mother during the ANC visit will ultimately effect the utilisation of PNC, that is, the more knowledgeable and the more positive the experience the more likely the health related behaviour will occur (Belemsage *et al.*, 2015: 93). The frequency of ANC visits has a reported positive effect on the

attendance of PNC services. Larsen *et al.* (2017: 6) reported that mothers who attended at least four ANC visits were more likely to attend PNC services.

4.2.2 PART II: KNOWLEDGE REGARDING POSTNATAL CARE

Knowledge, as described in the knowledge, attitude and practice (KAP) method links with the five constructs that guide behaviour in TPB. Beliefs regarding the outcome or consequence of behaviour (behavioural beliefs), beliefs about the expectations of others (normative beliefs), beliefs regarding the expectations of family, beliefs regarding factors that could hinder or facilitate the behaviour (control beliefs) and the perception of the ease or difficulty of performing the behaviour of interest (perceived behaviour control) (Ajzen, 2005:1).

Section C: Behavioural Beliefs

Behavioural beliefs include an individual's beliefs regarding the outcome of performing a certain behaviour and directly influences attitude, for instance, a positive behavioural belief regarding the outcome of the behaviour will result in a positive attitude towards the behaviour (Montano & Kasprzyk, 2015: 97).

In order to determine behaviour believes the respondents were requested to indicate their understanding of postnatal care by selecting a true (T), false (F) or unsure (U) option opposite each statement (S).

Only 46.4% ($n=51$) of the respondents gave the optimal response concerning the timing of PNC services. Refer to Table 4.14. The respondents favoured 'false' as their answer. The difference between the right and wrong answer was only one respondent, that is, $n=50$ (45.5%) versus $n=51$ (46.4%). In other words, although 51 of the respondents knew that the first PNC visit does not take place at six weeks, 50 of the respondents are under the impression that the first PNC visit does take place at six weeks after delivery. There was not an immense difference between the two answers, indicating that the knowledge regarding the timing of PNC visit was unsatisfactory.

An average percentage of respondents (69.1%, $n=76$) knew that both the baby and the respondent will be examined during the PNC visit, 75.5% ($n=83$) of the respondents felt confident that they will be able to identify danger signs regarding the baby. Almost all of the respondents confirmed that the nurse will ask about the

feeding of the baby (91.8%, $n=101$) and that the nurse will weigh the baby and evaluate the growth (99.1%, $n=109$) during the visit.

The percentage of respondents that confirmed that the nurse will ask about the mother's emotional and physical wellbeing was 58.2% ($n=64$). Almost 66% (65.5%, $n=72$) of the respondents believed that they only have to visit the clinic during the first week if their baby is ill. Most of the respondents (84.6%, $n=93$) said that the nurse will advise them on family planning methods during the PNC visit. Refer to Table 4.5.

TABLE 4.5: KNOWLEDGE REGARDING POSTNATAL CARE: BEHAVIOURAL BELIEFS

	STATEMENT	TRUE		FALSE		UNSURE	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
S15	PNC is 6 weeks after delivery.	50	45.5	51	46.4	9	8.1
S16	During the PNC visit both my baby and I will be examined.	76	69.1	27	24.6	7	6.3
S17	When I go home I will be able to identify danger signs regarding my baby.	83	75.5	14	12.7	13	11.8
S18	During the PNC visit the nurse will ask about the feeding of the baby.	101	91.8	7	6.4	2	1.8
S19	During the PNC visit the nurse will check my baby's weight and growth.	109	99.1	1	0.9	0	0.0
S20	During the PNC visit the nurse will ask about my physical and emotional wellbeing.	64	58.2	33	30.0	13	11.8
S21	I only have to go to the clinic during the first week if my baby gets sick.	72	65.5	35	31.8	3	2.7
S22	During the PNC visit the nurse will advise me on family planning methods.	93	84.6	10	9.1	7	6.3

A prospective observation cohort study that was conducted in South Africa aimed to identify the barriers to non-utilisation of PNC services in the Cape Town region (Milambu *et al.*, 2018:4). The mothers were approached one week after delivery and were requested to complete a questionnaire. The objective of the questionnaire was to assess whether the mothers went for PNC follow-up, and if not what barriers

where present. Out of 927 newborns, only 794 (82%) went for PNC follow-up. The main barriers indicated by the mothers who did not attend follow-up visits included: the newborn was not sick and maternal issues, such as responsibilities at home. The mentioned researchers suggested that the Western Cape region should consider additional region specific, culturally appropriate strategies to increase follow-up rates.

Since the current study had similar results with regard to attending the clinic even though the baby is healthy (65.5%, $n=72$) the negative response could be seen as an indication of inadequate or incomplete knowledge exhibited by the mothers. The mother and baby should attend PNC services even if the baby is considered healthy (NDOH, 2014, NDOH, 2016).

Section D: Normative Beliefs

Normative beliefs describe an individual's perception regarding important figures or key-role players that influence his or her life and whether they will approve or motivate the intended behaviour. When the individual believes that the key-role player will encourage the intended behaviour, and where the individual is motivated to meet the expectation, a positive norm will result (Montano & Kasprzyk, 2015: 97).

Respondents had to select a true (T), false (F) or unsure (U) option opposite each statement (S) to indicate what they believe other people such as their friends, neighbours and the church understand regarding PNC services.

The respondents (48.2%, $n=53$) stated that the important figures (friends, neighbours, community) believe that PNC will be six weeks after delivery of the baby. Almost 42% (41.8%, $n=46$), selected the 'false' option, indication that important others do not share this believe. Examination of both mother and baby received a positive response of 65.5% ($n=72$), feeding of the baby received 94.6% ($n=104$) and monitoring of the baby's weight attained 76.4% ($n=84$) of the responses.

Monitoring of the mothers physical and emotional wellbeing attained 60% ($n=66$) of the responses. A statement that attendance during the first week is only necessary if the baby is ill were confirmed by 82.7% ($n=91$) of the respondents, and advise on family planning methods received a high response with 66.4% ($n=73$). Refer to Table 4.6.

TABLE 4.6: KNOWLEDGE REGARDING POSTNATAL CARE: NORMATIVE BELIEFS

	STATEMENT	TRUE		FALSE		UNSURE	
		FREQ	%	FREQ	%	FREQ	%
S23	PNC is 6 weeks after delivery.	53	48.2	46	41.8	11	10.0
S24	During the PNC visit both my baby and I will be examined.	72	65.5	29	26.4	9	8.1
S25	When I go home I will be able to identify danger signs regarding my baby.	92	83.6	10	9.1	8	7.3
S26	During the PNC visit the nurse will ask about the feeding of the baby.	104	94.6	5	4.5	1	0.9
S27	During the PNC visit the nurse will check my baby's weight and growth.	84	76.4	16	14.6	10	9.0
S28	During the PNC visit the nurse will ask about my physical and emotional wellbeing.	66	60.0	34	30.9	10	9.1
S29	I only have to go to the clinic during the first week if my baby gets sick.	91	82.7	15	13.6	4	3.7
S30	During the PNC visit the nurse will advise me on family planning methods.	73	66.4	11	10.0	26	23.6

In the current study, there seems to be a correlation between the responses in the behavioural beliefs statements and the response in normative beliefs statements. Similar results were obtained in both statements with regard to six weeks PNC follow-up, as well as attendance during the first week is only required if the baby is sick. The

similarities between the results are a good indicator that the key-role players could influence the respondent's decision making process.

A study conducted in Nigeria examined the impact of community factors on the utilisation of PNC services by mothers. Data from a 2008 Nigeria Demographic and Health survey was obtained and a sample of 17 846 women between the age of 15 to 49 years were included in the study. The researchers found that there was a difference in perception across different communities, and that the community where the women were staying do have an effect on their healthcare seeking behaviour. The study reported that women who reside in a community where the majority of women were educated were 16 times more likely to utilise PNC services than women who resides in disadvantaged communities. The study concluded that the area of residence and the educational level of the women residing in the community are indicators for PNC service utilisation (Onokokpono *et al.*, 2014: 957).

Section E: Subjective Norms

The respondents' perceptions regarding the approval of important others such as family (mothers, grandmothers and sisters), and the motivation to meet their expectations will lead to a positive subjective norms (Montana & Kasprzyk, 2015: 97).

Respondents had to select a true (T), false (F) or unsure (U) option opposite each statement (S) to indicate what they believe their family understand regarding PNC services.

According to 54.6% ($n=60$) of the respondents, most of their family believe that PNC will take place six weeks after delivery. The respondents (69.1%, $n=76$) also stated that their family believe that both the mother and baby will be examined during the PNC visit. Almost 85% (84.6%, $n= 93$) of the respondents mentioned that their family believe that the mother will be able to identify danger signs regarding the baby. The family, according to 92.7% ($n=102$) and respectively 71.8% ($n=79$) of the respondents, firstly, believe that the nurse will inquire about the feeding of the baby, and secondly, that the weight of the baby will be monitored. Considering the statements on family beliefs related to the mothers physical and emotional wellbeing, 66.4% ($n=73$) of the respondents confirmed that their family believe that the nurse will inquire about the mothers well-being, opposed to 32 (29.1%) of the respondents who stated that this was not the case. Surprisingly, the majority of respondents

(84.6%, $n=93$), stated that their family believe that the mother only has to attend the clinic during the first week if the baby is ill. Family planning methods received confirmation from 68.1% ($n=75$) of the respondents, who chose the 'true' option, whereas 18 (16.4%) selected the 'unsure' option on whether their family think the nurse will advise on family planning methods. Refer to Table 4.7.

TABLE 4.7: KNOWLEDGE REGARDING POSTNATAL CARE: SUBJECTIVE NORMS

	STATEMENT	TRUE		FALSE		UNSURE	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
S31	PNC is 6 weeks after delivery.	60	54.6	45	40.9	5	4.5
S32	During the PNC visit both my baby and I will be examined.	76	69.1	25	22.7	9	8.2
S33	When I go home I will be able to identify danger signs regarding my baby.	93	84.6	13	11.8	4	3.6
S34	During the PNC visit the nurse will ask about the feeding of the baby.	102	92.7	6	5.5	2	1.8
S35	During the PNC visit the nurse will check my baby's weight and growth.	79	71.8	22	20.0	9	8.2
S36	During the PNC visit the nurse will ask about my physical and emotional wellbeing.	73	66.4	32	29.1	5	4.5
S37	I only have to go to the clinic during the first week if my baby gets sick.	93	84.6	11	10.0	6	5.4
S38	During the PNC visit the nurse will advise me on family planning methods.	75	68.1	17	15.5	18	16.4

Again, a significant correlation was found between the behavioural beliefs of the respondents and the subjective norms of the family members, especially related to the section regarding PNC visits. This implies that the family beliefs could also be an indicator in the healthcare seeking behaviour and decision-making by postnatal mothers.

A study conducted in South Africa on the experience of PNC patients with regard to PNC care, supports the above-mentioned statement. Participants in this study raised concerns during a semi-structured interview in a focus group setting. Their main problem was that the traditional birth attended or family member taking care of them at home, offered advice in conflict with the advice given by the midwife on discharge from the hospital. The family members, who were not present when health education was given, preferred to implement their beliefs and practices. The respondents in the same study reported that they were more likely to follow the advice of a family member since they spend most of their time with them. The respondents suggested that family members and traditional birth attendants should be involved during the PNC practices to enhance teamwork, and to ensure continuity of care during the PNC period (Ngunyulu, 2014:685-697).

Section F: Control Beliefs

Control beliefs are an individual's perceived amount of control over behavioural performance. It refers to an individual's perception regarding environmental factors and the role they play in performing the behaviour (LaMorte, 2018: online).

Respondents had to select a true (T), false (F) or unsure (U) option opposite each statement (S) to indicate what they consider might help or hinder them from accessing postnatal care services.

A larger part (46.4%, $n=51$) of the respondents believed that they will have time to attend the PNC clinic whilst 29.1% ($n=32$) were unsure whether they will have time to attend this important service. Though 56.4% ($n=62$) of the respondents stated that they have someone to take care of their children at home when they visit the clinic, 46 (41.8%) reported that they don't have anyone to assume this responsibility. Fifty percent ($n=55$) of the respondents did not believe that their baby will get ill when they go for PNC opposed to 34 (30.9%) who believed otherwise. Regarding them experiencing pain when walking to the clinic, 55.5% ($n=61$) stated that it will not be

too painful, however, 41 (37.3%) of the respondents did not share this view. Referring to statement 43, 50% ($n=55$) of the respondents wrongfully believed that they have to make an appointment before they could utilise PNC services. More than fifty percent (54.6%, $n=60$) of the respondents presented with a positive attitude towards the staff at the clinic. However, quite a number of respondents (40%, $n=44$), indicated that they were afraid that the clinic staff will be rude to them. Responding to a statement on whether the walking distance to the clinic would pose a problem, 60% ($n=66$) reported that the clinic was not too far to walk with a baby. A number of respondents (40%, $n=44$) experienced the distance to the clinic as a problem. Most of the respondents (49.1%, $n=54$) did not consider visiting the PNC clinic as a waste of time. Thirty (27.3%) respondents did not support this view. Refer to Table 4.8.

TABLE 4.8: KNOWLEDGE REGARDING POSTNATAL CARE: CONTROL BELIEFS

STATEMENT	TRUE		FALSE		UNSURE	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
S39 I will have time to go to the clinic for PNC.	51	46.4	27	24.5	32	29.1
S40 I don't have anyone to look after my children at home when I go for PNC.	46	41.8	62	56.4	2	1.8
S41 My newborn baby will get ill if I take him/her to the clinic.	34	30.9	55	50.0	21	19.1
S42 It will be too painful for me to go to the clinic.	41	37.3	61	55.5	8	7.2
S43 I have to make an appointment at the clinic before I can go for PNC.	55	50.0	42	38.2	13	11.9
S44 The staff at the clinic will be rude to me if I go for PNC.	44	40.0	60	54.6	6	5.4
S45 The clinic is too far to walk with a baby.	44	40.0	66	60.0	0	0.0
S46 It will be a waste of time to go to the clinic for PNC.	30	27.3	54	49.1	26	23.6

The overall control beliefs did not obtain high ratings by respondents, the lowest range being 12.5% ($n=13$) and highest range is 100% ($n=1$). The above results could imply that the respondents in this study felt that they do not have control over factors in their environment.

Research conducted in Ethiopia to establish the knowledge, perception and utilization of PNC of mothers recorded results similar to the current study. The Ethiopian study employed a cross-sectional design and implemented a structured questionnaire to collect data. The researchers found that the most frequent reason for not utilising PNC services was a lack of time; that the clinic was too far, that a care giver for their children was not available, and that the quality of service delivery at the healthcare facility was very poor. The same study concluded that women who had higher levels of autonomy were more likely to utilise PNC services (Tesfahun *et al.*, 2014: 1). Kinuthia (2014:1) reported that the factors affecting PNC in Kenya included lack of awareness regarding services offered at the healthcare facilities, long waiting times and cultural beliefs. The cultural beliefs and practices included maternal seclusions after delivery that prevented the mother to access PNC services. Kinuthia (2014:1) recommended that in order to improve PNC utilisation, the healthcare service providers should attend training addressing the relationships and communication between them and their patients.

Section G: Perceived Behaviour Control

Perceived behaviour control relates to the perception of ease or difficulty of performing the behaviour of interest, the easier the behaviour appears the more likely the behaviour will occur (Ajzen, 2005:1).

Respondents had to select a true (T), false (F) or unsure (U) option opposite each statement (S).

The greatest quantity of the respondents (40.9%, $n=45$) mentioned that they would be able to make time to go to the postnatal clinic within three to six days after delivery, however 33 (30%) indicated that they are unsure about time to attend PNC services. A confident 71.8% ($n=79$) of the respondents will be able to identify danger signs of the baby, 80% ($n=88$) will be able to identify danger signs regarding themselves, and 102 (92.7%) reported that they will be able to breastfeed their baby

exclusively for six months. Most of the respondents (78.2%, $n=86$) will be able to clean the baby's umbilical cord to prevent infection.

Refer to Table 4.9.

TABLE 4.9: POSTNATAL CARE SERVICES: PERCEIVED BEHAVIOUR CONTROL

	STATEMENT	TRUE		FALSE		UNSURE	
		<i>F</i>	%	<i>f</i>	%	<i>f</i>	%
S47	I will be able to make time to go to the clinic within 3-6 days after delivery.	45	40.9	32	29.1	33	30.0
S48	I will be able to identify any danger signs regarding my baby.	79	71.8	15	13.6	16	14.6
S49	I will be able to identify danger signs regarding myself.	88	80.0	12	10.9	10	9.1
S50	I will be able to exclusively breastfeed my baby for six months.	102	92.7	7	6.4	1	0.9
S51	I will be able to clean my baby's umbilical cord to prevent infection.	86	78.2	10	9.1	14	12.7

In the current study the perceived behavioural control of the respondents showed a positive response, indicating that the respondents were mostly confident to perform the above-mentioned PNC actions, and that they had adequate knowledge regarding postnatal care.

A study conducted to assess postnatal care service utilisation and associated factors found that maternal knowledge regarding postnatal danger signs, previous ANC experience and obstetric complications were all indicators that promoted utilisation of PNC services. In this study done by Belaclew, Taye and Belaclew (2016: 4), a bivariate analysis of data revealed that mothers with knowledge regarding at least one danger sign were 4.5 times more likely to utilise PNC services than mothers who

were less knowledgeable. This could be contributed to a heightened awareness of possible illness that increase healthcare seeking behaviour to prevent illness.

In contrast, a KAP study conducted in Nepal, found that 95% of their mothers were informed about immunisations, but a few had adequate knowledge regarding umbilical cord care of the baby, danger signs of the baby and feeding of the baby (Yadav *et al.*, 2016: 189). These researchers conducted a cross-sectional study implementing a structured interview questionnaire as a data collection tool. The prominent gap in knowledge was regarding breastfeeding. Few mothers knew how to support, latch or how frequently to feed the baby.

4.2.3 PART III: ATTITUDE

Attitude is considered part of an individual's character that reacts favourably or unfavourably to an object, person, subject or event. It is determined by an individual's perspective about the outcome of the performed behaviour (Glanz, Rimer & Viswanath, 2015: 97).

Respondents had to select a true (T), false (F) or unsure (U) option opposite each statement (S).

Section H: Attitude towards postnatal care services

Overall the respondents (64.6%, $n=71$) had a positive experience while attending antenatal care services, in spite of the fact that 34 (30.9%) indicated a negative experience during these visits. The same was observed with regard to the friendliness and helpfulness of the staff. Though almost 65 percent (64.6%, $n=71$) of the respondents expressed a positive attitude toward the clinic staff, the fact that 37 (33.6%) responded negatively should be noted. Most (80%, $n=88$) of the respondents' family supported them during the PNC period. Twenty (18.2%) respondents felt that they did not receive the same type of support. The respondents (65.5%, $n=72$) showed a positive attitude towards PNC services, affirming that it could contribute to prevent problems regarding the development of the baby opposed to 26 (23.6%) of the respondents that were unsure about the PNC ability to contribute to a baby's development.

A high percentage of the respondents (96.4%, $n=106$) were willing to talk about breastfeeding and 90% ($n=99$) had a positive attitude towards utilising family

planning to prevent conceiving another baby. Regrettably 73.6% ($n=81$) of the respondents believe that they will wait too long at the clinic before receiving assistance and an unexpected 74.6% ($n=82$) of the respondents reported that they felt sad and alone after the birth of their children. Refer to Table 4.10.

TABLE 4.10: ATTITUDE TOWARDS POSTNATAL CARE SERVICES

STATEMENT	TRUE		FALSE		UNSURE	
	<i>f</i>	%	<i>F</i>	%	<i>f</i>	%
S52 I had a good experience at the clinic while attending antenatal care services.	71	64.6	34	30.9	5	4.5
S53 The staff at my local clinic is friendly and helpful.	71	64.6	37	33.6	2	1.8
S54 My family supports me during the first three to six days after delivery.	88	80.0	20	18.2	2	1.8
S55 PNC can prevent problems with my baby's development.	72	65.5	12	10.9	26	23.6
S56 I am willing to talk about breastfeeding with the professional nurse at the clinic.	106	96.4	4	3.6	0	0.0
S57 I will wait too long at the clinic before being helped.	81	73.6	20	18.2	9	8.2
S58 I felt alone and sad after the birth of my previous children.	82	74.6	25	22.7	3	2.7
S59 I want to use family planning to prevent another baby.	99	90.0	9	8.2	2	1.8

Respondents who participated in a study in Kenya support the statement that long waiting time at a clinic affects their willingness to attend PNC clinic services. The researcher aimed to identify the factors influencing the utilisation of PNC services in Kenya, and interestingly the only clinic associated factor that had a negative influence on the utilisation of PNC services was long waiting times. The respondents were overall satisfied with attitude and quality of services delivered to them (Kinuthia, 2014:520).

4.2.4 PART IV: PRACTICES

Practice refers to the respondent applying the acquired knowledge, and rules that lead to a specific action or behaviour (ISSUU, 2015: 5). Practice in this study refers to the respondent's intention to perform a specific behaviour or task like utilising PNC services.

Section I: Intention to perform certain behaviour

The theory of planned behaviour believes that intention is the most accurate predictor of behaviour. It refers to the level of motivation that influences certain behaviour. The stronger the intention to perform the behaviour, the more likely the behaviour will take place (LaMorte, 2018: online).

Respondents had to select a true (T), false (F) or unsure (U) option opposite each statement (S).

Overall the responses related to their intention to perform certain behaviour indicated positive results. The percentage calculated on most statements were very high, that is >70% except for statement 65, that measured the intention to attend PNC services within three to six days after delivery. This question scored slightly above 60% (61.8%, $n=68$). The intention to breastfeed the baby was 93.6% ($n=103$), to clean the baby's umbilical cord (81.8%, $n=90$), and to clean the delivery wounds with salt water scored 84.5% ($n=93$). The intention to go to the clinic if any problems occurred was high (89.1%, $n=98$) and to prevent another pregnancy for at least two years was also high (89.1%, $n=98$). Almost all the respondent indicated that they will ask any questions regarding themselves or the baby (93.6%, $n=103$), in addition they are also willing to ask friends or family for help during the PNC period (90%, $n=99$).

Statement 68 regarding the respondents' intention to monitor the baby's weight and growth at the clinic scored the highest with 96.4% ($n=106$). . Refer to Table. 4.10.

TABLE 4.11: INTENTION TO PERFORM CERTAIN BEHAVIOUR

STATEMENT		TRUE		FALSE		UNSURE	
		<i>f</i>	%	<i>F</i>	%	<i>F</i>	%
<i>I plan to:</i>							
S60	Breastfeed my baby for 6 months.	103	93.6	7	6.4	0	0.0
S61	Clean my baby's umbilical cord to prevent infection.	90	81.8	8	7.3	12	10.9
S62	Clean my delivery wounds with salt water every day.	93	84.5	9	8.2	8	7.3
S63	Go to the clinic if I have any problems with me or the baby.	98	89.1	7	6.4	5	4.5
S64	Prevent another pregnancy for at least two years after this delivery.	98	89.1	9	8.2	3	2.7
S65	Attend the PNC services clinic within three to six days after delivery.	68	61.8	21	19.1	21	19.1
S66	Ask the nurse any questions that I might have regarding the baby or myself.	103	93.6	6	5.5	1	0.9
S67	Ask my friends or family to help me with the baby for the first few weeks.	99	90.0	10	9.1	1	0.9
S68	Monitor my baby's weight and growth at the clinic.	106	96.4	4	3.6	0	0.0

Section J: Actual Behaviour Control

Successful performance of behaviour not only relies on a favourable intention but also on behavioural control. Actual behaviour control refers to the extent to which a person has the resources and skill to perform the actual behaviour (LaMorte, 2018: online).

Respondents had to select a true (T), false (F) or unsure (U) option opposite each statement (S).

Corresponding with section I (intention), the actual behaviour control also scored high, that is, >70% but mostly >80%, except for question 74 that also referred to the respondents practical means to attend PNC services within three to six days after delivery. The responses to this statement were calculated to be 66.4% ($n=73$) compared to the rest of the statements. Most of the respondents (95.5%, $n=105$) indicated that they had the practical means to breastfeed, to clean the baby's umbilical cord (81.8%, $n=90$) and to clean their own delivery wounds (82.7%, $n=91$). The respondents (91.8%, $n=101$) also indicated that they will attend the clinic if any problems occur and that they would prevent another pregnancy for at least two years (90%, $n=99$). The respondents (87.3%, $n=96$) had the practical means to ask friends and family to assist them with the baby during the PNC period. The statement that obtained the highest score was S77, where 94.6% ($n=104$) of the respondents showed that they had the practical means to monitor the baby's weight at the clinic. The second best performing statement was S75 with 94.5 % ($n=104$) stating that they will ask the nurse any questions regarding themselves or the baby. Refer to Table 4.11.

TABLE 4.12: INDICATIONS OF RESPONDENTS ACTUAL BEHAVIOUR CONTROL

STATEMENT		TRUE		FALSE		UNSURE	
		<i>f</i>	%	<i>F</i>	%	<i>f</i>	%
<i>I have the practical means to:</i>							
S69	Breastfeed my baby for 6 months.	105	95.5	5	4.5	0	0.0
S70	Clean my baby's umbilical cord to prevent infection.	90	81.8	9	8.2	11	10.0
S71	Clean my delivery wounds with salt water every day.	91	82.7	8	7.3	11	10.0
S72	Go to the clinic if I have any problems with me or the baby.	101	91.8	8	7.3	1	0.9
S73	Prevent another pregnancy for at least two years after this delivery.	99	90	10	9.1	1	0.9
S74	Attend the PNC services clinic within three to six days after delivery.	73	66.4	21	19.1	16	14.5
S75	Ask the nurse any questions that I might have regarding the baby or myself.	104	94.5	5	4.6	1	0.9
S76	Ask my friends or family to help me with the baby for the first few weeks.	96	87.3	13	11.8	1	0.9
S77	Monitor my baby's weight and growth at the clinic.	104	94.6	6	5.5	0	0.0

Section K Behaviour

The theory of planned behaviour explained that a specific attitude towards behaviour could predict behaviour (LaMorte, 2018: online). In this section the respondents past behaviour was measured.

Respondents had to select a true (T), false (F) or unsure (U) option opposite each statement (S).

All the statements related to behaviour had a positive response scoring high percentages above 70%. Statement 83 scored the lowest indicating that only 72.7% ($n=80$) of the respondents attended PNC services clinic in the past. Most of the respondents (94.5%, $n=104$) were able to breastfeed their baby for six months, as well as clean their baby's umbilical cord (81.8%, $n=90$) and clean their own delivery wounds (81.8%, $n=90$). The respondents were able to go to the clinic if they had any problems (92.7%, $n=102$) and ask the nurse if they had any questions (92.7%, $n=102$). Most of the respondents were able to ask their friends and family for assistance (88.2%, $n=97$) and monitored the baby's weight at the clinic (94.6%, $n=104$). Refer to Table 4.12.

TABLE 4.13: INDICATIONS OF RESPONDENTS PAST BEHAVIOUR

STATEMENT		TRUE		FALSE		UNSURE	
		<i>f</i>	%	<i>F</i>	%	<i>F</i>	%
<i>I have in the past been able to:</i>							
S78	Breastfeed my baby for 6 months.	104	94.5	5	4.6	1	0.9
S79	Clean my baby's umbilical cord to prevent infection.	90	81.8	9	8.2	11	10.0
S80	Clean my delivery wounds with salt water every day.	90	81.8	10	9.1	10	9.1
S81	Go to the clinic if I have any problems with me or the baby.	102	92.7	8	7.3	0	0.0
S82	Prevent another pregnancy for at least two years after this delivery.	99	90.0	9	8.2	2	1.8
S83	Attend the PNC services clinic within three to six days after delivery.	80	72.7	19	17.3	11	10.0
S84	Ask the nurse any questions that I might have regarding the baby or myself.	102	92.7	7	6.3	1	0.9
S85	Ask my friends or family to help me with the baby for the first few weeks.	97	88.2	12	10.9	1	0.9
S86	Monitor my baby's weight and growth at the clinic.	104	94.6	5	4.5	1	0.9

4.2.5 KNOWLEDGE, ATTITUDE AND PRACTICES AND THE THEORY OF PLANNED BEHAVIOUR

The data related to knowledge, attitude and practice included the respective constructs of the theory of planned behaviour. The tables above depicted the results on questions related to socio-demographic and demographic information, as well as the individual statements formulated to determine KAP of respondents. The discussion below will focus on the variables embedded in the TPB, and KAP.

The following statistics reflects on most favoured responses received from respondents on each variable, that is, the number of correct answers received from the respondents. Refer to Table 4.14.

NOTE: The higher the median the more likely a positive behaviour will be achieved.

The variables related to the TPB and KAP are presented in table 4.14. The statements related to each variable that were used to calculate the median results were as follow:

TABLE 4.14: MEDIAN CALCULATIONS FOR TPB AND KAP VARIABLES.

Behavioural beliefs	(s15+s16+s17+s18+s19+s20+s21+s22)
Normative beliefs	(s23+s24+s25+s26+s27+s28+s29+s30)
Subjective norms	(s31+s32+s33+s34+s35+s36+s37+s38)
Control beliefs	(s39+s40+s41+s42+s43+s44+s45+s46)
Perceived behavioural control	(s47+s48+s49+s50+s51)
Attitude	(s52+s53+s54+s55+s56+s57+s58+s59)
Intention	(s60+s61+s62+s63+s64+s65+s66+s67+s68)
Actual behavioural control	(s69+s70+s71+s72+s73+s74+s75+s76+s77)
Behaviour	(s78+s79+s80+s81+s82+s83+s84+s85+s86)

Behavioural beliefs, normative beliefs and subjective norms all scored a median of 75. Control beliefs scored low at 43.8 and perceived behaviour control 80. Attitude scored a median of 62.5. Practice had a median score of 100 in all related variables.

TABLE 4.15: MEDIAN RELATED TO VARIABLES: TPB AND KAP

CONSTRUCTS OF KAP	VARIABLES	MEDIAN
KNOWLEDGE	Behavioural beliefs	75.0
	Normative beliefs	75.0
	Subjective norms	75.0
	Control beliefs	43.8
	Perceived behavioural control	80.0
ATTITUDE	Attitude	62.5
PRACTICE	Intention	100.0
	Actual behavioural control	100.0
	Behaviour	100.0

Table 4.15 illustrates the median scored for all constructs that were measured to assess the maternal knowledge, attitude and practices with regard to postnatal care services.

Percentages below 50% were considered low and indicate a negative behaviour response. Percentages between 50-70% were classified as middle or average and were also considered as not optimal behaviour response. Percentages above 70% were rated as a high and positive response indicating a strong likelihood of demonstrating a specific behaviour. Colour codes were applied to enhance the classification. Refer to Table 4.15 and 4.16.

Table 4.16: Colour coded classification of percentages related to variables TPB:




Low	<50%	
Average/middle	50% - 70%	
High	>70%	

TABLE 4.17: CLASSIFICATION OF PERCENTAGES OBTAINED ON THE VARIABLES RELATED TO THE THEORY OF PLANNED BEHAVIOUR

VARIABLE	CLASSIFICATION	F	%	INTERPRETATION OF RESULTS
Behavioural beliefs	Average	63	57.3	Average behavioural beliefs (57.3%, $n=63$), could imply a weak intention to perform the behaviour, that is, utilisation of postnatal care services within three to six days after delivery.
	Low	20	18.2	
	Low	27	24.6	
Normative beliefs	Average	60	54.6	An average scoring normative beliefs (54.6%, $n=60$) implies that the influence from the respondents key-role players, that is either friends, church or society, will likely result in a less then optimal encouragement to utilise PNC service. Also refer to subjective norms below.
	Low	16	14.6	
	Low	34	30.9	
Subjective norms	Average	61	55.5	An average scoring on subjective norms (55.5%, $n=61$) implies that the influence from the respondents key-role players, that is family, will likely result in a less then optimal encouragement to utilise PNC service. Also refer to normative believes above.
	Low	20	18.2	
	Low	29	26.4	
Control beliefs	Low	24	21.8	An average score in control beliefs (50%, $n=55$) implies that the respondents perception of control over factors that might hinder them to attend the clinic is low. Control beliefs are considered an important indicator, and a low score raises concern regarding the respondent's intention and confidence to utilise PNC service.
	Average	55	50	
	Low	31	28.2	

VARIABLE	CLASSIFICATION	F	%	INTERPRETATION OF RESULTS
Perceived behaviour control	Average	68	61.8	An average score for perceived behaviour control (61.8%, $n=68$), indicate that a high frequency of respondents do not believe that they have control in performing the aspects of postnatal care that is required of them. It may also indicate a lack of confidence during the postnatal period.
	Low	19	17.3	
	Low	23	20.9	
Attitude	Low	49	44.6	The attitude of the respondents towards postnatal care services was concerning very low at 44.6% ($n=49$). A negative attitude may influence the intention to perform behaviour, that is, utilise postnatal care services.
	Low	21	19.1	
	Low	40	36.4	
Intention	High	103	93.6	The intention of the respondents was high (93.6%, $n=103$), indicating that most of the respondents had very strong intention to act out postnatal care related behaviour.
	Low	3	2.7	
	Low	4	3.6	
Actual behaviour control	High	90	81.8	Actual behaviour control (81.8%, $n=90$) scored high, indicating that the respondents feel confident and have the necessary resources to perform the intended behaviour, that is, utilise PNC services.
	Low	6	5.5	
	Low	14	12.7	
Behaviour	High	91	82.7	Behaviour achieved a high percentage of 82.7% ($n=91$) indicating that the respondents were able to perform the actual behaviour in the past, which is an excellent indicator for future intention and behaviour.
	Low	6	5.5	
	Low	13	11.8	

KNOWLEDGE, ATTITUDE AND PRACTICE (KAP) OF RESPONDENTS AND THE THEORY OF PLANNED BEHAVIOUR (TPB)

The results will be discussed and supported by literature related to the KAP and TPB model. Refer to Figure 4.1. Each construct of KAP will be discussed under its own heading.

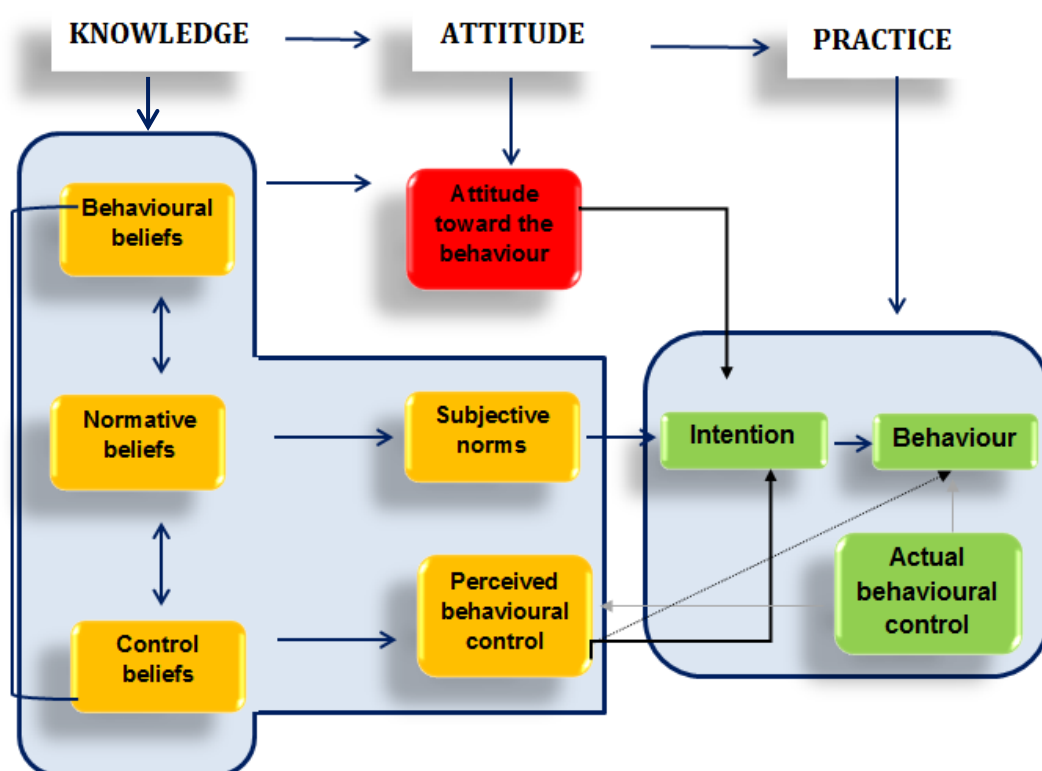


Figure 4.1: The Theory of Planned Behaviour (TPB) (LaMorte, 2018: online) and Knowledge, Attitude and Practice (KAP) (Alzghoul & Abdullah, 2015:62).

KNOWLEDGE

Figure 4.1 illustrates the classification of the results related to knowledge, attitude and practice of respondents in the current study as imposed on the theory of planned behaviour. The colour coded classification of results as high, average and low (refer to Table 4.1 and 4.17) was applied in this figure.

The results indicate that average behavioural beliefs (57.3%) translate into a negative attitude (44.5%) towards postnatal care. As discussed in chapter two, behavioural beliefs refer to the factors that motivate the behaviour, the stronger the intention to perform the behaviour the more likely the outcome of the behaviour

(LaMorete, 2018: online). Interestingly, the two statements of behavioural beliefs that scored the lowest are both related to the timing of PNC services. Statement 15 required that the respondents indicate whether PNC services are six week after delivery. Fifty (45.5%) of the respondents indicated that the statement is true. Another statement (21) was that postnatal mothers only have to go to the clinic during the first week if their baby gets sick, surprisingly 72 (65.5%) indicated that it was also true. These responses could indicate that although the respondents were aware of PNC services, their knowledge regarding 'when' to attend seemed to be inaccurate. Another cross-sectional KAP study conducted in Ethiopia had similar results (Tesfajim *et al.*, 2014: 2343). The majority of the mothers in the study, who showed an awareness regarding PNC, did not have satisfactory knowledge on when postnatal clinics are offered and for whom. Tesfajim *et al.* (2014: 234) reported that most of the mothers were under the impression that PNC was only offered to the children for immunisations 45 days after delivery. As mentioned in chapter 1 it is both the responsibility of midwives during the antenatal care period as well the midwives in the postpartum ward to inform the mothers about the importance of PNC and when and where to obtain these services (NDOH, 2015:32-136). Belaclew, Tae and Belaclew (2016: 6) found similar results in their study stating that the most reported excuse for missed PNC appointments were the lack of knowledge regarding the benefits as well as on the timing of postnatal care services.

Normative beliefs (54.6%, $n=60$) and control beliefs (50%, $n=55$) were both average to low and translated, as expected to average subjective norms (55.5%, $n=61$) and perceived behaviour control (61.8%, $n=68$). The TPB ultimately states that the respondent's subjective norms will be influenced by their normative beliefs. The respondents' perception regarding the approval of key-role players and the motivation to meet their expectations will predominantly lead to the positive subjective norms (Montanta & Kasprzyk, 2015: 97). This statement is supported by the results obtained in both normative beliefs and subjective norms since the same questions that scored low in behavioural beliefs reflected in what they believe, their family and community believe.

In normative beliefs, S23 inquired whether other people (friends and community) believe PNC is six weeks after delivery, and 48.2 % ($n=53$) answered true, which correlates with S31: what their family think (54.6%, $n=60$) as well as S15, what the respondents themselves think (45.5%, $n=50$). The same applies to S29 stating that other people think you only have to go to the clinic during the first week if your baby gets sick where 82.7% ($n=91$) of the respondents answered true, S37 what their family think (84.6%, $n=93$) and S21 what the respondents think (65.5%, $n=72$). These results indicate that family, friends and the community may play a significant role in the decision making process of the respondent, and in the case of this study, the role may have a negative impact.

Concerning control beliefs, the responses to statement (43) could be a strong indicator of respondents' intention to perform or not to perform the intended behaviour. Fifty percent ($n=55$) of the respondents believed that they have to make an appointment at the clinic before they can go for PNC. The current Ideal clinic guidelines implemented in the primary health care facilities in South Africa states that a mother and baby do not have to make an appointment for PNC services at the clinic (NDOH, 2017: 107). This is an indication of misconceptions by the patients or inadequate patient education by the healthcare provider. However, a prospective observational cohort study was done in the Western Cape region of South Africa regarding newborn follow-up after discharge, and the researchers suggested that setting an appointment date at the clinic prior to discharge could increase compliance to PNC service utilisation (Milambo *et al.*, 2018:6).

A study conducted in South Africa on the experience of postnatal patients regarding postnatal care, supports the above mention statement. The participants in the study reported that they were more likely to follow the advice of a family member or traditional birth attendant since they spend most of their time with them at home. The participants suggested that family members and traditional birth attendants should be involved in the postnatal care practices to enhance teamwork and to ensure continuity of postnatal care (Ngunyulu, 2014: 685-697). Authors Angore, Tufa and Bisetegen (2018: 5) also reported family ignorance as one of the top three reasons for participants in their study tendency not to utilize

PNC services. The other two reasons included distance to PNC clinic and lack of transport.

The average perceived behavioural control percentage (61.8%, $n=68$) implied that the respondents perceived that they had less power to act out positive PNC behaviour. Statement 47 scored the lowest with only 40.9% ($n=45$) of the respondents indicating that will be able to make time to go to the clinic within three to six days after the delivery. Almost thirty percent (29.1%, $n=32$) of the respondents indicated that they won't be able to make time to visit the clinic, and 30% ($n=33$) indicated that they were not sure whether they would be able to set time aside for the visit. Lack of time to attend the clinic was indicated in a study conducted in Ethiopia as one of the most prominent factors, together with distance to a health facility and lack of a guardian to take care of the children at home, contributing to poor PNC utilisation (Tesfahun, Worku, Mazengiye & Kifle, 2014: 2341-2351).

In conclusion, the knowledge of the respondents in the current study regarding PNC services faired average to low. A study conducted in an urban community in Ethiopia aimed to assess the determinants of postnatal care utilisation. The researchers performed a community-based cross-sectional study and collected data by means of structured questionnaires and face-to-face interviews. The study found that women who were well informed and had adequate knowledge regarding PNC services are two times more likely to seek out PNC services than women who had little or no knowledge, the study concluded that the respondent's knowledge regarding postnatal care services is a vital predictor for utilisation of PNC services. The researchers concluded that resources should be applied to improving the education of women, since knowing benefits of PNC services may increase utilisation of PNC services (Angore, Tufa & Bisetegen, 2018: 6).

ATTITUDE

As illustrated in table 4.16, only 44.6 ($n=49$) of the respondents showed a positive attitude toward PNC services. According to the TPB model, beliefs regarding the outcome or consequence of behaviour (behavioural beliefs), beliefs about the expectations of others (normative beliefs) and beliefs regarding factors that may

hinder or facilitate the behaviour (control beliefs) all respectively have an impact on attitude (Ajzen, 2005:1). The results of the current study confirm this theory since the above mention beliefs all respectfully scored average to low. Not surprising, the respondent's attitude reflected negative towards the utilisation of PNC services.

The respondents' negative feedback on two statements (S57 and S58) provided an indication of their intention to visit a PNC. Firstly, 73.6% ($n=81$) respondents believed that they will wait too long at the clinic before being helped. This belief is not exceptional. Long waiting times at clinics, together with lack of service and rude staff have contributed to poor clinic attendance in many countries (Angore, Tufa & Bisetegen, 2018:1; Tesfahun *et al.*, 2014:1; Okonofua *et al.*, 2017:1). Secondly, 82 (74.6%) of the respondents indicated that they felt alone and sad after the birth of their previous children. These results on the mothers' emotional wellbeing could be important indicators of their attitude and intention to perform postnatal related behaviour.

Madlala and Kassier (2018: 17) reported that the global prevalence of postpartum depression is 12% to 18% and one in eight women will show signs of depression within two weeks after delivery. The negative impact of postpartum depression is reluctance to breastfeed, impairment of caregiver role of mother and lack of bonding between mother and baby. A study on the prevalence and factors influencing postnatal depression in a rural community in South Africa suggested that there is a higher tendency of postpartum depression amongst unmarried women, women who were unemployed and women with a history of psychiatric illness and unplanned or unwelcome babies. The study was conducted in primary healthcare clinic in the Witzenberg subdistrict and the objective was to determine the prevalence of postnatal depression and to identify contributing risk factors. A descriptive cross-sectional design was implemented, and data was collected through self-rating questionnaires. The researchers recommended that prevention, early detection and treatment of postpartum depression are vital in maternal and neonatal well-being (Stellenberg & Abrahams, 2015: 1).

A negative attitude that may lead to poor intention and behaviour is indicated in the results of this current study. The results also indicated that waiting time and

postpartum depression may lead to a poor performing attitude, and may need intervention to control the outcome of the intended behaviour.

PRACTICE

Practice will be discussed in line with the three constructs of TPB namely intention, actual behaviour control and behaviour. The same statements were asked in all three sections to evaluate the association between the intention and past behaviour.

All the respondents in the study displayed a high intention (93.6%, $n=103$) to carry out the postnatal care related practice. Most respondents (81.8%, $n=90$) also exhibited high actual behaviour control as well as high behaviour (82.7%, $n=91$). These results suggest a high probability of performing the actual health behaviour, that is, utilising postnatal care services.

The Theory of Planned Behaviour suggested that past behaviour can be considered an independent contributor to predict intention, more so than attitude, subjective norms and perceived behavioural control (Ajzen, 2011: 1121). Interestingly, in this current study when comparing past behaviour to intention, past behaviour exhibited inferior results (82.7%, $n=91$) more than their intention (93.6%, $n=103$) to perform the postnatal care related activities. More surprising is that the respondents (61.8%, $n=68$) intention to attend PNC services clinic within three to six days after delivery displayed a lower response (72.7%, $n=80$) than the actual past behaviour. Refer to Statements 65 and 83. These results may indicate that the past experience had a negative impact on their motivation to repeat the behaviour. The statement (S65, S74 & S83) regarding attendance of PNC clinic scored the lowest in all three sections of intention (93.6%), actual behaviour control (81.8%) and behaviour (82.7%).

The role of past experience on future intention was also noticed in a study by Kinuthia (2014: 514). The researcher conducted a descriptive survey by means of a questionnaire to determine the factors influencing the utilisation of postnatal care services in Kenya. The researcher reported that there was an association between the amount of previous pregnancies and the utilisation of PNC services. The study noted that with every new birth, the utilisation of PNC services declined.

Factors contributing to these findings were experience and exposure. Other studies supported the statement that experience during the antenatal period, labour and past postnatal care period played an important role in utilisation of postnatal care services.

A study conducted in Malawi aimed to identify the determinants of women's satisfaction with maternal health care. The researchers conducted a systematic review on research regarding antenatal, intrapartum or postpartum care, and reports on maternal satisfaction from developing countries were included. The researchers found that mothers who were satisfied with delivery and past postnatal care services were more likely to attend the postnatal care clinic than those who were not satisfied. The respondents in the study reported that the performance and attitude of the healthcare providers during antenatal care and labour will affect their motivation to utilise postnatal care services in the future (Srivastava *et al.*, 2015: 1). This statement is supported by another study reviewing the factors associated with the utilisation of healthcare services in Africa (Belemsaga *et al.*, 2015: 97). The researchers identified factors that were relevant to effective utilisation of mother-and-child care services during the postnatal period, and poor healthcare service delivery was identified as one of the main indicators for poor utilisation. With relation to TPB it was stated that the more frequent a positive outcome has been obtained in the past the more likely behaviour will be repeated (Ajzen, 2011: 1120).

Intention expressed respondents desire to carry out postnatal care related activities. Almost all of the respondents in the current study (96.6%) had intentions to carry out postnatal care related activities such as breastfeeding their baby for six months, to exhibit wound care practices and go to the clinic if there was any problem with them or the baby.

4.3 CONCLUSION

This study described the maternal knowledge, attitude and practices postnatal care services, and the association between the variables. The knowledge of the respondents was found average and the attitude low and the practices high. The behavioural beliefs, normative beliefs, subjective norms, control beliefs and

perceived behaviour control scored average, correlating with knowledge of KAP. The intention, actual behavioural control and behaviour scored high.

Behavioural beliefs were observed to be influenced by normative beliefs and subjective norms, indicating that key-role players do have an impact on the respondent's healthcare seeking behaviour. Poor control beliefs raised concerns regarding the respondent's intention and confidence to utilise PNC services. Though the respondents' practices scored high, it was not a strong indicator that the actual behaviour will take place since the poor knowledge and attitude can still affect the intention of the respondent to carry out the behaviour.

The researcher managed to achieve the study aims and objectives, and recommendations can now be made.

CHAPTER V

CONCLUSIONS AND RECOMENDATIONS

5.1 INTRODUCTION

In Chapter IV the research results was presented in table format. The implications of the results were discussed under appropriate headings. The results was also supported by literature and aligned with the aim and objectives of the study and the methodology.

Chapter V includes a summary of the results, the recommendations, and the limitations related to the maternal knowledge, attitude and practice with regard to postnatal care services in a Free State rural hospital, and the recommendations.

5.2 SUMMARY OF RESULTS

Firstly, the socio-demographic variables related to the study will be discussed. The following results were considered to be important:

5.2.1 Socio-demographic variables

The majority of the respondents in the study were Sesotho speaking women with a mean age of 28 years. Most of the women were single, with a mean education level of grade eleven. The respondents (79.1%) were mostly unemployed and 75.5% received a child support grant. Regarding the living circumstances, 76.4% resided in an informal type of dwelling shared with an average of five people. Occupants of a house could include adults, children under five years and children above five years old. All the respondents had access to a primary healthcare facility with the majority (57.3%) residing less than two kilometres from the nearest clinic.

The study only included multigravida women, with the average number of pregnancies and live births being two. The antenatal care clinic attendance was positive with 87.3% of the respondents attending. The main reason for not attending ANC was that they did not know they were pregnant. The antenatal care

visits at the clinic were found the main source of information regarding postnatal care services (PNC).

5.2.2 Maternal knowledge, attitude and practice with regard to PNC services

The aim was to describe the maternal knowledge, attitudes and practices (KAP) with regard to postnatal care services..

KNOWLEDGE

In the study population behavioural beliefs, normative beliefs, subjective norms and perceived behavioural control were found to be average (50-70%), whilst control beliefs were rated low (<50%). With this understanding the overall maternal knowledge was found inadequate regarding postnatal care services.

Although an awareness of PNC services was present, the knowledge on timing and importance of these services were lacking (45.5%, $n=50$). Healthcare providers in various healthcare settings must be committed to discuss health issues regarding the timing and importance of postnatal care services with the mothers and both can be reminded through posters in the consultation area as a visual aid.

ATTITUDE

The attitude of mothers towards postnatal care services was found to be negative (44.6%, $n=49$). The majority of the respondents felt that they will wait too long at the clinic before being assisted, and the emotional well-being of the mother during the postnatal care period has been neglected. A high percentage (74.6%, $n=82$) of mothers admitted that in the past, they felt alone and sad during the postnatal care period. Healthcare providers as well as other important key-role players (family, friends, and community) must invest time and effort during this period to offer guidance, assistance and support.

PRACTICE

The intention, actual behaviour control (81.8%, $n=90$) and behaviour (82.7%, $n=91$) of respondents were found to be high. In all sections, the question regarding the utilisation of PNC, that is, intention (61.8%, $n=68$), practical means

(66.4%, $n=73$) or past behaviour (72.7%, $n=80$) received the lowest response. The intention to perform postnatal care related activities such as breastfeeding (93.4%, $n=103$) and monitoring the weight and growth (96.4%, $n=106$) of the baby at the clinic, all performed exceptionally well. The mothers' intention to attend postnatal care clinic (61.8%, $n=68$) were found to be lower than the actual attendance (72.7%, $n=80$) of PNC services in the past. This could be an indication that a negative experience regarding PNC services could have an impact on the intention to perform the behaviour in the future.

Quality service delivery is essential in assuring a positive experience for the mothers when attending antenatal care, during labour and postnatal care services. The practice (intention, 93.6%; actual behaviour control, 81.8% and behaviour, 82.7%) of the mothers fared well, but the knowledge (behavioural beliefs, 57.3%; normative beliefs, 54.6%; subjective norms, 55.5%, control beliefs, 50% and perceived behaviour control, 61.8%) and attitude (44.6%) achieved average to low percentages and will need intervention by healthcare providers for the actual behaviour to occur.

The poor KAP found amongst the respondents is a concern since inadequate knowledge and practices during the postnatal period could lead to morbidity and mortality for both mothers and newborns. Knowledge regarding postnatal care services is both the responsibility of the mothers as well as healthcare providers. The healthcare providers must ensure that relevant information is conveyed in an understandable manner. It is the responsibility of the mothers to utilise the knowledge given to them and to verbalise if there is any uncertainty or if any information must be repeated. People process information differently. Therefore, the mothers' literacy level and language preference must be taken into account when health information is provided. Healthcare providers might consider asking the mothers questions regarding postnatal care to estimate their level of understanding.

Although 72.2% of the respondents were able to attend postnatal care services at the clinic in the past, the respondents' intention and attitude may affect the utilisation of postnatal care services. The experience during the past PNC

attendance will ultimately determine the attitude toward, and intention to repeat the same action.

The majority of respondents (64.6%, $n=71$) had a good experience at the clinic while attending antenatal care services. Respondents also indicated that the healthcare providers at the local clinic were friendly and helpful. The only factor that hinders them from attending the clinic is the reported long waiting times and that they feel they must make an appointment before they can go for PNC services. It became apparent in this study that there is a tendency to compare their experience and the procedure followed during their ANC visits with the procedure for PNC services. During the ANC visits the mothers are required to make an appointment and may wait a while, depending on the number of ANC patients that need to be attended to. With regard to PNC service delivery in Ladybrand clinics, an exception is made with regard to scheduling of appointments. The mothers will be assisted on the same day since it is their first visit post-delivery, and postnatal care mothers are put in the 'fast line' in other words, will be attended to first, thereafter an appointment date will be given for the six weeks assessment and immunisations. This information must be given to the mother during the antenatal visits as well as before discharge from the hospital after delivery.

5.3 RECOMMENDATIONS

A summary of the recommendations will be conceptualised in a figure 5.1 and then discussed under the respective headings.

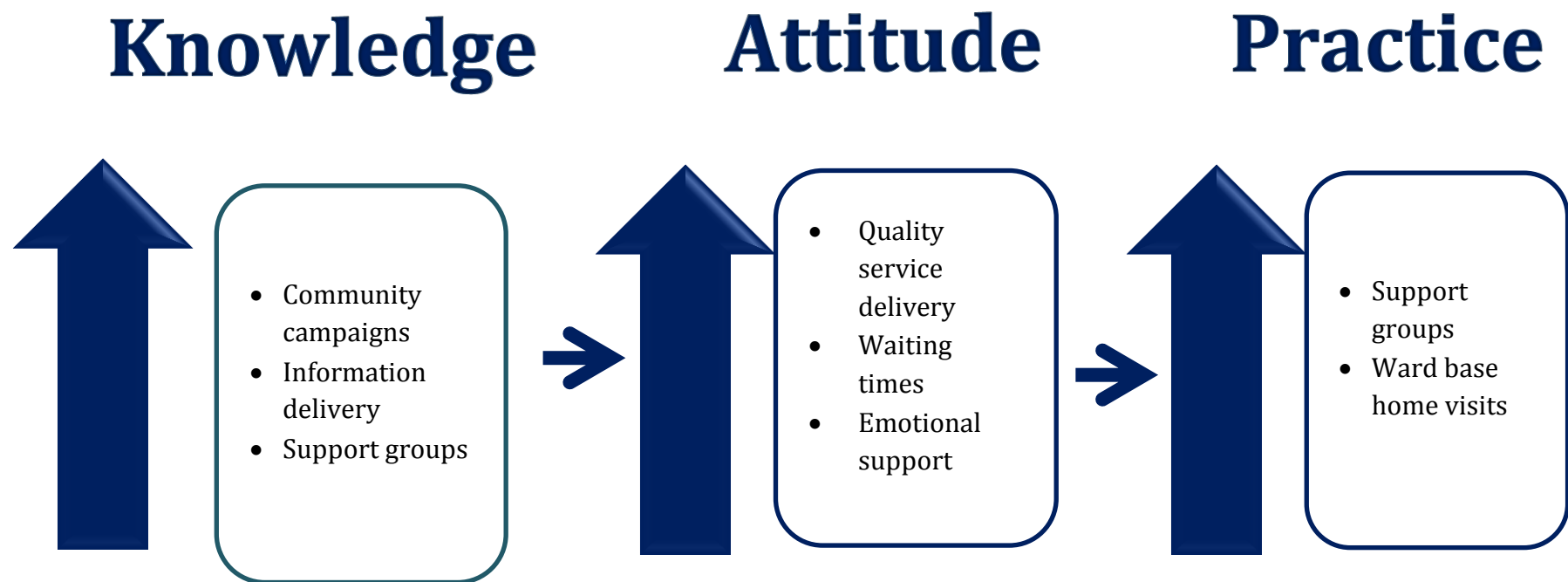


Figure 5.1: Recommendations for knowledge, attitude and practice to improve postnatal care service utilisation

Promote awareness of postnatal care services through community campaigns and information delivery

Currently, days, weeks and months are scheduled to raise awareness or to recognize health related conditions and diseases, for instance 4 February is allocated to world cancer day, 24 March is world TB day and 1 December is world AIDS day. In the past, campaigns were considered to be a good mode or strategy to strengthen communication between the healthcare sector and communities. These campaigns have been hosted to celebrate those who survived the above-mentioned diseases and to raise awareness regarding the importance of these diseases.

A study on health communication strategies concluded that information is crucial to change the perspectives of individuals, and when given, the literacy levels of recipients should be considered. Skilful strategies in communication that can facilitate effective understanding of health issues can contribute to behavioural changes. Health education encourages healthy life style practices, prevents disease, reduces disabilities and promotes well-being of the people. Health education can be communicated through campaigns, newsletters/pamphlets, bill boards, radio/television and social media (Nkaynunye & Obiechina, 2017:1).

Sexual and reproductive health week is held annually in the second week of February. An annual campaign to raise awareness related to women and men health issues could be an opportunity to convey information. The campaign can be held either in each sub-district or district in each province. All women and men in the community, including all girls and boys attending high school should be invited to join the campaign.

Health campaign programmes related to women's health should address issues such as:

- Services offered at the local clinics
- Availability and the importance of family planning
- The importance of cervical cancer screening

- Support available for pregnant mothers and women experiencing domestic abuse
- The long term side effects of young pregnancy
- Benefits of exclusive breast feeding
- Effects of smoking and alcohol during pregnancy on a foetus
- The importance of postnatal care services.

The main aim should be to create opportunities for the youth to inform them of options available to prevent early pregnancies, the importance of early antenatal visits if they are pregnant, and to increase their knowledge about health issues from an early age.

The presenters could include the local primary healthcare clinic nurses, social workers or physician, representatives from the community could also share their past experiences.

Campaigns could be culturally rich experiences, and valuable health information can be translated through song and dance appropriate to each local area. The presenters should be able to communicate in a language understandable to the community to guarantee that every woman and child is empowered.

By celebrating sexual and reproductive health, awareness could be raised and future mortalities and morbidities could be prevented or reduced.

Mothers-to-be support group

A strategy that could be implemented to address the knowledge and attitude of mothers during the antenatal period could be through prenatal classes in the form of support groups.

The aim of support groups for mothers-to-be would be to educate, support and prepare the pregnant women for the birth as well as the postnatal period after birth.

Pregnant women could be invited to join sessions scheduled twice a month. Due to the high unemployment rate in Ladybrand (79.1%) the meetings could be held during the day at the town hall or library, or after hours from 17:00 to 18:00 at a clinic in the rural area. Promotion of the support club could be done during the ANC visits at the clinic.

Each session of the support club could have a structured programme. Topics could include the danger signs during pregnancy, labour signs, importance and benefits of breastfeeding, proper hygiene, what to expect during labour, what to expect after birth, danger signs for the baby and mother after birth, signs of postpartum depression, wound care, bathing techniques, and the importance of attending the postnatal care clinic.

The sessions could be interactive to provide mothers with opportunities to pose questions or to share experiences. At the end of a session mothers could again use the opportunity to speak to the hosting midwife in order to clarify any additional issues or to address personal problems.

The mothers could be encouraged to invite the birth companion or a key-role player that will assist them after birth, to join the session. This could prevent transfer of conflicting health information and possibly prevent communication gaps. Midwives employed at the clinics as well as the hospital could share the responsibility to host sessions. The social worker should join these sessions at least once a month. The sessions should consider the home language and literacy level of the target groups.

Implementing the mothers-to-be support groups could contribute to clinic healthcare providers having more time available to deliver antenatal and postnatal care - since time is limited during the clinic visits. At the same time the mothers' knowledge with regard to healthcare topics could be improved, the support rendered and social interaction between attending mothers and the midwives could enhance their relationships.

QUALITY SERVICE DELIVERY

Focus should be given to quality service delivery to improve the relationship between the healthcare worker and patients. Guidelines are available to improve patient waiting times and the patient flow system. By encouraging training, whether in-service or formal trainings relating to these guidelines, the quality of service delivery by the healthcare providers will improve. The patients are not always aware of the guidelines, to inform them, a health talk can be done in the mornings at the clinics about the processes and what to expect. By decreasing the average patient waiting times, the attitude of the patients towards service delivery will improve.

Ward based postnatal home visits

To increase the indicators for postnatal care attendance, strategies must be implemented to reach the target populations. One strategy could include ward based postnatal care home visits conducted by professional nurses.

The Mantsopa district is currently divided into nine wards, and seven of those wards fall under Ladybrand town. Each ward is served by a clinic. Through partnership with Senorita Nhlabathi hospital, professional nurses from the primary healthcare clinics can be notified when a patient has been discharged from the maternity ward that is residing in the ward near to the clinic. The professional nurse could visit the mother and baby at home to make a thorough assessment of their physical and psychological well-being. The home visits could also create a relationship building atmosphere and hopefully the mother will confide in the nurse if she experiences any problems.

Allocating the professional nurses according to their ward, will limit the distance to the mother's house to not more than two kilometres, making it a comfortable walking distance. The mobile nurses should also be contacted if a patient from

one of their farms delivered a baby, to ensure that the rural areas are also serviced.

An agreement with the hospital could be negotiated at the perinatal meetings held between the primary healthcare sector and hospital on a monthly basis. During this meeting a policy for referral to the appropriate professional nurse in the allocated ward could be drafted.

Facility based training

Each clinic should conduct in service training to facilitate discussions on the guidelines and policies regarding antenatal- and postnatal care. The operational manager of the clinic could conduct the in service training once a month as a refresher course to ensure quality service delivery.

Key elements that should be included is to inform the mothers during the ANC visit that they do not need an appointment for PNC visit and that a patient flow strategy that will shorten their visit is applied.

5.4 LIMITATIONS OF THE STUDY

Language was initially identified as a potential limitation. Since the majority of the people were Sesotho speaking, the researcher compensated for the language barrier by translating the consent form, information leaflet and structured questionnaire into Sesotho. Sesotho speaking fieldworkers were trained to assist with data gathering where necessary. The structured questionnaire and important documentation was available in Afrikaans, English and Sesotho to accommodate all respondents. By utilising the fieldworkers to assist with the language barrier, no problems with completion of the structured questionnaire occurred.

The population of Ladybrand during the course of the study was unknown since the last South African census took place in 2011. The capital city of Lesotho, namely Maseru, is less than 20km from Ladybrand and a high percentage of the total patients in the clinics include Lesotho people. The potential problem was tracing the mothers back to Lesotho in order to complete the structured

questionnaire. Excluding the respondents residing in Lesotho could decrease the sample of the study significantly. The researcher overcame this problem by distributing the structured questionnaires in the postpartum ward in the hospital before discharge, thus including all relevant respondents. By doing so the potential problem was averted, and both mothers from the Ladybrand and Lesotho area, who qualified to take part in the study, were included.

5.5 CONCLUSION

The postnatal period is defined as the period immediately after birth of the baby and up to six to eight weeks after birth, and it is within this period that the maternal and neonatal mortality rates are at its highest. Some of the reported reasons for this excessive morbidity and mortality rates for South Africa are due to substandard quality of healthcare services, personal and economical circumstances of the mothers, under-equipped and under-staffed healthcare facilities. With all these factors taken in account the researcher strived to identify those factors that influence the maternal knowledge, attitude and practices during this period, therefore a quantitative, cross-sectional and descriptive study to address the research question: “what is the maternal knowledge, attitude and practices with regard to postnatal care services in a Free State rural hospital?”, was conducted.

The aim of the study was to describe the maternal knowledge, attitudes and practices (KAP) with regard to postnatal care services in a Free State rural hospital. The theory of planned behaviour together with knowledge, attitude and practice model was used to construct a structured questionnaire to collect data from the respondents. The sample was collected by means of a purposive sampling technique and included 110 respondents whom delivered at Senorita Nhlabathi hospital, Free State Province.

The results obtained from data collected identified that the statements linked to the knowledge regarding the postnatal care services, that is, behavioural beliefs, normative beliefs, subjective norms, control beliefs and perceived behavioural control were found to be average (50-70%). These results indicate that there is a gap in the knowledge of the respondents regarding the utilisation of postnatal care

services that must be addressed. The attitude of the respondents is a concerning 44.6%. A poor performing attitude, according to the theory of planned behaviour, could implicate a poor intention and ultimately prevent the behaviour from occurring.

The theory of planned behaviour guided the results of study by stipulating that the respondent's attitude will directly be influenced by their behavioural beliefs. Thus, the poor attitude of the respondents can be addressed by changing the respondent's beliefs regarding the outcome of their intended behaviour. If the healthcare providers can ensure a positive behavioural belief with regard to postnatal care services, a more positive attitude will result. The theory of planned behaviour also aided to identify the undeniable impact of important key-role players like family, friends and the neighbourhood on the healthcare decision making of the respondents. By including the primary key-role player of the respondent in the antenatal- and postnatal period, less conflict in health promotion will arise and the utilisation of postnatal care services could improve.

The results in the current study could benefit the health sector by developing, adjusting and implementing guidelines and policies to improve the mothers' knowledge, attitude and practices to ultimately prevent morbidity and mortalities during the postnatal period.

This study has shown where the gap lies in the maternal knowledge and attitude and by addressing these gaps, the postnatal care can be a positive experience for both healthcare provider and mothers. Since this is the first KAP study conducted in a Free State rural hospital, the information could aid healthcare providers, important stakeholders (programme directors, managers) to implement strategies to increase the utilisation of PNC services, and ultimately reach the strategic development goals to decrease maternal and neonatal mortality by 2030.

This study highlights that there is a vital need to improve the poor knowledge and attitude amongst women with regard to postnatal care services, to protect the lives of a vulnerable group of people during this period.

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ANNEXURE A

QUESTIONNAIRE: ENGLISH, SESOTHO,
AFRIKAANS

MATERNAL KNOWLEDGE, ATTITUDES AND PRACTICES (KAP) WITH REGARD TO POSTNATAL CARE SERVICES IN A FREE STATE RURAL HOSPITAL

QUESTIONNAIRE CODE: _____

DATE COMPLETED: ____/____/2017 (DD/MM/YYYY)

FACILITY COMPLETED: *Maternity ward, Senorita Nhlabathi Hospital, Ladybrand, FS.*

Please note:

1. Consent form must be signed before completion of questionnaire.
2. Mothers to complete questionnaire after given birth.
3. All sections and questions must be completed.
4. Answer the question by marking the answer with an **X** in the block provided.

CONGRATULATIONS ON YOUR BABY!

PART 1: RESPONDENT PROFILE

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

Please answer the following general questions about yourself.

1. How old are you in years?

2. What is your current marital status?

☐
☐
☐
☐

Single

Married

Divorced

Widowed

3. What is your highest level of education?

4. What is your home language? Choose one or more.

- ☐ Sesotho
- ☐ English
- ☐ Afrikaans
- ☐ Other

Please specify if other: _____

5. What is your current employment status?

- ☐ Unemployed
- ☐ Formally employed
- ☐ Part-time employed
- ☐ Self employed

6. Do you currently receive any type of grant?

- ☐ Yes
- ☐ No

Please specify what type of grant if answered yes:

7. What type of house do you live in?

- ☐ Formal dwelling
- ☐ Informal dwelling

8. Please indicate how many people lives in your house (write a number in the block).

- ☐ Adults
- ☐ Children older than 12 years

☐ Children younger than 12 years

9. What is the distance from your house to the nearest clinic?

- ☐ Less than 2km
☐ Between 3-5km
☐ Between 6-10km
☐ More than 11km

SECTION B: BIOGRAPHICAL INFORMATION

In this section I would like to know more about your past pregnancies.

10. How many times have you been pregnant (gravida)?

11. How many times have you given birth to a live baby (parida)?

12. Did you experience any problems with your pregnancies?

- ☐ Yes
☐ No

Please specify what your problem/s was:

13. Did you attend antenatal clinic during your pregnancies?

- ☐ Yes
☐ No

If no, please specify why you did/could not attend:

14. Where did you get the information about postnatal care?

<input type="checkbox"/>	Radio/TV
<input type="checkbox"/>	At my antenatal care visits
<input type="checkbox"/>	Hospital
<input type="checkbox"/>	Friends/family
<input type="checkbox"/>	Pamphlets/books
<input type="checkbox"/>	I did not receive any information regarding postnatal care

PART II: KNOWLEDGE REGARDING POSTNATAL CARE

SECTION C: BEHAVIOURAL BELIEFS

The following questions will test your knowledge and understanding regarding postnatal care.

Please indicate whether these following statements are true (T), false (F) or unsure (U)

- | | | | | |
|-----|--------------------------|--------------------------|--------------------------|---|
| 15. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | If I go for postnatal care at the clinic it will be 6 weeks after the delivery of my baby. |
| 16. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | During the postnatal care visit both my baby and I will be examined. |
| 17. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | When I go home I will be able to identify the danger signs regarding my baby. |
| 18. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | During the postnatal care visit the nurse will ask about the feeding of the baby. |
| 19. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | During the postnatal care visit the nurse will check my baby's weight and growth. |
| 20. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | During the postnatal care visit the nurse will ask about my physical and emotional wellbeing. |
| 21. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | I only have to go to the clinic during the first week if my baby gets |

- | | | | |
|-----|---|---|---|
| | | | |
| 22. | T | F | U |
- sick.
- During the postnatal care visit the nurse will advise me on family planning methods.

SECTION D: NORMATIVE BELIEFS

*The following questions are about what you believe **other people** (friends, neighbours, the church etc.) understand regarding postnatal care services.*

Other people believe:

- | | | | |
|-----|---|---|---|
| 23. | T | F | U |
| 24. | T | F | U |
| 25. | T | F | U |
| 26. | T | F | U |
| 27. | T | F | U |
| 28. | T | F | U |
| 29. | T | F | U |
| 30. | T | F | U |
- If you go for postnatal care it will be 6 weeks after the delivery of your baby.
- During the postnatal care visit both you and your baby will be examined.
- During the postnatal care visit the nurse will ask about the feeding of the baby.
- During the postnatal care visit the nurse will check the baby's weight and growth.
- During the postnatal care visit the nurse will ask about your physical and emotional wellbeing.
- You only have to go to the clinic during the first week if your baby gets sick.
- During the postnatal care visit the nurse will advise you on family planning methods.
- Postnatal care is important for you and your baby.

SECTION E: SUBJECTIVE NORMS

The following questions are about what your family understands regarding postnatal care services.

My family believes that:

- | | | | |
|-----|---|---|---|
| 31. | T | F | U |
| 32. | T | F | U |
- If you go for postnatal care it will be 6 weeks after the delivery of your baby.
- During the postnatal care visit both you and your baby will be

- | | | | | |
|-----|---|---|----------|---|
| | | | examined | |
| 33. | T | F | U | During the postnatal care visit the nurse will ask about the feeding of the baby |
| 34. | T | F | U | During the postnatal care visit the nurse will check the baby's weight and growth. |
| 35. | T | F | U | During the postnatal care visit the nurse will ask about your physical and emotional wellbeing. |
| 36. | T | F | U | You only have to go to the clinic during the first week if your baby gets sick. |
| 37. | T | F | U | During the postnatal care visit the nurse will advise you on family planning methods. |
| 38. | T | F | U | Postnatal care is important for you and your baby. |

SECTION F: CONTROL BELIEFS

The following questions are about what you think can help or hinder you from accessing the postnatal care services.

- | | | | | |
|-----|---|---|---|---|
| 39. | T | F | U | I will have time to go to the clinic for postnatal care services. |
| 40. | T | F | U | I don't have anyone to look after my children at home when I go to the clinic. |
| 41. | T | F | U | My new-born baby will get ill if I take her/him to the clinic. |
| 42. | T | F | U | It will be too painful for me to go to the clinic with my baby. |
| 43. | T | F | U | I have to make an appointment at the clinic before I can go for postnatal care. |
| 44. | T | F | U | The staff at the clinic will be rude to me if I go for postnatal care. |
| 45. | T | F | U | The clinic is too far to walk with a baby. |
| 46. | T | F | U | It will be a waste of time to go to the clinic for postnatal care services. |

SECTION G: PERCEIVED BEHAVIOURAL CONTROL

Please indicate whether the following statements are true (T), false (F) or unsure

(U).

- | | | | | |
|-----|---|---|---|--|
| 47. | T | F | U | I will be able to make time to go to the clinic within three to six days after delivery. |
| 48. | T | F | U | I will be able to identify any danger signs regarding my baby. |
| 49. | T | F | U | I will be able to identify danger signs regarding myself after given birth. |
| 50. | T | F | U | I will be able to exclusively breastfeed my baby for six months. |
| 51. | T | F | U | I will be able to clean my baby's umbilical cord to prevent infection. |

PART III: ATTITUDE

SECTION H: ATTITUDE TOWARDS POSTNATAL CARE SERVICES

Please indicate whether the following statements are true (T), false (F) or unsure (U).

- | | | | | |
|-----|---|---|---|---|
| 52. | T | F | U | I had a good experience at the clinic while attending antenatal care services. |
| 53. | T | F | U | The staff at my local clinic is friendly and helpful. |
| 54. | T | F | U | My family supports me during the first three to six days after delivery. |
| 55. | T | F | U | Postnatal care clinic can prevent problems with my baby's development. |
| 56. | T | F | U | I am willing to talk about breastfeeding with the professional nurse at the clinic. |
| 57. | T | F | U | I will wait too long at the clinic before being helped. |
| 58. | T | F | U | I felt alone and sad after the birth of my previous children. |
| 59. | T | F | U | I want to use family planning to prevent another baby. |

PART IV: PRACTICES

SECTION I: INTENTION

Please indicate whether the following statements are true (T), false (F) or unsure

(U).

I plan to:

- | | | | | |
|-----|---|---|---|--|
| 60. | T | F | U | Breastfeed my baby for six months. |
| 61. | T | F | U | Clean my baby's umbilical cord to prevent infection. |
| 62. | T | F | U | Clean my delivery wounds with salt water every day. |
| 63. | T | F | U | Go to the clinic if I have any problems with me or the baby. |
| 64. | T | F | U | Prevent another pregnancy for at least two years after this delivery. |
| 65. | T | F | U | Attend the postnatal care services clinic within three to six days after delivery. |
| 66. | T | F | U | Ask the nurse any questions that I might have regarding the baby or myself. |
| 67. | T | F | U | Ask my friends or family to help me with the baby for the first few weeks. |
| 68. | T | F | U | Monitor my baby's weight and growth at the clinic. |

SECTION J: ACTUAL BEHAVIOURAL CONTROL

Please indicate whether the following statements are true (T), false (F) or unsure (U).

I have the practical means to:

- | | | | | |
|-----|---|---|---|--|
| 69. | T | F | U | Breastfeed my baby for six months. |
| 70. | T | F | U | Clean my baby's umbilical cord to prevent infection. |
| 71. | T | F | U | Clean my delivery wounds with salt water every day. |
| 72. | T | F | U | Go to the clinic if I have any problems with me or the baby. |
| 73. | T | F | U | Prevent another pregnancy for at least two years after this delivery. |
| 74. | T | F | U | Attend the postnatal care services clinic within three to six days after delivery. |

- | | | | | |
|-----|---|---|---|---|
| 75. | T | F | U | Ask the nurse any questions that I might have regarding the baby or myself. |
| 76. | T | F | U | Ask my friends or family to help me with the baby for the first few weeks. |
| 77. | T | F | U | Monitor my baby's weight and growth at the clinic. |

SECTION K: BEHAVIOUR

Please indicate whether the following statements are true (T), false (F) or unsure (U).

I have in the past been able to:

- | | | | | |
|-----|---|---|---|--|
| 78. | T | F | U | Breastfeed my baby for six months. |
| 79. | T | F | U | Clean my baby's umbilical cord to prevent infection. |
| 80. | T | F | U | Clean my delivery wounds with salt water every day. |
| 81. | T | F | U | Go to the clinic if I have any problems with me or the baby. |
| 82. | T | F | U | Prevent another pregnancy for at least two years after this delivery. |
| 83. | T | F | U | Attend the postnatal care services clinic within three to six days after delivery. |
| 84. | T | F | U | Ask the nurse any questions that I might have regarding the baby or myself. |
| 85. | T | F | U | Ask my friends or family to help me with the baby for the first few weeks. |
| 86. | T | F | U | Monitor my baby's weight and growth at the clinic. |

THANK YOU FOR PARTICIPATING!

**TSEBO, MOKGWA LE BOIKWETLISO BA BOMME KA BOIMANA FOREISTATA LE DIPETLELE
TSA MAHAENG.**

QUESTIONNAIRE CODE: _____

DATE COMPLETED: ____/____/2017 (DD/MM/YYYY)

FACILITY COMPLETED: *Maternity ward, Seniorita Ntlabathi Hospital, Ladybrand, FS.*

Ela hloko:

1. Lengolo la tumellano le tekenwe pele ho tlatswa foromo ena.
2. Bomme ba tlatswe foromo kamora tswalo ya ngwana.
3. Dikarolo tsohle TSA foromo di tlatswe.
4. Araba ka letshwao la **X** kahara lebokose.

THLOKOMELO YA LESEAI

KARALO 1: RESPONDENT PROFILE

KAROLWANA A: SOCIO-DEMOGRAPHIC INFORMATION

Ka kopo araba dipotso tse latelang mabapi le wena.

1. O na le dilemo tse kae?

2. Boemo ba hao ba lenyalo?

☐

Ha oa nyalwa

☐

O nyetswe

☐

O hladuwe

☐

O mohlolohadi

3. Boemo ba thuto?

4. Puo? (Leleme)

- ☐ Sesotho
- ☐ English
- ☐ Afrikaans
- ☐ E nngwe

Hlalosa haeba ke e nngwe: _____

5. Maemo a hao a mosebetsi?

- ☐ Ha o sebetse
- ☐ Wa sebetsa
- ☐ Mosebetsi wa nakwana
- ☐ Wa itshebetsa

6. O fumana dithuso tsa tjhelete ho tswa mmusong (grant)?

- ☐ Eya
- ☐ Tjhee

Hlalosa hore na ke mofuta ofe haeba karabo e le eya:

7. O Dula kahara ntlo e jwang?

- ☐ Ntlo
- ☐ Mokhukhu

8. O dula lê batho ba bakae ka tlung (ngola kahara boloko).

- ☐ Batho ba baholo
- ☐ Bana ba kahodima dilemo tse 12
- ☐ Bana ba katlasa dilemo tse 12

9. O dula bohole bo bokae le kliniki?

- ☐ Katlasa 2km
- ☐ Mahareng a 3-5km
- ☐ mahareng 6-10km
- ☐ Ho feta 11km

KAROLWANA B: BIOGRAPHICAL INFORMATION

Karolong ena re lakatsa ho tseba ka boimana ba hao bo fetileng.

10. O bile moimana makgelto a makae (gravida)?

11. O bile le ngwana/bana ba phelang ba bakae (parida)?

12. O ile wa fumana mathata boimaneng ba hao?

- ☐ Eya
- ☐ Tjhee

Ka kopo hlalosa mathata a hao ene ele
afe? _____

13. O tsamaile kliniki pele o pepa?

- ☐ Eya
- ☐ Tjhee

Haeba karabo ele tjhee hlalosa hobaneng?

14. O fumane lesedi la ho itlhokomela kamora ho pepa kae?

	Radio/TV
	Kliniking ya boimana
	Sepetlele
	Metswalle/lalapa
	Dibukeng/masedinyaneng
	Ha ke a fumana lesedi ho hang

KAROLO II: TSEBO KA TLHOKOMELO KAMORA HO PEPA

KAROLWANA C: BEHAVIOURAL BELIEFS

Dipotso tse latelang di tla o botsa ka tsebo le kutlwisiso mabapi le ho itlhokomela kamora ho pepa.

Tshwaya Nnete (T), mafosi (F) kapa ho se tsebe hantle (U).

- | | | | | |
|-----|---|---|---|--|
| 15. | T | F | U | Ke ya kliniking kamora beke tse 6 kamora ho pepa. |
| 16. | T | F | U | Ke tla hlahlojwa nna le ngwana. |
| 17. | T | F | U | Ha keya hae ke tla tseba ha ngwanaka le nna rena le mathatha. |
| 18. | T | F | U | Mooki o tla o botsa ka phepo ya ngwana. |
| 19. | T | F | U | Mooki o tla sheba boima le kgolo ya ngwana. |
| 20. | T | F | U | Mooki o tla mpotsa ka maemo aka a bophelo. |
| 21. | T | F | U | Ke tlameha ho ya kliniking bekeng ya pele ha ngwana a ka kula. |
| 22. | T | F | U | Mooki o tla nkeletsa ka mefuta ya thero ya malapa nakong eo keileng kliniking. |

KAROLWANA D: NORMATIVE BELIEFS

Dipotso tse latelang ke tseo o nahang hore batho ba bang (metswalle, baahisane, kereke le tseding) ba utlwisisa tlhokomelo kamora ho pepa ka teng.

Ba bang ba dumela hore:

- | | | | | |
|-----|---|---|---|--|
| 23. | T | F | U | Ha oya kliniking kamora beke tse 6 kamora ho pepa. |
| 24. | T | F | U | Kliniking ho tla hlahlojwa Mme le ngwana. |
| 25. | T | F | U | Mooki o tla botsa ka phepo ya ngwana. |

- | | | | | |
|-----|---|---|---|---|
| 26. | T | F | U | Mooki o tla sheba boima le kgolo ya ngwana. |
| 27. | T | F | U | Mooki o tla botsa ka maemo a hao a bophelo. |
| 28. | T | F | U | O tlameha ho ya kliniking bekeng ya pele ha ngwana a ka kula. |
| 29. | T | F | U | Mooki o tla o eletsa ka mefuta ya thero ya malapa. |
| 30. | T | F | U | Tlhokomelo kamora ho pepa e bohlokwa bakeng sa hao le ngwana. |

KAROLWANA E: SUBJECTIVE NORMS

Dipotso tse latelang ke kamoo lelapa le utlwisisang ka ditshebeletso tsa tlhokomelo kamora ho pepa..

Lelapa laka le dumela hore:

- | | | | | |
|-----|---|---|---|---|
| 31. | T | F | U | Ha oya kliniking kamora beke tse 6 kamora ho pepa. |
| 32. | T | F | U | Kliniking ho tla hlahlojwa Mme le ngwana. |
| 33. | T | F | U | Mooki o tla botsa ka phepo ya ngwana. |
| 34. | T | F | U | Mooki o tla sheba boima le kgolo ya ngwana. |
| 35. | T | F | U | Mooki o tla botsa ka maemo a hao a bophelo. |
| 36. | T | F | U | O tlameha ho ya kliniking bekeng ya pele ha ngwana a ka kula. |
| 37. | T | F | U | Mooki o tla o eletsa ka mefuta ya thero ya malapa. |
| 38. | T | F | U | Tlhokomelo kamora ho pepa e bohlokwa bakeng sa hao le ngwana. |

KAROLWANA F: CONTROL BELIEFS

Dipotso tse latelang ke tseo o nahanang di kao thusa kapa ho o sitisa ho famana ditshebeletso tsa tlhokomelo kamora ho pepa.

- | | | | | |
|-----|---|---|---|--|
| 39. | T | F | U | Ke tlameha ho ya kliniking bakeng sa ditshebeletso tsa tlhokomelo ya kamora ho pepa. |
| 40. | T | F | U | Ha hona motho a ntshallang le bana ha keya kliniking. |
| 41. | T | F | U | Ngwana wa ka a qetang ho hlaha o tla kula ha ke mo isa kliniking. |
| 42. | T | F | U | Ke tla opelwa ha keya le ngwana kliniking. |

- | | | | | |
|-----|---|---|---|---|
| 43. | T | F | U | Ke lokela ho buka pele nka ya kliniking. |
| 44. | T | F | U | Basebetsi ba kliniking ba tla nkgalefela ha ke ya kliniking. |
| 45. | T | F | U | Kliniki e hole ha ke nkile ngwana. |
| 46. | T | F | U | Ke tshenyo ya nako ho ya kliniking bakeng sa tlhokomelo kamora ho pepa. |

KAROLWANA G: PERCEIVED BEHAVIOURAL CONTROL

Bontsha hore na ditaba tse latelang ke nnete (T), kapa mafosi(F) kapa ha o tsebe hantle (U).

- | | | | | |
|-----|---|---|---|--|
| 47. | T | F | U | Ke tla kgona ho etsa nako ya ho ya kliniking kamora dibeke tse 3 ho ya hotse 6 ngwana a hlahile. |
| 48. | T | F | U | Ke tla kgona ho bona mathatha ngwaneng. |
| 49. | T | F | U | Ke tla kgona ho bona mathatha ho nna kamora ho pepa. |
| 50. | T | F | U | Ke tla kgona ho nyantsha ngwana letswele kgewedi tse 6. |
| 51. | T | F | U | Ke tla hlwekisa mokgubu wa ngwana ho thibela mahloko. |

KOROLO III: ATTITUDE

KAROLWANA H: ATTITUDE TOWARDS POSTNATAL CARE SERVICES

Bontsha hore na ditaba tse latelang ke nnete (T), kapa mafosi(F) kapa ha o tsebe hantle (U).

- | | | | | |
|-----|---|---|---|---|
| 52. | T | F | U | Ke tshwere hantle kliniking hantse ke le moimana. |
| 53. | T | F | U | Basebetsi ba kliniking ba ntshwere hantle. |
| 54. | T | F | U | Lelapa la heso le mpha tshehetso matsatsi a 3-6 kamora ho pepa. |
| 55. | T | F | U | Tlhokomelo kamora ho pepa ho ka thibela mathatha kgolong ya ngwanaka. |
| 56. | T | F | U | Ke ikemiseditse ho bua ka ho nyantsha ngwana letswele le mooki kliniking. |
| 57. | T | F | U | Ke tla ema nako e telele kliniking pele ke thuswa. |
| 58. | T | F | U | Ke utlwile ke le bodutu ke kwatile kamora ho pepa bana ba ka ba pele. |

59.

T	F	U
---	---	---

 Ke batla ho sebedisa dithibela pelehi hore ke sebe le ngwana e mong.

KOROLO IV: PRACTICES

KAROLWANA I: INTENTION

Bontsha hore na ditaba tse latelang ke nnete (T), kapa mafosi(F) kapa ha o tsebe hantle (U).

Ke ikemeseditse ho:

60.

T	F	U
---	---	---

 Ho nyantsha ngwana letswele feela bakeng sa kgwedi tse 6.
61.

T	F	U
---	---	---

 Ho hlwekisa mokgubu wa ngwana.
62.

T	F	U
---	---	---

 Ho hlwekisa maqeba a ka ka letswai'le metsi.
63.

T	F	U
---	---	---

 Ho ya kliniking ha rena le mathata le ngwana.
64.

T	F	U
---	---	---

 Ho thibela pelehi bonyane dilemo tse 2 kamora ho pepa.
65.

T	F	U
---	---	---

 Ho ya kliniking matsatsi a 3-6 kamora ho pepa.
66.

T	F	U
---	---	---

 Ho botsa mooki dipotso ka nna le ngwana.
67.

T	F	U
---	---	---

 Ho kopa metswalle le ba lelapa ho nthusu ka ngwana dibeke tse mmalwa.
68.

T	F	U
---	---	---

 Ho hlokomela kgolo le boima ba ngwana.

KAROLWANA J: ACTUAL BEHAVIOURAL CONTROL

Bontsha hore na ditaba tse latelang ke nnete (T), kapa mafosi(F) kapa ha o tsebe hantle (U).

Kena le maikemisetso a ho etsa tsena tse latelang:

69.

T	F	U
---	---	---

 Ho nyantsha ngwana letswele feela bakeng sa kgwedi tse 6.
70.

T	F	U
---	---	---

 Ho hlwekisa mokgubu wa ngwana.
71.

T	F	U
---	---	---

 Ho hlwekisa maqeba a ka ka letswai'le metsi.
72.

T	F	U
---	---	---

 Ho ya kliniking ha rena le mathata le ngwana.
73.

T	F	U
---	---	---

 Ho thibela pelehi bonyane dilemo tse 2 kamora ho pepa.
74.

T	F	U
---	---	---

 Ho ya kliniking matsatsi a 3-6 kamora ho pepa.

- | | | | | |
|-----|---|---|---|---|
| 75. | T | F | U | Ho botsa mooki dipotso ka nna le ngwana. |
| 76. | T | F | U | Ho kopa metswalle le ba lelapa ho nthusa ka ngwana dibeke tse mmalwa. |
| 77. | T | F | U | Ho hlokomela kgolo le boima ba ngwana. |

KAROLWANA K: BEHAVIOUR

Bontsha hore na ditaba tse latelang ke nnete (T), kapa (F) kapa ha o tsebe hantle (U).

Nakong fetileng neke kgona ho etsa tsena tse latelang:

- | | | | | |
|-----|---|---|---|---|
| 78. | T | F | U | Ho nyantsha ngwana letswele feela bakeng sa kgwedi tse 6. |
| 79. | T | F | U | Ho hlwekisa mokgubu wa ngwana. |
| 80. | T | F | U | Ho hlwekisa maqeba a ka ka letswai'le metsi. |
| 81. | T | F | U | Ho ya kliniking ha rena le mathata le ngwana. |
| 82. | T | F | U | Ho thibela pelehi bonyane dilemo tse 2 kamora ho pepa. |
| 83. | T | F | U | Ho ya kliniking matsatsi a 3-6 kamora ho pepa. |
| 84. | T | F | U | Ho botsa mooki dipotso ka nna le ngwana. |
| 85. | T | F | U | Ho kopa metswalle le ba lelapa ho nthusa ka ngwana dibeke tse mmalwa. |
| 86. | T | F | U | Ho hlokomela kgolo le boima ba ngwana. |

Ke a leboha ha le nkile karolo!

KENNIS, HOUDING EN PRAKTYK (KHP) VAN MOEDERS MET BETREKKING TOT POSTNATALE DIENSTE IN 'N VRYSTAAT LANDELIKE HOSPITAAL

VRAELYS KODE: _____ DATUM VOLTOOI: ____/____/2017 (DD/MM/JJJJ)

FASILITEIT VOLTOOI: *Kraamsaal, Seniorita Nhlabathi Hospitaal, Ladybrand, FS.*

Neem asseblief kennis:

1. Die toestemmingsvorm moet geteken word voor die vraelys ingevul word.
2. Die moeders moet die vraelys na geboorte voltooi.
3. Al die afdelings moet voltooi word.
4. Beantwoord die vraag deur die mees toepaslike antwoord met 'n **X** te merk in die blokkie voorsien.

VEELS GELUK MET JOU NUWE BABAI

DEEL 1: RESPONDENT PROFIEL

AFDELING A: SOSIO-DEMOGRAFIESE INLIGTING

Antwoord asseblief die volgende algemene vrae oor jouself.

1. Hoe oud is jy in jare?

2. Wat is jou huidige huweliksstatus?

☐

Enkellopend

☐

Getroud

☐

Geskei

☐

Weduwee

3. Wat is jou hoogste vlak van opvoeding?

4. Wat is jou huistaal? Kies een of meer.

<input type="checkbox"/>	Afrikaans
<input type="checkbox"/>	Engels
<input type="checkbox"/>	Sotho
<input type="checkbox"/>	Ander

Spesifiseer asseblief indien ander: _____

5. Wat is jou huidige werksstatus?

<input type="checkbox"/>	Werkloos
<input type="checkbox"/>	Formeel aangestel
<input type="checkbox"/>	Tydlike werk
<input type="checkbox"/>	Werk vir myself

6. Ontvang jy enige owerheidstoelae (grant)?

<input type="checkbox"/>	Ja,
<input type="checkbox"/>	Nee

Spesifiseer tipe owerheidstoelae indien ja: _____

7. In watter tipe huis woon jy?

<input type="checkbox"/>	Formele huis
<input type="checkbox"/>	Informele huis

8. Dui asseblief aan hoeveel mense woon saam jou in die huis (skryf die getal in die blokkie).

<input type="checkbox"/>	Volwassenes
<input type="checkbox"/>	Kinders ouer as 12 jaar

☐ Kinders jonger as 12 jaar

9. Wat is die afstand vanaf jou huis tot die naaste kliniek?

- ☐ Minder as 2km
- ☐ Tussen 3-5km
- ☐ Tussen 6-10km
- ☐ Meer as 11km

AFDELING B: BIOGRAFIESE INLIGTING

In die afdeling wil ek graag meer oor jou vorige swangerskappe uitvind.

10. Hoeveel keer was jy al swanger van te vore (gravida)?

11. Hoeveel keer het jy lewendige geboorte gegee (parida)?

12. Het jy enige probleme ervaar tydens jou swangerskappe?

- ☐ Ja
- ☐ Nee

Spesifiseer asseblief wat jou probleem(e) was:

13. Het die voorgeboortesorg bygewoon by die kliniek tydens jou swangerskap?

- ☐ Ja
- ☐ Nee

Indien nee, spesifiseer hoekom jy nie voorgeboortesorg bygewoon het nie:

14. Hoe het jy inligting rakend postnatale sorg ontvang?

<input type="checkbox"/>	Radio/TV
<input type="checkbox"/>	By my voorgeboortesorg sessies by die kliniek
<input type="checkbox"/>	Hospitaal
<input type="checkbox"/>	Vriende/familie
<input type="checkbox"/>	Pamflette/boeke
<input type="checkbox"/>	Ek het nie enige inligting rondom postnatale sorg ontvang nie.

DEEL II: KENNIS RONDOM POSTNATALE SORG

AFDELING C: GEDRAGS OORTUIGINGS

Die volgende vrae sal jou kennis en begrip rondom postnatale sorg toets.

Dui asseblief aan of die volgende stellings waar (W), vals (V) of onseker (O) is.

15.	<input type="checkbox"/> W	<input type="checkbox"/> V	<input type="checkbox"/> O	As ek vir postnatale sorg gaan sal dit eers ses weke na die geboorte wees.
16.	<input type="checkbox"/> W	<input type="checkbox"/> V	<input type="checkbox"/> O	Tydens die postnatale sorg besoek sal beide ek en my baba ondersoek word.
17.	<input type="checkbox"/> W	<input type="checkbox"/> V	<input type="checkbox"/> O	Wanneer ek huis toe gaan sal ek instaat wees om die gevaartekens van my baba te identifiseer.
18.	<input type="checkbox"/> W	<input type="checkbox"/> V	<input type="checkbox"/> O	Tydens die postnatale sorg besoek sal die verpleegster uitvra oor die voeding van my baba.
19.	<input type="checkbox"/> W	<input type="checkbox"/> V	<input type="checkbox"/> O	Tydens die postnatale sorg besoek sal die verpleegster my baba se gewig en groei meet.
20.	<input type="checkbox"/> W	<input type="checkbox"/> V	<input type="checkbox"/> O	Tydens die postnatale sorg besoek sal die verpleegster meer wil weet oor my fisiese en emosionele gesondheid.
21.	<input type="checkbox"/> W	<input type="checkbox"/> V	<input type="checkbox"/> O	Ek hoef net tydens die eerste week kliniek toe te gaan as my baba siek is.
22.	<input type="checkbox"/> W	<input type="checkbox"/> V	<input type="checkbox"/> O	Tydens die postnatale sorg besoek sal die verpleegster raad gee oor gesinsbeplanning opsies.

AFDELING D: NORMATIEWE OORTUIGINGS

Die volgende vrae handel oor wat jy glo **ander mense** (vriende, bure, die kerk, ens) verstaan rondom postnatale sorg dienste.

Ander mense glo:

23.	W	V	O	As jy vir postnatale sorg gaan sal dit eers ses weke na die geboorte wees.
24.	W	V	O	Tydens die postnatale sorg besoek sal beide jy en jou baba ondersoek word.
25.	W	V	O	Tydens die postnatale sorg besoek sal die verpleegster uitvra oor die voeding van jou baba.
26.	W	V	O	Tydens die postnatale sorg besoek sal die verpleegster jou baba se gewig en groei meet.
27.	W	V	O	Tydens die postnatale sorg besoek sal die verpleegster meer wil weet oor jou fisiese en emosionele gesondheid.
28.	W	V	O	Jy hoef net tydens die eerste week kliniek toe te gaan as jou baba siek is.
29.	W	V	O	Tydens die postnatale sorg besoek sal die verpleegster raad gee oor gesinsbeplanning opsies.
30.	W	V	O	Postnatale sorg is belangrik vir jou en jou baba.

AFDELING E: SUBJEKTIEWE NORME

Die volgende vrae handel oor wat **jou familie** verstaan rondom postnatale sorg dienste.

My familie glo dat:

31.	W	V	O	As jy vir postnatale sorg gaan sal dit eers ses weke na die geboorte wees.
32.	W	V	O	Tydens die postnatale sorg besoek sal beide jy en jou baba ondersoek word.
33.	W	V	O	Tydens die postnatale sorg besoek sal die verpleegster uitvra oor die voeding van jou baba.

34.	W	V	O	Tydens die postnatale sorg besoek sal die verpleegster jou baba se gewig en groei meet.
35.	W	V	O	Tydens die postnatale sorg besoek sal die verpleegster meer wil weet oor jou fisiese en emosionele gesondheid.
36.	W	V	O	Jy hoef net tydens die eerste week kliniek toe te gaan as jou baba siek is.
37.	W	V	O	Tydens die postnatale sorg besoek sal die verpleegster raad gee oor gesins-beplanning opsies.
38.	W	V	O	Postnatale sorg is belangrik vir jou en jou baba.

AFDELING F: BEHEER OORTUIGINGS

Die volgende vrae handel oor wat jy dink jou kan help of hinder om postnatale sorg dienste by te woon.

39.	W	V	O	Ek sal tyd hê om te gaan vir postnatale sorg.
40.	W	V	O	Ek het niemand om na my kinders te kyk as ek kliniek toe gaan nie.
41.	W	V	O	My pasgebore baba sal siek word indien ek kliniek toe gaan.
42.	W	V	O	Dit sal vir my te seer wees om kliniek toe te gaan saam my baba.
43.	W	V	O	Ek moet eers 'n afspraak maak by die kliniek voor ek vir postnatale sorg dienste kan gaan.
44.	W	V	O	Die personeel by die kliniek gaan ongeskik wees met my as ek gaan vir postnatale sorg.
45.	W	V	O	Die kliniek is te ver om te stap met 'n baba.
46.	W	V	O	Dit sal 'n mors van tyd wees om te gaan vir postnatale sorg.

AFDELING G: WAARGENOME GEDRAGS BEHEER

Dui asseblief aan of die volgende stellings waar (W), vals (V) of onseker (O) is.

- | | | | | |
|-----|----------|----------|----------|--|
| 47. | W | V | O | Ek sal instaat wees om tyd te maak om kliniek toe te gaan binne drie tot ses dae. |
| 48. | W | V | O | Ek sal instaat wees om enige gevaartekens te identifiseer rondom my baba. |
| 49. | W | V | O | Ek sal instaat wees om enige gevaartekens te identifiseer rondom myself na geboorte. |
| 50. | W | V | O | Ek sal instaat wees om my baba eksklusief te borsvoed vir ses maande. |
| 51. | W | V | O | Ek sal instaat wees om my baba se naelstring skoon te maak om infeksie te voorkom. |

DEEL III: HOUDING

AFDELING H: HOUDING TEENoor POSTNATALE SORG DIENSTE

Dui asseblief aan of die volgende stellings waar (W), vals (V) of onseker (O) is.

- | | | | | |
|-----|----------|----------|----------|--|
| 52. | W | V | O | Ek het 'n goeie ondervinding gehad by die kliniek tydens my voorgeboorte sorg. |
| 53. | W | V | O | Die personeel by my kliniek was vriendelik en behulpzaam. |
| 54. | W | V | O | My familie ondersteun my tydens die eerste drie tot ses dae na geboorte. |
| 55. | W | V | O | Postnatale sorg kliniek kan probleme voorkom in my baba se ontwikkeling. |
| 56. | W | V | O | Ek is gewillig om oor borsvoeding te praat met 'n verpleegster by die kliniek. |
| 57. | W | V | O | Ek gaan te lank wag by die kliniek voor ek gehelp gaan word. |
| 58. | W | V | O | Ek het alleen en hartseer gevoel na die geboorte van my vorige kinders. |
| 59. | W | V | O | Ek wil gesinsbeplanning gebruik om nog 'n swangerskap te voorkom. |

DEEL IV: PRAKTYK

AFDELING I: INTENSIE

Dui asseblief aan of die volgende stellings waar (W), vals (V) of onseker (O) is.

Ek beplan om:

60.	W	V	O	My baba eksklusief te borsvoed vir ses maande.
61.	W	V	O	My baba se naelstring skoon te maak om infeksie te voorkom.
62.	W	V	O	My geboorte wonde met soutwater skoon te maak elke dag.
63.	W	V	O	Na die kliniek te gaan indien daar probleme met my of my baba is.
64.	W	V	O	Voorkom swangerskap vir ten minste twee jaar na die geboorte.
65.	W	V	O	Woon postnatale sorg dienste by binne drie tot ses dae na geboorte by die kliniek.
66.	W	V	O	Die verpleegster enige vrae te vra rondom my of my baba.
67.	W	V	O	My familie en vriende vra vir hulp met my baba die eerste week na geboorte.
68.	W	V	O	My baba se gewig en groei te monitor by die kliniek.

AFDELING J: WERKLIKE GEDRAGS BEHEER

Dui asseblief aan of die volgende stellings waar (W), vals (V) of onseker (O) is.

Ek het die praktiese bedoeling om:

69.	W	V	O	My baba eksklusief te borsvoed vir ses maande.
70.	W	V	O	My baba se naelstring skoon te maak om infeksie te voorkom.
71.	W	V	O	My geboorte wonde met soutwater skoon te maak elke dag.
72.	W	V	O	Na die kliniek te gaan indien daar probleme met my of my baba is.

73.	W	V	O	Voorkom swangerskap vir ten minste twee jaar na die geboorte.
74.	W	V	O	Woon postnatale sorg dienste by binne drie tot ses dae na geboorte by die kliniek.
75.	W	V	O	Die verpleegster enige vrae te vra rondom my of my baba.
76.	W	V	O	My familie en vriende vra vir hulp met my baba die eerste week na geboorte.
77.	W	V	O	My baba se gewig en groei te monitor by die kliniek.

AFDELING K: GEDRAG

Dui asseblief aan of die volgende stellings waar (W), vals (V) of onseker (O) is.

Ek was in die verlede instaat om:

78.	W	V	O	My baba eksklusief te borsvoed vir ses maande.
79.	W	V	O	My baba se naelstring skoon te maak om infeksie te voorkom.
80.	W	V	O	My geboorte wonde met soutwater skoon te maak elke dag.
81.	W	V	O	Na die kliniek te gaan indien daar probleme met my of my baba was.
82.	W	V	O	Swangerskap te voorkom vir ten minste twee jaar na die geboorte.
83.	W	V	O	Postnatale sorg dienste by te woon binne drie tot ses dae na geboorte by die kliniek.
84.	W	V	O	Die verpleegster enige vrae vra rondom my of my baba.
85.	W	V	O	My familie en vriende vir hulp te vra met my baba die eerste week na geboorte.
86.	W	V	O	My baba se gewig en groei gemonitor by die kliniek.

DANKIE VIR JOU DEELNAME!

ANNEXURE B

INFORMATION LEAFLET: ENGLISH, SESOTHO,
AFRIKAANS

Maternal Knowledge, Attitudes and Practices (KAP) with regard to postnatal services in a Free State rural hospital

Dear Participant,

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and why you are needed to take part. Please take your time to read the following information carefully. Ask questions if anything you read is not clear or you would like more information. Take time to decide whether or not to take part.

The purpose of this study is to better understand the maternal knowledge, attitude and practices with regard to postnatal services. We have noticed that although most pregnant women attend ante natal clinic before delivery, more than half of mothers do not go back to their clinic for postnatal care in Mantsopa. We want to understand what influences your decision to either attend or not attend the postnatal care services. It will guide us to improve our healthcare system or change our approach towards facilitating postnatal care services.

The selection criteria for the participants in this study are as follows:

- The Participant has given live birth at Senorita Nhlabathi hospital, Ladybrand.
- Understands Afrikaans, English or Sesotho.
- Participant has given written informed consent to participate.
- Has given birth to at least two or more (including current delivery) live children in the past.

For this study to be successful, we need information about the knowledge of mothers who already delivered, since it will be their next step to attend the postnatal care clinic.

It is up to you to decide to take part. The fieldworkers will describe the study to you and go through the information leaflet, which they will also hand to you. They will then ask you to sign a consent form to show you agree to take part. You are free to withdraw at any time, without reason, and your patient care will not be affected.

As soon as you have signed the consent form, the fieldworker will hand you a questionnaire to complete. You will be taken to a private room to answer all the questions

in peace and quiet. The questionnaire involves a few personal questions, and a few questions about your knowledge, attitude and practices toward utilisation of postnatal care. If you struggle with some of the questions, the fieldworker will assist you where needed. The questionnaire is private and will not include your name, contact numbers or address. Your answers will be kept confidential. There is only one questionnaire to be filled in which will take about 15 minutes to complete. Thereafter you are done with the study.

To participate in this study it will only cost you your time to complete the questionnaire. Participation will not cost you anything. Unfortunately there will be no payments to participate in this study. The only disadvantage you might have is the time it takes to complete the questionnaire. We understand by recently delivering a baby, you might be in pain. The fieldworkers will assist you in any means possible to make to process more comfortable for you.

I cannot promise the study will help you, but the information I receive from the study will help to increase the understanding regarding the maternal knowledge, attitude and practices with regard to postnatal care services. The information can then be used to develop guidelines and protocols to improve service delivery in the public health sector.

Your name will not appear on the questionnaire or in the study. The completed questionnaire will be put in a sealed envelope by the fieldworker. The researcher will collect the sealed envelope and give it a code. The envelope will be locked in a safe place that only the Researcher can access. While the data is being processed, the computer being used will be guarded by a safe word.

If you withdraw from the study all the information and data collected from you, to date, will be destroyed. You will not be punished or held responsible for withdrawing from the study.

In the instance you want to contact the researcher for either more information regarding the study or you have a complaint, please be free to contact me.

Cell phone number: 079 779 3863; Email: daleendeklerk@yahoo.com

If you would rather want to speak to the Health Science Research Ethics committee, please feel free to contact them regarding your concerns.

Thank you for your time and effort to participate in this study.

Kind regards,

Tsebo, mokgwa le boikwetliso ba bomme ka boimana Foreistata le dipetlele tsa mahaeng.

Daleen de Klerk

Banka karalo ba ratehang,

Ke rata ho le mema hore le nke karolo dipatlisisong tsa thuto. Pele oka nka qeto o lokela ho utlwisisa hore na hobaneng di etswa le hore hobaneng o lokela ho nka karolo. Ke kopa o nke nako ho bala lesedi lena ka hloko. Botsa moo o sa hlakelweng kapa hao batla ho tseba haholwanyane. Nka nako ya hao pele o nka qeto ya ho nka karolo.

Sepheo sa thuto ena ke o tseba hantle ka mokgwa, boikwetliso ditshebeletsong tsa boimana. Re hlokometse hore boholo ba baimana ba tsamaya kliniki ya boimana pele ba pepa. Bomme ba fetang halofo haba kgutlele kliniking Mantsopa. Re batla ho tseba sesosa hore hobaneng ba ikgethela hotla kapa ho setle ditshebeletsong tsa boimana. E tla re thusa ho phahamisa maemo ditshebeletsong tsa boimana kapa mokgwa oo re buang ka wona hare bua le bona ka boimana.

Tse kgethilweng bakang sa bankakarolo ke tse latelang:

- Ba nkakarolo ba pepetseng Seniorita Ntlabathi Manyatseng.
- Ba utlwisisa seburu, senyesemane le Sesotho.
- Banka karolo ba ngotseng ho nka karolo.
- A pepile ngwana a le mong kapa ho feta nakong e fetileng.

Hore thuto ena e atlehe, re hloka lesedi ka bomme ba kileng ba pepa kaha etla ba mohato wa bobedi hotla ditshebeletsong tsa boimana kliniking.

Ho ho wena ho nka qeto. Basebeletsi batla fana ka tlhakisetso ba be ba ofe leqetswana la dintlha ka kakaretso. Ba o kope ho tekena foromo ho hlake hore oa dumela ho nka karolo.

O lokolohile ho tswa nako e nngwe le e nngwe sena se keke sa ama kalafo ya hao kliniking.

Ha ose o saenne foromo ya kenelo, mothusi o tla o fa tokomane ya dipotso oe arabe. O tla iswa phaposing moo o tla araba dipotso tsohle ka kgutso. Tseding tsa dipotso di botsa ka wena, ka tsebo ya hao, mokgwa le boikwetliso ka ditshebeletso tsa boimana.

Tse dingwe tsa dipotsa, basebetsi ba tla thusa moo ho hlokelang. Dipotso ke tsa sephiri ebile lebitso, nomoro ya mohala le nomoro ya ntlo, hadina bonahatsoa. Dikarabo di tla ba tsa lekunutng. Potso e nngwe e tla arabuoa eo e tla nkang metsotso e mashome a nang le metso e mehlano ho e geta. Ha morao ho moo o tla be o getile ka patlisiso.

Ho ha hlokahala nako ya hao fela o le monka karolo patloisang ena hore o qete dipotso. Ha ho na ba le tefello ho nkeng karalo patlisisong ena.

O ka iphumana o le ka mosing ha o tlamea ho qeta dipotso. Re ya utlwisisa ka morao hore o belehe, o ka iphumana o le mahlabeng. Jwale mosebeletsi wa kalaneng o tla o thusa ka hohle ho etsa tsamaiso ena ebe e bobebe ho wena e be e phuthuluhleng

Ha kena tshepisa letho ka morao ho patlisiso ena ntle le tsebiso e phethahetseng ka mora patlisiso ena e tlang hoo thusa ho eketsa tsebo, boitshwaro le tshebetso ya motsoadi ha ho tluwa tabeng tsa ka morao ho pelehi tsa mona Ladybrand. Boitsebiso bona botlo thusa ho ntlafetsa tshebetso lefapha la bophelo bo botle.

Lebitso la hao ha le na hlaella ho leqephe la dikarabo kapa ho dipatsisiso. Leqephe la dikarabo kapa la dipatsisiso le tla kengwa ka hara onfolopo le mosebeletsi wa kalaneng hore a etse bonnete ba hore le bolokehile. Mobatlisisi o tla tla ka onfolopo tsena kaofela a di fe code/nomoro e ikhethileng. Di tla nkuwa di notlellwe ka hara sebaka se bolokehileng se tla kenwa ke mobabatisi fela. Bonka karolo ba hao bo tla ananelwa bo bolokehe hoya fihlella qetellong ya patlisiso ena. Hanghang ha dintlha tsohle di nkuwe, komporo etla tla sebediswa e tla sireletswa ka tsela e khethileng ya lentswe le tla sebediswa.

Ha fela o ka wa tswa ho patlisiso ena, dintlha kaofela tse bokelleditsweng ho tswa ho wena di tla timetswa. Ebile ha o na tla fuwa kotlo ka lebaka la ho ikhula patlisisong ena.

Ha e kaba ho tla ba le nako eo o tla batha ho iteaanya le mobatlisisi mabapi le dintlha tse keneletseng tsa patlisiso, o tla fuwa monyetla ono. Le ha ekaba o batla hotla tletleba, o tla fuwa monyetla ono.

Ha e kaba o ka hloka ho buisana le mooki kapa mobatlisisi, o dumeletswe ho etsa hono ka ho letsetsa nomoro tsena tse latelang:

Cell number: 079 779 3863; E-mail: daleendeklerk@yahoo.com

Ke lebohela nako le matsapa ka ho nka karolo patlisisong ena.

Ke ya leboha

*Kennis, houding en praktyk (KHP) van moeders teenoor die gebruik van
postnatale dienste in 'n Vrystaat landelike hospitaal.*

Sr D. de Klerk

Geagte deelnemer,

Hiermee wil ek jou graag uitnoui om deel te neem aan 'n navorsing studie. Voor jy 'n besluit maak om deel te neem, moet jy eers verstaan hoekom die navorsing plaasvind en hoekom dit nodig is vir jou om deel te neem. Neem asseblief jou tyd om deur die volgende inligting te lees. Voel vry om enige vrae te vra as iets onduidelik is of as jy meer inligting wil hê. Neem soveel tyd nodig om te besluit of jy deel wil neem aan die studie, of nie.

Die doel van die studie is om kennis, houding en praktyk van moeders teenoor die gebruik van postnatale dienste in 'n Vrystaat landelike hospitaal beter te verstaan. Dit het onder ons aandag gekom dat alhoewel meeste swangervrouens voorgeboortesorg bywoon by die klinieke, sal minder as die helfte van die moeders terug keer na geboorte vir postnatale dienste in Mantsopa. Ons wil graag beter verstaan watter faktore beïnvloed jou besluit om postnatale dienste by te woon, of nie by te woon nie. Dit sal ons help om die gesondheidsstelsel te verbeter of ons benadering teenoor die fasilitering van postnatale dienste te verander.

Die seleksie kriteria vir die deelnemers in die studie is as gevolg:

- Die deelnemer moes lewendige geboorte gegee het by Seniorita Ntlabathi hospitaal, Ladybrand.
- Verstaan Afrikaans, Engels of Sesotho.
- Deelnemer het skriftelike toestemming gegee om deel te neem.
- Het geboorte gegee aan twee of meer lewendige kinders (insluitend huidige geboorte) in die verlede.

Vir die studie om suksesvol te wees benodig ons inligting rakend die kennis van moeders wat reeds geboorte gegee het, aangesien hulle volgende stap sal wees om postnatale dienste by te woon na ontslag van die hospitaal. Die veldwerkers sal die studie aan jou verduidelik en deur die inrigtings-brosjyre gaan wat hulle aan jou sal oorhandig. Hulle sal jou daarna vra om die toestemmingsbrief te teken wat wys dat jy gewillig is om deel te neem. Jy is vry om enige tyd te onttrek van die studie sonder om 'n rede te gee, jou

pasiënt sorg sal nie beïnvloed word nie. Nadat jy die skriftelike toestemmingsbrief geteken het sal die veldwerker aan jou die vraelys oorhandig. Jy sal na 'n private area geneem word om al die vrae in rus en vrede te beantwoord. Die vraelys bestaan uit 'n paar persoonlike vrae en vrae oor jou kennis, houding en praktyk teenoor die gebruik van postnatale dienste. Indien jy sukkel met van die vrae, sal die veldwerkers jou help waar nodig is.

Die vraelys is privaat en sal nie jou naam, kontaknommers en adres op hê nie. Jou antwoorde sal konfidensieel gehou word. Daar is net een vraelys wat ingevul moet word wat min of meer 15 minute gaan neem om te voltooi. Daarna is jy klaar met die studie.

Al wat die studie jou gaan kos, is die tyd wat jy afstaan om die vraelys te voltooi. Ongelukkig is daar geen geldelike of ander vergoeding om deel te neem aan die studie nie. Ons verstaan dat jy dalk nog in pyn is weens jou onlangse geboorte. Die veldwerkers sal jou bystaan om die proses so gemaklik as moontlik vir jou te maak.

Ek kan nie belowe dat die studie jou gaan help nie, maar die inligting wat ek ontvang uit die studie sal ons kennis verbreed rondom die kennis, houding en praktyk van moeders teenoor die gebruik van postnatale dienste. Die inligting kan dan gebruik word om riglyne en protokolle te ontwerp wat dienslewering kan verbeter in die gesondheidsstelsel.

Jou naam sal nie op die vraelys óf in die studie verskyn nie. Die voltooide vraelys sal in 'n geseëde koevert geplaas word deur die veldwerker. Die navorser sal die geseëde koevert kollekteer en 'n kode op die koevert plaas. Die koevert sal in 'n veilige plek gebêre word wat net deur die navorser bereik kan word. Terwyl die data geprosesseer word, sal die rekenaar wat gebruik word deur 'n wagwoord beskerm word.

Indien jy onttrek van die studie, sal al die inligting ontvang van jou vernietig word. Jy sal nie gestraf word of verantwoordelik gehou word vir jou onttrekking van die studie nie. Indien jy die navorser wil kontak vir meer inligting oor die studie of as jy 'n klagte het, voel vry om my te kontak:

Selfoonnommer: 079 779 3863; Epos adres: daleendeklerk@yahoo.com

As jy eerder in kontak wil treë met die Gesondheidswetenskap Etiekkomitee, voel vry om hulle te kontak rakend jou bekommernisse.

Dankie vir jou tyd en moeite om deel te neem aan die studie. Vriendelike groete,

Daleen de Klerk

ANNEXURE C

INFORMED CONSENT: ENGLISH, SESOTHO,
AFRIKAANS

INFORMED CONSENT FORM

I, Daleen de Klerk, 2005080813, am a Master's degree student at the Free State School of Nursing, University of the Free State, and would hereby request permission from you to part take in this Study.

The study is titled: Maternal Knowledge, Attitude and Practices (KAP) with regard to postnatal services in a Free State rural hospital.

You will be requested to answer a series of questions in a form of a questionnaire as honest as possible. You may choose your home language to answer in. A fieldworker will be present to assist you if you need help or have questions.

Your name will not appear on the questionnaire and your answers will be kept confidential, and will only be represented as data in my study. No harm will be inflicted onto you or your loved ones.

The participation of the study is voluntary, and you may request to leave the study at any time. You will not be penalised if you terminate your participation. Unfortunately there will be no financial or any other compensation for your participation in your study.

You may contact the Secretariat of the Ethics Committee of the Faculty of Health Sciences, UFS at telephone number (051) 4052812 if you have questions about your rights as a research subject.

Please fill in the spaces below.

I, (your name and surname), _____, date of birth, _____ declare that I am willing to partake in the above mentioned study. I will answer the questions truthfully as far as possible. I understand the aim of the study and what is requested of me.

Signature of participant

Date:

Signature of fieldworker

Date:

TUMELLO YA HO SEBELETSOA

Nna Daleen de Klerk, 2005080813, ke morutwana wa Masters degree sekolong sa foreisetata sa booki, junibesithi ya foreisetata, ke rata ho kopa tumello ho tswa ho wena ho nka karolo thutong ena.

Sehloho sa thuto. Tsebo, mokgwa le boikwetliso ba bomme mabapi le ditshebeletso tsa ka mora bokgashane dipetleleng tsa foreisetata tsa mahaeng.

O tla hloka hloka o arabele dipotso ka tatellano ka tsela eo o botsitsweng ka teng ka botshepehi bo kgonahalang. O ka ketha puo ya hao ya lapeng ho araba. Motho aka le thusang o tla ba teng ho o thusa ha eba o hloka thuso kapa ona le dipotsa.

Lebitso la hao ha lena hlahella dipotsong le di karabo tsa hao ditla bolokwa ele lekunutu ditla hlahella ele lenane di thutong tsaka. Ha hona kotsi etla o hlaela ka bao o baratang.

Ho nka karolo thutong ke boithaupi. O tla kopuwa ho siya dithuto ka nako engwe le engwe. Ha ona fuwa kotlo haeba o tlohela ho nka karolo. Ka bomadimabe ha hona ba le tijelete kapa moputso otlala o fumana ho nkeng karolo dithutong tsa hao.

O ka letsetsa Secretariat of the Ethics Committee of the faculty of Health Science, UFS nomoro tsa mohala: 051 405 2812, ha eba ona le dipotso mabapi le ditokelo tsa hao jwalo ka dipatlisiso ka sehloho.

Ka kopo tlatsa dikgeo tse latelang

Nna (lebitso le sefane) _____, tsatsi la tswalo _____ ke dumela ho nka karolo thutong e seng e boletswe. Ketla araba dipotso ka nnete ka moo ke kgonang. Ke utlwisisa sepheo sa thuto ena le seo se lebeletsweng ho nna.

Signature ya monka karolo

Letsatsi:

Signature ya fieldworker

Letsatsi:

SKRIFTELIKE TOESTEMMINGS VORM

Ek, Daleen de Klerk, 2005080813, is 'n Meestergraad student aan die Skool vir Verpleegkunde, Universiteit van die Vrystaat, en wil hiermee toestemming vra van jou om deel te neem aan die studie.

Die studie se naam is: Kennis, houding en praktyk (KHP) van moeders teenoor die gebruik van postnatale dienste in 'n Vrystaat landelike Hospitaal.

Jy sal gevra word om 'n reeks vrae so eerlik as moontlik te antwoord in die vorm van 'n vraelys. Jy mag jou huistaal kies om in te antwoord. 'n Veldwerker sal teenwoordig wees om jou help waar nodig of as jy enige vrae het.

Jou naam sal nie op die vraelys verskyn nie en jou antwoorde sal konfidensieel wees en sal net verteenwoordig word in my studie. Geen kwaad sal aan jou of jou geliefdes gedoen word nie.

Die deelname aan die studie is vrywillig, en jy mag versoek om die studie te verlaat op enige stadium. Jy sal nie gepeenaliseer word vir jou onttrekking nie. Ongelukkig sal daar geen finansiële of ander kompensasie wees vir jou deelname aan die studie nie.

Jy mag die Sekretaris van die Etiekkomitee van die fakulteit van Gesondheidwetenskap, UOVS, kontak by (051) 405 2812 indien jy enige vrae het rondom jou regte in die navorsing studie.

Vul asseblief die spasies hier onder in.

Ek, (jou volle naam en van), _____, geboorte datum, _____ verklaar hiermee dat ek gewillig is om deel te neem aan die bogenoemde studie. Ek sal al die vrae so eerlik as moontlik antwoord. Ek verstaan die doel van die studie en wat van my verwag word.

Handtekening van deelnemer

Datum:

Handtekening van veldwerker

Datum:

ANNEXURE D

LETTER FROM HOD



health

Department of
Health
FREE STATE PROVINCE

01 June 2017

Ms. D De Klerk
School of Public Health
Idalia Loots Building
UFS

Dear Ms. D De Klerk

Subject: Knowledge, attitude and practices (KAP) of mother's towards the utilisation of postnatal services in a Free State rural hospital.

- Please ensure that you read the whole document, Permission is hereby granted for the above – mentioned research on the following conditions:
- Participation in the study must be voluntary.
- A written consent by each participants must be obtained
- Serious adverse events to be reported and/or termination of the study.
- Ascertain that your data collection exercise neither interferes with the day to day running of Mantsopa Hospital nor the performance of duties by the respondents or health care workers.
- Confidentiality of information will be ensured and please do not obtain information regarding the identity of the participants.
- Research results and a complete report should be made available to the Free State Department of Health on completion of the study (a hard copy plus a soft copy).
- Progress report must be presented not later than one year after approval of the project to the Ethics Committee of the University of Free State and to Free State Department of Health.
- Any amendments, extension or other modifications to the protocol or investigators must be submitted to the Ethics Committee of the University of Free State and to Free State Department of Health.
- **Conditions stated in your Ethical Approval letter should be adhered to and a final copy of the Ethics Clearance Certificate should be submitted to sebeclats@fshealth.gov.za before you commence with the study**
- No financial liability will be placed on the Free State Department of Health
- Please discuss your study with the institution managers/CEOs on commencement for logistical arrangements
- Department of Health to be fully indemnified from any harm that participants and staff experiences in the study
- Researchers will be required to enter in to a formal agreement with the Free State department of health regulating and formalizing the research relationship (document will follow)
- You are encouraged to present your study findings/results at the Free State Provincial health research day
- ~~Future~~ research will only be granted permission if correct procedures are followed see <http://nhrd.hst.org.za>

Trust you find the above in order.

Kind regards

Dr D Motau

HEAD: HEALTH

Date: 2/07/17

Head : Health
PO Box 227, Bloemfotein, 9300
4th Floor, Executive Suite, Bophelo House, cnr Maitland and, Harvey Road, Bloemfotein
Tel: (051) 408 1646 Fax: (051) 408 1556 e-mail: khusemi@fshealth.gov.za / fshealth.gov.za@fshealth.gov.za / chikobvup@fshealth.gov.za

www.fs.gov.za

ANNEXURE E

LETTER FROM HSREC

IRB nr 00006240
REC Reference nr 230408-011
IORG0005187
FWA00012784

08 January 2019

D DE KLERK
SCHOOL OF NURSING
IDALIA LOOTS BUILDING
UFS

Dear D De Klerk

HSREC 33/2017 (UFS-HSD2017/0186)

PRINCIPAL INVESTIGATOR: D DE KLERK

PROJECT TITLE: MATERNAL KNOWLEDGE, ATTITUDE AND PRACTICES WITH REGARD TO POSTNATAL CARE SERVICES IN A FREE STATE RURAL HOSPITAL

This letter replaces the letter dated 08 November 2017, and is therefore the first and only official approval letter.

APPROVED

1. You are hereby kindly informed that the Health Sciences Research Ethics Committee (HSREC) approved this protocol after all conditions were met at the meeting held on 25 July 2017.
2. The Committee must be informed of any serious adverse event and/or termination of the study.
3. Any amendment, extension or other modifications to the protocol must be submitted to the HSREC for approval.
4. A progress report should be submitted within one year of approval and annually for long term studies.
5. A final report should be submitted at the completion of the study.
6. Kindly use the **HSREC NR** as reference in correspondence to the HSREC Secretariat.
7. The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; The International Conference on Harmonization and Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH Tripartite), Guidelines of the SA Medicines Control Council as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

Yours faithfully



DR SM LE GRANGE

CHAIR: HEALTH SCIENCES RESEARCH ETHICS COMMITTEE

**Health Sciences Research Ethics Committee
Office of the Dean: Health Sciences**

NHREC 230408-011 / IRB 00006240 / IORG 0005187 / FWA00012784

T: +27 (0)51 401 7795/7794 | E: ethics@ufs.ac.za

Block D, Dean's Division, Room D104 | P.O. Box/Posbus 339 (Internal Post Box G40) | Bloemfontein 9300 | South Africa
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ANNEXURE F

LETTER FROM LANGUAGE EDITOR

33 Manors Road
Pinetown
3610
30 January 2019

Dear Sir/Madam

LANGUAGE EDITING OF MASTER'S THESIS: DALEEN DE KLERK

I was approached by Daleen de Klerk to do the language editing of her dissertation for the qualification: Master of Social Science in Nursing in the School of Nursing.

I hereby take no responsibility for the outcome of the study. The onus of applying my language suggestions lies with the student.

If there are any queries, please don't hesitate to contact me on janetmarieventer@gmail.com or 0793124974.

Yours faithfully

Janet Marié Venter