UNIVERSITY OF THE WESTERN CAPE

DEVELOPMENT OF A TRAINING PROGRAMME FOR PROFESSIONAL NURSES TO PROMOTE THE USE OF POSTPARTUM FAMILY PLANNING IN EPE LOCAL GOVERNMENT AREA, LAGOS STATE, NIGERIA

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ABSTRACT

Postpartum family planning (PPFP) is the initiation of family planning methods among postpartum women, within 12 months after delivery. During this period, the women are a vulnerable group of people with high unmet need for family planning. They are exposed to the risks of unwanted pregnancy, which potentially, could increase maternal mortality, due to the consequences of too frequent pregnancies. Studies have revealed a consistent low use of family planning during the postpartum period. Additionally, it has been documented that the low use of postpartum family planning, most likely, was attributed to inadequate services that had been rendered at healthcare centres, as well as poor motivation by those providing family planning services. A training programme for nurses, to improve health services, was identified as the most appropriate for quality healthcare services, to influence the behavioural skill and good decision making of the PP women, regarding the use of PPFP.

This current research study, therefore, was aimed at developing a training programme for professional nurses, to promote the use of PPFP in Epe Local Government Area of Lagos State, Nigeria. A concurrent mixed method was employed, using both quantitative and qualitative approaches to gain all the necessary information from the postpartum women and the professional nurses. The study was conducted in 4 phases, using the adapted Programme Development Model of Meyer and Van Niekerk.

Phase 1 was the preliminary phase, during which all the necessary documentation were sought. *Phase 2* was the situational analysis phase, during which data were collected in two stages, using a quantitative and qualitative approaches. For the quantitative study, a multi-stage sampling method was used to select the sample. Six primary healthcare facilities that offer family planning services were purposively selected. Two-hundred-and ninety-seven (297) postpartum women were enlisted from the sample frames, using systematic random sampling. A purposeful sampling technique was employed in the qualitative study, to select eligible participants for the study. The data were collected through focus group discussions with the professional nurses, to address the motivating factors, used by them, to promote the use of PPFP. The collected quantitative data were analyzed as descriptive and inferential statistics, in which the categorical variables were presented as frequencies and percentages, in the form of tables, charts, and histograms, as well as inferential statistics, in form of a t-test. The Statistical

Package for Social Science (SPSS) version 24 was utilised. For the qualitative analysis, Tesch's Thematic Analysis method was employed.

During *Phase 3*, the findings from the quantitative and qualitative analysis in phase 2 were triangulated to inform the programme design. Further triangulation of the main findings was culminated and merged, using the Information-Motivation-Behavioural Skill (IMB) Model (1992) construct, as a key concept. Additionally, the prescribed list of activities in the Practice-Oriented Theory by Dickoff, James, and Wiedenbach, provided a reasoning map, as a guide towards the development of the training programme.

The findings from the quantitative study revealed that the postpartum women did not receive adequate information from the nurses. Besides, a large percentage of the women did not use postpartum family planning. The majority of the women reported that the family planning information, which they received from the nurses, was unclear to them, they were never allowed to participate in the discussions during counselling, and the nurses hardly ever used a friendly tone of voice, when offering them health information. Additionally, the findings from the qualitative study revealed the negative attitude of the nurses towards the promotion of PPFP. Besides, the social groups, comprising men, community leaders, and religious leaders in the community, were poorly motivated by the nurses.

The final triangulated culminated findings revealed that the professional nurses lacked certain skills and abilities, which were vital to the promotion of PPFP. These challenges included poor communication skills, poor interpersonal relationship skills, the inability to adequately motivate the social group of people, namely the men, religious and comunity leaders, as well as inadequate teaching methods to promote PPFP. However, the findings confirmed the training needs of nurses, in terms of motivating PP women, and promoting PPFP.

Phase 4 was the programme development phase. The content of the training programme was based on the final triangulated findings from the situational analysis in *phase 2*, as well as support from the literature. In addition, the training programme took into consideration certain research principles, such as learning theories, as well as the requirements for an effective training programme. A plan for future validation was developed.

KEYWORDS

Family Planning

Postpartum Family Planning

Professional nurses

Promotion

Training programme

Use

LIST OF ABBREVIATIONS

ANC – Antenatal clinic

DHS – Demographic Health Survey

FP – Family planning

FGD – Focus group discussion

HBM – Health Belief Model

HIV – Human immunodeficiency Virus

ICN – International Council of Nurses

ICM – International Confederation of Midwives

IMB (model) – Information Motivation Behavioural Skill Model

LG – Local Government

LCDA – Local Government Development Area

LGA – Local Government Area

NDHS – Nigeria Demographic Health Survey

NMCN – Nursing and midwifery council of NIGERIA

PHC – Primary health center

R – Respondent

PDM – Program development model

PP – Postpartum

PPFP – Postpartum family planning

SDGs – Sustainable Development Goals

UNFPA – United National Population Fund

WHO – World Health Organization

DECLARATION

I, Omo-ojo Betty Igbinoghodua, declare that this research study titled, "Development of a training programme for professional nurses to promote the use of postpartum family planning in Epe Local Government Area, Lagos State, Nigeria", is my own work, that it has not been submitted for any degree or examination at any other university, and all the sources I have used or quoted, have been indicated and acknowledged by complete references.

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Signed: ……..

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First and foremost, I give all the glory to Almighty God, who is the source of life, knowledge, wisdom, and understanding. He is the Alpha and Omega, the Ancient of Days, the beginning and the end. The Most High God started this programme and ended it victoriously. His word has been a lamp unto my feet, and a light unto my path. To my God, I give all the praises and solemn adoration. What shall I say more, time would not permit me to tell of all his goodness, His kindness, His steadfast love that never ceases, His unfailing grace, and His mercies that never come to an end in my life. Unto Him, I give all adoration

To my late parents, Mr. and Mrs. Eguavon, I am immensely grateful to them for the educational motivation they gave to me, which laid the foundation for my career. I will continue to give them my posthumous thanks and appreciations.

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I will remain grateful forever to my husband, Honourable Omo-ojo Orobosa, for his unstinting and unwavering support, without which this dream would not have become a reality. This is truly a confirmation of the adage that "Beside every successful woman there is a man". I remain loyal to you. sir. This accolade goes to you. I hope to make you proud.

To my children, Engineer Osazemen, Dr/Mrs Owen Ochayi, Adesuwa, and Ekan. You are my greatest fans. I thank you for all your support and understanding of the times, especially when I had to travel to South Africa and you needed me. God Almighty will continue to grant, all of you, divine grace, mercies, and remarkable breakthroughs in life, in Jesus' name, Amen.

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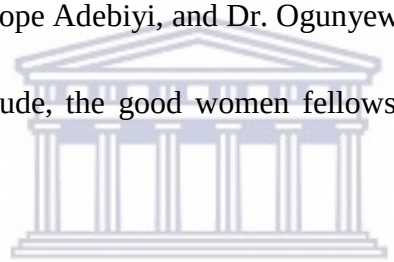


DEDICATION

This dissertation is dedicated to my children, Osazemen, Dr/Mrs Owen Ochayi, Adesuwa, and Ekan

The realisation of this doctoral study, came as a result of your encouragement, your encompassing support, and your continual prayers, which instilled peace and calmness to my total being, throughout my doctoral pursuit.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

ORIENTATION TO THE STUDY

1.1. INTRODUCTION

Accelerated population growth places a burden on the environment, economy, education, and health services, and consequently, has been identified as an encumbrance by international and national governments (Mubarak & Nugroho, 2020; Ogboru & Anga, 2015). Family planning [FP], on the other hand, has been reported to slow down unsustainable population growth, in addition to promoting gender equality (Aina & Aina-Pelemo, 2019; Starbird, Norton, & Marcus, 2016), as well as educational empowerment for women (Grant, 2016), despite the propagating for universal FP coverage (Hellwig, Coll, Ewerling, & Barros, 2019). It is estimated that approximately 65% of postpartum women, globally, have unmet family planning needs (Embafrash & Mekonnen, 2019). The prevalence of unwanted pregnancies, attributed to unmet postpartum family planning [PPFP] needs in developing countries, is pegged at 75%, according to Embafrash and Mekonnen (2019). Reportedly most of these unwanted pregnancies are terminated through unsafe methods, which is one of the leading causes of maternal mortality (Alkema et al., 2016). Consequently, family planning became an integral component of reproductive health (Semachew Kasa, Tarekegn, & Embiale, 2018), and a keystone of the Sustainable Development Goal 3.7 (Choi & Fabic, 2018; Starbird et al., 2016).

Family planning refers to the spacing of pregnancy by individuals and couples, to attain the desired number of children, through the use of an effective birth control method (Semachew Kasa, Tarekegn, & Embiale, 2018). The intention is to improve health, and consequently, reduce maternal and infant morbidity and mortality (Rimon & Tsui, 2018). Despite efforts to ensure universal access to family planning, the use of FP among postpartum women remains low (Eliason et al., 2013b). This is a health concern, as the postpartum period is recognized as a vulnerable time, with increased risk for unintended pregnancies, and some women regarding this as an unfertile reproductive period (Singh, Verma, & Tanti, 2013). Such unwanted pregnancies have negative effects on both mother and child, which includes poor prenatal and antenatal care, resulting in low-birth-weight babies. This in turn may negatively affect the mental and psychological well-being of these mothers (Alene, Yismaw, Berelie, Kassie, Yeshambel, & Assemie, 2020).

Postpartum family planning [PPFP] refers to the initiation, and use of family planning methods, during the postpartum period. The aim is to prevent unintended pregnancies, as well as closely spaced pregnancies, within the first 12 months after birth (Gaffield, Egan, & Temmerman, 2014). Evidence indicates that PPFP does not only improve the wellbeing of the mother and child, but the interval between pregnancies also influences maternal and infant mortality (Rodriguez, Chang, & Thiel De Bocanegra, 2015). When couples space their pregnancy intervals for more than 2 years, infant morbidity and mortality of children between the ages of 1 and 4, are reportedly reduced by 10% and 21%, respectively (Gaffield et al., 2014). Besides, the adverse effects of closely-spaced pregnancies, such as preterm deliveries, low birth weight, and stillbirths, can be averted (Mahande & Obure, 2016). Although women may desire to space their pregnancy, they lack the necessary support and family planning services, required to prevent unintended pregnancy, during the postpartum period (Gaffield et al., 2014).

Possible barriers to using family planning methods include poor service delivery by healthcare providers, untimely counselling, lack of information, cultural and religious beliefs, fear of side effects, misconceptions, and husband disapproval (Kirigia, Gitonga, & Muraya, 2019). However, quality healthcare services have the potential to stimulate the increased use of postpartum family planning (Hounton, Winfrey, Barros, & Askew, 2015).

1.2. BACKGROUND

Globally, an estimated 99,1 million unintended pregnancies occur per year (Bearak, Popinchalk, Alkema, & Sedgh, 2018), with Africa alone accounting for about 21,6 million. It is reported that an estimated 44% of pregnancies, and 23% of births were unwanted, while 56% of all unwanted pregnancies ended in termination (Beyene, 2019). Unfortunately, in Sub-Saharan Africa, the use of PPFP remains low, which is linked to unintended pregnancy (Eliason et al., 2013a). In Nigeria, one of the developing countries in Sub-Saharan Africa, the average fertility rate is 6 children per woman (National Population Commission [NPC], 2019). It is also reported that the majority of postpartum women rely primarily on breastfeeding, as a method of family planning. This contravenes WHO's recommendation of early initiation of PPFP, shortly after delivery, irrespective of breastfeeding (RamaRao, Ishaku, Liambila, & Mane, 2015). These authors further stated that there is a remarkably low use of PPFP, particularly in rural areas, where fertility and unmet need among postpartum women are the highest (RamaRao et al., 2015).

Other research findings report poor ethical professional practice, such as poor patient rights, inadequate confidentiality, lack of privacy, including poor dignity (Hafez, Mohamed, & Eltabeysobeh, 2016). Further challenges related to the use of family planning services include inadequate awareness of family planning services, poorly trained service providers, and cultural barriers (West, Isotta-Day, Ba-Break, & Morgan, 2017). Given the consensus of the international conference on population and development, attention was drawn to the fundamental human right of individuals and couples to information, education, and supervision about family planning and other reproductive health conditions, including the prevention and treatment of HIV/AIDS, as well as safe pregnancy (United Nations [UN] Population Division, 2018). The intention was to enable individuals and couples to make informed decisions, regarding the desired number of children, as well as the spacing of their pregnancies (UN Population Division, 2018).

The various encounters of postpartum women with the nurses and midwives, therefore, provide great opportunities to improve the use of PPFP. Despite these encounters, the use of PPFP remains low, with a high unmet need for PPFP (RamaRao et al., 2015). It is estimated that 222 million women around the world have an unmet need for family planning; therefore, if these unmet needs were satisfied, 54 million unintended pregnancies, 21 million unplanned births, and 26 million abortions could be averted, annually, as well as approximately 79,000 maternal mortalities, and more than one million infant mortalities (Scott et al., 2015). Similarly, adequate provision of family planning services, most likely, could reduce maternal mortalities by 32%, childhood mortalities by 10%, worldwide (West et al., 2017). However, globally, maternal mortalities remain high. An estimated 800 women die every day due to preventable causes, related to pregnancy, and 99 percent of these deaths occur in developing countries, in rural areas, among the poorer communities, where fertility is high (World Health Organization [WHO], 2019).

Similarly, it is estimated that Nigeria has the 14th highest maternal death ratio, globally, which is estimated at 560 maternal deaths per 100,000 life birth, and accounts for 14% of maternal death globally (Schwandt, Skinner, Hebert, Cobb, Saad, & Odeku, 2017). It is predicted that maternal deaths will decrease by 30%, with early initiation of PPFP. Consequently, the adverse health burden of both mother and child, from closely spaced pregnancies, would be prevented, provided couples spaced their pregnancies to more than two years (Mahmoud, Elweshahi, Ismail, Saad, Sadek, & El-sharkawy, 2018).

1.3. PROBLEM STATEMENT

According to Miles (2019), problem statements provide the rationale for the study, using data and research to confirm the need to address the problem in the research study. It describes the present, as well as anticipated issues, and clarifies the justification for the study (Nimehchisalem, Tarvirdizadeh, Sayed Paidary, & Binti Mat Hussin, 2016). It is documented that postpartum women have the highest unmet family planning needs. Unmet family planning needs, in this context, refer to sexually active women, who do not use any family planning method, nor intend to space their children (Mahmoud et al., 2018).

Unacceptable low use of PPFP in most developing countries is reported (Idowu, Deji, Ogunlaja, & Olajide, 2015). For example, in Nigeria, only 17 percent of married women use any family planning method, with the lowest FP use reported in rural areas. This is reflected in the maternal mortality rate reported as 556 per 100,000 live births, and the fertility rate in rural areas as 6 births per woman (NPC, 2019). A further challenge is that only 22% of rural women deliver in healthcare facilities, where access to PPFP information is available (Sam-Agudu et al., 2017). Evidence from research reveals that most women do not experience respectful and quality care; consequently, they are unwilling to seek care at health facilities during pregnancy and childbirth (Ackerson, & Zielinski, 2017; Tanabe, Nagujjah, Rimal, Bukania, & Krause, 2015).

According to Alkema et al., (2016), there is no significant indication that maternal mortality has reduced in Nigeria, over the last decade. In addition, the current statistics in Nigeria revealed that the maternal mortality ratio was 814 per 100,000 births in 2015, with an estimated 58,000 maternal deaths in 2015 (Babalola & Oyenubi, 2018). Additionally, Nigeria accounts for about one-fifth of all maternal deaths worldwide, and is one of the countries with the poorest reproductive health outcomes (Babalola & Oyenubi, 2018). It is estimated that the maternal mortality of Lagos state of Nigeria, is 555 per 100,000 live births (Idowu, 2013).

Statistics revealed a high patronage of women for deliveries with traditional birth attendants (TBAs) in the Epe local government area, Lagos, Nigeria, which is attributed to the caring attitude of the TBAs. This attitude is contrary to the unpleasant attitude of health workers (midwives) in the primary healthcare center (Sowunmi, Olajide, Akodu, Sodimu, & Ajibade,

2020). Consequently, the lack of information, and inadequate services are identified as factors that prevent women from receiving, or seeking FP (Scott et al., 2015).

The map in Figure 1.1 contains an overview of the prevalence of PPFP use at 3 months, for women aged 15 to 49 years, in all the states of Nigeria (Hounton et al., 2015). The Delta has the highest prevalence of PPFP use (20-25 %), followed by the states of Oyo and Imo (15-20%). Edo, Rivers, and Lagos, under which Epe (the study setting) is located, are at 10-15 %, while the four states of Kwara, Osun, Ogun, Nasarawu and Akwa Ibom have a prevalence of 5-10%. The rest of the country has a prevalence below 5 %.

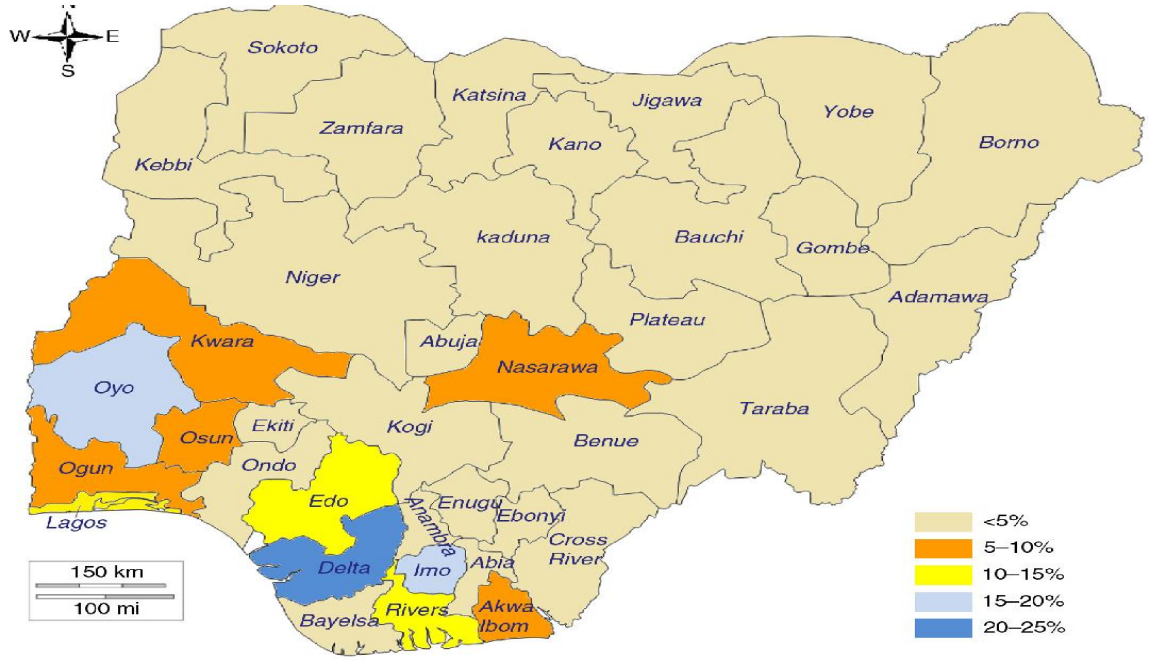


Figure 1.1: Prevalence of postpartum family planning use at 3 months for each Nigerian State

Source: Hounton et al. (2015).

It is documented that the maternal mortality rate in Epe Local government is 803 per 100,000 live births (Idowu, 2013), which is higher than the national and state rates. Evidence reveals that only 38 percent of currently married women use family planning in Epe Local Government (Oluwole, Kuyinu, Goodman, & Odugbemi, 2016). This is a risk factor that fuels increased maternal and infant mortality in this community, and therefore, needs urgent intervention. It is reported that the proportion of respondents, who use family planning in the rural areas of Nigeria, is consistently low **(**Etokidem, Ndifon, Etowa, & Asuquo, 2017). The lack of information, and inadequate services, therefore, are identified as factors that prevent women

from receiving, or seeking FP (Scott et al., 2015), and a great need exists to prioritize the provision of information, and to empower the postpartum women in rural areas to use PPFP (Mekonnen, Gelagay, & Lakew, 2021). Consequently, it is unclear how professional nurses and midwives support and motivate postpartum women to use PPFP. Besides, research that targets this phenomenon is limited in Nigeria **(**Mekonnen et al., 2021). The above-mentioned inadequacies, therefore, provided the rationale for the researcher to develop a training programme for professional nurses, aimed at addressing the identified deficiencies, to promote the use of postpartum family planning in Lagos state, Nigeria.

1.4. SIGNIFICANCE OF THE STUDY

The researcher's anticipation is to enhance best practice in providing quality PPFP services in Lagos State in Nigeria. The intention is that the policymakers will provide quality PPFP services, based on the best practice evidence made available by this research. Therefore, the long-term effect of this training programme, is the eventual contribution to the reduction of maternal and infant mortality rates in the Epe local government area of Lagos State in Nigeria. The findings of this current study could add to the existing literature, as well as the body of knowledge in nursing research on PP family planning.

1.5. AIM OF THE STUDY

The aim of this research was to develop a training programme for professional nurses to promote the use of postpartum family planning (PPFP) in Epe local government area of Lagos State in Nigeria.

The following research questions were addressed by the four main objectives to achieve the aim of the study

1.5.1. Research questions

1. What information did the PP women received regarding the use of PPFP?

2. What are the factors influencing the behavioural skills of postpartum women regarding the use of PPFP?

3. What are the motivating factors used by professional nurses to promote the use of PPFP?

4. What are the components of a training program that can improve the use of PPFP?

1.6. OBJECTIVES OF THE STUDY

The objectives of this current study were to:

1. Examine the information received by postpartum women, regarding the use of PPFP.
2. Identify factors that influence the behavioural skills of postpartum women linked to PPFP.
3. Explore and describe the motivating factors that professional nurses use to promote PPFP.
4. Develop a training programme for nurses to improve the use of PPFP.

1.7. PARADIGMATIC PERSPECTIVE AND ASSUMPTIONS

According to Kivunja and Kuyini (2017), paradigm refers to a world view that guides an investigation in the research study. It is a philosophical way of thinking that enlightens the researcher's understanding of data interpretation (Kabanda, 2019). Paradigms are usually characterised by their basic philosophical questions related to ontology and epistemology.

1.7.1. Ontological assumptions

Ontology is concerned with what exists, or the fundamental nature of reality, and consists of two basic positions, namely, realism and relativism (Kivunja & Kuyini, 2017; Mertens, 2016). The ontological position that underpinned this current study was that of relativism, as the researcher acknowledged that multiple realities were socially and experientially constructed (Kivunja & Kuyini, 2017).

1.7.2. Epistemological assumptions

Epistemology is concerned with the origin of knowledge, or the most valid ways to reach the truth (Kivunja & Kuyini, 2017). The epistemological orientation that aligns with an interpretive/constructivist paradigm is that knowledge is based on subjective beliefs, values, reasons, and understandings (Aliyu, Singru, Adamu, Mu 'awuya, & Abubakar 2015; Kabanda, 2019). Findings, therefore, are the creation of a process of interaction between the inquirer and the inquired (Kivunja & Kuyini, 2017).

The epistemological orientation of this current study reflects a pragmatic worldview (Creswell, 2015), as the researcher's assumptions were informed by both positivists and

constructivist ideologies, to accommodate different perspectives (Allana & Clark, 2018). Firstly, the positivist quantitative approach was used to address objectives 1 and 2 of the study. Positivists assert that the social world exists externally, and a reality exists that seeks to identify a causal relationship (Kivunja & Kuyini, 2017). Therefore, a standardized questionnaire was employed. The researcher sought objective information from both PP women and professional nurses related to PPFP services. Positivists also claim that universal laws exist that govern social events; therefore, uncovering this law enables the researcher to describe such phenomena, and necessitate the use of a quantitative approach (Aliyu, Bello, Kasim, & Martin, 2014).

Secondly, *constructivism* was employed to explore objective 3. According to Amineh and Asl (2015), constructivists assert that reality is socially constructed, and influenced by circumstances, such as experiences, perception, and interaction, within the social environment. Additionally, social constructivism signifies information and knowledge as a human product that is constructed socially and culturally. This assumption indicates that learning does not exist in isolation; instead, effective learning arises when individuals are engaged in social interactions (Amineh & Asl, 2015). Constructivism was employed in this current research, using focus group discussions to explore diverse opinions among the staff nurses, staff midwives, and the nurse managers, related to PPFP

1.8. THEORETICAL ASSUMPTIONS

According to Grant and Osanloo (2016), theory refers to the blueprint for dissertation inquiry. It serves as a guide on which to build and support the research study. Additionally, it is a system of ideas, emphasising a set of relationships in a research study (Ahmad, Shah, Latada, & Wahab, 2019). The theoretical framework, therefore, serves as a tool to explain the phenomenon under investigation, consequently, enhancing the overall goals of the research study (Ngulube, 2018). The theoretical assumptions of this current study were underpinned by two theories, namely: Information-Motivation-Behavioural Skills (IMB) Model, developed by Fisher, Fisher, and Harman (2003) as depicted in Figure 1.2.; and Practice-oriented theory, by Dickoff, James, and Wiedenbach (1968). According to Ngulube (2018), linking and incorporating theories within the theoretical framework of a research study, enhances the overall goals of the research study. Similarly, when multiple theories and models are employed in a single research study, various view points are provided, and the outcome of the research is

expanded, which consequently, improves the success rate of research study (Grant & Osanloo, 2016; Williams, Rana, & Dwivedi, 2015)

1.8.1. Information, Motivation, and Behavioural Skills (IMB) Model

The Information, Motivation, and Behavioural Skills (IMB Model), developed by Fisher, Fisher, and Harman (2003), guided the exploration and analysis of the experiences related to PPFP, to inform the content of the PPFP training programme for nurses. The following facts clarify the concept of the IMB model:

- Misinformation attracts non-compliance in health matters, while accurate information influences positive compliance in health-related matters (Chang, Choi, Kim, & Song, 2014).
- Clients adhere to health-related issues, when the perceived negative effects of nonadherence are evident (Whiteley, Brown, Lally, Heck, & Van den Berg, 2018).
- Motivational activities, such as good interpersonal relationships and good communication skills, tend to improve the behavioural skill of postpartum women.
- Misinformation, misconceptions, and other barriers to motivation could influence the behavioural skills of the postpartum woman (John, Walsh, & Weinhardt, 2017).
- Behavioural skills translate to self-efficacy, the ability of the postpartum woman to make her own informed choice.

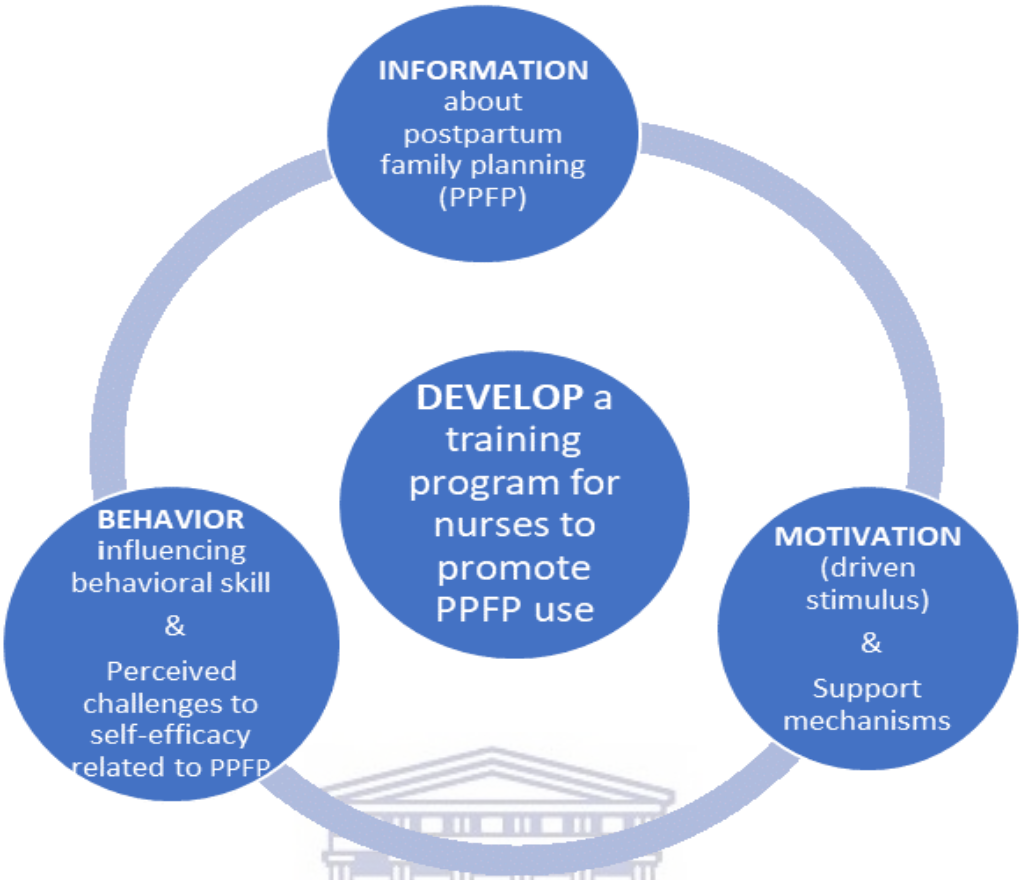


Figure 1.2: Modified Model adapted from Fisher, Fisher, and Harman (2003)

1.8.2. Practice-oriented theory

In addition to the above theoretical model, the Practice-oriented theory, by Dickoff et al., (1968) in Figure 1.3, was used. The following six questions provided a reasoning map for the Design Phase of the PPFP training programme, developed for nurses in Epe District (Sumpi & Amukugo, 2016).

1. Who, or what performs the activities? (Agent)
2. Who, or what is the recipient of the activity? (Recipient)
3. In what context is the activity performed? (Context)
4. What is the energy source for the activity? (Dynamics)
5. What is the guiding procedure, technique, or protocol, of the activity? (Procedure)
6. What is the end-point of the activity? (Terminus)

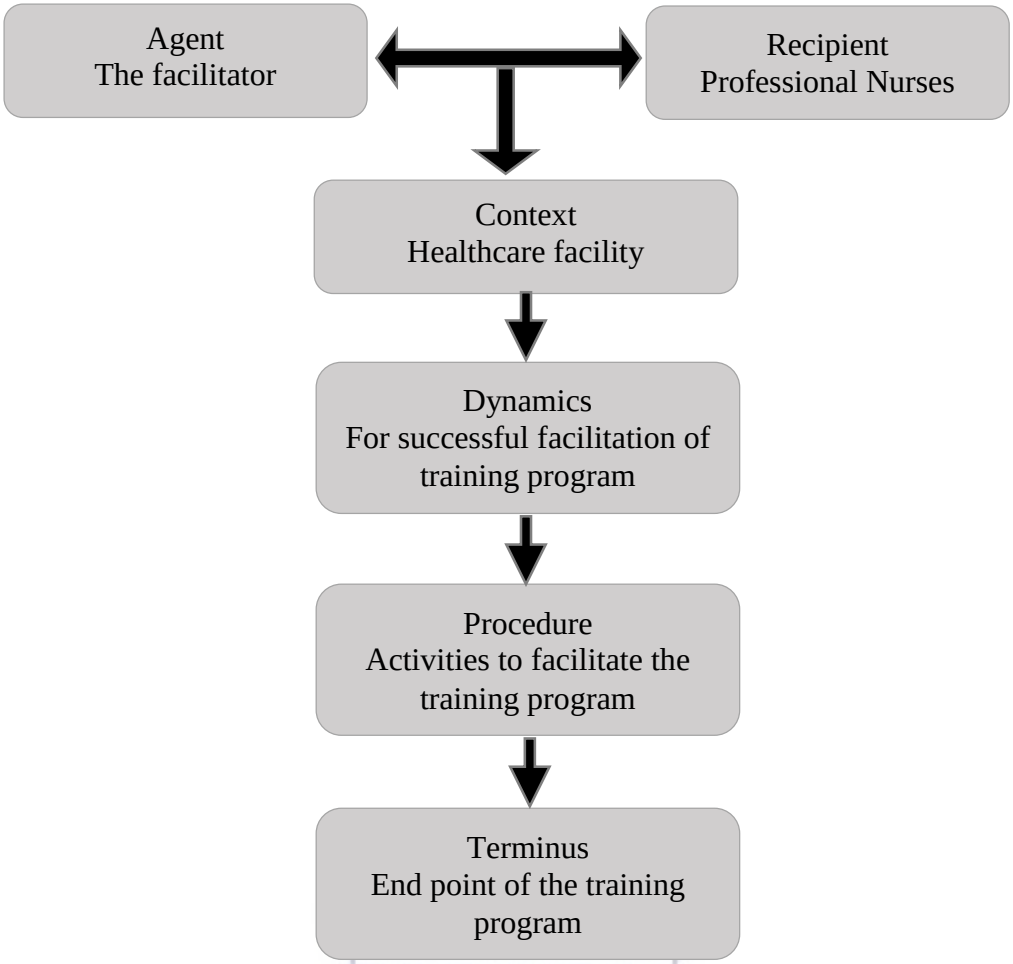


Figure 1.3: Reasoning map adapted from Dickoff et al., (1968) Practice-oriented theory

Further details related to the application of this theory are provided in Chapter 7.

1.9. METHODOLOGICAL FRAMEWORK

The PPFP training programme for nurses, developed for this current study, was based on the Program Development Model (PDM), by Meyer and Van Niekerk (2008). The PDM was deemed appropriate as the methodological framework, because it considers the end-users (professional nurses in practice), and provides for the incorporation of other theories/models, relevant to the improved educational activities in nursing (Meyer & Van Niekerk, 2008). The five phases of the PDM are as follows:

- Phase 1: Preliminary phase: This phase is regarded as the introduction, when all the necessary documentations, related to the granting of approval/permission to conduct the research, are pursued.
- Phase 2: Situation analysis phase: During the *situation analysis phase*, the researcher engages in data collection. The approach provides a full understanding of the phenomenon of interest (Martin, Pauly, & MacDonald, 2016). It entails the analysis of the present situation and a potential view of the future (Meyer & Van Niekerk, 2008).

The activities during this phase include, identifying the problem, conducting the situational need assessment, and subsequently, analysing the collected data.

- Phase 3: Designing Phase: During this phase, the findings drawn from phase 2 are used to inform the design phase, towards the development of the training programme.
- Phase 4: Development phase: This phase involves the selection of the programme objectives, purpose, and content, of the training programme.
- Phase 5: Validation: The criterion for this phase is the assessment of the programme development.

1.10. RESEARCH DESIGN AND METHODOLOGY

According to Kabanda (2019), a research methodology is a procedural, or step-by-step, outline within which research is conducted. It specifies the method and direction of the research process (Mohajan, 2018). The research methodology adopted in this current study was a mixed-methods approach, using a concurrent triangulation mixed-methods design.

1.10.1. Concurrent triangulation mixed-methods design

According to Almalki (2016), the triangulation mixed-methods design is the combination of data from different sources, or samples, in one study, using different approaches, such as quantitative and qualitative research studies. The triangulation mixed-methods design enables the merging and justification of results that are gathered from different sources, to enhance the scientific validity (Caillaud, Doumergue, Préau, Haas, & Kalampalikis, 2019). The purpose is to provide an in-depth understanding of various perspectives, as well as explain the complexity of the phenomenon, determining what works for whom, and the relevance of the context (Shannon-Baker, 2016).

In this current study, the quantitative and qualitative data sets were collected *concurrently* from different data sources (postpartum women and nurses), followed by a separate presentation and interpretation of the data sets (see Chapters 4 and 5 for more details on data presentations and interpretation). The situational analysis in phase 2 of the Meyer and Van Niekerk (2008) was conducted to provide a complete and accurate description of the research problem.

During Phase 3 of the PDM of Meyer and Van Niekerk (2008), the triangulation of the concurrent mixed-methods design was achieved. The main findings from both data sets were triangulated, using the IMB, in terms of the similarities and differences among the different population groups for the qualitative data. This was followed by the merging of the main findings from the qualitative and quantitative data, visually, according to the IMB model (see Figure 6.1 for further details). The triangulation mixed-methods design further enabled the researcher to merge the main findings (see Table 6.2), by justifying the interpretation of these, based on the available method of promoting PPFP, informed by IMB model, which is relevant for a developing country such as Nigeria.

1.10.2. Phase 1: Preliminary phase of the PDM

In this phase, the researcher dealt with all the necessary documentation, related to the ethical approval for the study, permission from the relevant gatekeepers to gain access to the health facilities, and obtaining informed consent from the prospective respondents. Ethics approval was obtained from the Health and Social Sciences Research Committee of the University of the Western Cape (Appendix 5). Additionally, permission to use the selected PHC centres in the Epe Local Government Area of Lagos State, Nigeria, was granted before the commencement of the study (Appendix 4). Subsequently, informed consent was obtained from the prospective respondents.

1.10.3. Phase 2: Situation analysis phase of the PDM

During this phase, both quantitative and qualitative methods were used to collect data related to the three listed objectives. *Quantitative* data were collected, using proportional sampling, from 297 post-partum women at 6 PHCs in Epe Local Government Area of Lagos state, to address the first two objectives of the study:

- Objective 1: To examine the information received by the postpartum women, regarding the use of PPFP. A structured questionnaire (Appendix 1, sections D, E, F, and G) was the data collection tool.
- Objective 2: To identify the factors that influence the behavioural skills of postpartum women linked to PPFP. A structured questionnaire (Appendix 1, section H) was the data collection tool.

Qualitative data were collected from two target populations, to address objective 3: To explore and describe the motivating factors that professional nurses use to promote PPFP.

The researcher used purposive sampling to recruit 17 staff nurses/midwives, from 3 primary healthcare centres (see Table 3.5), to conduct three focus group discussions. Another three FGDs were conducted at another PHC with 18 nurse managers (Table 3.6). An interview schedule was drawn up to guide the interview process. In Chapter 3, the setting, various populations, respondents/participants, data collection tools, analyses, and rigor or trustworthiness of the study are discussed in detail.

1.10.4. Phase 3: Design phase of the PDM

The quantitative and qualitative data, collected during phase 2, were analysed, and the findings triangulated to inform the design of the training programme for professional nurses to promote the use of PPFP. The Information, Motivation, and Behavioural skill (IMB Model) developed by Fisher, Fisher, and Harman (2003), guided the exploration and analysis of the respondent's/participants' experiences, related to PPFP, to inform the main content of the PPFP training programme for nurses. Further triangulation of the main findings culminated in the final merging of the main findings (see section 6.2). This allowed the researcher to identify relevant concepts/themes for consideration, during the development of the training programme, correspondingly justifying the interpretation, with the available best practices of the interventions used in the promotion of PPFP. Consequently, special attention was given to terms/concepts, such as the agent, recipient, context, dynamics, procedure, and terminus. In addition, special attention was given to the dynamics related to the sources that hinder the promotion of PPFP, as well as the procedure. The latter term/concept refers to the various activities, techniques, or protocols, regarded as fundamental for inclusion in the proposed training programme. Further description of the practice-oriented theory by Dickoff et al., (1968) is provided in Chapter 7.

1.10.5. Phase 4: Development phase of the PDM

The development of the training programme constitutes phase 4 in this current study. The selected content of the training programme was based on the findings from the triangulation of the quantitative and qualitative situational analysis from phase 2. The findings revealed that professional nurses lacked certain skills and abilities to promote PPFP. These challenges included poor communication skills, poor interpersonal relationship skills, the inability to adequately motivate the social group of people (for example, the men, religious and community leaders), as well as the inability to apply

different teaching methods, during health education. In this current study, the content of the training programme constituted five modules, in which the objectives and the expected outcomes were highlighted. The purpose of the training programme was to empower the professional nurses to promote the use of PPFP. More details on the above mentioned is provided in Chapter 8.

1.10.6. Phase 5: Validating phase of the PDM

Validation refers to ways through which the credibility of a research study is established (Kihn & Ihantola, 2015). In this current study, the validation process entailed the continual engagement of the researcher and the supervisors, to check and address any questions that arose. The supervisors critically queried the research process, and also made necessary contributions, to ensure a quality research study, although the validation phase of the PDM by Meyer and Van Niekerk (2008) falls outside the scope of this current study. However, the programme will be validated by experts in the field of family planning, for further evaluation and implementation. More details are provided in section 3.15.

1.11. ETHICAL CONSIDERATIONS

- Confidentiality and Anonymity: All the respondents were assured that strict confidentiality and anonymity would be maintained throughout the research process, as well as after. All the data obtained during the data collection process, were strictly safeguarded, and not linked to the participants/respondents' identities. Before the commencement of the focus group discussions, confidentiality binding forms were signed by the participants. The collected data were secured in password-protected files on computer, with no unauthorised access. Field notes and audiotapes were strictly kept under lock and key. During the focus group discussion data transcriptions, codes were used instead of the participants' names.

- Respect for the person**:** The respondents/participants were informed that their participation was voluntary, and withdrawal from the study, for any reason, would be allowed, without any negative repercussions. Before the commencement of the study, the respondents/participants were provided with detailed information about the aim and objectives of the study, and their individual written consent was requested.

1.12. CONCEPT CLARIFICATION

- Family planning: Refers to the ability of individuals and couples to anticipate and space their desired number of children. This is achieved through the use of contraceptive methods (Yemaneh & Birie, 2017). In this current study, family planning refers to postpartum women's knowledge about family planning, including their attitude towards the use of, and decision to use, family planning.
- Postpartum family planning: Refers to the prevention of unintended, as well as closely spaced pregnancies, during the first year following delivery, by using FP (Hounton et al., 2015). In this current study, this term refers to the initiation of postpartum family planning among postpartum women, within 12 months after childbirth.
- Promotion: Refers to activities that seek to persuade and encourage the improvement of services being delivered, in order to ensure positive outcomes (Widayati & Marta, 2019). In this current study, promotion refers to the nurses' actions that improve service delivery to postpartum women, to influence their positive decision regarding the use of PPFP.
- Programme**:** Refers to a planned intervention, or services (World Health Organization [WHO] 2013. In this current study, the programme involves the outline of activities and processes for the design of postpartum family planning training programmes.
- Training: Refers to a sequence of activities aimed at acquiring more skill and knowledge for the performance of new tasks (Ten Cate et al., 2016). In this current study, it is referred to as those activities that are aimed at equipping the professional nurses and nurse managers with the necessary skills and knowledge needed to promote the use of PPFP competently.
- Training programme**:** Refers to a set of specialised services that involve a variety of activities and training, aimed at imparting skill and knowledge (El Talla, Al Shobaki, Naser, & Amuna, 2017). In this current study, the training programme is the end product, developed to equip professional nurses with the necessary skills and knowledge to promote the use of PPFP.
- Nurse**:** "The nurse is a person who has completed a program of basic, generalized nursing education and is authorized by the appropriate regulatory authority to practice nursing in his/her country." (Crisp, 2018, p. 184).

- Midwife: “A midwife is a person who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title ‘midwife.’” (Crisp, 2018, p. 184).
- Nurse Manager**:** Refers to an experienced senior nurse, who is capable of providing managerial services, in terms of accountability, supervisory responsibility, as well as supportive care to patients (Feather, Ebright, & Bakas, 2015). For this current study, the term, nurse manager, refers to a registered nurse/midwife, who is a senior nurse, with many years of experience, providing family planning services, as well as managerial services.
- Professional nurse: This term refers to a registered nurse/midwife, who has completed a programme of basic general nursing education, and has also acquired the requisite qualifications to be registered, and/or legally licensed to practice midwifery (Crisp, 2018, p. 184). In this current study, the term professional nurse refers to the registered staff nurse/staff midwife, as well as the nurse manager (senior nurse, who also provides managerial services). However, both groups are capable of providing preventive, promotive, and rehabilitative healthcare services, as well as family planning services.
- Information: Refers to facts that are provided, or learned about a phenomenon, or someone (Forster, 2015). In this current study, the researcher refers to information that was conveyed to the PP women, regarding postpartum family planning, in terms of perceived adequacy, uniqueness, and sources.
- Motivation**:** Refers to a phenomenon that inspires a person to action, and anchors him/her in the course of action already initiated (Sandhe & Joshi, 2017). In this current context, motivation refers to the actions initiated by the nurses to influence the behavioural skill of postpartum women towards the use of PPFP.
- Technical competence: This is the application of knowledge and skill that an individual employ in a specific job, to perform a task (Wilson, 2019). Competence is defined as a framework of skills, knowledge, attitude, and psychomotor, which is attributed to practical abilities (Casey et al., 2017). It also involves the ability to engage in a role, which may differ depending on the context (Casey et al., 2017). In this current research, technical competence was referred to as the communication skills that the nurses employ when conveying messages to the PP women, during their various contact

sessions. The understanding and utilisation of different techniques in communication are expected to influence behavioural change.

1.13. OUTLINE OF THE THESIS

The thesis chapters are arranged as follows:

Chapter 1 contains an overview of the study, in terms of the background, problem statement, aim, objectives, and significance of the study.

Chapter 2 comprises the literature review.

Chapter 3 includes the methodology used in the study, based on the various phases of the PDM.

Chapter 4 comprises Phase 2 Exploratory Quantitative Phase – presentation and discussion of findings.

Chapter 5 comprises Phase 2: Exploratory Qualitative Phase – presentation and discussion of findings.

Chapter 6 contains Phase 3: Design Phase – Triangulation of quantitative and qualitative findings.

Chapter 7 includes the application of the Practice-Oriented Theory.

Chapter 8 comprises Phase 4: Development Phase. (Phase 5: Validation of the developed training programme is not within the scope of this current study).

Chapter 9: comprises the summary, limitations, recommendations, and conclusion.

Table 1.1: Overview of methodological framework as executed in the study

Phase 1: Preliminary phase						
Preliminary phase was the introductory period, during which necessary documentation for approval were sought before the situational assessment.						
Phase 2: Situation Analysis (Quantitative study)						
Objectives	**Design**	**Population**	**Sampling method**	**Data collection**	**Sample size**	**Data analysis**
1. To examine the information received by the postpartum women, regarding the use of PPFP.	Concurrent Quantitative design approach	Postpartum women in participating primary health care centre	Simple random sampling technique	Structured Questionnaire	n=319	Descriptive and inferential statistics using (SPSS) version 24
2. To identify factors that influence the behavioural skills of	Concurrent Quantitative design approach	Postpartum women in the participating primary health care facilities	Simple random sampling technique	Questionnaire on factors influencing the behavioural skill of the	n=319	Descriptive and inferential statistic analysis using

postpartum women linked to PPFP.				postpartum woman		(SPSS) software version 24.
Phase 2: Situation Analysis (Qualitative study)						
3. To Explore and describe the motivating factors used by the nurses in promoting the use of postpartum family planning	Concurrent Qualitative Design approach	Nurses that provide family planning services and the Nurses at the managerial level in the participating primary health care facilities	Purposive Sampling technique	Focus group discussion	Staff nurse /midwives n=17 Nurse managers n=18 Total=35	Tesch method of thematic analysis
PHASE 3: Design of proposed training programme						
Triangulation: Merging of quantitative and qualitative findings (Objective 1,2,3) from phase 2 The practice-oriented theory by Dickoff et al., (1968) guided the design of the training programme.						
PHASE 4: Development of training programme: Selection of IMB content to be included						
	I	1. Lack of sufficient method of teaching during health education				
	.	2. Poor communication skill				
	M	3. Lack sufficient strategies to motivate the social group of people for the promotion of PPFP. This is evidence by the poor knowledge of the social group about PPFP				
		4. Poor interpersonal relationship				
	B	**5.** Stressful work situation due to work overload. Evidence by aggressive attitude of nurses				
PHASE 5: Proposed validation of the developed training programme						
		Experts in postpartum family planning	Simple random sampling technique	Interview guide	**N=4**	

1.14. CHAPTER SUMMARY

In this chapter, the researcher presents the background of the study, including the problem statement, which provides up-to-date information regarding the utilisation of postpartum family planning, globally and locally. Consequently, the researcher clarifies the justification for the study. The aims and objectives of the study focus on the development of a training programme for the improved use of PPFP. The researcher describes the paradigmatic perspectives and assumptions, as well as the theoretical assumptions that underpins the research study. In addition, the researcher describes and presents the methodological framework employed, in terms of the various phases. The strategies to ensure ethical considerations are also described. Finally, the researcher committed to outlining an overview of the methodological framework, as executed in the study.

CHAPTER 2

LITERATURE REVIEW

2.1. INTRODUCTION

In this chapter, the researcher provides a review of literature on family planning, postpartum family planning, as well as the intervention used to promote PPFP. The literature review offers a clear view of the research at hand. It pays attention to various approaches, techniques, concepts, and methods used previously, in the related area of interest, and enables the researcher to investigate the existing problem (Chih-Pei & Chang, 2017). The literature review is essential in accomplishing academic research. It confirms the researchability of the research areas (Snyder, 2019).

This chapter is divided into 10 sections. The first section focuses on the overview of family planning. The second section addresses postpartum family planning. The third section addresses the socio-cultural view on family planning, while the fourth section explores the history of family planning education and previous practices. The fifth section discourses nursing education in Nigeria, while the six-section addresses the professional ethics that guide the practice of the nursing profession. The seventh section examines the International Council of Nurse's idea on the *scope of practice*. The eighth section focuses on learning theories, while section nine discourses the assumptions of the behavioural theories. Finally, the tenth section focuses on a literature review of the interventions used to promote PPFP.

2.2. LITERATURE SOURCES

Bibliographies and computer databases such as Ebscohost, Medline (Medical Online Literature), Science Direct from the library in the University of the Western Cape and Academic Search Premier, Cumulative Index for Nursing and Allied Health Literature (CINAHL), including Google Scholar, were utilised, using the following keywords: 'family planning', 'postpartum family planning', 'use of family planning', 'use of postpartum family planning', 'learning', 'promotion', 'health promotion', 'promotion of postpartum family planning', 'training', 'training of nurses', 'training programme'. 'intervention programme', 'intervention programme on postpartum family planning' and 'intervention studies on postpartum family planning'.

2.3. OVERVIEW OF FAMILY PLANNING

At the outset, it is important to elaborate on the term, *family planning*, to prepare the foundation on which this current research rests. By definition, the term refers to *the ability of individuals and couples to anticipate and attain their desired number of children by spacing of their births*, (Çalikoğlu, Yerli, Kavuncuoğlu, Yılmaz, Koşan, & Aras, 2018; WHO, 2014). According to Yasmin and Miyan (2018), family planning involves the provision of effective services that includes adequate information about family planning, as well as courteous attitudinal practices by the provider. It is also considered a fundamental human right, as well as a key intervention in the prevention of unwanted pregnancies (WHO, 2014).

Globally, it is documented that family planning is one of the pillars of reproductive health for the achievement of safe motherhood (Onwurah, Ogu, & Makata, 2019). Access to family planning, is a human right of the female, irrespective of her circumstances (Starbird et al., 2016). Previously, before the advent of modern methods of family planning, people practiced birth control differently, and most of the methods used, were intended to control fertility, which frequently led to sterility or death (Okunade, Daramola, Ajepe, & Sekumade, 2016). Currently, it is estimated that, internationally, 9 out of 10 people, who use family planning, depend on modern methods of family planning (Rabiu, 2018). However, studies indicate that, in sub-Saharan Africa, only 6.1% of reproductive-age women, who are in unions, use traditional methods of family planning, while 15.7% rely on modern methods of family planning (Rabiu, 2018).

There are *three methods* of family planning, namely, the traditional method, the natural method, and the modern methods (Maxwell, Devries, Zionts, Alhusen, & Campbell, 2015). The *first method* (traditional method) include practices that are passed down from generation to generation. It involves the use of medicine that is prepared by the traditional medicine man, such as herbs and concoctions, along with some rituals. It also includes the lactational amenorrhea method, coitus interruptus (withdrawal), and abstinence (Rabiu, 2018). The *second method* (natural method) involves birth control based on fertility awareness. It does not require the use of any devices or pills. It only requires the ability of the woman to keep track of her fertile days. This includes the rhythm method, cervical mucus or ovulation method, basal body temperature (BBT) method, and the Sympto-thermal method (Henry J Kaiser Family Foundation [KFF], 2018). *The third method* (modern methods) relates to the use of pills and

devices. This method includes combined oral contraceptives (COCs), or *the pill*, Progestogen-only pills (POPs), or *the mini-pill*, implants, monthly injectables, the patch, male and female sterilization, intrauterine devices, diaphragms, and emergency contraception (Ewerling, Victora, Raj, Coll, Hellwig, & Barros, 2018). Other method of modern methods includes vaginal rings, sponge and spermicidal agents in the form of gels, foams, creams, and suppositories (Hubacher & Trussell, 2015).

Studies indicate that the use of family planning averts maternal and infant mortality. For example, the study, conducted by Islam (2018) on factors affecting modern contraceptives among fecund young women, revealed that the use of family planning averts 272,040 maternal deaths. Similarly, a 2012 analysis of data from 172 countries revealed that, in developing countries, the use of family planning averted 44% of maternal deaths, including a 10% reduction of infant mortality, and 21% of childhood mortality (Tessema et al., 2017). However, despite the above-stated benefits of family planning, a great number of women continue to die, because of pregnancy and childbirth-related causes. Globally, it is estimated that maternal death in 2017 remained extremely high, with approximately 295 000 deaths during pregnancy and after childbirth, of which 196 000 of these deaths occured in sub-Saharan Africa. Similarly, a high number of these death (94%) occured in low-resource settings (WHO, 2019).

A demographic and health survey, on the percentage use of family planning by currently married women in Nigeria, one of the developing and populous countries in Africa, revealed an approximate 17% prevalent use of family planning (NPC, 2019). This number is significantly low for such a vast and populous country; however, this is the desired situation, and not a lack of awareness (Fagbamigbe, Adebowale, & Morhason-Bello, 2015). One documented reason, which explains why most women engage in uncontrolled childbearing, especially in the rural setting, is that they expect the children to provide additional help in their old age, in terms of a helping hand on the farm, especially as agriculture is their major source of livelihood (Rabiu, 2018).

According to Aychiluhm, Tadesse, Mare, Abdu, and Ketema (2020), closely spaced pregnancies, and the consequences of unwanted pregnancies remain the leading causes of infant and maternal mortality, which negatively affect the developing nation, especially among the reproductive age group. The woman, therefore, needs to engage in healthy timing and spacing of her pregnancies, to achieve a healthy pregnancy outcome. Healthy spacing and

timing of pregnancies is defined as “an approach to family planning service delivery that helps women and couples make an informed decision about delaying the first pregnancy until age 18, and timing (delay/limit) and spacing subsequent pregnancies for the healthiest outcomes for mother and baby” (Agida, Akaba, Ekele, & Isah, 2016, p. 57). The Sustainable Development Goals 3.7 and 5.6, in its global call, acknowledge family planning as a tool to achieve universal health for all, including universal access to sexual and reproductive healthcare services (Starbird, Norton, & Marcus, 2016).

The idea of sexual and reproductive health was highlighted during the 1994 international conference on population and development, and the definition of reproductive health was identified “as a state of complete, physical, mental, and social wellbeing and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes” (Chandra-Mouli, Svanemyr, Amin, Fogstad, Say, Girard, & Temmerman, 2015, p. 51). It is important to mention that maternal morbidity is defined by the United States Agency for International Development [USAID] (2014, p. 34) as “any health condition attributed to and/or aggravated by pregnancy and childbirth that hurts the woman’s wellbeing”. In light of the above, it could be concluded that family planning has a reversible relationship with good health. This implies that the greater utilisation of the family planning method, reduces the rate of maternal morbidity and mortality, while the contrary contributes to morbidity and mortality.

A study conducted by Eltomy, Saboula, and Hussein (2013), on the barriers to the utilisation of family planning services among rural Egyptian women, highlights a lack of vital information about family planning, as well as poor provider attitude, and meager services rendered by the family planning providers, even though the women are in dire need of detailed information, to help them make informed choices, for possible prevention of unwanted pregnancies. Similarly, a study conducted by Handady, Naseralla, Sakin, and Alawad (2015), among women attending primary healthcare centres in Sudan, on the knowledge, attitude, and practice of family planning, reported that, although 87.0% of the women had heard of family planning, its usage remained low.

2.4. POSTPARTUM FAMILY PLANNING

Postpartum family planning refers to the initiation of family planning within the first 12 months following delivery, to prevent unwanted pregnancies (Gaffield et al., 2014; Demie, Demissew, Huluka, Workineh, & Libanos, 2018). The majority of women are prone to the vulnerability of unwanted pregnancies, shortly after delivery, due to sexual intercourse, especially when they are unable to track their fertile period (Anzaku & Mikah, 2014). It has been observed that a woman, who engages in consistent and exclusive breastfeeding for at least 6 months following birth, may experience amenorrhea, which is a family planning method that serves to prevent pregnancy. However, those who are not devoted to breastfeeding, would be exposed to the risk of unwanted pregnancy (Sridhar & Salcedo, 2017). Frequently, during this period, the use of family planning is very low (Bwazi, Maluwa, Chimwaza, & Pindani, 2014). The contrast is that many postpartum women want to postpone subsequent pregnancies; however, they do not usually use family planning at this critical period, as they do not envisage ovulation before 12 months have passed (Bwazi et al., 2014). In Nigeria, approximately one-quarter of births have a birth interval that is less than the recommended 24 months (Schwandt et al., 2017). A child, whose preceding birth interval is between 18 and 23 months, is more susceptible to death, than one with a preceding birth interval of more than 60 months (Tariku, 2019).

In keeping with the above, it is of great importance to address the reason/s for the use, or disuse of family planning among postpartum women, especially in the rural setting, where the fertility rate is high, and the use of family planning is minimal. According to Fenny, Enemark, Asante, and Hansen (2014), most healthcare providers lack adequate care for their clients. The findings of a study conducted by Chavane, Dgedge, Bailey, Loquiha, Aerts, and Temmerman (2017) on the assessment of women's satisfaction with family planning services, confirm that most women complain about not receiving the required care. In addition, the women complained about not receiving appropriate and respectful care. This situation has the adverse potential of exacerbating the unwillingness of women to seek care at health facilities. The nurse's poor interactions with the women, in most of their various contact, influence the women negatively, and creates a dissatisfaction and antipathetic feeling (Chavane et al., 2017). Similarly, Kieft, de Brouwer, Francke, and Delnoij (2014) assert that the above-stated repulsive expression of patients' experiences could be defined as a rethinking of what transpired throughout the period of care.

In light of the above, the utilisation of postpartum family planning issues, and the role of the nurses, it could be concluded that a real need exists to provide women with the necessary support, to ensure their compliance to use family planning, especially the postpartum women, who belong to the vulnerable groups.

2.4.1. Unmet need of postpartum family planning

Studies estimate that approximately 222 million women have an unmet need for family planning (Gebre, Birhan, & Gebreslasie, 2016; Machiyama et al., 2017). The concept of unmet need for family planning highlights the disparities between reproductive intentions, and their contraceptive behaviour. Women with unmet needs are those, who are sexually active, without using any method of contraception, while reporting the desire to delay the conception of more children, or cease further childbearing (World Health Organization [WHO], 2021).

As mentioned in the previous section, available literature revealed that 91 percent of postpartum women desire to space, or limit subsequent pregnancies. Among this group, 70% do not use family planning, while only 30% of them do, besides the unmet need that ranges from 25% to 96% (Pasha et al., 2015). This may account for the high level of unmet need for postpartum family planning. In developing countries, it has been observed that approximately 225 million women would like to adopt, or cease childbearing, but they fail to use any method of family planning (Silumbwe et al., 2018). The reasons for this may be due to various factors, such as limited choice of various methods, fear of side effects, cultural or religious opposition, poor provider system, gender-based barriers, limited access to family planning, particularly the poorer groups, for example, those living in the rural settings, or the unmarried (World Health Organization [WHO], 2020).

2.4.2. Information about postpartum family planning

Information is also known as knowledge, given to, or received by, an individual, which should be true, adequate, and thoughtful enough, for the receiver to make an intellectual decision (Forster, 2015). In the nursing profession, information plays a vital role in evidence-based practice (Nursing and Midwifery Council of Nigeria [NMCN], 2019). According to Forster (2015), information learning for nurses is fundamental to knowledge creation and decision-making abilities. In this perspective, the Nursing and Midwifery Council of Nigeria [NMCN] stipulates that it is the responsibility of nurses to

deliver active and evidence-based nursing care information to their clients, for a better health outcome (NMCN, 2014). Equally important, Babalola, Babalola, and Oladimeji (2012), as well as Kio, Agbede, Olayinka, and Ojinni (2016) assert that family planning information remains one of the reproductive health rights of the client. Abdulreshid and Dadi (2020) assert that postpartum family planning services, which are disjointed, coupled with poor provider-client communication, greatly affect the utilisation of postpartum family planning.

Historically, studies have revealed the use of postpartum family planning as persistently low (Dev, Kohler, Feder, Unger, Woods, & Drake, 2019; Hounton et al., 2015). Currently, it is important to highlight that the decision to use, or not to use, any method of family planning is dependent on the adequacy of the information received about family planning; therefore, any hints of fabricated and inadequate information are limitations to the use of family planning (Etukudo, 2015). Akben, Sonmez, and Kiran, (2017) conducted a study on the sources of information and observed that only 16.2% of the respondents received family planning information from public health centres, 13.7% from doctors, 9.8% from the media, and 43.3% from nurses/midwives, while 36.5% received the information from their relatives.

It has been reported that women, who are exposed to better information about postpartum family planning, have four times the opportunity to use postpartum family planning, compared with those, who lack information (Kaydor, Adeoye, Olowolafe, & Adekunle, 2018). This optimistic relationship between good knowledge about family planning and its use is also confirmed by other studies (Moore, Pfitzer, Gubin, Charurat, Elliott, & Croft, 2015). In this context, the source of family planning information is referred to as a place, or person, from which, or whom, the woman received information about the family planning method (Alege, Matovu, Ssensalire, & Nabiwemba, 2016). In a study conducted by Naanyu, Baliddawa, Peca, Karfakis, Nyagoha, and Koech (2013) on the examination of postpartum family planning uptake, the source of information through which the postpartum women received family planning information was majorly the radio. The study also revealed 88% of missed opportunities to deliver the correct information. The same study revealed that some women, who were willing to use family planning, did not receive adequate and consistent advice, in most of their several contacts with the family planning provider (Naanyu et al., 2013). Another study on the prevalence

and determinants of contraceptive use in rural Northeastern Nigeria, confirmed the above findings, and reported that the current use of contraceptives was 26%, and the major sources of family planning information were the radio, friends, and women, who were educated at the facility (Kana et al., 2016).

Bwazi et al., (2014) conducted a study to investigate the factors that were associated with the utilisation of postpartum family planning services between six and twelve months of delivery. Of the 383 postpartum women, who participated in the study, 24.4% were informed about lactational amenorrhea (LAM), 2.6% were familiar with standard day methods, 1.6% knew about emergency contraceptives, 4.7% about the natural method of family planning, 5% reportedly received information on the transition from LAM to other family planning methods, and 10% had information on fertility return (Bwazi et al., 2014). In all these various methods, only injectables and implants were mentioned by most of the respondents, and none of them were informed about the female condom and vasectomy. According to the study, the sources of information revealed the percentages of those, who received the information before delivery, as well as after delivery. A total number of 386 respondents participated (193 in the antenatal clinic, and 193 in the postnatal ward). Subsequently, it was documented that 74% of 193 (143) received the information before delivery, in the antenatal clinic, while 54.4% of 193 (105) received the information after delivery, in the postnatal ward (Bwazi et al., 2014).

2.4.3. Factors that influence the use of postpartum family planning

Globally, according to Mehare, Mekuriaw, Belayneh, and Sharew (2020), the use of postpartum family planning remains extremely low. In sub-Sahara countries, its utilisation is inconsistent, for example, in Nigeria only 15% of postpartum family planning is utilised, less than 10% in Ethiopia, 20% in Tanzania, 25% in Kenya, while in Zambia it is 40% utilisation. Various studies have investigated and highlighted a considerable host of factors that negatively influence the use of postpartum family planning. The reasons range from inadequate services by family planning providers, to myths, misconceptions, partner opposition, religious beliefs, as well as cultural opposition (Jennifer, Ibrahim, Mat, & Jan, 2020; Kaydor et al., 2018). Equally important, a study conducted by Ackerson and Zielinski (2017) in sub-Saharan Africa, focused on factors that influence the use of family planning. Their findings revealed a low utilisation

of family planning, with reasons that included the lack of trust and low socioeconomic status.

The findings of a study conducted by Dansereau et al., (2017) on the perception of, and barriers to family planning services in the poorest Chiapas, Mexico, revealed that 50% of women, who wish to engage in family planning, do not use any method of family planning. Their interest in family planning was mainly because they were concerned about unwanted pregnancies. However, they failed to use any family planning methods because of a lack of detailed information about family planning, especially the side effects of the various methods. Apart from reasons mentioned previously, poor knowledge about family, as well as low educational attainment, should also be added to the list (Fleming et al., 2019).

West et al., (2017) revealed that some of the barriers to the use of family planning are not only incompetent service providers and cultural barriers regarding fertility, but also negative experiences with the providers, for example, the nurses. It was suggested that, to achieve quality family planning healthcare, a need exists to train the providers, particularly the nurses, on the proper approach, while providing healthcare services to their clients. In support of the view, regarding the health information needs of the client, Kamali, Ahmadian, Khajouei, and Bahaadinbeigy (2018), in their study on women's health information needs, stated that it is the responsibility of the healthcare provider to consider the client's needs, their level of understanding, and the clarity of information, when passing on health information. Similarly, this is required to promote positive health behaviour (Wasike & Tenya, 2013).

However, contrary to this claim, the majority of the respondents corroborated being treated with disrespect in the health facility, the lack of adequate information, as well as the poor knowledge and understanding of FP, with many believing that certain methods of FP could cause harm. All these contributed to the negative motivation in clients to the use of FP. A further explanation for the women's avoidance of healthcare services, is the fact that most healthcare providers are unfriendly and insensitive, and the waiting times are interminable (Olasunkanmi & Olorunsola, 2018). Consequently, it was suggested that unless the issue of disrespect, by the nurses or midwives and other health providers, are addressed, there might not be sufficient improvement in the utilisation of FP (Ackerson

& Zielinski, 2017). This justifies the need for interventions to address the attitudinal behaviour of the midwives, regardng the motivation of clients.

2.4.4. Motivation leading to behavioural change in postpartum family planning

"Motivation refers to how urges, drives, desires, aspirations, and strivings or needs direct, control or explain the behaviour of human beings" (Sandhe & Joshi, 2017, p. 7). According to Robert Dubin (1974, p.100), "Motivation is the complex forces starting & keeping a person at work in an organization. Motivation is something that moves the person to action, & continues him in the course of action already initiated."

Nimbalkar (2017, p.187) explains that the term, *motivation*, involves "aims", "goals", and "motives". All these form the driving force that activates, directs, and sustains human behaviour. Similarly, motivation can be stimulated through a range of teaching activities such as discussion method, simulation, role-playing as well as problem-solving (Nalevska, & Kuzmanovska, 2020) Such transaction significantly influences the students' intrinsic motivation and determination Han & Yin, (2016)

Consequently, Lack of motivation for educational process are a result of inadequate teaching method which can be described as inappropriate choice of teaching activities and learning styles (Nalevska, & Kuzmanovska, 2020). This simply indicate that motivational strategies of providing information by the nurses through range of teaching activities as well as effective teaching styles has the capability to promote and influence the intrinsic motivation of the PP women to use PPFP

Motivation is also concerned with the activities that can arouse and guide behavior, a process whereby goal-directed activity is instigated and sustained. Though, motivation cannot be directly measure or validated but, there is a causal factor that influences an individual to take a particular action and that something is the motivation (Sogunro, 2015). An effective teaching approached transactions is a motivating factor that can arouse and instigate behavior towards achieving a specific goal, because there is a reciprocal relationship between teaching approach transaction and motivation (Sogunro, 2015).

The role of the nurses as PPFP providers, remains paramount in ensuring the willingness of the PP woman the use of FP (Puri et al., 2018). Significantly, the motivating strategies to enhance the promotion of PPFP include career development for the provider of family planning services, such as the nurses (Thapa et al., 2018). Therefor empowering the nurses on different motivational strategies including different teaching and learning

approach such that they are able to arouse the interest of the PP women would serve as a motivating driving force in promoting the use of PPFP. Additionally, engaging the postpartum women and their partners on issues that relate to PPFP, as well as giving women their due right to FP information, play a major role in motivating them to use PPFP (Tran et al., 2018).

In general terms effective communication is a motivational driving force that is capable of promoting human needs and improving interpersonal relationship. It also has a very important role in enhancing behavioral change (Bucata, & Rizescu, 2017).

According to Cook and Artino (2016, p. 998), motivation is defined as "the process whereby goal-directed activities are instigated and sustained". Only a well-stimulated and motivated client could significantly internalise the need for a positive behavioural change (Peeters, Rijk, Soetens, Storms, & Hermans, 2018). This implies that motivation is goal-oriented, and entails initiation and continuity of the event, to achieve a desirable result. In a real sense, it entails the communication that exists between two individuals or more, among a particular social group of people (Cook & Artino, 2016).

Motivation is a concept used to describe the initiation, intensity, perseverance, and goal-oriented behaviour, which encourages an individual to act (Buckley & Doyle, 2016). Considering the abovementioned components of motivation, indicates that the decision of the postpartum woman to initiate a behaviour change, requires a driving force. Consequently, the driving force that motivates the woman is guided by her need, attitude, and beliefs, while such motivation is a reflection of evidence-based information that she has acquired (Epley & Gilovich, 2016). The information an individual receives has a great impact on how s/he is motivated (James & Van Ryzin, 2016). One significant fact is that motivation is the stimulus to move into action, which implies that it is the driving force, which encourages an individual to take specific action, to achieve the necessity of human needs (Cook & Artino, 2016).

Motivation can either be intrinsic or extrinsic. Intrinsic motivation arises from within the individual, while extrinsic motivation arises from outside, or is initiated by external factors (Buckley & Doyle, 2016). A study conducted by Sanderson et al., (2016), on motivations, concerns, and preferences of personal genome sequencing research respondents, revealed that 57% of the respondents acknowledged privacy as a motivating factor. The study also revealed that some of the respondents reported one of the

motivating factors as the provision of adequate health information that addresses the benefits of the action, to equip them psychologically for positive health action (Sanderson et al., 2016).

This conforms with the concept of information, motivation, and behavioural skill (IMB) model, which maintains that an individual need to be informed about s/he health situation, as well as motivated to make a change, while being behaviourally skilled to adjust that behaviour, to achieve a positive healthy habit (John, Walsh, & Weinhardt, 2017). A wide range of studies have highlighted various ways to enhance the motivation of clients towards better health outcomes, for example, the use of text messages has had a positive impact on the behavioural change of the client (Heng, Gupta, & Shaw, 2018). Others include the *persuasive motivational technique* that involves a communication approach, with the goal of ensuring behavioural changes, which could lead to the promotion of health, as well as the prevention of harmful health practices (Orji & Moffatt, 2018).

Apart from simply being persuaded or convinced, motivation also requires incentives (Cook & Artino, 2016). In the study conducted by Wlodkowski and Ginsberg (2017) on enhancing adult motivation to learn, some of the approaches used include, creating a safe learning environment, carefully presenting the task, setting goals, and gaining knowledge about the people's culture, to promote cooperation. Additionally, the provision of a conducive environment, in which a skillful and knowledgeable nurse is required to improve motivation (Kieft et al., 2014), is imperative. This simply illustrates that the client, who is the PP woman, becomes motivated, when the topic piques their interest.
Similarly, in a study conducted by Batalden et al. (2016), on the coproduction of healthcare services, the authors highlighted some motivating strategies to improve healthcare delivery between the provider and the consumer of healthcare services. These include shared decision making, patient engagement, patient activation, including good interpersonal relationships. The relevance of this simply indicates the core responsibilities of the healthcare provider, to involve the client as a co-partner, and allow the client to participate in, as well as negotiate the course of health services, including the application of problem-solving ability, while engaging with the client. The goal is to empower the client to engage in joint decision-making for positive health behaviour

outcomes, as well as ensure client satisfaction (Batalden et al., 2016; Filipe, Renedo, & Marston, 2017).

However, studies have equally revealed that most of the providers of family planning services lack certain motivational strategies to influence postpartum women on the use of PPFP. For example, Puri et al., (2018) revealed that the PPFP providers, including the nurses, lack certain motivational strategies, such as the lack of providing adequate information to the postpartum women, during the counselling process. Similarly, Thapa et al., (2018) confirms that the poor nature of the provider-client relationship is an associated factor to the low use of PPFP

2.4.5. Health education in PPFP services

Health education is defined as the campaign of health, using educational-motivated systems for possible behavioural changes (Hwang & Kuo, 2018). It refers to all combinations of planned learning experiences, based on sound theories that provide individuals, groups, and communities, the opportunity to acquire the information and skill needed to make quality health decisions (Sharma, 2021). To ensure standardisation in professionalism, ethical knowledge and skills are required in the process of health education practices (Viens, Vass, McGowan, & Tahzib, 2020). Health education is an essential component in the promotion of PPFP, and is associated with decreasing negative health practices. However, competence is required for the effective promotion of PPF. Competence is defined as the incorporation of knowledge, skill, and educational empowerment in professionalism, to accomplish behavioural changes. The exhibition of competence during health education, remains a vital tool, if the PP women are to adhere to the advice that will yield positive health-related results. However, the understanding, as well as exhibition of this vital tool, are lacking among most healthcare professionals, particularly nurses (Hwang & Kuo, 2018). Besides, education boosts health literacy, generally with a combination of various teaching methods and teaching processes (Dudley, Cotton, & Peralta, 2015; Sari & Osman, 2015). Therefore, to ensure good health education in the promotion of PPFP, the nurse's activities should be re-evaluated and the nurse encouraged to engage in a back-and-forth decision-making process, to ascertain the need for change to better teaching methods and teaching processes.

Studies have revealed that appropriate health education improves the utilisation of services, such as family planning services, by the client, facilitating behavioural change and reducing the span of hospital stay (Sari & Osman, 2015). Additionally, health education is crucial, and should be well-thought-out, when considering positive client health outcomes (Przybylska, Borzęcki, Drop, Przybylski, & Drop, 2014). It is regarded as one of the tools to determine competence in nursing practice for improved healthcare; however, the competence to render health education is still lacking among professional nurses, which accounts for the meagre understanding of health education competence among healthcare providers, inadequate information, dearth of skill, and lack of etiquettes (Salama, Abdalla, & Tanyous, 2015). Furthermore, there is an omission of family members and relatives in the course of health education, including a dearth of self-confidence, which is a result of inadequate knowledge, poor organisation of education, as well as the lack of teaching skills (Hwang & Kuo, 2018).

2.4.6. Communication skills in PPFP services

Communication is the exchange of information between people. It involves sending and receiving a message(s), either by speaking, writing, or through other media. The aim is to notify, arouse interest, demand, explore, and update. Creating good human communication remains an ethical value in nursing care **(**Hosseinabadi, Momtaz, Shahboulaghi, Abbaszadeh, Kamrani, & Pournia, 2020). In the nursing profession, communication is an integral aspect that has an impact on health outcomes (Sibiya, 2018). Therefore, to achieve effective communication for the promotion of PPFP, the application of professional technical competence, as well as effective communication skills are required. Communication skill is an essential nursing tool that is centred on two keystones, which are, *patient safety* and *quality of care* for better health outcomes (Carr, 2017). The skill involves the ability of the nurse to convey information effectively, and efficiently. The understanding and utilisation of different techniques in communication, both verbal and non-verbal, comprises a variety of features such as, eye contact, gestures, good tone of voice, and effective listening skills, which provides an essential platform for communication in professional practice (Sheth, 2017). Additionally, clarity of information, including a feedback mechanism, as well as the sensitivity of a good interpersonal relationship, offers a vital foundation for effective communication (Nwabueze & Mileski, 2018). Similarly, addressing the needs of the PP women and solving their family planning dilemmas, entails the utilisation of knowledge, and depends

on the ability of the nurse to communicate the essential PPFP health information, using effective communication skills (Kilugwe & Ruheza, 2018; WHO, 2013). The application of relational skills, such as respectable verbal communication, good listening skills, operational persuasive skills, basic creativity, teamwork, and active coordination, is vital in clinical practice (Doyle, Lennox, & Bell, 2013). Studies revealed that effective communication enhances positive health outcomes, while inadequate communication could be unsafe and lead to medical errors (Kilugwe & Ruheza, 2018; Sibiya, 2018).

Despite the relevance of communication in the nursing profession, it is documented that nurses do not communicate well with their clients, the clients' family members, and their colleagues (Sibiya, 2018). It is important to note that communication has to follow basic clinical principles in nursing, such as respect for other persons, as well as providing clear information (Turan, 2020). Most importantly, it is circular and not linear. It is complex, irreversible, and involves a total personality (Sibiya, 2018). However, there are barriers associated with communication, including language barriers, cultural differences, conflict, deciding on which care is rendered, internal noise and external noise, mental distress, perception, as well as difficulty with speech and hearing (Sibiya, 2018).

2.5. SOCIO-CULTURAL VIEW ON FAMILY PLANNING

Based on multiple related studies on postpartum family planning, it could be concluded that any decision about the understanding of family planning and postpartum family planning also relies on the understanding of the immediate environment of women (Bibi, Shoukat, Maroof, & Mushraf, 2019; Paulus & Lette, 2019). The environment concern in question is the society, in terms of the rural and urban environment, where religion and traditional values are very important factors in decision-making, regarding the use of family planning (Aawan, Shah, & Ali, 2018). There have been numerous reflections of the religious and cultural influence on family planning, when traced back to the earlier times. For example, the Jewish, Roman Catholic, Protestant, Islamic, Hindu, and Buddhist faiths, all have their various concerns about the social norms and behaviour of the people, regarding the use of family planning (Salam & Latif, 2017).

Religion is a unified system of beliefs and practices, which is comparable to being sacred, implying that certain things are set apart and forbidden (Norenzayan et al., 2016). This religious

practice that cuts across nations is recognised as a binding principle for human existence. Consequently, it should be noted that socio-cultural values remain an influential factor in reproductive health matters, particularly in family planning decisions (Paulus & Lette, 2019). Its impact in most societies could either hinder, or improve the use of family planning (Bakibinga, Mutombo, Mukiira, Kamande, Ezeh, & Muga, 2016). For example, the Roman Catholic faith maintains that any exposure to sexual activities in a mutual relationship demands procreation. In the same vein, religion forbids the use of family planning methods (Bakibinga et al., 2016).

In Nigeria, three main religions are licit, namely, Christianity, Islam, and African Tradition religion, which are predominantly practiced in the country (Alao, 2017). The Islamic religion, which dates back to the 11th century by the Islamic scholar, is the earliest in the country, through the Kanem-Bornu Empire, among the Hausa speaking communities, while Christianity permeated Nigeria in the 15th century, particularly through the Roman Catholic missionaries (Ntamu, Abia, Edinyang, & Eneji, 2014). Several studies have identified the socio-cultural influence on reproductive health issues, for example, it is revealed that religion and culture, particularly, influence the decision of women to use family planning methods (Paulus & Lette, 2019; Sundararajan et al., 2019).

2.6. HISTORY OF FAMILY PLANNING EDUCATION AND PRACTICES IN THE PAST

History is defined as the study of past and present events (Egenes, 2017). It emphasises the manner in which the past influences the present, as well as how the new trend shapes the destiny of people (Egenes, 2017; Van Straaten, Wilschut, & Oostdam, 2018). In retrospect, during the primitive period, when human beings essentially engaged with natural remedies in their struggle for survival, especially when faced with challenges, such as unwanted pregnancies, the women were educated to utilise roots, leaves, fruits, or a combination of these (Chikezie & Ojiako, 2015; Falah & Hadiwibowo, 2017). During the Middle Ages, before the advent of modern methods of family planning, women were informed by people in the community about various family planning practices, usually without any regulation or control (Rabiu, 2018). According to Rabiu (2018), neither were there any medical interventions. For example, in China, the women were told to drink lead and mercury to control fertility (Okunade et al., 2016). Magicians in Europe advised the women to wear the testicles of a weasel on their thighs, or hang their amputated foot around their necks (Planned Parenthood Federation of America

[PPFA], 2015). Besides, the use of charms and amulets were used for the prevention of unwanted pregnancies in most societies of the world (Moroole, Materechera, Otang-Mbeng, & Aremu, 2020). In some locations, they made use of flax lint tied in a cloth and soaked in menstrual blood (Okunade et al., 2016). The history of family planning education and practice does not only reveal the primitive nature of the people, but it also exposes women to various health risks, such as infertility and death (Okunade et al., 2016).

By the late 19th century, the journey of modern family planning commenced in the medical field, and in 1939, the Family Planning Association was born (Stacey, 2018). Their main aim was to advocate for the promotion of family planning, although its acceptance ever since, has always been opposed by so many factors, ranging from religious bodies, as well as some individuals, like men, especially in a male-dominated culture (Kriel et al., 2019; Sundararajan et al., 2019). Apparently, the belief was that family planning encouraged infidelity in women, madness, and sterility (Adofo, Dun-Dery, Kotoh, Dun-Dery, Avoka, & Ashinyo, 2021; Kriel, et al., 2019). Even at present, in the face of persistent challenges, either from society or individual belief, family planning is recognised as one of the vital pillars in reproductive health for reducing maternal mortality (Onwurah et al., 2019; United States Agency for International Development [USAID], 2020).

2.7. NURSING EDUCATION IN NIGERIA

The 19th century marked the beginning of the nursing professional training education in Nigeria, specifically in 1914, after the amalgamation of the colony and protectorate of Nigeria (Nursing and Midwifery Council of Nigeria [NMCN], 2018; Abdullahi, Ghiyasvandian, Shahsavari, & Imanipour, 2019). The move was made possible, when the British graduate missionaries from Florence Nightingale School of Nursing, initiated the training of nurses in Nigeria (Sweet & Hawkins, 2015). Although the missionary training schools at commencement had no proper structured training curriculum, gradually progress was made, and more training schools were established in different regions in the country (Wall, 2018). The aim was to meet the increasing nursing healthcare needs of individuals and families in society. Subsequently, in 1930, the midwife's ordinance was established, to regulate midwifery education and practice in Nigeria. Seventeen years later, the Nursing Council was established for the registration of the nurse's ordinance, to regulate nursing education (Thompson, Afolabi, & Nwaorgu, 2019).

However, the two bodies were eventually merged, under decree 89 of 1979, and have since been referred to as the Nursing and Midwifery Council of Nigeria (NMCN, 2018).

The training programme in Nigeria is regulated by the Nursing and Midwifery Council of Nigeria (NMCN), and the body works in association with the National University Commission (NUC). Additionally, the NMCN is the only statutory body that undertakes certain responsibilities on behalf of the federal government of Nigeria, to control the activities of nurses, including the legislative, administrative, and educational affairs (NMCN, 2018). A regulatory body is responsible for the accreditation of education, setting standards for education, and assuring the quality of education, while it also plays a role in continuing professional development, and assessing competency before registration (World Health Organization [WHO], 2018). The core responsibilities of the NMCN includes: the accreditation of schools of nursing and midwifery, including the post-basic schools of nursing; indexing of students; assessment of competence; licensure; as well as registration of the professional nurses (NMCN, 2018). An educational system, under a regulatory body, has the potential to influence a better health outcome (WHO, 2018).

In Nigeria at present, two levels of entering into nursing education exist, these are the hospital-based and university-based, both having the same entering qualification which is five 'O' level credits in English, Mathematics, Biology, Physics, and Chemistry, which is also in conformity with the standard requirements by the International Confederation of Midwives (Abdullahi et al., 2019; Ukaigwe, Nnabuenyi, Nwafor, & Louis-Egbuchiem, 2020). It is anticipated that the single qualified nurse or midwife should have completed a three-years basic nursing or midwifery programme, while a double qualified nurse-midwife should have completed an additional 18 months, to the initial basic qualification (Oyetunde & Nkwonta, 2014).

Previously, the highest qualification that nurses could obtain, within the scope of hospital-based education, has remained at the level of certificate, irrespective of the continuous evaluation of the curriculum (Ayandiran, Irinoye, Faronbi, & Mtshali, 2013; Dolamo, & Olubiyi, 2013). For many years, hospital-based education has experienced a sluggish progression in the nursing profession (Ayandiran et al., 2013), which is a clear reflection of the fact that the majority of the nurses lack what it takes in career progression. Besides, the greatest challenge has been the limited number of universities that offer nursing degree programmes in Nigeria (Ayandiran et al., 2013), and taking nursing education to the university setting is a

global agenda (Ayandiran et al., 2013). Currently, in Nigeria, 76 hospital-based training nursing schools exist, as well as 27 post-basic nursing schools, 21 university-based nursing training programmes for a bachelor's degree, 9 universities offering masters, and 5 universities that offer doctorate programmes (Emelonye, Pitkäaho, Aregbesola, & Vehviläinen-Julkunen, 2016). The nursing education programme, discussed above, appears to be incomplete without the family planning training programme, which the following section addresses.

2.7.1. Family planning training programme in Nigeria

The family planning training course in Nigeria, offered in the midwifery programme, is reviewed by the regulatory body, which is the Nursing and Midwifery Council of Nigeria [NMCN] (Oyetunde & Nkwonta, 2014). The course is embedded in the midwifery curriculum of which Midwifery is a profession which focuses on the care of women during pregnancy, labour, postpartum period including family planning (Nursing and Midwifery Council of Nigeria [NMCN], 2016; Oyetunde, & Nkwonta, 2014). Midwifery is a professional programme, in which the individual is trained to provide sexual and reproductive healthcare services to the woman, in preparation for womanhood, pregnancy, labour, and the postpartum period. It also includes the provision of family planning services, as well as essential newborn care (Oyetunde, & Nkwonta, 2014).

The International Confederation of Midwives [ICM] define a midwife as, a person who has successfully completed a midwifery education programme that is based on the ICM essential competencies for basic midwifery practice, as well as the framework of the ICM global standards for midwifery education, and is recognized in the country where it is located, Additionally, a midwife is a person, who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery, use the title, midwife, and demonstrates competence in the practice of midwifery (International Confederation of Midwives [ICM], 2017). Another definition by ICM/ICM/FIGO (cited in Borrelli, 2014, p. 4) is that "the midwife is recognised as a responsible and accountable professional, who works in partnership with women, to give the necessary support, care, and advice during pregnancy, labour, and the postpartum period, to conduct birth on the midwife's own responsibility and to provide care for the newborn and the infant."

During the midwifery programme, the student midwives are also exposed to six (6) weeks of clinical experiences in family planning with Planned Parenthood Federation of Nigeria

(PPFN, 2020). This exposure is aimed at equipping the student with further clinical experience. PPFN is a non-governmental organization [NGO], and one of their services is to provide sexual and reproductive health training, which involves family planning. The unique concept of the family planning training is to equip the individual nurse with knowledge about the fundamental family planning needs of the client, through which the theoretical exposure prepares the student with the necessary skills, knowledge, and morals, required to achieve an effective clinical practice to individuals, family, and the community (Anarado, Agu, & Nwonu, 2016; Bogren, Rosengren, Erlandsson, & Berg, 2019). According to Dobrowolska et al., (2015), clinical preparation is necessary to equip the nurses with technical competency. Similarly, according to Saifan, AbuRuz, and Masa'deh (2015), clinical education is fundamental to nursing teaching; however, they add that a disparity exists between theoretical exposure and clinical practice.

It is pertinent to note that midwifery practice in Nigeria, which includes family planning education, is still below standard (Oyetunde & Nkwonta, 2014). Despite the series of exposure to theory and clinical preparation in nursing education in Nigeria, a disparity still exists between what is obtainable in theory, and clinical practice (Jafaru, 2021). Previously, particularly since the 19th century, the clinical role of the nurse has faced a great challenge (Klainberg, 2014). In addition, the majority of the nurses are resistant to the acquisition of new skills and knowledge (Ingwu, Ohaeri, & Iroka, 2016). Consequently, a significant need exists for the continuous training of nurses, to improve the quality of care, as well as maintain standardization in nursing practice (Oyetunde & Nkwonta, 2014). In keeping with the above, the researcher is of the opinion that educational advancement for nurses is a necessity, to attain the required evidence-based clinical practice

2.7.2. Concept of nursing

Nursing is an integral aspect of the healthcare system that encompasses the provision of healthcare services to individuals, families, and the community. In addition, it includes the prevention of illness, promotion of health, and restoration of life (International Council of Nurses [ICN], 2017). A nurse is defined as a person, who has completed a programme of basic general nursing education, and is authorised by the appropriate regulatory authority to practice nursing in his/her country (ICN, 2017). The nurse practitioner is a registered nurse, who has acquired the necessary nursing education at an

accredited school of nursing (Heale & Rieck Buckley, 2015). According to Virginia Henderson (1966, cited in Nero, 2017, p. 42), "The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And do this in such a way as to help him gain independence as rapidly as possible."

2.8. PROFESSIONAL ETHICS THAT GUIDE THE PRACTICE OF THE NURSING PROFESSION

Commonly, ethics is understood as a discipline, in terms of moral values and standard norms of conduct, which distinguish between acceptable or unacceptable, right or wrong, and prescribe what humans ought to do (Murariu, Pricop, Bobu, Geletu, Danila, & Balan, 2016). Ethics include standards that enjoin the virtues of honesty, compassion, and loyalty. They also include standards relating to rights, such as the right to life, the right to freedom from injury, and the right to privacy. Such standards are adequate standards of ethics because they are supported by consistent and well-founded reasons (Mahajan & Reshamwala, 2011; Velasquez, Andre, Shanks, & Meyer, 2015).

Professional ethics are the guiding principles that governs behaviour, and regarded as the accepted norms and moral values in a given profession. It is the moral principles regarding a fault in human conduct that distinguishes between good and bad behaviour (Kangasniemi, Pakkanen, & Korhonen, 2015). In the nursing profession, the code of ethics is an integral aspect that entails the moral obligation and guiding principles in nursing practice (ICN, 2017). It is a vital aspect that must be evaluated regularly, to respond to challenges that may arise in nursing practice (Engel & Prentice, 2013). However, work ethics refer to individual commitments and dedication to work. It is a set of values, that bind an employee (Sah, 2015). Achieving quality nursing care requires a professional ethical approach (Poikkeus, Numminen, Suhonen, & Leino-Kilpi, 2014), which has the likelihood of preventing and overcoming any ethical conflict (Brecher, 2014). Given this, the International Council of Nurses (ICN) highlighted four core dimensions in its code of ethics for nurses (International Council of Nurses [ICN], 2012; Priyadarshini, 2021), which include:

2.8.1. Nurses and people

Studies revealed that the practitioner nurse and the nurse manager should provide care that fosters the respect for human rights, while taking into consideration the clients' beliefs, values, and customs. They should provide adequate information for the client to make informed choices. In addition, the nurse is obliged to use an information management system that guarantees confidentiality, and should ensure an enabling environment in the workplace, for the comfort of the client (Priyadarshini, 2021; Stievano & Tschudin, 2019).

2.8.2. Nurses and practice

The ICN recommends that the practitioner nurse and nurse manager provide adequate information and quality nursing-care at all times during their various contacts with their clients. In addition, they are to engage in continuing education, to update their knowledge, which is necessary for the renewal of licensure to practice (ICN, 2012, 2021).

2.8.3. Nurses and the profession

The practitioner nurse and nurse manager have to set the standards for nursing practice, research, education, and management, to promote the dissemination and utilisation of research that is related to nursing and health. In addition, active participation in the National Nurse's Association is unequivocally expected of any practicing nurse (ICN, 2021).

2.8.4. The nurse and the co-workers

The practitioner nurse and the nurse manager are expected to acknowledge each other's opinions, when matters arise, and subsequently provide a platform for the resolution of the issues, which promotes an enabling workplace environment. Expectations to support ethical values and healthy behaviour that will safeguard other healthcare providers, as well as the client, family members, and members of the community, must be ensured (International Council of Nurses [ICN], 2021). Despite the stipulated values in the code for nurses, it appears that the implementation of the code of ethics is difficult (Ebrahimi, Nikravesh, Oskouie, & Ahmadi, 2015). According to certain studies, it appears that nurses do not protect the patients' interests; neither do they act in accordance with their code of ethics (Ebrahimi et al., 2015; Wagoro, & Duma, 2018). It has been evidenced that most of the factors that influence nurses in ethical decision-making are, the lack of

participation in ethical decision-making, and deficient evidence-based interventions (Ebrahimi et al., 2015). Similarly, poor time management, the unfriendly relationship at the workplace, the negative behaviour exhibited by some patients, and work overload, play very important roles (Ebrahimi et al., 2015; Poikkeus et al., 2014).

2.8.5. Code of ethics for midwives

The International Confederation of Midwives (ICM), in its attempt to enhance standardisation in midwifery practice, outlines various guiding principles that are directed at promoting professionalism. The established code is directed at addressing the educational attainment of the midwife, to promote human rights. It also emphasises fairness of accessibility to healthcare services for women, family members, and the community at large (International Confederation of Midwives [ICM], 2019).

The core responsibilities of the midwife in the course of practice are to provide care that acknowledges respect for cultural diversity, while simultaneously, attempting to eliminate any harmful practice that may exist within such a culture (International Confederation of Midwives [ICM], 2018b, 2019). The midwife should safeguard the interest of the woman, or adolescent woman, and ensure that she is not harmed, either in conception, or in childbearing. In addition, she is to display an evidence-based practice, and respond to the psychological, physical, emotional, and spiritual needs of women, who are seeking healthcare services. It is also expected that she engages in professional development continuously, to ensure progressive practice (Hay & Marshall, 2019). Every practicing nurse is expected to reflect on the stipulated code of ethics, during their various contacts with the client (Nursing and Midwifery Board of Australia, 2018). The application of critical thinking, including vital skills in ethical decision-making, are crucial, when resolving any conflict (Hay & Marshall, 2019). Similarly, nurses need to be aware that professional ethics is based on accountability, which demands consistent exposure to the process and channels of proper ethical decision-making (Ebrahimi et al., 2015).

The midwife's role also includes the application of skills, evidence-based knowledge, as well as the exposition of a good attitude (Casey et al., 2017, p. 4). These are specifically for improved professional obligation, and to ensure quality health outcomes for the patient.

2.9. INTERNATIONAL COUNCIL OF NURSES IDEA ON SCOPE OF PRACTICE

The International Council of Nurses (ICN) is a federation of the National Nursing Association that represents more than 20 million nurses, in about 130 countries of the world. The body was founded in 1899, and is the first international organisation for health professionals. It is a global initiative that promotes advocacy for quality education and the provision of quality healthcare services. Its major drive is to provide a platform that strengthens nursing education, the scope of practice, and the establishment of a code of ethics. It also focuses on the socio-economic welfare of nurses, in areas of remuneration and career development (ICN, 2017).

The professional regulatory authority is fundamental in nursing (International Council of Nurses [ICN], 2014). Its core responsibility is to provide a platform that ensures standardisation in the nursing profession. Historically, the procedural requirement, relating to an effective educational requirement, includes registration, certification, licensure to practice, the periodic renewal of license, and the stipulated scope of practice (Heale & Buckley, 2015).

The ICN outlines certain core responsibilities that are expected by the regulatory body, including:

- Educational Standard: Only those that meet the educational requirement at the point of entering into the nursing profession are eligible to commence the programme.
- Issuance of license to individuals, who have satisfied all the necessary criteria, and are qualified to practice the nursing profession.
- Certification of those, who meet the requirements.
- Periodic renewal of licenses: It is expected that every practicing nurse continuously engages in professional development. Before any renewal of license, the certificate for proof of fitness, regarding health matters and criminal convictions, must be presented.

- Establishment of the code of ethics: It is the responsibility of the regulatory body to clearly outline the code of ethics, as well as its consequences, when violated.
- Establishment and articulation of the scope of practice: The practicing nurse needs to be well informed of the scope of practice that is guided by the authority.
- Managing complaints: The regulatory body is obliged to respond to and carry out proper investigations to sensitive matters that negatively affect the public, or the practitioner.
- Maintenance of the public register: The regulatory body is obliged to update the register regularly, to confirm that the holders of the licenses meet the criteria to practice (ICN, 2014). It is expected that the nurse continuously engages in professional development to ensure progressive practice (Hay & Marshall, 2019; International Confederation of Midwives [ICM], 2018a).

Despite the stipulated regulation of the scope of practice, the practice still differs from country to country (ICN, 2014). This has a reflective impact on professional nursing practice (Heale, & Buckley, 2015). Some of the factors that possibly influence the professional regulation include deficiency in understanding their role, lack of consistency, poor role clarity, role conflict, social variation, and economic peculiarity (ICN, 2017). These disparities, however, expose the patient to risks (Benton, González-Jurado, & Beneit-Montesinos, 2014). Nurses should be aware that professional ethics is based on accountability, and consequently, demands that they should be exposed to the channels and process of proper ethical decision-making.

According to Halcomb, Stephens, Bryce, Foley, and Ashley (2016), the consumers of healthcare services can only develop respect for, and accept, the services provided by the nurses, if there is a better reflection on the nurse's scope of professional practice and competence. The International Council of Nurses (ICN, 2021) defines competence as the ongoing ability of a nurse to integrate and apply the knowledge, skills, judgments, and personal attributes, required to practice safely and ethically, in a designated role and setting.

2.10. LEARNING THEORIES

This current study was based on the assumptions around the following learning principles namely: Kolb's theory of experiential learning, and Knowles' adult learning theory.

2.10.1. Kolb's theory of experiential learning

Kolb's (1984, p. 38) Experiential Learning Theory, defines learning as "the process whereby knowledge is created through the transformation of experience and knowledge results from the combination of grasping and transformation experience" (also cited in McCarthy, 2016). Kolb (1984) is of the opinion that a learning cycle is a procedural event that requires the creation of knowledge, through the transformation of experience. Tomkins and Ulus (2016) refer to two methods involved in the learning process, namely *concrete* and *abstract*, as well as two means of transforming these experiences into knowledge, which are *reflective observation* and *active experiment*. It is a cyclical event involving four facets, during which the individual becomes fully connected, by way of influencing *rational reasoning*, *sensitivity*, *perception*, and *behaviour* (Arseven, 2018; Botelho, Marietto, Ferreira, & Pimentel, 2016).

Experiential learning is a form of teaching and caring that is more relationship-centred. It involves teaching and caring, with an equilibrium of care after prevailing empowerment (Tomkins & Ulus, 2016). Learning obtained from such experiences, enables the nurses to operate around diverse approaches, with much thoughtfulness and sensitivity, resulting in empowerment (Tomkins & Ulus, 2016). This impression is in line with this current training programme, because there would be a transfer of knowledge to the professional nurses that would empower them to assume their various tasks and responsibilities. The application in this current study is further elaborated in Chapter 8.

2.10.2. Knowles' Adult Learning Theory (1950)

According to Kelly (2017), professional learning requires more knowledge for practice, knowledge in practice, and knowledge for self-improvement. In light of this claim, the researcher in this current study adopted Knowles' Adult Learning Theory (1950, 1968, 1980, 1984) which stipulates six vital needs of adult learners (Cochrane & Brown, 2016, pp. 76–81; Knowles, Holton, & Swanson, 2005). The need of more knowledge for professional nurses becomes relevant, when they are required to effectively address the challenges that are reflected in this current study (detailed discussion in 8.2.2). The needs are as follows:

- Need to know: The nurses will be motivated to learn when they know why they need to acquire more knowledge. The acquisition of new knowledge is expected

to equip professional nurses to provide optimal care to their clients in their workplace (Price & Reichert, 2017).

- Self-concept: Learning is self-centred through life situations because, as a person matures, his/her self-concept moves from one of being a dependent personality, towards one of being a self-directed human being (Maddalena, 2015). The teaching of the adult professional nurses, through in-service learning, seeks to promote their self-awareness, as well as acceptance, urging them to search for positive creativity that would ensure improvement in the promotion of postpartum family planning (WHO, 2013)

- Experience: Experience is the richest resource. In this current study, the professional nurses would accumulate new knowledge through participation in the training programme. Such exposure is expected to enable them to identify the negative attitude, or negative practice that needs to be changed, which is made possible when the habit of the mind is re-formed (Malik, 2016).

- Readiness to learn: Adults have a deep need for the development of new skills to improve in practice. Teaching adult professional nurses is expected to arouse their deep need for the development of new skills for improved clinical practice (Tønseth, 2015).

- Orientation to learning: As a person matures, his/her orientation to learning and problem-solving changes from one of postponed application of knowledge, such as the subject-centeredness, to the real application of knowledge (Maddalena, 2015). The training programme would improve the professional nurses' problem-solving abilities, as opposed to subject-centredness (Ancel, 2016).

- Motivation to learn: As a person matures, the motivation to learn is internal (Maddalena, 2015). Teaching adult professional nurses is expected to stimulate their self-learning, for effective nursing practices to promote PPFP (WHO, 2013).

2.11. BEHAVIOURAL THEORIES ASSUMPTIONS

Behaviourist's theories consider that human behaviour could be controlled through proper stimuli; therefore, educational perspectives, based on this theory, could be used to assess learning (Meyer & Van Niekerk 2008). Nurses fulfil the vital role of supporting the client,

while considering his/her behavioural change, for example, offering information to the client has the potential to positively influence a wide range of his/her perceptions of health-related matters (Barley & Lawson, 2016). Therefore, it is expected that nurses possess the necessary skills, knowledge, and abilities to motivate the PP women towards positive behavioural changes. Similarly, theories on behaviour change have been widely used in conceptual frameworks, to guide the research design (Dulli, Eichleay, Rademacher, Sortijas, & Nsengiyumva, 2016).

2.11.1. Health Belief Model [HBM]

The Health Belief Model [HBM] is a socio-cognitive model of health behaviour, which was first developed in the 1950s, by social scientists, Hochbaum, Rosenstock, and Kegels (Tarkang & Zotor, 2015). The model seeks to predict the health behaviour of people. The construct embedded in the model, includes certain factors that could influence the behaviour of the PP women, regarding the use of PPFP. These factors include perceived threat, perceived consequences, perceived benefits, perceived barriers, cue to action, and self-efficacy (Tisha, Haque, & Tabassum, 2015). According to Grant, Morgan, Mannay, & Gallagher (2019), pregnancy prevention is healthy behaviour, while the negative health outcomes of pregnancy could be influenced by the behaviour of the individual. The Health Belief Model assumes that health action is enhanced when there are perceived threats, perceived consequences, perceived benefits, and barriers. A positive association could exist, between the perceived severity of an unplanned pregnancy and the perceived benefits, with greater use of family planning. Similarly, greater perceived barriers result in the lower use of family planning (Dulli et al., 2016).

In this current study, it is assumed that the PP women's cue to action, and their willingness to adopt PPFP, may be influenced by the quality of care, the motivation, and the quality of information that they received about PPFP from the nurses. According to Jones, Jensen, Scherr, Brown, Christy, and Weaver (2015), the decision of an individual to make a positive health action, and the desire to prevent negative health consequences, are due to certain motivating factors. In a study conducted by Kauffman et al., (2017) on patient motivation for participation in genome sequencing, the respondents revealed that the knowledge they acquired about family planning, motivated them to participate in it.

This concurs with the concept of the Health Belief Model, which maintains that the understanding of the susceptibility of a disease condition, as well as the benefits of using family planning, will motivate the individual to make a positive health action (Mohsen, El-Abbassy, & Khalifa, 2016). Therefore, nurses conveying clear, adequate, and unambiguous postpartum family planning health information to the postpartum women is highly recommended. Such information could foster the optimal use of family planning, and consequently, prevent the associated health risks (Mohsen et al., 2016).

2.11.2. Information-Motivation-Behavioural Skills Model

Refer to section 3.5.1 on the discussion of the Information-Motivation-Behavioural Skills Model and its involvement in this current study.

Having discussed the different adult learning theories and the behavioural models, in the following section, the researcher critiques the two behavioural models and the Programme Development Model of Meyer & Van Niekerk (2008).

2.11.3. Critique of the three models

In this current study, three models, namely the Health Belief model [section 2.11.1], Information-Motivation-Behavioural skills model [section 3.5.1], and the Programme Development model by Meyer and Van Niekerk (2008) [section 3.7], are evaluated to determine the preferred one to employ in the development of the training programme.

- Health Belief Model: This model is focused on the understanding that the decision to undertake a health action is enhanced when there is a perceived threat, such as the risks of unwanted pregnancy, and the potential benefits when family planning is used. The *cue to action* involves motivation through external stimulus and self-efficacy, which is the ability of the postpartum woman to perform a task that involves the use of postpartum family planning. The main focus of this model is behavioural change.

- The IMB Skills Model comprises three constructs that are interrelated, namely, Information, Motivation, and Behavioural Skills. The IMB model seeks to identify the fundamental performance determinants of the behaviour. The model postulates that an individual need to be informed about his/her health situation, and encouraged towards possible behavioural change. This suggests that the

nature of the information about postpartum family planning, received by the postpartum women, as well as the way the nurses motivated them, have a significant influence on the behavioural skills of the postpartum women.

- The Programme Development Model deals with curriculum development for nurses, and acknowledges the professional development of nurses through effective education. It is aimed at ensuring a workforce that is able to meet the aspirations of the client. The Programme Development Model is all-encompassing, as it deals with educational activities. In this current study, the researcher's aim was to develop a training programme for professional nurses to promote the use of PPFP. This activity involves educational activities. Therefore, by critically assessing the HBM, IMB and the Programme Development models, it is obvious that the HBM and the IMB models involve behavioural change and user perspectives specifically, while the Programme Development Model comprises both user and provider perspectives.

2.12. LITERATURE REVIEW ON INTERVENTION USE TO PROMOTE PPFP

2.12.1. Introduction

This section provides information on promotional activities for the improved use of PPFP. It became necessary to review different intervention programmes, used to promote PPFP, to identify a unique intervention that might improve the skill of the professional nurses to promote the use of PPFP.

2.12.2. Studies on interventions used to promote postpartum family planning

Tran et al., (2018) conducted a study to identify the package of interventions that promote postpartum family planning in Burkina Faso and the Democratic Republic of Congo. A qualitative research method was used to identify the barriers to, and promoters of the use of PPFP. The findings of the study revealed that a similar promoter's technique was employed in the promotion of the use of PPFP in both countries. The interventions used, focused on refresher training of PPFP providers, and counselling strategies, including regular supportive supervision of service providers.

However, Cleland, Shah, & Daniele (2015) conducted a study on interventions to improve postpartum family planning in low- and middle-income countries. The authors used various search databases to conduct the research review. The study design was based on a randomised controlled trial. Their interventions focused on PPFP counselling, during the antenatal and postnatal periods. In addition, the integration of family planning with immunisation was another approach that offered opportunities for counselling about family planning. However, a common factor among the various interventions, was the use of the counselling process as a form of educational approach, which evidently, may have inspired the use of PPFP.

A systematic review study was conducted in the USA by Blazer & Prata (2016) for evidence of recent, successful postpartum family planning interventions. In the study various approaches for the improvement of PPFP were revealed, namely, educational strategies in the form of counselling, using educational materials (brochures/leaflets) as visual aids, as well as male involvement. Additionally, the findings of the study revealed eight other, existing, up-to-date interventions (from various reviews) that were used to promote PPFP. They are as follows:

- Koblinsky (2005) reviewed community-based interventions aimed at improving postpartum care. The review focused on integrated maternal and newborn care, as well as family planning, specifically community-based postpartum care. The author outlines three programmes, namely, home visits by skilled clinicians, home visits by community workers, and home visits with a referral. In addition, the author explains that, although the programmes are feasible, they are resource-intensive and not highly effective. However, recommendations for further studies were centred on ways of delivering postpartum care, including FP, during the postpartum period in the community, as well as the best positioned individual/s to provide such care.
- A review conducted by Vernon (2009) involved programmatic training on strategies to provide PPFP messages to PP women, for the possible improvement in the use of PPFP. The intervention was a non-experimental design that involved small samples. The focus was on antenatal family planning counselling for the increased use of PPFP, male involvement, and the promotion of lactation

amenorrhea. The intervention was a key strategy to provide educational knowledge on family planning for the promotion of PPFP.

- Yeakey, Muntifering, Ramachandran, Myint, Creanga, and Tsui (2009) conducted a programme intervention that was based on the outcome of the use of family planning and birth spacing. Evidence from the review revealed mixed results; however, there were indications that the use of family planning guarded against short birth intervals.
- A Cochrane Systematic review that was conducted by Lopez, Grey, Hiller, and Chen (2015) evaluated family planning education on the use of postpartum family planning by women after birth. The authors used a randomised control trial. The findings revealed an improved use of PPFP, with adequate education.
- Arrowsmith, Aicken, Saxena, and Majeed (2012) conducted a systematic review on strategies to improve the acceptability and acceptance of the copper intra-uterine device. A randomised control trial was conducted, and the strategy to improve the use of postpartum family planning focused on counselling, as well as the use of leaflets.
- Sonalkar, Mody, and Gaffield (2014) also assessed the effectiveness of various strategies to increase PPFP. The review was based on randomised control trials, case-control, cross-sectional, and cohort studies. The authors concluded that the programme intervention could extend birth intervals, with increased use of PPFP.
- In contrast, Cleland et al., (2015~~)~~ evaluated programme interventions aimed at promoting PPFP, through the promotion of lactation amenorrhea, delay contraceptive use until the woman returns to menses, and a delay to contraceptive use until 6 weeks postpartum. The study design was based on a randomised controlled trial, and the intervention strategies included the use of counselling.
- Hatfield, Withers, & Greaves (2020) reviewed health behaviour change interventions, aimed at identifying the effects of professional healthcare training on the delivery of quality health behaviour change, and subsequently, on patient health behaviour. A systematic review method was used, with the authors searching multiple databases. An educational approach was used in all the studies, including practical learning exposure. The findings of the study revealed valuable content delivery approaches for an effective behavioural change intervention.

Examples of these included the use of different communication techniques, including the use of audio-visual aids.

2.12.3. Summary of interventions employed to promote the use PPFP

The literature reviewed for this current study revealed similar discussions about the various interventions employed to promote the use of PPFP. Postpartum family planning intervention is aimed at improving the promotion of PPFP (Tran et al., 2018). To improve the use of family planning among PP women, a training programme for professional nurses was considered necessary, for them to improve the healthcare delivery to PP women. The review in this current study identified various interventions, used by PPFP providers (including nurses), to promote the use of PPFP, for example, including refresher training for family planning providers (Tran et al., 2018). In addition, the review revealed educational strategies, such as counselling, including the use of educational material in form of leaflets (Blazer & Prata, 2016; Cleland et al., 2015; Hatfield et al., 2020).

Additionally, evidence from the review indicated the usefulness of behavioural change techniques to promote healthcare delivery, for example, communication skills (Hatfield et al., 2020). However, despite the various interventions used to promote PPFP, no training intervention, aimed at developing a training programme for professional nurses to improve the use of PPFP, was revealed. The aim of this research study is a novel package that will be developed for nurses, to promote the use of PPFP.

2.13. SUMMARY

In this chapter, the researcher reviewed appropriate literature on family planning, globally, especially in Africa, and specifically in Nigeria. The researcher also presented appropriate literature on postpartum family planning, based on the research objectives. In addition, the socio-cultural view, as it applied to family planning, was discussed. The nursing education programme was discussed; however, this seems to be incomplete, without a discussion on the family planning programme in Nigeria.

Therefore, discussions on past family planning practices, as well as how the training programme is incorporated into midwifery education in Nigeria, were highlighted. Professional ethics that guide nursing practices, including the International Council of Nurses'

views on the scope of practice, were highlighted. In this chapter, the relevance of the learning theories, as well as the behavioural models, and the programme development model that underpin the study, were discussed. Finally, the literature review on the intervention used to promote PPFP was discussed. In the following chapter (Chapter 3), the researcher discusses the research methodology used in this current study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. INTRODUCTION

In this chapter, the researcher presents, in seventeen sections, the methods and processes used in this current study, to achieve the aim of the study. The sections are as follows: section one, the methodology; section two, the paradigmatic perspective and assumptions; section three, a description of the mixed-method approach; section 4, the research design; section five, theoretical assumptions; section six, the research setting; section seven, the Program Development Model (PDM); section eight, the aim of the study; section nine, objective of the study. Section 10, phase 1, the preliminary phase; section eleven, phase 2, situational analysis of the quantitative methodology; section twelve, phase 2 PDM of the qualitative methodology; section thirteen, phase 3, methodology; section fourteen, phase 4 methodology; section fifteen, Phase 5, Validation; section sixteen, measures to ensure trustworthiness; and section seventeen addresses the ethics.

3.1.1. Defining methodology

Methodology is a strategic approach, employed to conduct a research study, to offer meaningful research findings. It involves a procedural principle of data collection and analysis in the research study (Mohajan, 2018). It is also referred to as a systematic process that indicates how the research is to be conducted (Walliman, 2017). This indicates that a methodological process is a scientific approach that addresses the uniqueness of a research study to achieve the research objectives. It also explains how methodology clearly indicates the way the research process will progress from one stage to the other. Also, refer to section 1.7 for the discussion of the paradigmatic perspective and assumptions, underpinning the mixed-methods approach, as well as its suitability for this current study.

3.2. PARADIGMATIC PERSPECTIVE AND ASSUMPTIONS

Refer to section 1.7 for the discussion of the paradigmatic perspective underpinning the mixed methods approach and its suitability for this study.

3.3. MIXED-METHODS APPROACH

The core characteristics of mixed-methods designs involve the procedural rules, in terms of concurrent or sequential data collection, data analysis, interpretation, and integration of datasets (Creswell, 2014). The purpose of using mixed-methods designs is to provide an in-depth understanding of various perspectives, to explain the complexity of the phenomenon, determining what works for whom, as well as the relevance of the context (Shannon-Baker, 2016).

3.3.1. Types of mixed-methods designs

Creswell (2014) identifies three basic types of mixed-methods designs, and three advanced strategies that incorporate the three basic mixed-methods designs. The three basic mixed-method designs include, convergent parallel mixed-methods design, explanatory sequential mixed-methods design, and exploratory mixed methods design, as depicted in Figure 3.1 below.

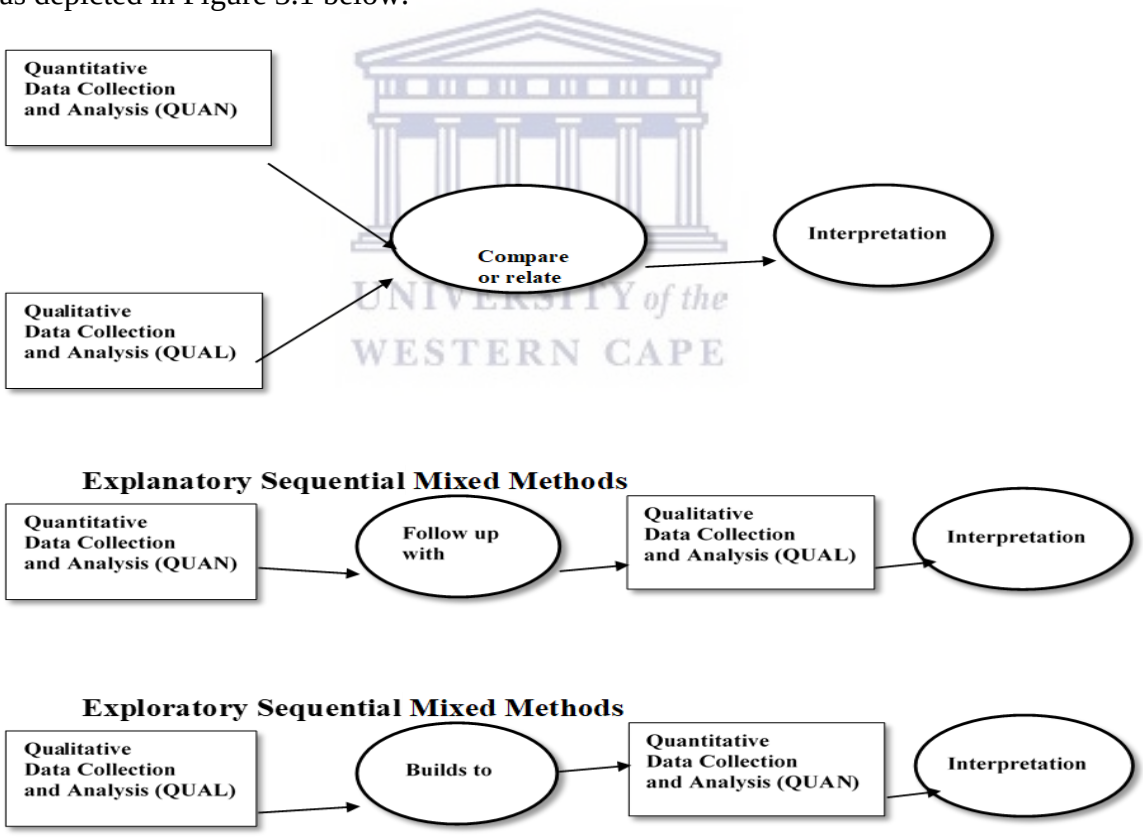


Figure 3.1: The three basic types of mixed methods (Creswell, 2014, p. 270)

The three advanced mixed-methods include, embedded mixed-methods, transformative mixed-methods, and multiphase mixed methods. However, Almalki (2016) also identified the triangulation mixed-methods design.

3.3.2. Convergent parallel mixed-methods design

In convergent parallel mixed-method designs, the researcher collects data for both the quantitative survey and the qualitative research study concurrently. In this design, information is obtained from a small sample size in the qualitative study, using either focus group discussions, interviews, or observation checklists, while the quantitative survey information is obtained from a larger population, using a large sample size for the statistical test (Snelson, 2016).

In this type of design, the merging of the two datasets could be achieved in various ways. One approach is called side-by-side comparison, in which the researcher first discusses the quantitative statistical result, and subsequently, proceeds to the discussion of the qualitative, or vice-versa, thereafter comparing the findings to confirm or disconfirm the findings of the two datasets (Wisdom & Creswell, 2013). Another approach is referred to as a joint display of findings from both datasets. In this approach, the merging of the two datasets is done within the discussion section, usually after the separate interpretations of the two datasets. Thereafter, the findings are presented in tabular form, in which the quantitative findings and findings from the qualitative dataset are arranged horizontally, with the key concepts alongside (Moseholm & Fetters, 2017). The main objective in this approach is for the researcher to jointly merge the two findings (Creswell 2014). This approach is also referred to as the triangulation concurrent mixed-methods design (Almalki, 2016).

3.3.3. Explanatory sequential mixed-methods design

This method of design requires a strong background in the quantitative survey. The researcher first collects the quantitative data, analyses the results in the first phase, and uses the results as a follow-up, to inform the types of qualitative questions and selection of participants in the second phase. The purpose of this design is to elicit detailed information from the qualitative interviews, based on the quantitative findings (Wisdom & Creswell, 2013).

However, the major concern in this type of design is the decision to use the quantitative results to follow up with the qualitative interviews. The same samples are included in both the qualitative and quantitative phases. The rationale for the explanatory design is

that one dataset builds on the other, and the data collection are carried out sequentially. The interpretation of the results is carried out in the discussion section, in which the researcher commences by first reporting on the quantitative results, followed by the report of the qualitative findings (Hong, Pluye, Bujold, & Wassef, 2017). Subsequently, the researcher proceeds to explain how the qualitative results expand the quantitative results, and thereafter, the two databases are merged (Creswell 2014).

3.3.4. Exploratory sequential design

Exploratory sequential design is conducted in two phases. The researcher commences by collecting and analysing qualitative data in the first phase. Subsequently, the researcher uses the findings to inform the development of quantitative instruments in the second phase, and thereafter, analyses the resultant data. The interpretation is carried out in the discussion section of the research study, in which the researcher reports, first on the qualitative findings, and subsequently, the second analysis of the quantitative findings. The rationale is to develop a better instrument, using a specific population (Snelson, 2016). However, the main challenge is deciding how to use the information from the qualitative phase, in the quantitative phase (Creswell 2014). Another challenge is inadequate amount of time for the researcher to plan before the commencement of the second phase. A further challenge, however, is the associated risk that the respondents/participants would not be keen or able to participate in both phases, which is time-consuming (Almalki, 2016).

3.3.5. Triangulation concurrent mixed-method design.

According to Almalki (2016), the triangulation mixed-methods design is the combination of data from different sources or samples, in one study, using different approaches, such as quantitative and qualitative. The triangulation mixed-methods design allows for the merging and justification of results that are gathered from different sources. Triangulation is defined as the combination of two research approaches, in one study, to enhance scientific validity (Caillaud et al., 2019). The procedure involves the concurrent or simultaneous collection of data from different sources (Guest & Fleming, 2014).

However, the different datasets are analysed and presented separately, without being dependent on the other, which consequently, reduces the risk of partial and inaccurate interpretation (Guest & Fleming, 2014). Thereafter the findings from both the

quantitative and qualitative datasets are integrated. Usually, the point of integration is the point at which the quantitative and the qualitative findings are mixed, as depicted in Figure 3.2 below.

Figure 3.2: Triangulation mixed methods design (Almalki, 2016)

Frequently, the triangulation merging of data occurs after the presentation of the results from both data sets (McLaughlin, Bush, & Zeeman, 2016). In addition, a listing of the concluding statements of the findings from both datasets is presented, followed by a joint display of the two findings, including an integrative statement or a concluding statement of the findings (Schoonenboom & Johnson, 2017). The key findings are merged by way of connecting both sets of findings. The *theoretical construct*, which unifies the qualitative and the quantitative data also constitutes the horizontal axis rows, while the summaries of the quantitative and qualitative are presented horizontally in two separate columns (Guest & Fleming, 2014). This triangulation, therefore, allows for scientific validity (Caillaud et al., 2019).

3.3.6. Application of the concurrent triangulation mixed-methods design

In this current study, the concurrent triangulation mixed-methods design was employed, as both the quantitative and qualitative studies were conducted during the same period, but independently, followed by separate analyses and interpretations of the respective results. The concurrent collection of the quantitative and qualitative data was cost-effective, in terms of effective time management. Secondly, the analysis that was conducted separately, indicates the uniqueness of each result. In addition, the two diverse datasets indicate a proportionate value, in terms of compensating for the weaknesses of one method, with the strength of the other (Pardede, 2019). Refer to Chapters 4 and 5 for the respective data presentations, analyses, and findings, of the quantitative and qualitative studies, conducted during Phase 2 of the PDM.

The main objective of concurrent triangulation design is to substantiate and support the findings revealed from both datasets (Alavi & Hąbek, 2016). Refer to Chapter 6 for further details of the triangulation, as applied in this current study. In the concurrent triangulation design, the researcher seeks to establish and discuss the relationship of both findings (Warfa, 2016). The findings, therefore, are combined in Table 6.1., following due confirmation of the results. However, it is important to note that there is no right way of integrating data, since the field of mixed-methods is still undergoing some fundamental development. Consequently, a researcher is advised to be innovative when integrating data (Guest & Fleming, 2014).

3.3.7. Critique of mixed-methods research designs

Mixed-methods research is the combination of both quantitative and qualitative research approaches in one study. The criticism against mixed-methods research includes its inability to indicate a clear and visual model, to understand the details, as well as flow of the research activities, due to the complex nature of the research design (Creswell, 2014). Further criticism of the mixed-methods design includes some notable challenges, such as the extensive data collection process. Besides, it is time-consuming, and requires quite an intensive period for the researcher to become familiar with the research process.

However, the justifications for using mixed-methods are as follows:

- The combination of quantitative and qualitative research enables the researcher to acquire a better understanding of the research problem (Halcomb & Hickman 2015).
- A mixed-methods design has proven to be effective in intervention programmes because it offers the researcher a wide range of options to address complex situations that quantitative or qualitative research, individually, could not address (Creswell, 2014).
- The strength of one method is used to complement the weakness of the other (Guest & Fleming, 2014), which may explain the fact that new knowledge is generated through the combination of quantitative and qualitative research.

The researcher drew on the justifications outlined, despite the limitations. It is important to realise that there are reciprocal advantages, when combined in a research study, as it

improves the quality of the research findings. Additionally, the findings from both perspectives could initiate new knowledge, especially in nursing practice, where more knowledge is required to meet the complex needs of the client.

3.4. RESEARCH DESIGN

Research design is a systematic method of inquiry within a quantitative or qualitative research study, or the combination of both in one study. Such an approach follows a scientific direction (Heppner, Wampold, Owen, Thompson, & Wang, 2015). Betram and Christiansen (2014, p. 40, also cited in Makombe, 2017 pp. 3377) describe research design in the following ways: "The research design should answer the following questions: What evidence or data must the researchers collect to answer the research questions? How will the researchers collect the data (or what data collection method will be used)? What will the researcher do with the data once they have been collected? How will the researcher analyze and make meaning from the data?" This implies that the research design provides the required instruments or combination of instruments to direct the research (Makombe, 2017). Consequently, it is clear that the research design is the basic research process.

3.4.1. Descriptive design

Descriptive design involves activities that the investigator could employ to examine the characteristics and the opinions of the population under study (Nassaji, 2015). It provides detailed information about the experiences or behaviour of individual, groups, or situations under study (Zirkel, Garcia, & Murphy, 2015). According to Mayer (2015), descriptive studies allow researchers to define certain characteristics of people's behaviour and experiences, and provides the basis for the conducting of correlational studies. In addition, descriptive studies allow the frequency of occurrences to be described (Zirkel et al., 2015).

In this current study, the researcher selected a descriptive design, as it could offer a clear description of the family planning information that the postpartum women received, during their various contacts with the professional nurse. In addition, it could enable the researcher to garner the opinions of the women, regarding the factors that influence their behaviour, either to use or not to use family planning.

3.5. THEORETICAL ASSUMPTIONS

A theoretical framework serves as a base, on which to build and support the research study (Osanloo & Grant, 2016). In this current study, other theories were incorporated into the Program Development model of Meyer and Van Niekerk (2008), as theoretical principles in nursing provide scientific and evidence-based programmes (Meyer & Van Niekerk 2008). According to Osanloo & Grant (2016), when multiple theories are used to address the research process, it provides a superior understanding of the situation; besides, it improves the success rate of the programme to be implemented. In keeping with the above-stated position, the researcher in this current study incorporated the Information-Motivation-Behavioural skills model (Fisher et al., 2003) in phase 2, during the situational analysis, as well as the Practice-oriented theory of Dickoff et al., (1968), in phase 3.

3.5.1. Information-Motivation-Behavioural skills (IMB) model

The information, motivation, and behavioural skill model proposed by Fisher et al., (2003) was used as the key concept, to address the three objectives during the situational analysis (See 3.11.1 situational analysis of the study). The IMB model, which is a behavioural theory, takes cognizance of the determinant of human behaviour. According to Meyer and Van Niekerk (2008), behaviourist theories consider that human behaviour is governed by stimuli. This indicates that the information provided by the nurse, as well as the motivational strategies, have the potential of influencing the behavioural skills of the postpartum woman, regarding the use of PPFP

The IMB model has been applied in interventions to promote the use of contraceptives, including the prevention of HIV transmission (Aliabadi et al., 2015; Cai et al., 2013). However, it has also been used successfully for an evidence-based diabetes self-management mobile application (Jeon & Park, 2018). In addition, it has been used successfully for the predictors of condom use behaviour among men, who are sexually active with men (Jiang, Chen, Li, Tan, Cheng, & Yang, 2019).

3.6. RESEARCH SETTING

This current study was conducted in Epe Local Government area of Lagos State, Nigeria. The country is situated on the Gulf of Guinea, and is the most populous country in Africa, with a population of over 170 million citizens. It consists of 36 states, besides the federal capital city.

There are six geo-political zones in Nigeria, namely: South-South, South-West, South-East, North-East, North-West, and North-Central (Ploch, 2013), and Lagos state is one of the states in Nigeria, which constitutes the South-West region. The state was created on 27 May 1967, under Decree No. 14, and eventually launched as an administrative unit on 1 April 1968. It is a port city, which occupies a land space area of 358,862 hectares. It is bounded in the North and East by Ogun state, in the West by the Republic of Benin, and in the South by the Atlantic Ocean (Ploch, 2013; Oteri & Ayeni, 2016). There are 20 local government areas in Lagos state, which have been split into 56 Local Council Development Areas (LCDAs) for administrative purposes (Oteri & Ayeni, 2016). It consists of five administrative divisions, namely, Ikeja, Badagry, Epe, Lagos Island, and Ikorodu (Oteri & Ayeni, 2016).

After the 2006 Nigerian Census, Lagos state had a population of 17,552,940 citizens. However, with the rapid population growth rate, a population projection of 23,305,971 was predicted for 2015 (Opatola Kikelomo, Olanrewaju, & Atulomah, 2020). The state was the seat of power, as the federal capital city, until 1976, when it was moved to Abuja. However, the city of Lagos remains the nation's most economic and commercial capital (Oteri & Ayeni, 2016).

Epe is one of the local government areas in Lagos state, which was established by the mid-18th century (Mohammed, Iyiola, & Usman, 2015). The Local Government Area is a rural setting that is located on the north bank of the coaster Lagos lagoon, and has a road connection to Ikorodu Local Government Area, as well as the neighbouring state of Ijebu-Ode. It has a total land scale area of 965 square kilometres (Abasilim, Balogun, & Adeyemi, 2019).

The main occupations of the people are farming, fishing, and petty trading (Abasilim, Balogun, & Adeyemi, 2019). This locality also serves as a collecting point for the export of farm produce, such as cocoa, maize, kola nut, and palm oil. In the 2006 census, the population of Epe was 181,409, with the male population quoted as 91,925, and the female population, as 89,809. The community comprises two Local Council Development Areas (LCDAs), Eredo and Ikosi Ejinrin LCDA, and one Local Government (LG), Epe LG (Abasilim, Balogun, & Adeyemi, 2019; Makinde Yetunde, Afodu Osagie, Balogun Olubunmi, Awoyinka Iyabo, & Bello Taofeek, 2015). There are 19 rural communities, with one primary healthcare centre in each of the communities, namely, Odomola, Ilara, Otta-Ikosi, Ejinrin, Eredo, Odoragunsen, Mojoda, Ibowom, Itoikin, Ketu, Odo-Ayandelu, Orugbo, Igbonla, Ita oko, Yegunda, Molajoyo Oke egun, Iganke, Araga, and Aferan (Ogbu, & Iruobe, 2018). However, there are numerous lower

levels of care in each community in Epe, such as the traditional birth attendants (TBA), utilised by most of the women for maternal health issues, especially deliveries (Sowunmi et al., 2020).

For this current study, six selected primary healthcare facilities were used, because they were more functional, and provided maternal services, such as prenatal and postnatal care, as well as postpartum family planning services. It is revealed that the maternal mortality in Epe Local Government is 803 per 100,000 live births (Abdulahi, & Adegbite, 2019), and the prevalence of family planning use is 38.6% (Oluwole et al., 2016). Consequently, the study was conducted in Epe LG, because of the high level of maternal mortality, and the low use of family planning. The above setting was used for both quantitative and qualitative study populations.

Figure 3.3: Map of Nigeria showing Lagos state and Epe local Government

3.7. THE PROGRAMME DEVELOPMENT MODEL (PDM)

The Programme Development Model, by Meyer and Van Niekerk (2008), was adapted to develop a training programme for professional nurses on how to promote the use of PPFP. The Programme Development Model deals with the scientific plans that acknowledge the professional development of nurses through effective educational activities. It is a domain of knowledge acquisition within the context of nursing education (Meyer & Van Niekerk, 2008). Therefore, as the researcher's aim was to develop a training programme for professional nurses, to improve the use of PPFP, this approach, which deals with development through educational activities, was deemed suitable for this current study. This training programme is an educational activity, aimed at empowering professional nurses with the necessary acquisition of knowledge, skills, and abilities, to improve the care they render to the PP women for improved PPFP use. The model highlights the value of improved educational activities in nursing (Meyer & Van Niekerk, 2008). According to Hervie and Winful (2018), training upgrades professional competence and improves cognitive reasoning. In addition, training enhances steady professional progress, promotes rational thinking, and enhances positive behaviour (Meyer & Van Niekerk, 2008). The model consists of five phases, as depicted in Figure 3.4.

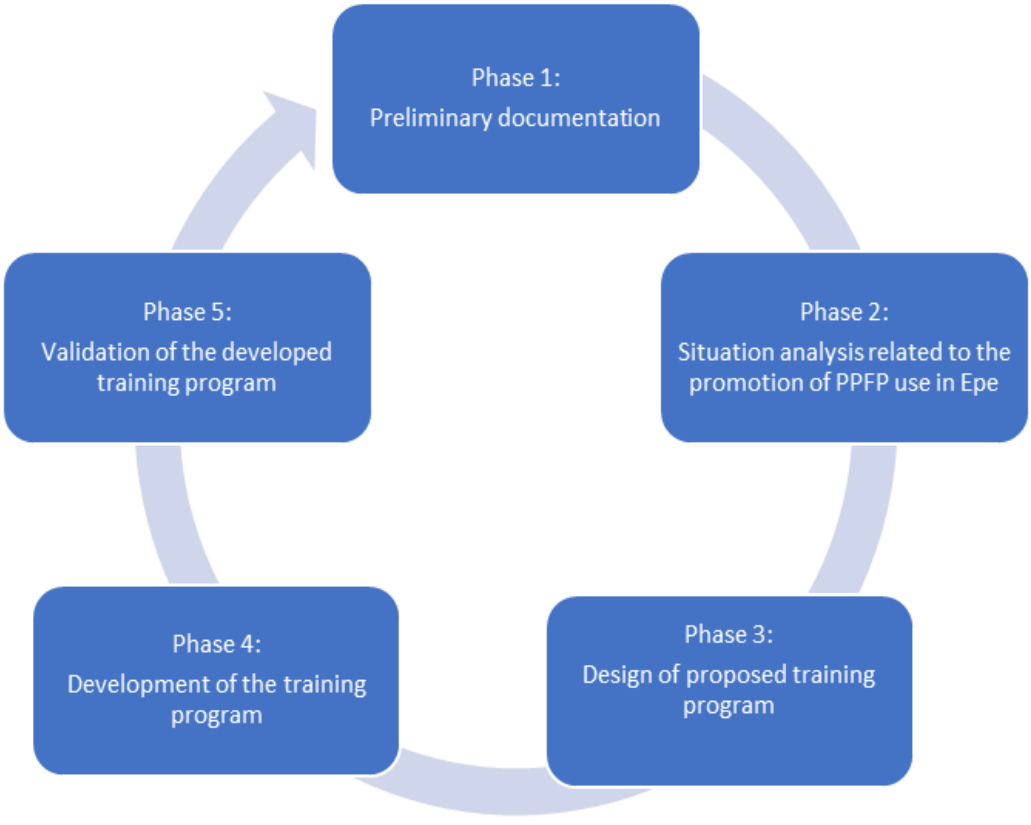


Figure 3.4: Modified Program Development Model (Meyer & Van Niekerk, 2008)

3.7.1. Phase 1: Preliminary phase

This phase is regarded as the introduction to the exploratory phase, in which all necessary documentation for the approval and conducting of the study are sought.

3.7.2. Phase 2: Exploratory phase

This phase is also referred to as the situational analysis phase. The researcher starts to collect empirical data to get a full understanding of the phenomenon of interest (Martin et al., 2016). The process entails the analysis of the present situation, with a possible view of the future (Meyer & Van Niekerk, 2008). The activities during this phase include the identification of the problem, conducting the situation analysis, and analysis of the collected data.

3.7.3. Phase 3: Designing phase

This phase involves the procedural activities that serve as a guide for the programme development.

3.7.4. Phase 4: Development phase

This phase involves the development of the programme.

3.7.5. Phase 5: Validation

The criteria for this phase are concerned with the activities to established the relevance and usefulness of the developed programme. The following section outlines the aim and objectives of the study, before focusing on the methodology employed during each of the listed phases of PDM.

3.8. AIM OF THE STUDY

This research aimed to develop a training programme for professional nurses, to promote the use of postpartum family planning (PPFP) in the Epe local government area of Lagos State, Nigeria.

3.9 OBJECTIVES OF THE STUDY

The objectives of this study were to:

1. Examine the information received by the postpartum women related to the use of PPFP.

2. Identify factors that influenced the behavioural skill of postpartum women linked to PPFP.
3. Explore and describe the motivating factors used by professional nurses to promote PPFP.
4. Develop a training programme for nurses to improve the use of PPFP.

3.10. PHASE 1: PRELIMINARY PHASE

Before the commencement of the situational analysis in this current study, the researcher engaged in a preliminary introduction, during which all relevant documentation for approval were sought. The aim of this exercise was to ensure that all the necessary ethical approval was granted to allow the researcher to gain entry into the identified research settings. In addition, it allowed the researcher to become familiar with the activities within the settings, as well as introduce the purpose of the training programme at the participating primary healthcare centre. This was necessary to secure all the necessary cooperation required to explore and describe the situation (See section 3.11.6 on access to the research site).

3.11. PHASE 2: QUANTITATIVE METHODOLOGY

A quantitative research method using a descriptive survey design was adopted in this current study. This method was employed during phase 2 of the PDM (Meyer & Van Niekerk, 2008) to collect data related to objectives 1 and 2. Quantitative research is ideal to test a phenomenon of interest, using closed-ended questions, to establish the strength of the relationship that exists between variables, through statistical tests (Creswell, 2014; Apuke, 2017). Such a survey provides a descriptive relationship between two or more groups (Creswell, 2014).

3.11.1. Situational analysis

The situational analysis phase occurred when the researcher engaged in data collection and analysis. This was conducted in two stages, using a quantitative and qualitative approach. The quantitative survey collected data related to the first two objectives of the study. Objective 1 was to examine the information received by postpartum women regarding the use of PPFP. Objective 2 was to identify factors that influenced the behavioural skill of postpartum women, related to the use of PPFP. The qualitative approach was utilised to explore and describe the motivating factors, used by professional nurses to promote the use of PPFP, which was Objective 3. The intention was to obtain

a good understanding of the situation, as well as identify issues that militated against the use of PPFP.

3.11.2. Study population 1 for the survey (Objectives 1 and 2)

A study population includes all eligible individuals of a target group that a researcher intends to study (Jackson, 2015). A sample, on the other hand, is a subset of the study population, selected from the identified study population (Walliman, 2017), based on certain selection criteria (Gray, Grove, & Sutherland, 2017).

The study population for the survey included 1,885 postpartum women, while the calculated representative sample size of the population was 319 (See Table 3.2 on the proportional sample of the various PHCs). Although six primary healthcare centres were initially selected, only five centres participated, because one of the centres, Afuye PHC, was under renovation at the time of data collection, and maternal services were not in operation. Consequently, a total number of 300 participants were recruited; however, two of the PP women declined, and one of the questionnaires was not completed. Therefore, the actual number of PP women, who participated, were 297.

3.11.3. Inclusion and exclusion criteria for sample

Inclusion criteria are the identified requirements, established by the researcher, which qualifies an element or respondent to be included in a study While Exclusion criteria are the restriction of subject or factors that are capable of increasing bias in the study (Gray, Grove, & Sutherland, 2017). For this current study the following criteria applied:
Inclusion criteria for PP women

1. Postpartum women in the postnatal ward, who are in their immediate postpartum period (up to 6 weeks).
2. Postpartum women in the extended postpartum period (up to 12 months post-delivery), who attend the post-natal clinic in the participatory primary healthcare centres.

   Exclusion criteria: for PP women

1. Postpartum Women who are 13 months and above post-delivery were excluded from the study due to the questions on family planning during postpartum period.

2. The potential postpartum women who were not willing to participate were excluded from the study

3.11.4. Sampling method

A sampling method is used to select a subset of an entire population, to represent the chosen population fully, without any bias or discrimination (Gray, Grove, & Sutherland, 2017). For the quantitative strand of this current study, the multi-stage sampling technique was employed, because it guarantees a good representation of the population that was selected. The first stage entailed the random cluster selection, followed by the second stage of sampling the unit of interest, while the third stage involved the subsequent random selection of the respondents (Gray, Grove, & Sutherland, 2017). This process involved the compilation of an initial list (sampling frame) that included all the PHCs, followed by a randomly selected PHC from the above sampling frame (Grove & Cipher, 2019). A sampling frame is representative of the population under study, which comprises the list of all the units of interest from which the research sample will be selected (Rahi, 2017; Taherdoost, 2016).

In the Epe community, there are two Local Council Development Areas (LCDA) and one Local Government (LG), namely, Ikosi-Ejinrin LCDA, Eredo LCDA, and Epe Local Government (LG). Additionally, 19 primary healthcare centres are managed under the 2 LCDAs and one LG (Abasilim, Balogun, & Adeyemi, 2019; Ogbu & Iruobe, 2018). In the first stage, three sets of PHCs, which are under the two LCDAs and one LG, were listed. Subsequently, one set of PHCs under one LCDA, as well as another set of PHCs under one LG were selected from the initial three sets (See Table 3.1 regarding the list of the sampling frame and the final selected PHCs). In the second stage, a simple random technique by lottery method was used to select six primary healthcare centres from the selected LCDA and one LG. Using the lottery method, all the PHCs under the selected LCDA and the LG respectively, were listed. The total number of the PHCs was 10. Each of the PHCs was allocated a number, which was written on a slip of paper. The slips were dropped into a bag, which was shaken thoroughly, to mix up the slips. Subsequently, one slip at a time was removed from the bag, until the required six primary healthcare centres were selected (Alvi, 2016).

The third stage was the random selection of the postpartum women in each of the selected PHCs, using a systematic random sampling technique. Systematic random sampling occurs when a member (respondent) is selected after a fixed interval, and the selected member is referred to as the Kth element. In this method, a list of the population of interest is provided. To determine the sample size, and find the sampling interval, the following formula was used: K=N/n, where K= sample interval, N=the population of interest, and n=sample size (Bhardwaj, 2019). The calculated sample size was 319, while the sample frame was 1,885 (See Table 3.2). The sample interval was calculated and based on the statistical formula, 1 of K=N/n:

K = sample interval

N = Total population in the sample frame=1885

n = sample size = 319

The calculated interval for the selection of each postpartum woman, was taken as 6.

Table 3.1: Sampling frame and the selected Primary Healthcare Centres

The two LCDA and one LG	List of all the Primary Healthcare Centres under the two LCDA and one LG in Epe	List of the Primary Healthcare Centres under the selected LCDA and one LG	List of the final selected Primary Healthcare Centres
1. Ikosi-Ejinrin LCDA 2. Eredo LCDA 3. Epe Local Government (LG).	**1. EPE LG** 1. Epe PHC 2. Sagidan PHC 3. Papa PHC 4. Afuye PHC **2. EREDO LCDA** 1. Igbonla PHC 2. Ibowon PHC 3. Ilara PHC 4. OdomolaPHC 5. Eredo PHC 6. Mojoda PHC **3. IKOSI-EJINRIN LCDA** 1. Itoikin Phc 2. Igbodu PHC 3. Otta PHC 4. Agbowa Phc 5. Owu PHC 6. Ado ikosi PHC	**1. EPE LG** 1. Epe PHC 2. Sagidan PHC 3. Papa PHC 4. Afuye PHC **2. EREDO LCDA** 1. Igbonla PHC 2. Ibowon PHC 3. Ilara PHC 4. OdomolaPHC 5. Eredo PHC 6. Mojoda PHC	1. Epe PHC 2. Afuye PHC 3. Ibowon PHC 4. Odomola PHC 5. Eredo PHC 6. Mojoda PHC

	7. Ejinrin PHC 8. Ajebo PHC 9. Odo PHC		

3.11.5. Sample size

The sample size calculation was based on the sampling population of postpartum women in the 5 selected primary healthcare centres. In the Epe local government area, the population of postpartum women in the 6 selected centres for 2016 was 1,885. The following sample size calculation formula was used:

$$S = \frac{X^2NP(1 - P)}{d^2(N-1) + X^2P(1-P)}$$

Where

S = Required sample size

= Z Value (e.g. 1.96 for 95% confidence level)

N = Population size

P = Population proportion (expressed as a decimal) (assumed to be 0.5 (50%)

d = Degree of accuracy (5%). Expressed as a proportion (0.5) it is margin of error

Calculation

$$S = \frac{1.96^2 \times 1885 \times 0.5 \times 0.5}{.05^2 \times 1884 + 1.96^2 \times 0.5 \times 0.5}$$

S = 5.6704 = 319.3

S = 319

See Table 3.2 below for a summary of the proportional sample from each of the PHC centres.

Table 3.2: The Proportional Sample per PHC Centre

S/N	Selected Primary Healthcare Centers	No of PP Women N	Percentage %	Sample n
1	EPE Maternity center	898	48	153
2	AFUYE	122	6	19
3	EREDO	284	15	48

4	IBOWON	144	8	26
5	ODOMOLA	306	16	51
6	MOJODA	131	7	22
	Totals	**1,885**	**100**	**319**

3.11.6. Access to the research site

To access the study site, a written letter, and a copy of the approved proposal, including a supporting letter from the School of Nursing at the University of the Western Cape was submitted to the office of the permanent secretary, Primary Healthcare Board in Nigeria, for permission to access the participating primary healthcare centers. Approximately five (5) months later, the researcher received the final approval letter from the office of the permanent secretary of the Primary Healthcare Board (Appendix 4). Subsequently, copies of the approval letter were forwarded to the medical officers and ward nurses in charge of the various participating primary healthcare centres in Epe Local government area. A permission letter was also addressed to the chairman of the local Government (Appendix 6), in charge of the primary health centre, granting the researcher access to the various participating healthcare facilities.

3.11.7. Recruitment and training of the research assistants

Two research translators, fluent in English and Yoruba, were trained by the researcher, regarding the data administration process and collection, ensuring confidentiality, as well as the translation, should more clarification be needed in the dominant local language. The purpose was to ensure the full participation of the respondents, for accurate responses to the questions. The process of training lasted three days. The information sheet (Appendices 10 & 11) that outlined details of the study, as well as the expectations, were distributed to each respondent, in addition to verbal information that was provided.

3.11.8. Data collection process

The respondents (postpartum women) were formally informed of the nature and purpose of the study, and assured of strict confidentiality. The information sheet (Appendices 10 & 11) and its translated version were distributed to the postpartum women for a better understanding of the study. Before the administration of the questionnaire, the consent form (Appendices 10 & 11) was signed by the consenting postpartum women. The

questionnaire was administered by the research assistants of the two trained bilingual translators. The researcher and the assistants were present throughout the process to help with any queries and challenges, until the PP women had completed the questionnaire. Daily, the completed questionnaires were properly and safely stored for five weeks.

3.11.9. Data collection instrument for quantitative study

The quantitative data were collected, using a self-administered questionnaire, adapted from the Nigeria demographic health survey (NPC, 2019). The modified questionnaire was pre-tested to ensure validity and reliability (See Table 3.3 on the result of reliability statistics). The modified questionnaire was also translated through forward-backward and back-ward translations from English into the dominant local language, Yoruba. This coincided with the findings of a study by Kante, Kouame, & Kante (2020), who emphasised the need to translate a questionnaire into another dominant language, especially in cross-cultural studies. Translating the questionnaire presented the opportunity to address issues, such as cultural adaptation (Barais et al., 2017), as well as gain a better understanding of the items, especially for those who were not fluent in English (Kante, Kouame, & Kante, 2020). The translation was executed by two bilingual individuals (English and Yoruba), a research assistant, and a professional translator with no medical knowledge or background.

- Forward translation

  The research assistant was employed to perform this task, being a bilingual person, who was fluent in English, as well as the Yoruba language. The instrument was translated from the English language into the Yoruba language.

- Backward translation

  The backward translation from Yoruba into the English language was performed, independently, by another bilingual person, a professional in languages, without any medical background, employed by the University of Lagos. Thereafter, both forward and backward translations were checked by family planning professionals to ensure the clarity of the instrument.

The instrument (Appendices 1 & 2) consisted of 8 sections (A to H). Section A measured the social demographic information. Section B assessed reproductive health information, while Section C explored the medium of PPFP information. Section D questioned the

method of PPFP that the PP women could use immediately, and up to 12 months after birth. Section E focused on specific information that the PP women received about PPFP, while section F questioned some facts about the PPFP method. Section G explored the adequacy of the information that the PP women received, while Section H assessed the factors that influenced the women's behaviour, in relation to using or not using PPFP. The respondents spent about 15-20 minutes to complete the questionnaire.

3.11.10. Pilot testing of the instrument

A pilot study is defined as a study that is conducted on a subset of the calculated sample of the planned target population, which is approximately 10% (Eldridge et al., 2015). Therefore, in this current study, the questionnaire was pilot tested on 10% of the calculated sample of the target population (32 respondents), at the Ibeju primary healthcare centre, which did not form part of the main setting, but displayed similar characteristics. The rationale was to test the ability of the instrument to reveal any unpredictable issue that may affect the full-scale research study. In addition, the intention was to test for the ambiguity and validity of the tools. Besides, it was important to ensure that the instrument could measure what was expected, namely, the content validity. Additionally, the questionnaire had to be comprehensible, to ensure the adequacy of the tool, before its final application in the main study (Bjerre et al., 2018; Mohaddesi & Harteveld, 2020).

3.11.11. Measures on rigor of the quantitative study

Rigor refers to the degree to which the researchers endeavoured to ensure the quality of the research process (Connelly, 2016). In a quantitative research study, this is achieved through the evaluation of the validity and reliability of the instrument (Heale & Twycross, 2015). The criteria involved in validity include content, construct, and face validity, while the criteria involved in reliability include credibility, dependability, confirmability, and transferability (Forero et al., 2018).

The purpose of rigor in a research study is to ensure quality research findings (Connelly, 2016). According to Houston (2019), there are four facets of rigor that are vital in research, namely:

- Facet 1: Rigor in designing research questions. In this aspect, the researcher requires a good understanding of the research objectives regarding the phenomenon of interest, to post important research questions (See 1.6, 1.5.1 on objectives and research questions respectively, Appendix 1 on quantitative survey questions, and Appendix 3 on focus group discussion questions).
- Facet 2: Conceptual rigor. This involves theory-driven thinking, whereby the researcher needs to include the precise set of variables to test the specific set of relationships among variables (See table 4.17 on the statistical test on differences in adequacy of PPFP information between previous users and non-users).
- Facet 3: Methodological and analytical rigor**.** This involves the systematic choice of sampling, the careful gathering of valid data, the preparation for the analysis of data, and formulating explanations for the findings (See Tables 4.1 to 4.18, and 5.2 and 5.4, for the data collection of the quantitative survey and focus groups, respectfully, as well as 3.11.4 on the various sampling methods)
- Facet 4: Rigor in crafting**.** This occurs when the researcher engages in a logical flow, connecting findings back to prior literature. However, this facet should be ensured throughout the introduction and implementation of the research study. The researcher in this current study steadily ensured the logical flow of clear information at each step with evidence, and provided cross-references where necessary.

3.11.12. Reliability of the instrument

Reliability in quantitative research refers to the measurement that maintains stability and consistency of results, regardless of the occasion (Mohajan, 2017). It measures the repeatability, accuracy, and consistency of the results in research studies. It also shows the extent to which the result is error-free (Elhedoudi, Ragheb, & Sadek, 2018). There are four major types of reliability, namely, split-half, test-retest, alternate forms, and interrater reliability.

3.11.12.1. Split-half reliability

This occurs when the result of a test or instrument is randomly divided into two halves, followed by a matching of both items for correlation. Strong correlation shows high reliability, while weak correlation indicates poor reliability. This type

of reliability test accommodates questions with two answers, for example, yes or no, and 0 or 1 (Heale & Twycross, 2015).

3.11.12.2. Test-retest

Test-retest refers to the repeatability of the test items, from the same group of individuals, on two different occasions, when the same assessment is being administered, using a statistical evaluation after each test, yielding similar results. This offers an indication of the reliability of the instrument (Leppink & Pérez-Fuster, 2017). Test-retest is also referred to as, *the reproducibility of the questionnaire item*, through the initial pilot testing of the instrument, followed by a repeat test in 2-3 weeks later. In this current study, the test-retest was conducted within two weeks. The time frame was selected to avoid memory loss (Bjerre et al., 2018).

3.11.12.3. Alternate-form reliability

This occurs when a different form of an instrument, with different wording, is administered subsequently to the respondent. For an instrument to yield good stability the correlation must be high (Heale & Twycross, 2015).

3.11.12.4. Interrater reliability

This type of reliability requires an agreement between two raters. The level of reliability depends on the measurement from the different raters. Inconsistency in the reliability of the assessment may be observed due to the influence of different assessments (Heale & Twycross, 2015).

The **Test-Retest** was the best fit for this current study, based on the fact that estimating test-retest reliability is suitable when the item is administered repeatedly under the same or similar circumstances, following the same content and structure (Bardhoshi & Erford, 2017). According to Leppink and Pérez-Fuster (2017), any attempt to estimate reliability that differs in content, or structure, becomes difficult, and even more difficult to defend a single-item measurement. One way to reduce measurement error, as well as increase the reliability of the instrument, is the use of multi-item measurement, instead of single-item measurement.

Reliability statistics assume that the item under consideration measures the same underlying variables (Heale & Twycross, 2015). Similarly, it is assumed that all Cronbach's alpha items under consideration are positively correlated on the same scale (Vaske, Beaman, & Sponarski, 2017). Additionally, the interpretation of Cronbach's alpha is preferred in multi-item instruments, instead of when single-item instruments are administered in a reliability test (Leppink & Pérez-Fuster, 2017). The reliability test of the instrument is determined when a repeat test is conducted, and the result can produce a similar value, especially for a newly developed scale, to ascertain the consistency of the scale (Berchtold, 2016). Such a test-retest involves the application of the instrument, on two different occasions, with an interval of 7-14 days, to the same set of respondents, under the same environment and clinical conditions, to evaluate the stability of the tools (Simões et al., 2018).

In this current study, the reliability of the instrument was determined by the use of the Cronbach's alpha test. The researcher conducted a test-retest at Ibeju Lekki Primary Healthcare Centre of Lagos State, which was a setting with similar characteristics as the main study setting, but was not included in the main study. The researcher first administered a sample of 32 questionnaires (Pre-test) on Tuesday, January 15, 2019, to randomly selected postpartum women at Ibeju Lekki Primary Healthcare Centre of Lagos State. Two weeks later (January 29, 2019), the second 32 test items were administered (Post-test) to the same postpartum women (see section 3.11.12. 2). However, before the first instrument was administered, the respondents were informed and encouraged to participate in a further survey, two weeks after the initial one. The purpose was to test the stability and consistency of the instrument. The Cronbach's alpha test was a good fit in this current study because it is a measurement used to test the reliability of an instrument that has more than two responses (Heale & Twycross, 2015), and the instrument is administered on different occasions. A single administered item should not be used as an indicator, when interpreting the reliability of an instrument (Leppink & Pérez-Fuster, 2017). According to Sharma (2016, p. 273), the decision rule for the Cronbach's alpha test of internal consistency is as follows:

Table 3.3: Reliability Cronbach's alpha statistics

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Table 3.4: Reliability Statistics result

Test	Cronbach' Alpha	N of Items
Pre-test	0.860	60
Post-test	0.882	60

Source: Field Survey, 2019.

When the Cronbach's alpha coefficient value is 0.70 and above, it is considered acceptable, as well as reliable to use in a study. The reliability test of all the variables in this current study resulted in a Cronbach's alpha (α) coefficient of approximately 0.860 for the pre-test and 0.882 for post-test (see Table 3.4); therefore, it was concluded that the research instrument for this current study was excellent, which confirmed the reliability, stability, and precision of the items employed in this current study. The reliability test result for the pilot study revealed that the post-test was better than the pre-test.

3.11.13. Validity

Validity is the extent to which the interpretations of the results of the test are guaranteed, when the instrument measures what it is intended to measure (Gray, Grove, & Sutherland, 2017). In this current study face-, construct-, and content validity were tested. To ensure face- and content validity, back-to-back translations of the questionnaire, from English into the Yoruba language were performed for postpartum women, who could not speak or read in the English language. The questionnaire was presented to the researcher, supervisors, statistician, and experts in family planning provision, to review and critique.

3.11.13.1. Face validity

Face validity involves a valid measure, is based on the agreement with experts in the field of study, and achieved by examining the questionnaire, to determine how valid the contents are, as well as ensure that the questions are clear (Bolarinwa, 2015; Elhedoudi et al., 2018). For this current study, face validity was established by involving experts in the field of postpartum family planning. In addition, the opinion of the research supervisors on the evaluation of the content and clarity of the questionnaire was solicited.

3.11.13.2. Content validity

Content validity reveals the extent to which the elements in the assessment tool represent the construct for a particular assessment (Yusoff, 2019). An assessment tool refers to a questionnaire, which is a method of acquiring data. Establishing the content validity remains an important criterion that helps to establish the validity of the questionnaire in research (Yusoff, 2019). This type of validity focuses on examining the extent to which the instrument incorporates all the vital elements that are relevant to the concept being measured (Gray, Grove, & Sutherland, 2017). These vital elements, required in the tools, are determined by experts in the field of interest, who are expected to express their degree of agreement, once the content of instruments is considered satisfactory, in terms of completeness, theoretical relevance, practical relevance, conciseness, clarity of language, and readability (Bolarinwa, 2015; Cattuzzo, 2017).

In this current study, the questionnaire was reviewed by experts in the area of study (Postpartum family planning) to examine the content validity for clarity of language, and conciseness, including both theoretical and practical relevance, as well as the research objectives, for further suggestions. Additionally, the view of the statistician was absorbed. When the final review was completed, new items were added and some were removed.

3.11.13.3. Construct validity

Construct validity determines whether the questionnaire tool measures the theoretical construct that it is meant to measure. Essentially, it is a measure that determines the suitability of the instrument, when exposed to practical use

(Bolarinwa, 2015). Therefore, by addressing the construct validity of the instrument used in this current study, the researcher ensured that the questionnaire was aligned with the variable, embedded in the construct of the (IMB) model, which was the basis for the research objectives that guided the structure of the questionnaire. This was to ensure that the instrument measures what it was supposed to measure.

3.11.14. Quantitative data analysis

Data analysis for the quantitative study was executed, using descriptive and inferential statistics within the Statistical Package for Social Sciences (SPSS) version 20 (Abu-Bader, 2021). Quantitative data analysis is a method of manipulating and interpreting numbers, which allows the researcher to understand the social reality of the phenomenon under study (Mertens, 2016; Ong & Puteh, 2017).

According to Gray, Grove, and Sutherland (2017), descriptive data, in the form of categorical data, for example age, educational level, among others, could be described in a form of frequency and percentage. However, inferential statistics are used to describe the relationship between assumptions and data, using statistical tests, such as T-test or Chi-square (Amrhein, Trafimow, & Greenland, 2019; Mishra, Pandey, Singh, Keshri & Sabaretnam, 2019). The categorical variables in this current study were described, summarised, and presented as frequencies and percentages, in the form of tables, charts, and histograms (see Tables 4.1-4.9; Tables 4.15-4.16; Figures 4.1- 4.4). The inferential statistics, in the form of a t-test, were employed to test for statistical significance between variables, regarding the use of PPFP. It was also used to determine the relationship between the information received by the PP women, and the use of PPFP, with the level of statistical significance set at $p < 0.05$. (See Table 4.18). In the next section, the researcher discusses the qualitative study of Phase 2.

3.12. PHASE 2 PDM: QUALITATIVE METHODOLOGY

Qualitative research methods are used to provide a detailed understanding of the phenomenon under study (De-xin, 2018). It is aimed at addressing the perceptions and opinions of the individual in a particular study. In such a study, information is elicited from a few participants, using open-ended questions, receiving an open-ended answer, and the themes generated, are

interpreted by the researcher (De-xin, 2018). In this current research study, qualitative research was used to explore and describe the process through which professional nurses motivated the PP women and their social groups to promote postpartum family planning. The world view of qualitative research is discovery, for a better understanding of the research problem. These actions are initiated through social interaction, employing interview conversations, as well as focus group discussions (Antwi & Hamza, 2015).

Qualitative research plays a key role in developing effective health promotion strategies and interventions (Lewis, 2015). Additionally, qualitative research involves an interpretive and naturalistic approach (Creswell & Poth, 2018; Basias & Pollalis, 2018). This indicates that researchers involved in a qualitative approach, study phenomena in their natural settings, to make sense of, or interpret such phenomena, in terms of the meaning people ascribe to them. Therefore, the process of qualitative research, as indicated by Creswell and Poth (2018), starts with assumptions, followed by an outline that informs the research problem, using a qualitative approach to address the meaning that individuals or groups ascribe to a human problem. To study problems, the researcher must engage in an emerging qualitative approach of inquiry. Correspondingly, the collection of data is done in a natural setting, and data analysis is established logically, usually in the form of themes, while the final writing of the findings involves explanations and interpretations of data.

3.12.1. Study population 2 for qualitative study (Objective 3)

This target population involves two groups of participants; the staff nurses or staff midwives (single qualified nurses), and the nurses at managerial level, doubly qualified nurses (nurse-midwives). The two groups provide family planning services at the Primary Health Care centre. The objective of this section was to explore and describe the motivating factors, used by these groups of nurses, in promoting the use of PPFP.

3.12.2. Sampling Method

The sampling method involves the sequence of action taken to select people, events, behaviours, or other elements that are representative of a chosen population under study (Gray, Grove, & Sutherland, 2017). The method encompasses choosing a representative sample for the entire population, selected according to the required criteria (Gentles, Charles, Ploeg, & McKibbon, 2015). A purposive sampling technique was used in this current study. Purposeful sampling is defined as the selection of participants, or sources

of data to be used in a study, based on their anticipated richness and relevance of information about the study research questions (Gentles et al., 2015). The following section covers the sampling determination (frame) for staff nurses/midwives and nurse managers.

3.12.2.1. Staff nurses/midwives

Before the commencement of the study, the participants were duly informed about the aim and objectives of the study. They were provided with an information sheet (Appendix 12), as well as a confidentiality binding form (Appendix 15). For the determination of the sample size for this group of nurses, 6 primary healthcare facilities were purposively selected from the 19 primary healthcare centres. Subsequently, 3 participants were purposively selected from each of the 6 selected primary health centres. However, only 17 participants were recruited from this population. The reason was that the participants in the pilot group discussion were 5, while the other two focus group discussions in this population had 6 participants each. Although, a total of 6 focus group discussions were conducted with the two populations, 3 focus groups discussions were conducted with the staff nurse/staff midwives. (See Table 3.5 for the three FGDs conducted with the staff nurses/staff midwives).

Table 3.5: For staff nurse/midwife

PHC (FGD)	Number of respondents	Demographics
Pilot focus group discussion	5	5 Female
PHC 1	6	Male -1 Female -5
PHC 2	6	Male -1 Female -5
Total 3	**17**	**17**

3.12.2.2. Nurse managers

Purposive sampling was used to determine the sample size for the nurse managers. In defining this, 6 primary health centres were purposively selected from the 19 primary healthcare centres. Subsequently, three (3) participants were purposively selected from each of the 6 selected primary health centers. A total of 3 groups of

6 participants each were formed from this population. The three discussions took place in the following primary health centres: PHC 3, PHC 4 then PHC 5 (See Table 3.6)

Table 3.6: For nurse managers

PHC(FGD)	Numbers of respondents	Demographics
PHC 3	6	Male- 1 Female- 5
PHC 4	6	Female- 6
PHC 5	6	Female- 5 Male- 1
Total 3	**18**	**18**

3.12.2.3. Inclusion and exclusion criteria

The participants included single qualified nurses and nurse managers (doubly qualified nurse-midwives), because they provided family planning services directly to the PP women in the participating primary healthcare facilities. Ultimately, the assumption was that they would be able to provide accurate information about their experiences and activities while promoting the use of PPFP.

Exclusion criteria for nurses

Professional nurses who do not provide family planning services were excluded from the study

3.12.3. Data collection for the qualitative study

Qualitative data were collected, with the aid of a self-developed focus group discussion guide (Appendix 3) for the two groups of professional nurses, to address objective 3, which was to explore and describe the motivating factors, they employed to promote the use of PPFP in the participating Primary Health Care facilities.

3.12.4. Focus group discussions for the two groups of nurses

A focus group discussion (FGD) is a type of data collection tool in qualitative research that requires people with similar characteristics to gather and discuss their perceptions, beliefs, and opinions on particular issues (Greenwood, Kendrick, Davies, & Gill, 2017).

The participants were selected for the focus group discussions because they were directly involved in the provision of postpartum family planning services. Focus group discussions are useful in qualitative studies, as they provide great awareness and a good understanding in a research study (Greenwood et al., 2017). The discussion involves interviewing about 6 to 8 people in a group, which is usually led by the interviewer (Creswell, 2014). In this current study, a total of 6 group discussions were conducted among the two different populations, namely, three with staff nurse/staff midwives and three with nurse managers (See 5.3 section 1 and 5.4 section.2 on the description of the FGDs with the two different populations, respectively).

The discussions were moderated by the researcher, and data collection was conducted in a conducive location within the facilities. Before the commencement of the discussions, the researcher explained the abiding rules to the participants. They were advised to maintain orderliness when any person was speaking, even when there was a disagreement of opinion, to allow for the easy flow of transcripts, for which a voice recorder was utilised, after consent was received from the participants. The participants were assigned numbers instead of their names, for easy identification, as well as anonymity. The use of cell phones was restricted to emergencies, while their phones were required to be in silent mode. Additionally, they were duly encouraged to participate completely, in anticipation of a successful discussion. Besides, they were provided with detailed background information regarding the purpose of the study, the aims, voluntary participation, potential benefits, as well as the risks of the study, because any interaction between humans may attract some elements of fear, especially when they are expected to disclose information about their job. Additionally, various techniques were used during the discussion, namely, probing, facial expressions, and follow-up questions. The confidentiality binding forms and consent forms were signed by all the participants, before the commencement of the FGDs. Informed consent is a major ethical issue, when conducting nursing research (Fawcett & AbuFannouneh, 2017). It implies that the person knowingly, voluntarily, intelligently, clearly, and manifestly offers his/her consent.

The two groups of nurses were asked the same questions. The use of an open-ended approach was employed to explore different opinions about the situation, after much information and understanding. All discussions with the professional nurses were in the English language, in which they were fluent. The researcher spent a maximum of 45-60

minutes per section, and the proceeding of the discussion was recorded on an audiotape recorder, while field notes were also taken.

3.12.5. Qualitative data analysis

Qualitative data analysis was performed after the focus group discussions. The coding analysis was performed, using thematic analysis, according to the following 8-step systematic approach by Tesch (1990).

1. Get a sense of the whole. Read all the transcriptions carefully, perhaps jotting down some ideas as they come to mind, while you read.
2. Pick one document (one interview). The most interesting one is the shortest, or the one on the top of the pile. Read through it, asking yourself, "What is this about?" Do not think about the substance of the information, but its underlying meaning. Write thoughts in the margin.
3. When you have completed this task for several participants, make a list of all topics. Cluster similar topics together. Form these topics into columns, perhaps arrayed as major, unique, and leftover topics.
4. Take this list and return to your data. Abbreviate the topics as codes, and write the codes next to the appropriate segments of the text. Try this preliminary organising scheme to determine whether new categories and codes emerge.
5. Find the most descriptive wording for your topics and turn them into categories. Search for ways to reduce the total list of categories, to show interrelationships.
6. Make a final decision on the abbreviation for each category and alphabetise these codes.
7. Assemble the data material belonging to each category in one place, and perform a preliminary analysis.
8. If necessary, recode your existing data.

Thematic analysis is a suitable process to investigate the views of different participants in a qualitative study. It also emphasises the similarities and differences to draw a clear and conclusive report (Nowell, Norris, White, & Moules, 2017). During data collection, the researcher ensured that all the discussions were recorded by an audiotape recorder.

During data analysis, the researcher carefully replayed the recorder to listen, and subsequently, re-listen to the information recorded, or read and re-read the field notes, to make use of all the relevant information, and to avoid the loss of important information.

Thereafter, the data were transcribed verbatim by the researcher. The transcribed data were handed to the supervisors for review. Subsequently, the data were organized according to the different themes that emerged, and handed to an external expert in qualitative data coding, who, independently, completed the coding process. The researcher also engaged in the data analysis and clarification of the data, along with the supervisors.

Consensus was reached between the researcher and the external coder, regarding the coding of data, to facilitate the consistency of the findings, as consensus between encoders ensures the reliability and trustworthiness of qualitative research (Ghamari, Zeinabadi, Arasteh, & Behrangi, 2018).

3.13. PHASE 3: METHODOLOGY

The quantitative and qualitative findings, collected during phase 2, were triangulated to inform the design of the training programme for professional nurses, to promote the use of PPFP. The Information, Motivation, and Behavioural skill (IMB) Model, developed by Fisher and Fisher (2003), guided the exploration and analysis of the experiences, in terms of the similarities and differences among the different population groups, to inform the main content of the PPFP training programme for nurses. Further triangulation of the main findings culminated in the final merging of the main findings. This allowed the researcher to identify relevant concepts/themes to be considered during the development of the training programme, correspondingly justifying the interpretation on the available best practices of intervention used in promoting PPFP (see section 2.11). Consequently, special attention was given to terms/concepts like the agent, recipient, context, dynamics, procedure, and terminus (See Chapter 7). Additionally, special attention was given to the dynamics related to sources that hinder the promotion of PPFP, as well as the procedure. The latter term/concept refers to the various activities, techniques, or protocols, regarded as fundamental for inclusion into the proposed training programme. According to Osanloo and Grant (2016), a theory is a system of

concepts that guide and support the research process. The implementation in a study ensures specific direction in the research design (Ngulube, 2018).

The training programme for nurses to promote PPFP, was designed, using the Practice-oriented theory by Dickoff et al., (1968). The six-point questions provided a reasoning map to answer the following questions for the design of the PPFP training programme:

1. Who or what performs the activities? (Agent)
2. Who or what is the recipient of the activity? (Recipient)
3. In what context is the activity performed? (Context)
4. What is the energy source for the activity? (Dynamics)
5. What is the guiding procedure, technique, or protocol of the activity? (Procedure)
6. What is the end-point of the activity? (Terminus)

3.13.1. Agent

The Agent is the facilitator, whose role includes various activities, such as organising, coordinating the training programme, empowering the professional nurses to initiate quality improvement to address the identified challenges.

3.13.2. Recipients

The recipients are the professional nurses, who receive the training. They are adult learners, who are expected to exhibit creativity and competence, with exposure to learning (Maddalena, 2015). The training programme in this current study seeks to promote competence for nurses, and teaching adult professional nurses seeks to promote positive creativity that would ensure improvement in service delivery, regarding the services of postpartum family planning.

3.13.3. Context

The context refers to the healthcare facilities, where PPFP is provided at the grassroots level. However, the influence of the community leaders remains paramount, regarding the activities that transpire in the healthcare centre, as the religious leaders and community leaders are regarded as the gateway to the community. They are an influential and social group of people, who have access to members of the community, and could also deliver information to healthcare providers, namely nurses, as well as their

congregations. Therefore, collaborating with these groups of people has been described as a great success in health promotion, as well as health programmes (Rivera-Hernandez, 2015). Nurses are expected to ensure promotional activities in healthcare centres, as well as collaborate effectively with the stakeholders in the community, namely, the men, and specifically, the religious/community leaders.

3.13.4. Dynamics

The challenges that hinder the promotion of PPFP were the dynamics, which included:

- Lack of sufficient methods of passing on PPFP health information.
- Aggressive attitude of the nurses.
- Inadequate communication skills.
- Poor interpersonal relationships.
- Lack of sufficient methods of motivating the social group (men, community/religious leaders).

3.13.5. Procedure

The procedure involved various training activities to empower the professional nurses to promote the use of PPFP, which included:

- Provision of different teaching methods.
- Empowerment for effective interpersonal relationships.
- Stress management to reduce work-related aggressive attitudes.
- Empowering nurses on how to encourage the men and community/religious leaders to promote PPFP.
- Establish good communication skills.

3.13.6. Terminus

The terminus in this current study indicated the endpoint of activities. Due to their exposure to various empowerment efforts, nurses are expected to be well equipped with the necessary skills, knowledge, and capabilities, to promote the use of PPFP (see chapter 7 for more details of the Practice Oriented Theory).

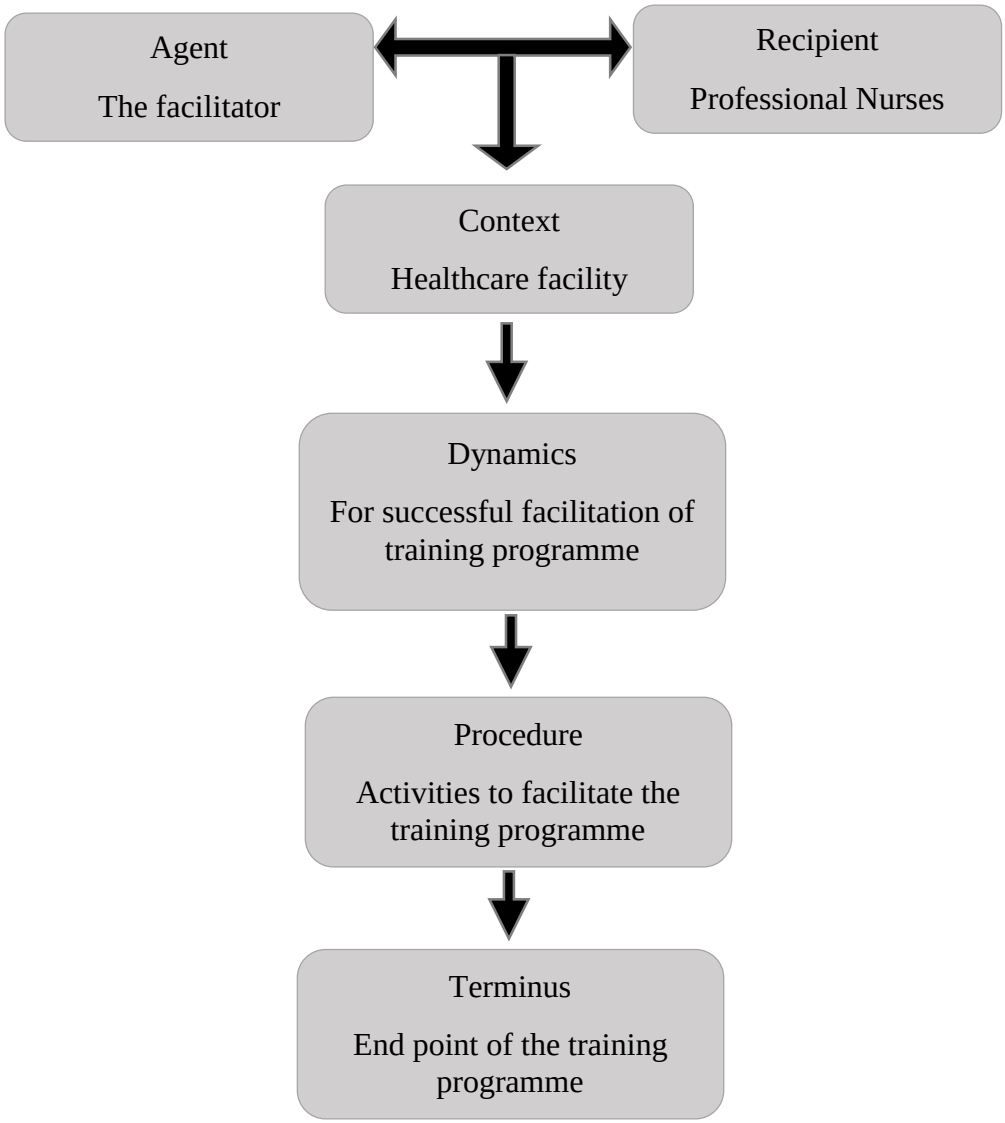


Figure 3.5: Reasoning map adapted from Practice-oriented theory (Dickoff et al., 1968)

3.14. PHASE 4: METHODOLOGY

The final triangulated findings from the quantitative and qualitative situational analysis in phase 2 revealed that the professional nurses lacked certain motivational skills, such as communication skills, interpersonal relationship skills, as well as the ability to adequately motivate the social group of people (men, community leaders and religious leaders), for them to encourage PP women to use PPFP. The finding also revealed that nurses lacked the ability to educate the PP women, by using different teaching methods, during health education. This situation required a training intervention, as a key component to improve the promotion of the use of PPFP. The training programme takes into consideration certain research principles, such as the objectives, the purpose, the content, and expected outcome. The content of the developed

training programme, was based on the findings of the final triangulation of the situational analysis, as well as support from literature. Five modules were developed, and the expected outcomes include the following:

- Ability to employ different teaching methods.
- Improved motivation of the social group of people (men, community/religious leaders).
- Improved communication skills.
- Improved interpersonal relationships.
- Ability to cope in a stressful work environment. (See Chapter 8 for further details)

3.15. PHASE 5: VALIDATION

Validation refers to the process of establishing the practicality of a developed research study, as well as the suitability of the intended use (Eker, Rovenskaya, Obersteiner, & Langan, 2018). It involves the researcher's undertaking to develop explanations around the research findings. In addition, it could be understood as a way of justifying the credibility of the research, in the presence of the relevant audiences. According to Meyer and Van Niekerk (2008), evaluation in the form of validation, is a systematic process of valid appraisal, to measure the progress of the desired goals or outcomes. The criteria for this phase was concerned with activities to establish the usefulness of the developed training programme. The validation process in this current study involved activities that the researcher and the supervisors were engaged in, continually, throughout the research process, to check and address queries that arose. The supervisors engage critically and constructively to question all the processes, throughout the research study, to ensure a good quality research study. In this current study, the validation phase of the PDM (Meyer & Van Niekerk, 2008) was not part of the training programme, because the programme objectives terminated at the development of the training programme. However, experts in the field of family planning are expected to validate the programme for future evaluation and implementation.

3.16 MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness in qualitative study refers to the degree of confidence of the researchers in data assessment (Connelly, 2016). It can be evaluated using different criteria such as credibility, transferability dependability, confirmability and authenticity (Amin, Nørgaard, Cavaco, Witry,

Hillman, Cernasev, & Desselle, 2020) In this study the researcher adopted the following methods which are: credibility, transferability, dependability, confirmability and authenticity.

Credibility

Credibility is the principal goal in establishing trustworthiness in a qualitative research, it encompasses the researcher confidence in the truth of the study and in the interpretations of data (Kyngäs, Kääriäinen, & Elo, 2020; Connelly, 2016). Approaches employed to enhanced credibility includes: Prolong engagement, persistent observation and triangulation (Stahl, & King, 2020). In this study the measures utilized by the researcher to ensure the criteria of credibility includes: Prolong engagement, Persistent observation and Triangulation.

Prolong engagement

An important aspect in establishing the integrity of credibility in qualitative research is prolong engagement. This method require that the researcher spend sufficient time with the participant, know about the setting in which the research is conducted and also to build trust (Amin, et al., 2020; Connelly, 2016). Before the commencement of data collection, the researcher invested enough time to visit all the participating Primary healthcare centers to familiarize herself with the participants and the research setting. Sufficient time was spent with the participants to explain the research process in order to build trust and established good rapport before each focus group discussion. During data collection the researcher spent 45 to 60 minutes during each focus group discussion. Data were obtained in six different Primary Healthcare centers at different time and, such involvement require time (See table 3.1). Similarly, during the analysis and interpretation of data the researcher spent quality time in repeated reading to become immersed in the data for better understanding.

Persistent observation

persistent observation require that the researcher's is well engage with data to ensure completeness of relevant information and to provide detail description of data (Amin et al., 2020). In this research study, the researcher was well engaged with data during data analysis. The researcher carefully replayed the audio recorder to listen, and re-listen to the information recorded to make use of all the relevant information, in order to avoid the loss of important information that are crucial in the development of the training program. (See 3.12.5). Also, details description of the qualitative data was provided in this present study (See chapter 5).

Triangulation

Triangulation refers to the use of multiple sources to draw up conclusions about what constitutes truth. It also involves the collection of data in multiple sites, to test for cross-site consistency (Ang, Embi & Yunus, 2016). In this study focus group discussions were conducted among two different groups, namely the staff nurses and the nurse managers at different primary healthcare centers. (See 3.12.1). And triangulation of both finding was done, this approach provided the researcher the opportunity to identify the relevant concepts to be considered during the development of the training program. (See chapter 6).

Dependability

Dependability is concerned with the consistency across the research starting point of data collection and analysis. It is similar to the reliability in quantitative study. However, the measure is focused on the integrity of the study and the researcher should ensure the logical process of the research study which include attachment such as tables to explain the research process (Kyngäs, Kääriäinen & Elo, 2020) In this study the researcher provided detailed explanation right from the data collection, data analysis, interpretations and the result. Also, attachment such as tables, figures that easily explain the categorization process in the final

report was provided. This was done to ensure that the reader can easily evaluate the categorization process.

Transferability

Transferability refers to the extent to which the research findings can be applicable to other context (Kyngäs, Kääriäinen, & Elo, 2020). Such applicability relies on the researcher ability to provide sufficient description of the research study for easy evaluation of the applicability to other context. Though the intension is not for generalizability rather, it is to provide evidence. (Kyngäs, Kääriäinen, & Elo, 2020; Stahl, & King, 2020). In this study the researcher provided adequate information about the research setting as well as the study participants (See chapter 3 and 5). Similarly, the researcher provided a detail description of the research process with respect to the research design and methodology including the research findings

Confirmability

Confirmability refers to objectivity of the data produced and the degree of accuracy of the research findings (Stahl & King, 2020) It can also be described as the degree of proof that the data analysis, interpretation and finding was not twisted or bias (Kyngäs, Kääriäinen, & Elo, 2020). In this study the qualitative data collection was guided by the research focus group guide. The researcher also employed the input of the external independent coder to ensure objectivity and accuracy. (See 3.12.5). The researcher's supervisors' continuous securitization was also helpful in ensuring competence.

Authenticity

Authenticity refers to the extent to which the researchers persuasively show different realities in the analysis and interpretation of the data It is also concerns with the demonstration of citation from participant. For example, any identified category should include at least one relevant citation. (Kyngäs, Kääriäinen, & Elo, 2020). In this research study the researcher engaged extensively in the description of the research context, the participant's experiences

indicating their verbatim quotations during data analysis. (See chapter 5). Also detailed description of the analysis and interpretations of data was properly ensured

3.17. ETHICAL CONSIDERATION

Ethics is referred to as a discipline that encompasses the recognition and resolving of moral issues, in an attempt to clarify and differentiate between good and bad notions (Murariu et al.,2016), following the declaration of Helsinki ethical principles involving human subjects, human material, and data collection. In a general meeting, held in June 1964, in Helsinki, Finland, the World Medical Association (WMA) stated that the ethical principles were predominantly intended to address physician clinical ethical issues; however, the WMA appeals to all researchers, involved with human subjects, to adopt these principles, as well (Shrestha & Dunn, 2019). The aim is to ensure standardisation, as well as the protection of any interested respondent/participant in a research study. In line with the Helsinki ethical principles, the basic ethical principles on which this current research study is based, includes the scientific approval by the ethics committee of the University of the Western Cape; approval to use the selected primary healthcare centres in Epe Local Government in Lagos State; the principle of informed consent; the principles of privacy and confidentiality; the principle of beneficence; as well as the principle of respect for the person.

In this current study, ethical approval was obtained from the Faculty of Community and Health Sciences higher degrees' committee, and the Biomedical Research Ethics Committee of the University of the Western Cape (ethics number BM18/4/15, Appendix 5). In addition, the proposal, including the ethical approval from the Biomedical Research Ethics Committee, and a supporting letter from the School of Nursing of the University of the Western Cape, was submitted to the permanent secretary of the Primary Health Care Board in Nigeria, Lagos state, for permission to use the selected primary healthcare centre in Epe Local Government Area of Lagos State, Nigeria. Approval was received before the commencement of the study (Appendix 4). The purpose of the study was thoroughly explained, and the participants were given detailed information regarding the study. In addition, they were assured of strict confidentiality throughout the process. Written consent (Appendices 13 & 14) was obtained from the participants, after they had fully understood the aims, objectives, benefits, and risks of the study.

3.17.1. Confidentiality and Anonymity

All the participants were assured of strict confidentiality, and anonymity was maintained throughout the research process, and after. Transcribing codes, instead of names, were written on the questionnaire, as well as other collected data. Hard copies of collected data (field notes and audiotapes) were safely stored under lock and key, while the soft copies were password protected on computer, to which only the researcher had access. The confidentiality binding form (Appendix 15) was signed by every participant to protect the identity of the individuals before the commencement of the discussions.

3.17.2. Principle of beneficence

This refers to the principle of *no harm to the participant* through a good understanding of the research benefits. Beneficence is the commitment to minimise harm, and simultaneously increase the benefits in the research study (Neighbors, 2017). Although the researcher did not anticipate that any form of harm would come to the participants, the PP women could experience some psychological distress, due to the psycho-socio-emotional and cultural beliefs, associated with the use of PPFP. Similarly, the nurses could experience some element of psychological discomfort, while talking about their job description, regarding their motivational engagement with the postpartum women about the use of PPFP. However, before the data collection/focus group discussions commenced, the participants were well informed about the research study, and an information sheet (Appendices 10, 11, & 12) was distributed to each, for a proper understanding of the potential risks and benefits. Subsequently, informed consent (Appendices 13 & 14) was obtained from all the participants before the discussions commenced. Finally, a psychologist was readily available to the participants in the event of any distress, although no one required the services of the psychologist. Confidentiality and anonymity were ensured throughout the research process, to guard against any form of fear, anxiety, and victimization.

3.17.3. Informed consent

The postpartum women and the nurses were provided with an information sheet (Appendices 10, 11, & 12) which contained detailed information about the time frame for data collection, including the potential risks and benefits. Additionally, they were fully informed of their rights to decide whether to participate or not, as participation was

voluntary. They were also informed of their right to withdraw at any point during the study process, without any fear of reprisals. After a full understanding of the research study was attained, informed consent (Appendices 13 & 14) was obtained from each participant before the commencement of data collection, to confirm their willingness to participate. The participants were informed about the use of audiotape recorders, and permission was granted before the commencement of the discussions. Finally, the confidentiality binding forms were signed to protect the identity of individuals, while the rules binding the participation were communicated to them, before the commencement of the discussions.

3.17.4. Respect for person

During the study process, the researcher ensured a good interpersonal relationship with the participants. Each question raised was adequately answered. They were all treated equally, without any discrimination, and due respect was demonstrated. The participants were informed that participation was voluntary, and they were allowed withdraw, without any reprisals. Consequently, all the respondents voluntarily participated in the study**.**

3.18. SUMMARY

In this chapter, the researcher emphasised the multiple research design methods that were employed to conduct this current research study. The research setting, including the theoretical phase of the study was also discoursed. A detailed explanation of the various mixed-method designs was highlighted, while the researcher offered justification for using a particular mixed-method design. The Program Development Model of Meyer and Van Niekerk guided the methodological process. Data from quantitative and qualitative studies were collected concurrently during the situational assessment; however, the analysis and interpretations were conducted separately. The findings were triangulated to inform phase 3, which was the design phase. The programme development phase was based on the final triangulated findings, while the activities listed in Dickoff et al., (1968) guided the development of the training programme. Ultimately, measures were employed to ensure trustworthiness, and the ethical principles were well deliberated, and applied. The following chapter comprises the presentation and discussion of the quantitative data.

CHAPTER 4

PRESENTATION AND DISCUSSION OF THE QUANTITATIVE DATA

4.1. INTRODUCTION

The situational analysis, phase 1 of Meyer and Van Niekerk (2008) was conducted using the triangulation mixed-method design. The process involved the concurrent collection of data from different sources, simultaneously, but analysed separately (Almeida, 2018; Guest & Fleming, 2014). The different datasets are also presented separately in Chapters 4 and 5. The integrated findings from both the quantitative and qualitative datasets are presented in Chapter 6.

The quantitative survey collected data related to the first two objectives of the study: Objective 1 examined the information received by the postpartum women, regarding the use of PPFP; and Objective 2 identified factors that influenced the behavioural skill of postpartum women, related to the use of PPFP. In this chapter, the researcher presents the findings and the discussions of the quantitative data collected from the postpartum women, using the structured questionnaire (Appendices 1 & 2). To provide a comprehensive understanding of the study findings, the socio-demographic information of the respondents is presented first.

4.2 SOCIO-DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

The socio-demographic characteristics of the postpartum women are shown in Tables 4.1 and 4.2, to describe their age, religion, marital status, educational attainment, occupation, income, and ethnicity. Of the total of 300 questionnaires that were administered to the respondents, 297 were retrieved and analysed, resulting in a response rate of 99%. The women's ages ranged between 13 and 33 years; their mean age was 24 years (± 4.7 standard deviation). Of the 297 women studied, 53 (17.8%) were teenage mothers, while the remaining were mothers between the ages of 20 and 33 years. This is consistent with the Nigeria Demographic Health Survey (NPC, 2019), which revealed that 19% of women, aged 15 to 19 years, are teenage mothers in Nigeria. In this current study, the age of the mother is vital, because it influences the behavioural skill relatively, regarding the decision to use postpartum family planning.

Regarding religious affiliation, 109 (36.7%), and 161 (54.2%) of the women were Christians, and Muslims, respectively (Table 4.1), while 20 (6.7%) and 7 (2.4%) were traditionalist and pagan, respectively. This is consistent with the Nigeria Demographic Health Survey (NPC, 2019), which revealed that 46% of women and men are Christian, whereas 54% are Muslim, and less than 1% are traditionalists. Religious beliefs significantly influence the decision of some couples regarding whether or not to accept family planning (Barranco & Soler, 2017), because religion in most societies is so well-rooted in their culture, that it influences the behaviour and ideology of the people, especially in decision making, regarding the use of family planning (Pinter, Hakim, Seidman, Kubba, Kishen, & Di Carlo, 2016).

A total of 200 (67.3%) women were married. The marital status of women in this current study is consistent with the current marital status of women in the Nigeria Demographic Health Survey (NPC, 2019), which indicated that 70% of women in Nigeria are currently in a union. The majority, 166 (55.9%), had primary school education. This is also consistent with the Nigeria Demographic Health Survey (NPC, 2019), which indicated that the level of primary school attendance ratio in Nigeria is 59% for females. In this current study, the primary school level was the highest educational attainment among the respondents. This may have implications for the fertility rate of the women, and consequently, the use of FP. This NDHS (NPC, 2019) revealed that women with low or no education are three times more likely to have multiple children, compared with women with higher education.

In Table 4.1, the primary occupation of the women is presented as 51 (17.2%), who were unemployed, and 169 (56.9%), who were self-employed. Only 35 (11.7%) were salary earners, and 23 (7.7%) were farmers/fishing, while 19 (6.4%) were housewives. The level of occupation is consistent with the Nigeria Demographic Health Survey (NPC, 2019), which reveals that 65% of women are employed. The Nigeria Demographic Health Survey (NPC, 2019) also confirms that 70% of women are self-employed. The education of the PP women is a reflection of their occupation. Since education is strongly associated with socioeconomic development, this may influence how they utilise the healthcare facility for PPFP.

According to Table 4.1, the majority of the PP women 264 (88.9%) were earning below the expected thirty thousand Naira minimum wage in Nigeria, while 11 (3.7%) earn a minimum wage and above. The income of the PP women in this current study reflected a poor socio-economic status.

Table 4.1: Respondents' Socio-demographic characteristics (N = 297)

Socio-demographic characteristics	Frequency	Percent	Mean
Age groups			
Teenage mothers	53	17.8	24±4.7
Mothers (Age 20-33)	244	82.2	
Religion			
Christianity	109	36.7	
Islam	161	54.2	
Traditional	20	6.7	
Pagan	7	2.4	
Marital status			
Married	200	67.3	
Single	46	15.5	
Divorced	24	8.1	
Widowed	8	2.7	
Living together but not married	19	6.4	
Highest educational level attained			
No formal schooling	57	19.2%	
Primary school	166	55.9	
Secondary school	74	24.9	
Primary occupation			
Unemployed	51	17.2	
Self employed	169	56.9	
Salary earner	35	11.8	
Farmer/fishing	23	7.7	
Housewife	19	6.4	
Income Range			
Below minimum wage	264	88.9	
Minimum wage & above	11	3.7	
Income not disclosed	22	7.4	

In Table 4.2, the largest ethnicity group indicated was Yoruba 176 (59.3%). This is consistent with the Nigeria Demographic Health Survey (NPC, 2019), which confirms that the main ethnic groups in Nigeria are Hausa, Yoruba, and Ibo.

Table 4.2: Respondents' ethnicity

Ethnic groups	Frequency	Percent
Yoruba	176	59.3
Ibo	49	16.5
Hausa	41	13.8
Igala	3	1.0
Ibibio	4	1.3
Edo	4	1.3
Delta	2	0.7
Ogoja	3	1.0
Ishekiri	1	0.3
Calabar	4	1.3
Foreigner	3	1.0
Auchi	2	0.7
Isoko	1	0.3
Urobo	4	1.3
Total	297	100.0

4.3. REPRODUCTIVE HEALTH ANALYSIS

In Table 4.3, the number of pregnancies (gravidity) and the number of children (parity) of the respondents are presented. Only 12 (4.0%) of the women were mothers, who had been pregnant once (primigravid mothers), while the majority, 171 (57.6%) had 5 pregnancies or more.

Table 4.3: Respondents' reproductive health data

Reproductive Health data	Frequency	Percent
Number of pregnancies		
1 pregnancy	12	4.0
2 – 4 pregnancies	114	38.4
5 pregnancies and above	171	57.6
Number of childbirths		
1 child	27	9.1
2 –4 children	145	48.8
5 children and above	125	42.1
Termination of unwanted pregnancy		
Yes	73	24.6
No	224	75.4

In addition, mothers who had delivered just once (prim-para) were 27 (9.1%), while the majority, 171 (57.6%) were mothers, who had achieved five pregnancies and above (grand multigravida mothers). The mothers who had delivered more than four times, specifically five times and above (grand multipara), were 125 (42.1%). This is consistent with the NDHS (NPC, 2019), which shows that each Nigerian woman is currently giving birth to 5.3 children, and each woman also desires to have, at least, 6 children.

According to Table 4.3, less than a quarter, 73 (24.6%), reported terminating an unwanted pregnancy in their lifetime. In Table 4.4, 33 (11.1%) listed that the pregnancies were unwanted, while 8 (2.7%) and 7 (2.4%) disclosed that the termination was due to the lack of money, or immaturity.

Table 4.4: Respondents' given reasons for termination of pregnancy

Reason for termination of pregnancy	Frequency	Percent
Unwanted pregnancy	33	11.1
Not married	5	1.7
No reason	10	3.4
No money	8	2.7
Immaturity	7	2.4
Abortion & Miscarriage	8	2.7
No time	1	0.3
Lack of support	1	0.3
Not applicable	224	75.4
Total	297	100.0

Although the Nigerian Demographic Health Survey did not measure the termination of unwanted pregnancies, this information was collected from the PP women to establish their understanding of the impact of unwanted pregnancies, and the use of postpartum family planning. A recent study revealed that quality postpartum family planning information has the potential to decrease the likelihood of unwanted pregnancies substantially, as well as increase the likelihood of the use of PPFP (Gul, Hameed, Hussain, & Sheikh, 2019).

In Table 4.5, the information regarding the respondents' children is presented. The majority, 286 (96.3%) reported the age of their current child to be between 5-50 weeks, while 197 (66.3%) indicated the age of their immediate previous children to be between 12 to 20 months (between 1 year and 1 year, 8 months) at the time of data collection. The findings further revealed that 184 (62.0%) of the respondents indicated that they had planned to space their children's births at one-year intervals. The majority, 205 (69.0%) of women, also anticipated to give birth to 6-7 more children, to complete their family.

Table 4.5: Information about respondents' children (N = 297)

Information about respondents' children	Frequency	Percent	Mean SD
Age of current child			
2-4 weeks (Neonates)	11	3.7	14 weeks ±12.7
5-50 weeks (Infants)	286	96.3	
Age of the previous child			
12 – 20 months	197	66.3	
21—23 months	82	27.6	20 months ± 2.5
24 – 26 months	18	6.1	
No of years for planned child spacing			
1 year	184	62.0	
2 years	102	34.3	
3 years	3	1.0	
5 years	1	0.3	
6 years	3	1.0	
7 years	4	1.3	
Number of additional children needed to complete their family			
0-3 children	24	8.1	
4-5 children	45	15.2	
6-7 children	205	69.0	
8-9 children	23	7.7	
Total	297	100.0	

The above findings are consistent with the Nigerian Demographic Health Survey (NPC, 2019), which revealed that, in Nigeria each woman desires to have 6 children. Additionally, the Nigeria Demographic Health Survey (NPC, 2019) revealed that 22% of women have a demand for child spacing. This is a reflection of the unmet need for family planning, because if all the women, who stated that they want to space their children, use family planning, the prevalence rate should have increased to about 36% (NPC, 2019).

In addition, the findings in Table 4.6 indicate that 187 (63.0%) of the index children were delivered in the traditional home (TBA), while 39 (13.1%) were delivered at primary healthcare clinics. This is consistent with the Nigeria Demographic Health Survey (NPC, 2019), which revealed that only 28% of births are assisted by a skilled provider in the rural area.

Table 4.6: A birthing place of the index (the present newborn) child of the participants

Birthing place of the index child	Frequency	Percent
At home	58	19.5
Primary healthcare clinic	39	13.1
Private hospital	13	4.4
Traditional (TBA) home	187	63.0
Total	297	100.0

The next section reports the findings related to objective 1.

4.4. INFORMATION RECEIVED ON THE USE OF PPFP

Information was collected on the sources of family planning information, namely: the medium used to disseminate PPFP information to the respondents by nurses; contents and adequacy of PPFP information received by the respondents; FP methods that nurses told respondents could be used immediately after childbirth; information on facts about PPFP that respondents received from nurses. Lastly, a summary of the main findings concludes this chapter.

4.4.1. Respondents' sources of family planning information

In Table 4.7, the respondents' sources of FP information are presented. Of the 297 women, who accessed FP information, 127 (42.8%) heard it on the radio, while only 87 (29.3%) heard about it in healthcare facilities. In Table 4.8, the researcher indicates when the respondents were exposed to family planning messages. Among the women, 173 (58.2%) heard about PPFP before childbirth, while 25 (8.4%) heard about it immediately after delivery. Additionally, in Table 4.8, the language(s) used for dissemination of information are provided, with the majority of the respondents, 204 (68.7%), reporting that the English and Yoruba languages were mostly used in disseminating information to them. On the mode used by nurses to disseminate PPFP information, the majority of the respondents, 284 (95.6%), reported that group discussions were mostly used, while 8 (2.7%) reported that a one-on-one method of dissemination was used, and 5 (1.7%)

reported that a demonstration was used. Table 4.9 displays FP methods that nurses told respondents could be used immediately after childbirth.

Table 4.7: Sources of information about PPFP

Sources of information about family planning	Frequency	Percent
Media	63	21.2
Radio	127	42.8
Health facility. (clinic)	87	29.3
Community. (outside the facility)	20	6.7
Total	297	100.0

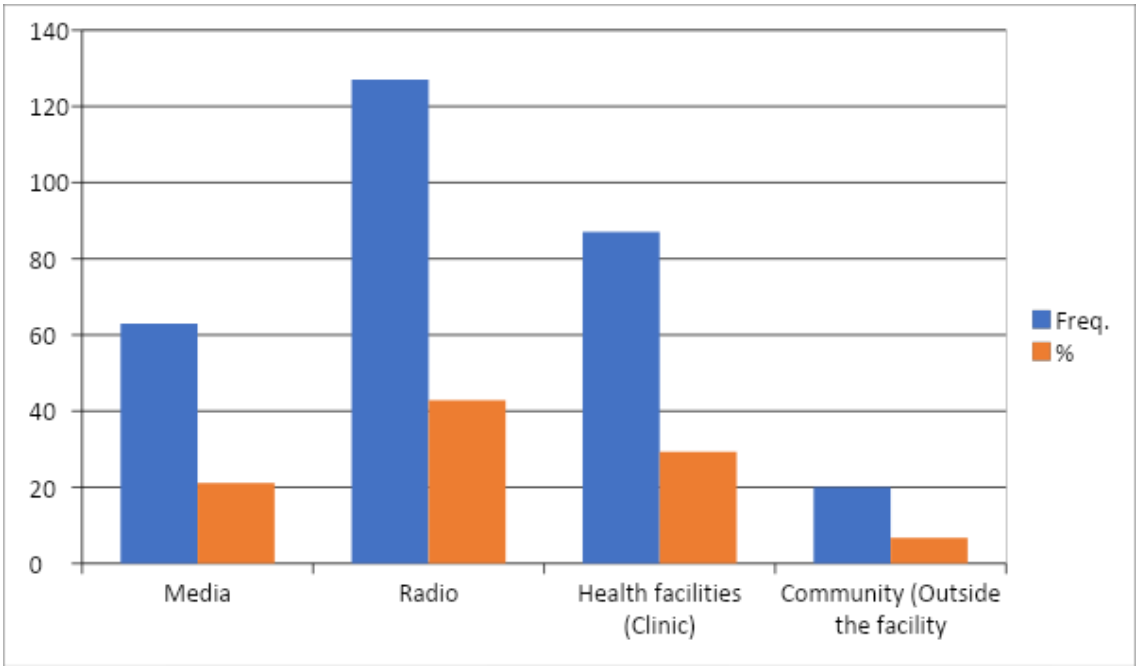


Figure 4.1: Sources of information about PPFP

Table 4.8: Medium used to disseminate PPFP information to respondents by nurses

Dissemination of FP information	Frequency	Percent
Period of exposure to FP message		
Before childbirth	173	58.2
Immediately after delivery	25	8.4
Within 6 weeks to 1 year after delivery	99	33.3
Mode of dissemination of FP information		
Group discussion	284	95.6
One-on-One	8	2.7

Demonstration	5	1.7
Language used for dissemination of FP Information		
English only	37	12.5
Yoruba only	56	18.9
English & Yoruba	204	68.7

4.4.2. Contents and adequacy of PPFP information received by the respondents

In response to the question, "Which of the following methods of FP did the nurses advise you to use, beginning immediately after childbirth, to 12 months after childbirth?", contraceptive pills topped the list of FP, with 250 (84.2%) nurses mentioning that it could be used from the time of parturition, up to 12 months after childbirth, followed by IUCDs with 238 (80.1%), injectables with 219 (78.7%), and Male condoms with 181 (60.9). Table 4.9 contains the list of FP methods that the women claimed the nurses told them they could use from immediate postpartum, up to 12 months after childbirth.

Table 4.9: FP methods that nurses told the respondents to use immediately after childbirth

FP that can be used immediately after childbirth	Yes		No	
	N	%	N	%
Female sterilization	2	0.7	295	99.3
Male sterilization	7	2.4	290	97.6
Female condom	38	12.8	259	87.2
Male condom	181	60.9	116	39.1
Pills	250	84.2	47	15.8
Intra uterine Device (IUCD)	238	80.1	59	19.9
Injectable	219	73.7	78	26.3
Implant	122	41.1	175	58.9
Diaphragm	31	10.4	266	89.6
Emergency contraceptives	4	1.3	293	98.7
Foam/Jelly	11	3.7	296	96.3
Lactation Amenorrhea	51	17.2	246	82.8
Standard day/ Cycle beads	16	5.4	281	94.6
Withdrawal method	2	0.7	295	99.3
Rhythm	0	0	297	100

The findings of this study further revealed that information on the risks of non-use of FP, consequences of unplanned pregnancy, and what to do if there are any side effects after the use of any methods, were never communicated to many of the women. For example, 198 (66.7%) women reported that they had never received the information on the risks involved, if they did not use FP after delivery to space their childbirths, 182 (61.3%) did not receive the information on the consequences of unplanned pregnancy, only 18 (6.1%) admitted to receiving the communication on what to do if there were any side effects of FP, and 52 (17.5%) reported that they had received the information on the benefits of family planning. Additionally, 221 (74.4%) women never received FP information with their husbands at the clinic. In Table 4.10, the PPFP information received, and not received by the respondents from the nurses is presented.

Table 4.10: PPFP information received by the respondents from nurses

Information on PPFP	Never		Sometimes		Most times		Always	
	N	%	N	%	N	%	N	%
The risks involve if you do not use FP after delivery to space your child birth	198	66.7	71	23.9	25	8.4	3	1
The consequences of unplanned pregnancy	182	61.3	86	29	28	9.4	1	0.3
The benefits of using FP after delivery	154	51.9	89	30	52	17.5	2	0.7
The side effects relating to any methods of FP	148	49.8	111	37.4	35	11.8	3	1
What to do if there is any side effect after the use of any methods	176	59.3	102	34.3	18	6.1	1	0.3
Receiving FP information with your husband in the clinic	221	74.4	80	20.2	15	5.1	1	0.3
Giving of FP information by nurse to both the adolescent, and adult mothers at the same time in the clinic	20	6.7	26	8.8	192	64.6	59	19.9
Giving of FP information by nurse to the parents of the adolescent mothers in the clinic	112	37.7	142	47.8	40	13.5	3	1
Giving you information by nurse on the impact of religion and culture relating to the use of FP	162	54.5	122	41.1	13	4.4	0	0

Similarly, a larger percentage of the women were not informed of certain useful facts about PPFP. For instance, 250 (84.2%), 257 (86.7%), 248 (83.5%) women were not given information on the possible side effect of IUCDs, implants, and injectables, respectively. Women, who accessed information on the possible side effects of the FP methods, in Table 4.11, were less than seven percent across all the methods. The overall performance

of the women on the Likert scale (in section E of the questionnaire), used to assess the information they received on PPFP, was very poor. The minimum and the maximum obtainable scores on the scale were 0 and 27 points, respectively. The maximum (highest) score among the 297 women was 12 points, while their mean score was 6.28, ±1.7 standard deviation. Ordinarily, 50% of the obtainable score (27 points) should be 13.5 points. In this current study, all the women scored less than 50% (13.5 points), which is below average. This further confirmed that the women were not exposed to adequate PPFP information.

Table 4.11: Information on facts about PPFP that respondents received from nurses

Facts about PPFP	Yes		No		I don't know	
	N	%	N	%	N	%
Intra Uterine Contraceptives Device (IUCDs): Irregular menstruation	15	5.1	250	84.2	32	10.8
Intra Uterine Contraceptives Device (IUCDs): Menstrual pain	14	4.7	251	84.5	32	10.8
Implant: Weight gain	11	3.7	257	86.5	29	9.9
Implant: Breast tenderness	11	3.7	257	86.5	29	9.9
Injectable: Irregular bleeding	13	4.4	248	83.5	36	12.1
Injectable: Breast tenderness	13	4.4	248	83.5	36	12.1
Progestin-only pills (POP): You may miss your period	20	6.7	222	74.7	55	18.5
Progestin-only pills (POP): Headache	20	6.7	222	74.7	55	18.5
Diaphragm: You may have vaginal irritation	20	6.7	218	73.4	59	19.9
Male/ female condom: Allergic reaction to latex (Your body may react to the condom rubber)	7	2.4	245	82.5	45	15.2
Female/Male sterilization: You may have some pain few days after it is done	11	3.7	230	77.4	56	18.8

Similarly, a larger percentage of the women were not informed about the contraindication of the FP methods. For example, 226 (76.1%), and 228 (76.8%) women were not offered information on the contraindications for IUCDs, and implants, respectively. Consequently, the women who accessed information on the contraindications of FP methods in Table 4.12, were less than six percent (6%) across all the methods. Additionally, Table 4.13 contains added information that should be communicated to the women. According to this table, most women were denied useful information. For

instance, 288 (97.0%) had no information about FP that a woman could use immediately after childbirth, and up to 12 months after childbirth to prevent unwanted pregnancy.

Table 4.12: Information on PPFP contraindications that respondents received from nurses

Information on contraindications of PPFP methods	Yes		No		I don't know	
	N	%	N	%	N	%
Intra Uterine Contraceptives Device (IUCDs) : Having sex with more than one partner	11	3.7	226	76.1	60	20.2
IUCDs: Infection of the pelvic organs	11	3.7	226	76.1	60	20.2
IUCDs) Pregnancy	11	3.7	226	76.1	60	20.2
Implant: Diabetes woman	16	5.4	228	76.8	53	17.8
Implant: Over weight	16	5.4	227	76.4	54	18.2
Injectable: Jaundice	6	2	247	83.2	44	14.8
Injectable: Liver diseases	6	2	246	82.8	45	15.2
Progestin-only pills (POP): Breast cancer	12	4	237	79.8	48	16.2
Progestin-only pills (POP): Diabetes	12	4	237	79.8	48	16.2
Female/Male sterilization: Man/Woman without children	17	5.7	219	73.7	61	20.5
Female/Male sterilization: Man/Woman having not more than one child	17	5.7	220	74.1	60	20.2

Table 4.13: Other information on PPFP respondents received from nurses

Other information on PPFP	Yes		No		I don't know	
	N	%	N	%	N	%
FP that a woman could use immediately after childbirth, and up to 12 months after childbirth to prevent unwanted pregnancy.	3	1.0	288	97.0	6	2.0
Natural FP method is a way of preventing pregnancy without the use of drugs.	13	4.4	268	90.2	16	5.4
IUCDs prevent pregnancy by blocking the sperm from coming into contact with the woman egg	8	2.7	250	84.2	39	13.1
Condoms could prevent STDs	45	15.2	181	60.9	71	23.9
A woman, who has undergone female sterilization will stop menstruation.	14	4.7	242	81.5	41	13.8
Emergency contraception is used for unprotected intercourse.	12	4	218	73.4	67	22.6

Table 4.14 contains the results of the women's assessment regarding the adequacy of the FP information they received from nurses. A total of 119 (40.1%) women stated that the nurses never passed across information on PPFP in a language they could understand. Similarly, 152 (51.2%) disclosed that the messages on FP were never clear to them. Additionally, 238 (80.1%) women were of the view that nurses never allowed them to participate in the discussions during counselling, while 162 (54.5%) expressed that the nurses never used a friendly tone of voice, when communicating with them during health education on FP. Table 4.14 contains a detailed report of the assessment, and in Figure 4.2 the women are classified into two categories, namely, those who considered the PPFP information they received as *adequate*, and those who described the PPFP information they received as *inadequate*.

Table 4.14: Respondents' assessment of adequacy of PPFP

Information on PPFP	Never		Sometimes		Most times		Always	
	N	%	N	%	N	%	N	%
Do the nurses pass across information on postpartum family planning to you in the language you understand?	119	40.1	74	24.9	78	26.3	26	8.8
Are the messages on family planning clear to you?	152	51.2	124	41.8	17	5.7	4	1.3
Does the nurse permit you to ask questions when you do not understand?	221	74.4	62	20.9	11	3.7	3	1.0
Does the nurse allow you to take part in the discussions during counselling?	238	80.1	49	16.5	8	2.7	2	0.7
Do you understand the information giving to you on family planning by the nurses?	212	71.4	72	24.2	12	4.0	1	0.3
Does the nurse separate the adult mothers from the young (adolescent) mothers when giving information on family planning in the clinic?	218	73.4	68	22.9	8	2.7	3	1.0
The information given to you by the nurse does it motivate you to take decision on the use of family planning?	163	54.9	111	37.4	19	6.4	4	1.3
Does the nurse listen to your needs when giving family planning information?	151	50.8	114	38.4	30	10.1	2	0.7
Does the nurse respond to your needs when giving family planning information?	167	56.2	92	31.0	36	12.1	2	0.7
Does the nurse use a friendly tone of voice when giving health information on family planning?	162	54.5	116	39.1	18	6.1	1	0.3
Are you satisfied with the way the nurses counsel you on family planning?	87	29.3	183	61.6	26	8.8	1	0.3
Would you recommend any one to this facility?	56	18.9	223	75.1	18	6.1	0	0.0

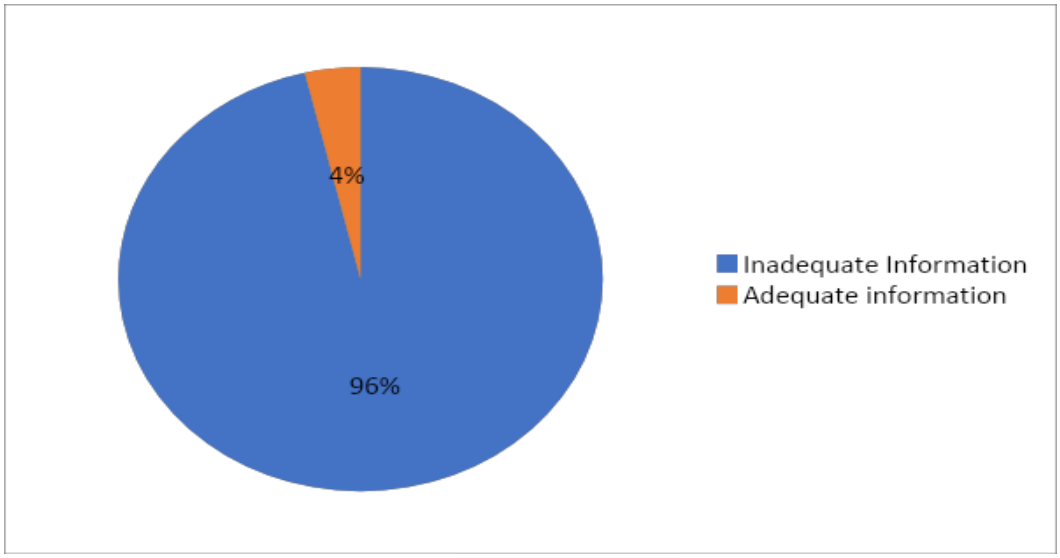


Figure 4.2: Adequacy of PPFP information

The following section reports the findings related to objective 2.

4.5. FACTORS INFLUENCING THE BEHAVIOURAL SKILL OF POSTPARTUM WOMEN ON THE USE OF PPFP

4.5.1. Factors related to previous and current utilisation of FP among respondents

A total of 60 (20.2%), and 41 (13.8%) women had used one, or the other type of FP method previously, as at the time of data collection, respectively (Figure 4.5). Table 4.15 contains the previous use and non-use of FP among the respondents, as well as the factors responsible for the women's previous decision to use FP, while in Table 4.16 the factors responsible for the women's current decision to use, or not to use FP, at the time of data collection, are presented.

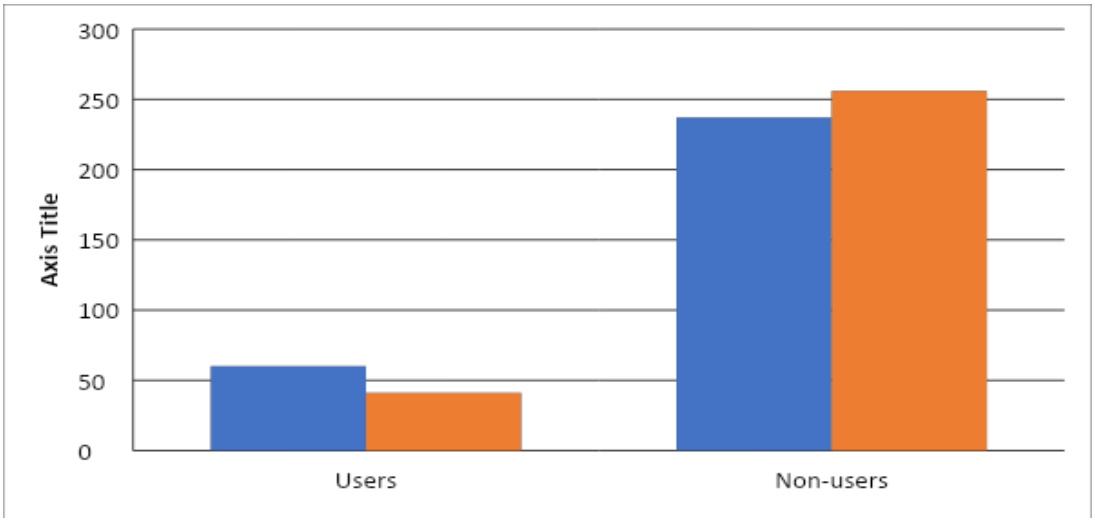


Figure 4.3: Previous and current and users and non-users of FP

Table 4. 15: Previous use and non-use of FP among respondents (N = 297)

Previous use and non-use of FP among respondents	Frequency	Percent
Factors responsible for decision to ever use FP		
Friends	1	0.3
To prevent pregnancy and STIs	41	13.8
Fear of unwanted pregnancy	18	6.1
Not applicable	237	79.8
Factors responsible non-use of FP		
I am afraid of its negative consequences	138	46.5
I don't know where to do it	1	0.3
No method is available	2	0.7
The attitude of the nurse	13	4.4
It can lead to illness or death	16	5.4
My husband disapproves of it	10	3.4
It is against my religion	8	2.7
It is against my culture	13	4.4
I am afraid of the side effect	35	11.8
Attitudes of d health workers is discouraging	1	0.3
Not applicable	60	20.2

Table 4. 16: Current use and non-use of FP among respondents

Current use and non-use of FP	Frequency	Percent
Factors responsible for decision to currently use FP		
Friends	2	0.7
Parents	1	0.3
Nurses	1	0.3
To prevent pregnancy and STIs	26	8.8
Fear of unwanted pregnancy	11	3.7
Not applicable	256	86.2
Factors responsible for currently non-use of FP		
I am afraid of its negative consequences	119	40.1
I don't know where to do it	1	0.3
The attitude of d nurse	15	5.1
It can lead to illness or death	13	4.4
My husband disapproves of it	14	4.7
It is against my religion	18	6.1
It is against my culture	16	5.4
I am afraid of the side effect	59	19.9
Attitudes of the health workers is discouraging	1	0.3
Not applicable	41	13.8

4.5.2. Influence of accessibility to the adequacy of PPFP information on previous utilisation of FP

To determine whether access to the adequacy of PPFP information influenced previous utilisation of FP methods among the women, an independent sample t-test was employed to establish the mean difference in the adequacy of PPFP information, between previous users and previous non-users of FP methods. The findings of the study revealed that women, who had used FP methods previously, had access to more adequate PPFP information, than women who did not use FP previously. The difference in their mean adequacy of PPFP information was statistically significant, Pv < 0.05 (Table 4.17). This implies that access to adequate PPFP information, promotes and enhances PPFP utilisation.

Table 4.17: Difference in PPFP information adequacies between previous users and non-users

Previous utilisation of PPFP	Group Statistics			F	T	Df	Pv
	N	Mean	Std. Deviation				
Users	60	7.83	4.35	2.66	2.71	295	0.007
Non-users	237	6.44	3.31				

4.5.3 Influence of accessibility to adequacy of PPFP information on current utilisation of FP

Similarly, to determine whether access to the adequacy of PPFP information influenced the current utilisation of FP methods among the women, an independent sample t-test was employed to establish the mean difference in the adequacy of PPFP information between current users and current non-users of FP methods. The findings of the study revealed that women, who used FP methods currently (as at the time of data collection) had access to more adequate PPFP information, than women who were not using the FP method currently (as at the time of data collection). The difference in their mean adequacy of PPFP information was statistically significant, Pv < 0.05 (Table 4.18). Akin to previous users, this implies that accessibility to adequate PPFP information promotes and enhances PPFP utilisation.

Table 4.18: Difference in PPFP information adequacies between current users and non-users

Current utilisation of PPFP	Group Statistics			F	T	Df	Pv
	N	Mean	Std. Deviation				
Users	41	9.37	6.37	45.60	3.04	42.30	0.004
Non-users	256	6.30	2.69				

4.6. DISCUSSION OF QUANTITATIVE RESULTS

4.6.1. INTRODUCTION

In this section, the researcher presents the discussion of the findings from the quantitative research study, in line with the research objectives, which were to examine the information that the postpartum women received from the nurses, regarding the use of PPFP, as well as to identify the factors influencing the behaviour of the women towards the use of PPFP. Specific emphasis was laid on how the findings relate to other findings of similar studies. The discussion is addressed in four sections. The first section deals with socio-demographic characteristics, followed by the reproductive health analysis, while section three focuses on PPFP information received by the women, and section four addresses the factors that influence their behaviour, regarding the use of PPFP.

4.6.2. Socio-demographic characteristics

In this current study, the mean age of the respondents was 24 ±4.7, although the majority of the respondents ages ranged between age 20 and 30 years; however, close to a quarter were teenage mothers. This was anticipated, given that women in this age group are usually exposed to early pregnancy, especially in the rural areas, where the educational level is very low. This corresponds with a study conducted by Bwazi, Maluwa, Chimwaza, & Pindani (2014) to determine the utilisation of PPFP services between six and twelve months of delivery in Malawi. A sample size of 383 PP women was recruited for the study, and the mean age of the respondents was 25. The majority of the mothers were below the age of 30, and about a quarter of the respondents were teenagers. This is expected because fertility is high among this age group in rural areas, compared to the urban areas, especially in Nigeria, where childbearing commenced three times earlier in rural areas compared to urban areas. It was observed that the majority of the respondents

were Muslim, which may be explained by the fact that, among the 371 tribes, 521 languages, and 174 million people living together within the 6 geo-political zones in Nigeria, three main religions, namely, Christianity, Islam, and the African Tradition religion are the most valid, while the Islamic religion followers top the list, among the three predominant religions (Alao, 2017; NPC, 2019). The majority of the respondents reached primary school level, as the highest level of educational attainment, which most likely influences the social behaviour of the women, regarding the use of FP. This is supported by the findings of a study conducted by Fleming et al., (2019) on knowledge, attitudes, and practices related to family planning, which indicated that low educational attainment is significantly associated with poor use of FP. In addition, educational attainment has been documented as a significant indicator of a country's socioeconomic growth. It is equally reported in this current study that the majority of the participants earn below the expected thirty thousand Naira minimum wage in Nigeria. Besides, the majority, 56.9% of the respondents, claimed to be self-employed. However, this form of employment that is observed in this locality, is majorly petty trading, which does not translate to sufficient financial empowerment. Consequently, this may account for the low socioeconomic status of the women.

This corresponds with another study, conducted by Dehlendorf, Henderson, Vittinghoff, Grumbach, Levy, Schmittdiel, & Steinauer (2016), which indicated that women with less education and lower income are not likely to use family planning. It was revealed that the majority of the respondents originated from the Yoruba ethnic group. This is to be understood, as the study was conducted in southwest Nigeria, where the Yoruba ethnic group is predominant, compared to other ethnic groups.

4.6.3. Reproductive health analysis

Exposure to frequent pregnancies, with high fertility, remains a risk factor for maternal and infant morbidity and mortality (Pimentel et al., 2020). Postpartum women are most vulnerable, especially in rural areas, where they lack the necessary support, together with a low socioeconomic status. The findings from this current study revealed a high number of pregnancies and deliveries among the respondents. A majority (57.6%) had had 5 pregnancies and above, while 42% of the women already had deliveries above five. This corresponds with the findings of a study conducted by Alaba, Olubusoye, and Olaomi (2017) on spatial patterns and the determinants of fertility levels among women of

childbearing age in Nigeria. The results revealed that reproductive age women, who lived in the rural areas, anticipated more pregnancies and childbearing. The study further revealed that women with limited education bear more children. Therefore, it is crucial that such women be properly guided on the risk associated with increased pregnancies and deliveries, as well as the benefits of the early initiation of PPFP, for improved maternal and infant health.

The findings of this current study further revealed that about a quarter of the respondents had been exposed to the termination of unwanted pregnancies. This may also be attributed to the poor socioeconomic status of the respondents, as well as the poor motivation to seek better health actions, such as the use of FP as a preventive measure. Besides, there is the implication of increased maternal morbidity and mortality. This concurs with a study conducted by Metcalfe, Talavlikar, Du Prey, and Tough (2016) that explored the relationship between socioeconomic factors, method of contraception, and unintended pregnancy. The findings revealed that, of the 95% of the respondents, who engaged in the termination of pregnancies, 19.6% are reported to have had an unwanted pregnancy. This group of women had low education and very low income.

On the information about the respondent's children (child spacing), the majority (66.3%) reported that the age of their preceding child, before the present baby, ranged between 12 to 20 months, while most of the women (62.0%) planned to have only one-year space between their births, besides, a majority (69%) expressed that they needed 6 to 7 children. The short space between births and anticipating an increased number of children, is a risk factor for maternal and infant morbidity and mortality (Schwandt et al., 2017). In corroboration with the findings of this current study, Agida et al., (2016) revealed that the majority (50%) of the women in their study had birth to pregnancy intervals of less than 24 months. In addition, Beyene (2019) concurs that the majority of the mothers (61.5%) anticipated having 4 to 6 children. The findings from this current study indicated inadequate child spacing that is below the recommended 24 months' birth interval.

Therefore, it could be concluded that if women are adequately sensitised to space their births for more than two years, through early initiation of PPFP, immediately after childbirth, it would minimise too close pregnancies, and exposure to unwanted pregnancies, which could lead to an increased number of children. However, previous

studies observed a preceding median birth interval of 33 months among the respondents (Tariku, 2019). In addition, Gebrehiwot, Abera, Tesfay, and Tilahun, (2019) observed a majority of the respondents (50.2%), who reported a birth interval range of 33-59 months, in contrast with findings of this current study.

Regarding the place of delivery, only 13.1% of the respondents reported having their children delivered at the primary healthcare centre. This is similar to a study conducted by Wako and Kassa (2017) who observed that only 13.9% of their respondents gave birth in health institutions, preceding the survey. Additionally, a majority of respondents (63.0%) in this current study disclosed having their deliveries at the traditional birth attendance places. A study conducted by Eshiet, Jackson, and Akwaowoh (2016) revealed that the majority of their respondents (76.5%) utilised the traditional birth attendants for their birth services. The place of delivery remains a significant factor in determining the extent to which the PP woman is likely to be exposed to early initiation and compliance of PP family planning.

The low utilisation of primary healthcare centres, and the high patronage of traditional birth attendants for delivery, observed in this current study, compared to previous studies, may be associated with the fact that both studies were conducted in rural settings, where most of the women are highly motivated by the services they received from the traditional birth attendants, compared to the low motivation of services they obtained from the healthcare centre. This may also be attributed to socio-cultural norms, religion, and traditional disposition. The poor patronage of the respondents for delivery at the primary healthcare centre, as observed in this current study, indicates that most women lack access to family planning sensitisation, which is a risk factor for unwanted pregnancies. This suggests that postpartum women need to be motivated more at the healthcare facilities.

4.6.4. Information received about postpartum family planning

Receiving satisfactory information about PPFP plays a vital role in influencing the decision-making ability of the woman towards the use of PPFP. In the nursing profession, information plays a vital role in evidence-based practice (NMCN, 2019). In this perspective, the nursing and midwifery council indicated that it is the responsibility of the nurse to deliver active and evidence-based nursing care information to their client, to

achieve a better health outcome (NMCN, 2019). Besides, any hints of fabricated and inadequate information, are limitations to the use of family planning (Etukudo, 2015). In addition, research has revealed a significant relationship between the use of PPFP, and the adequacy of the information received (Bwazi et al., 2014). At this juncture, it is important to highlight that the decision to use, or not to use any method of family planning, is dependent upon the adequacy of the information received about family planning. The need for family planning providers, therefore, is crucial, to ensure the continuity of care, through the strengthening of good information and effective communication for the promotion of postpartum family planning.

Regarding the sources and exposure to family planning information, only 29.3% of the respondents heard about PPFP from the healthcare facility. This is consistent with the findings of a study conducted by Akben et al., (2017), which revealed that only 16.2% of the women heard about family planning information from the healthcare centre. Similarly, in this current study, only 8.4% of the respondents were exposed to postpartum family planning information immediately after delivery. This may be explained by the fact that the majority of the women use the traditional birth attendants for delivery, as was noted in this current study. Whereas, if the women were well motivated to deliver in the healthcare facility, a larger percentage of the women could have been exposed to FP information. By extension, it implies that better-quality healthcare services are needed, for improved use of postpartum family planning. Similarly, exposure to FP information immediately after delivery, significantly influences the positive use of postpartum family planning (Rajan, Speizer, Calhoun, & Nanda, 2016).

Concerning information about the various methods of PPFP, which the respondents should have received from the nurses, only four methods topped the list, among the various methods that the respondents reported to be aware of to use immediately after delivery. This reveals a low level of awareness of the various methods, which is inconsistent with a study conducted by Rokade and Hanji (2018), to ascertain the awareness of contraceptives among postpartum women in a government hospital, in Maharashtra. The findings in that study revealed that approximately 97% of the PP women were aware of family planning; however, only 20.8% had used a method of family planning. This implies that awareness that is not well guided to influence positive

behavioural change, is counter-productive, which highlights that adequate information is needed to promote the use of PPFP.

Regarding the respondents' reaction to vital information about PPFP, the findings revealed that the postpartum women did not receive adequate PPFP information from the nurses. For example, in the classification of information received by the PP women, a majority of the respondents (96%) described the information that they received about PPFP as inadequate and never clear to them. This clearly indicates that the communication skill employed by the nurses were rather flawed, which is consistent with a study conducted by Sibiya (2018) on effective communication, in which the findings revealed that nurses do not communicate well with their clients during health education, despite the importance of communication in the nursing profession. Similarly, poor interpersonal relations were also displayed as evidence from the findings that the majority of the nurses never allowed the clients to participate in most of their discussions during health education. Besides, quite a large number of the respondents (54.5%) said that nurses never used a friendly tone of voice, when communicating with them during health education on FP. Additionally, they were never allowed to take part in the discussions, during counselling.

Similarly, most of the women reported that they were not informed of certain useful facts about FP. For example, the majority (66.7%) of the women reported that they never received any information about the risks involved, if they decided not to use family planning. Besides, women who accessed information on the possible side effects of the PPFP methods, were less than seven percent across all the methods, and merely 17.5% reported that they had received the information on the benefits of family planning. This corresponds with a study conducted by Assaf, Wang, and Mallick (2017) on the quality of family planning services, in which the findings revealed that the overall quality of family planning information rendered by the nurses, was inadequate, with merely 18% being provided with information about the side effects of family planning, and fewer than two-thirds being offered information on the effectiveness of the methods.

Regarding information on PPFP that was received by the respondents in this current study, the findings revealed that most of the women were denied useful information. For example, 97.0 % received no useful information about FP, during the postpartum period,

to prevent unwanted pregnancies. This is consistent with a study conducted by Puri, Moroni, Pearson, Pradhan, and Shah (2020), investigating the quality of family planning counselling, in which the women reported the overall quality of FP information they received as unsatisfactory, based on their anticipations and experience of interaction with their provider, despite their interest.

Similarly, one-third of the respondents reported that they did not receive any good information and counselling services on PPFP. Research has highlighted a breakdown in the flow of PPFP information, which affects the expectations of the women significantly, and in turn, disrupts the overall quality of care (Henderson, Stumbras, Caskey, Haider, Rankin, & Handler, 2016). Additionally, a study conducted by Eltomy, Saboula, and Hussein (2013) on the barriers that affect the utilisation of family planning services, among rural Egyptian women, confirms poor provider attitude as a barrier to the use of FP, including the lack of vital information.

4.6.5. Factors that influence the behaviour of postpartum women to use PPFP

Only 13.8% of the respondents reported that they were using FP, currently, and only 20.2% admitted to using any other type of FP, previously. Comparatively, this is similar to the Nigeria Demographic Health Survey (NPC, 2019), which indicated that the current FP use among married women was 17%. This is also consistent with the findings of a study conducted by Kana et al., (2016) on the prevalence and determinants of contraceptive use in rural Northeastern Nigeria, which revealed that the current use of FP was 26%. This observation could be contextualised with this current study, since both studies were conducted in rural communities.

The factors that influenced the previous use of FP were surveyed in this current study. Reportedly, the decision to use or not use FP was based on several factors, with fear of unwanted pregnancies topping the list of factors that influenced PP women to ever use FP previously, while the fear of the negative consequences of FP, featured as the major factor for the non-use of FP. For example, the majority of the respondents (46.5%) indicated that their reason for not using FP, was the fear of its negative consequences. Other factors highlighted for the non-use of FP, included the attitude of the nurses, their husbands' disapproval, religious and cultural barriers, and the fear of side effects. This highlights the lack of adequate information about FP, which the PP women should have

received from the nurses. Besides, empowering women with accurate FP information has been reported to be vital to the use of FP, as generally, it influences the woman's decision-making powers, and plays a role in reducing the termination of pregnancies (Belay, Mengesha, Woldegebriel, & Gelaw, 2016). In addition, the lack of access to PPFP information inclines most women to poorly space pregnancies, which is associated with an increased fertility rate, and adverse maternal and infant morbidity and mortality ((Dev et al., 2019).

In this current study, the researcher examined the factors that influenced accessibility to adequate PPFP information, regarding the use of FP, for both previous and current users, as well as non-users. The findings revealed that women, who had access to adequate FP information, either previously or currently, participated in the use of FP, as opposed to those who had no access to adequate FP information, for example, very few of the respondents (20.2%) had used FP previously. Similarly, only 13.8% of the respondents were currently using some method of PPFP.

This is consistent with a study conducted by Kaydor, Adeoye, Olowolafe, and Adekunle (2018) on the barriers to the acceptance of post-partum family planning among women in Montserrado County. The findings of their study revealed a low use of PPFP (11.9%) among their respondents, and that the postpartum women, who had received adequate information on PPFP, were about four times more likely to use PPFP, compared to women, who lacked the necessary FP information. The fear of the side effects of using PPFP was significantly highlighted as one of the major factors that influenced the non-use of PPFP.

Therefore, the positive association between effective FP information and the use of PPFP are also well reported in other studies (Puri et al., 2020). Consequently, the call for an intervention that informs evidence-based FP health communication approaches, is vital to enhance the use of PPFP.

4.7. SUMMARY

In this chapter, the researcher presents the findings related to objectives 1 and 2 of the quantitative study. The findings in this current study revealed that the information on family planning that the PP women received from the nurses, during health education and counselling sessions, was inadequate, in terms of clarity and motivation. In addition, the findings revealed that PP women were never allowed to participate in the discussions during counselling. Besides, the nurses never use a friendly tone of voice when providing health information to them. Yet another factor responsible for the non-use of PPFP by postpartum women was the fear of negative consequences and side effects, which was due to the lack of adequate information.

CHAPTER 5

PRESENTATION AND DISCUSSION OF THE QUALITATIVE DATA

5.1. INTRODUCTION

In this chapter, the researcher presents and discusses the results of the data analysis from the focus group discussions, conducted with the staff nurse/staff midwives and nurse managers. The Information Motivation and Behavioural skill (IMB) model forms the basis of this research objective. Specifically, in this chapter, the concept of motivation in the IMB model was required to address objective 3 in this section. The aim was to explore and describe the motivating factors used by nurses to promote the use of PPFP.

Throughout the data collection process in the two groups, the same focus group guide (Appendix 3) was used to elicit information regarding the motivating factors used in promoting the use of PPFP. Consequently, the responses and the themes that emerged from both groups were similar, as the respondents from both groups expressed the same views regarding the motivating factors that they used to promote the use of PPFP. The results are organised into 3 sections as follows:

- Section 1: The vertical themes, sub-themes, and categories, generated from the transcription analysis of the three focus group discussions, conducted with the staff nurse/staff midwives, are presented and discussed, including direct quotations from the respondents, reported in italics.
- Section 2: The vertical themes, sub-themes, and categories that emerged from the three focus group discussions, conducted with the nurse managers, are presented and discussed, including direct quotations from the respondents, reported in italics.
- Section 3: A summary of the vertical and the horizontal themes, which cut across all the respondents in both groups, is presented in tabular form. In addition, the researcher compares and contrasts the findings of the qualitative analysis with existing literature.

5.2. CONSENSUS BETWEEN EXTERNAL CODER AND THE RESEARCHER

For the qualitative analysis, an expert in qualitative study analysis was employed to assist in coding the data. This was done to increase the trustworthiness of the data analysis process. The

abstract, the research objectives, and the audiotaped transcripts were handed to the external independent coder. The researcher also engaged in the analysis and clarification of data coding, while the supervisors of the study reviewed the data for further clarification. Subsequently, a consensus was researched between the researcher and the external coder (See section 3.12.5). Besides, the undermentioned FGD guide (Appendix 3) was used to check the accuracy of interpretation, against the emerging themes. The purpose was to increase the trustworthiness of the data analysis. The following are the FGD guide questions:

1. What communication skills do you employ to motivate the PP women, when passing on postpartum family planning information to them?
2. What communication issues (challenges) do you encounter, when communicating with these postpartum women?
3. How do you think you could improve your communication skills?
4. What do you do to promote an interpersonal relationship with the postpartum women?
5. What affects the interpersonal relationship between you and the PP women?
6. How do you think your interpersonal relationship with women could be improved?
7. How do you motivate the men to support their wives on the use of postpartum family planning?
8. What do you do to motivate the community leaders and the religious leaders to promote the use of PPFP?
9. What are your experiences in motivating these social groups of people?
10. What do you think could be done to improve on motivating this social group of people?
11. What are the training needs for nurses to promote the use of PPFP?

5.3. SECTION 1: DESCRIPTION OF THE STUDY RESPONDENTS: STAFF NURSES/STAFF MIDWIVES

Three focus group discussions were conducted with staff nurses/staff midwives at three selected primary health centres, with a total of 17 respondents, whose ages ranged from 22 to 58 years. The majority were female respondents, who provide family planning services (see Table 5.1). They were assigned numbers for easy identification, as well as to ensure confidentiality and anonymity. Similarly, consent was obtained from each respondent, before the commencement of every discussion. All the FGDs were conducted in a conducive

environment and every respondent participated fully in all the discussions (See Table 5.1 regarding the description of the bio-data of staff nurses/staff midwives in the focus group discussions).

Table 5.1: Biographic-data of staff nurses/staff midwives in the focus group discussions

Primary Healthcare Centers (PHC`s)	Number of respondents/gender	Ages of respondents	Area of practice	Ethnicity
Pilot FGD = 5 PHC 1 = 6 PHC 2 = 6	Female = 15 Male = 2	22 – 30 = 7 31 – 37 = 6 40 – 55 = 3 58 = 1	Family planning provider	Yoruba = 14 Igbo = 2 Isoko = 1
17	**17**	**17**		**17**

Table 5.2: Staff nurse/staff midwives' themes, sub-themes, and categories

Themes	Sub-themes	Categories
1. Communication skills to motivate PP women for PPFP.	1.1. Health Education about PPFP.	1.1.1. Providing communication on FP through group talk.
		1.1.2. Reminding mothers of previous FP information during antenatal, immunisation clinics, and outreach programmes.
2. Interpersonal relationship skills to motivate PP women for PPFP	2.1. Create a good interpersonal relationship.	2.1.1. Establishing a relationship through listening.
3. Challenges/Issues in promoting PPFP.	3.1. Challenges/Issues in motivating the PP women	3.1.1. Lack of enough manpower resources and insufficient time
		3.1.2. Negative attitude of the nurses.
		3.1.3. Influence of religious/cultural beliefs
		3.1.4. Language barriers
	3.2. The influence of social support group	3.2.1. Negative attitude and poor sensitisation of men.
		3.2.2: Challenges in motivating the community/ religious leaders
4. Suggestions and training needs for improvement in the promotion of PPFP.	4.1. Training needs of nurses for promotion of PPFP	4.1.1. Training sessions in interpersonal relationship skills, communication skills, as well as attitudinal change for nurses.
		4.1.2. Training in personal development and/or providing emotional support to nurses.
		4.1.3. Organising counselling and group information sessions with fathers (Men)
		4.1.4. Organising health education for community and religious leaders is of paramount importance.

5.3.1. Theme 1: Communication skills to motivate PP women for PPFP

In this theme, the sub-theme that was generated was health education about PPFP. In addition, two categories emerged, namely, providing communication on FP through group talk, and reminding mothers of previous FP information, during antenatal, immunisation clinics, and outreach programmes.

5.3.1.1. Sub-theme 1.1: Health education about PPFP

In this current study, the respondent's responses about the communication skills to motivate PP women to use FP, revolved around health education. Health education refers to a set of approaches/techniques used to provide health information.

5.3.1.1.1. Category 1.1.1: Providing communication on FP through group talk

Communication skill is understood as the timely transaction of information that exists between the provider of a service and the client, in a respectful and empathetic manner, with the purpose of influencing behaviour, and relating well with people (Hardjati & Febrianita, 2019). In addition, it ascertains increased service performance (Hardjati & Febrianita, 2019). The skill is a dynamic process required to convey a message in a clear and understanding manner (Khan, Khan, Zia-Ul-Islam, & Khan, 2017). Knowledge gained through effective communication is vital for professional progress (Khan et al., 2017). Each respondent's spontaneous response to the question about communication skills to motivate PP women about FP, was that they used *health education* as the motivating communication method to promote the use of PPFP, which was majorly conducted through group discussions. Their responses indicated that they mainly emphasised the advantages and disadvantages of FP, when providing knowledge about family planning. In addition, their report also revealed that the method of health education was centred on discussions, which was nurse-led education. Ultimately, their responses highlighted the lack of patient participation, and an inadequate method of conveying health education to the client. The following are some of the direct quotations that were recorded:

"We use health education in such occasion once we are doing that, we ensure that we tell them the importance of the FP." ***(PHC1P1)***

"I will say that one of the motivating factor I normally use during health education is that I do tell them that PPFP is done six hours after delivery which means they don't need to come back again with their baby before they get the family planning done and during that process I will also tell them that even when they have delivered they can easily they will do it before going home so, it is not time consuming." ***(PilotP2)***

"Sometimes, the way we do in our place when they come for the ante-natal, during the ante-natal we give them during the health talk so we include FP so we tell them what FP really means." ***(PHC2P3)***

Most of the respondents' responses about health education, when communicating with the PP women, was more about the advantages and disadvantages of FP.

"We can use communication which can involve given health talk inform of health education educating them about the importance of the FP, the meaning of the FP what is entails even their knowledge what they know about FP initially and what it entails, the benefits of the FP." ***(PHC2P6)***

"...group discussion during their postpartum clinic I think, it will help a long way and when we are doing that, we should show them the commodities we have how they are been use, what are the advantages, of each of those commodities, I think it will help." ***(PHC2P1)***

5.3.1.1.2. Category 1.1.2: Reminding mothers of FP information during antennal, immunisation clinics, and outreach programmes

Reinforcing the initial message to persuade is a basic value required for behavioural change, and is equally, an essential tool used during health education (Haleem, Khan, Sufia, Chaudhry, Siddiqui, & Khan, 2015). This was acknowledged by some respondents as the ideal; however, their responses revealed that they were trying to do so inarticulately. The following direct quotations refer:

> *"During the outreaches for the immunisation of their baby, I can also try to tell them about FP, tell them the usefulness of FP."* ***(PHC2P1)***

> *"When patient come for the ante-natal clinic or immunization then when they are in labour, we can use that opportunity to discuss with them and let them know about FP."* ***(PHC1P3)***

> *"We can also pass this information to them during their first, second visit after, that means that is after second visit during six weeks after birth of their baby so then we will be able to tell them that they should be able to space their children."* ***(PHC2P5)***

5.3.2. Theme 2: Interpersonal relationship skills to motivate PP women for PPFP

One category emerged from this theme, namely, establishing a relationship through listening

5.3.2.1. Sub-theme 2.1: Create a good interpersonal relationship

In answer to the question on the interpersonal relationships, the spontaneous responses of the respondents were the need to create an atmosphere for a good interpersonal relationship.

5.3.2.1.1. Category 2.1.1: Establishing a relationship through listening

The application of good listening skills remains a valuable interpersonal skill that is able to influence positive rapport, and improve service delivery (Islam,

Nasira, Pritom, Kumar, Paul, & Reza-E-Rabbi, 2016), as interpersonal skills encompasses listening, empathy, optimism, and a leadership role. The understanding and display of the core characteristics of the skill, improves the perception and attitude of people, while the expectation is to increase service performance (Islam et al., 2016).

Some of the respondents in this current study indicated that, to inform about and attempt to convince mothers to use PPFP, the nurses firstly needed to create a conducive atmosphere for listening, to ensure good interpersonal relationships. However, their responses indicated how it should be done, and not how it was currently being done. Additionally, their responses revealed a shallow understanding of interpersonal relationships; hence, the need for training. The following direct quotations illuminates:

> *"We have to create a good rapport between you and your client, then you should learn how to comport yourself while attending to any client when talking to her on F/P."* ***(PHC2P4)***

One respondent's response revealed that her communication with the client was not well established, which resulted in poor listening, and the lack of understanding by the client, as per the following extract:

> *"There is no communication at all because they are not listening and they are not understanding and they are not accepting it. So, you are just giving the information, they are not accepting the information so there will be no feedback."* ***(PHC1P5)***

The majority of the respondents mentioned that they needed to improve on their interpersonal relationships with their clients. The respondents were of the opinion that their relationships were not adequate; hence, the need for improvement, as per the following extracts:

> *"Good interpersonal relationship, to improve on it we have to create a good rapport between you and your client, then you should learn how to comport yourself while attending to any client when talking to her."* ***(PHC2P4)***

> *"How I can improve my interpersonal skill is by trying to create a good rapport with them and also go for training in order to learn all the skills needed to have a good interpersonal relationship."* ***(PHC1P2)***

> *One way in which we can improve our interpersonal relationship, is when receiving information from them, you make sure you give them a listening ear, make them understand that you actually care and you actually understand all the information they are giving to you concerning FP."* ***(PHC1P2)***

5.3.3. Theme 3: Challenges/issues in promoting PPFP

In this theme, four categories emerged, namely, the lack of enough manpower resources and insufficient time, the negatives attitude of nurses, the influence of religious/cultural beliefs, and language barriers.

5.3.3.1. Sub-theme 3.1: Challenges/issues in motivating the PP women

Although the respondents' responses indicated that they were well aware of the need for interrelationship skills, there were several challenges with the motivating of the PP women.

5.3.3.1.1. Category 3.1.1: Lack of enough manpower resources and insufficient time

Human resources play a vital role in organisational work outcomes, and is a determining factor for quality healthcare (Kharkheli, 2019). In this current study, the respondents disclosed their experiences regarding the shortage of staff and insufficient time, which hindered the promotion of PPFP. The following are extracts of their responses:

> *"One of the issues we have when communicating with the pp women is one, time, we may not have enough time especially when we are short staff--The time may not be there. I may not have enough time to counsel them."* ***(PHC1P1)***

"*One of the challenges is time--it is always difficult to convince the person so that is one of the challenges."* ***(PilotP2)***

5.3.3.1.2. Category 3.1.2: Negative attitude of nurses

The negative attitude of the nurses was mentioned, which accounted for one of the major challenges that impeded the use of PPFP among the PP women. Some of the respondents in this current study described the attitude of the nurses as unappealing. Their report also unveiled the transfer of their home issues to their client. The following extracts illustrate:

"…some of us we have non-callants [a nonchalant] attitude, we talk to our patient anyhow, consciously or unconsciously we do it. Some of us when we have issues at home, we bring it to work and we transfer the anger or aggression on the client so which really push the client. ***(PHC2P3****)*

"Attitude of the health workers (nurses) is one of the things for example in the health facility…if you see the way the client is talking…the way the health worker will fire the client…will be too noisy." ***(PHC2P2)***

"This thing is as if they created it with nurses because when my daughter deliver in general hospital Ijebu-Ode, all the nurses that were there, the way they behave, despite the fact that I am a nurse, they still behave the same way. I don't know how we can stop this thing…it has been in their blood; the way we behave to our client is bad…we have to change…it is all over. It is not one place, it is all over. I have seen the character in all the nurses, so we have to change towards our client." ***(PHC2P5)***

The report of this respondent demonstrates a huge concern about negative interaction, and the need for a change. The following extract refers:

"My interaction as an health worker the first thing is about my attitude you know if a patient is just coming in the way you welcome will make the patient be like can I really open up to this

person? --so if we can improve on our attitude as an health worker then it will definitely improve my interaction with postpartum mothers." ***(PilotP4)***

5.3.3.1.3. Category 3.1.3: Influence of religious/cultural beliefs

The barrier of religious beliefs was identified by the respondents as an obstacle, which is closely related to cultural beliefs. It was reported that religious and cultural beliefs influence the poor utilisation of family planning by the women. The following extracts refer:

"…one of the challenges is some religions actually come against FP…some religion doesn't support the FP method, so this is actually a barrier for some women in accepting FP…they don't want to embrace it base[d] on the religion" ***(PilotP3)***

"*Religion can be part of those things that will hinder the acceptance of FP to the people…husband refuser also. There is a taboo, they belief in their taboo about FP."* ***(PHC2P4)***

*"Their belief culture and most of them they also believe in their traditional way of FP than modern, because of the side effecst. Most of them, they always complaint of the side effects like bleeding, of which they said it does not happen with the traditional." (****PilotP4)***

The following respondent felt that the educational level of the women is interconnected with the beliefs.

*"…one of the challenges still come down to their culture, their religion and still their level of education because it still, these things are interrelated so it still affects the community leaders just the same way it affects the religious leaders." (****PilotP3)***

Some of the respondents mentioned the influence of socio-cultural beliefs with increased fertility. They reported that the women were of the opinion that having many children is the will of God for them. One respondent

admitted that she did not even know how to persuade the women, because of their beliefs. The following extracts refer:

> *"The challenge is on that religion or culture belief…they don't want to…according to their culture they are supposed to deliver or born the number of children they want…but me I don't know how to explain to them and encourage them to take the FP."* ***(PilotP1)***

> *"Also to add to it, culture too is also one of the huge factors, because most times they believe that, according to their culture, God asked them to come and procreate in the world and they don't have the right to like to limit or start looking for child spacing…anything like that…so basically they refuse, based on their culture."* ***(PilotP5)***

> *"One of the barriers also include cultural beliefs or religion belief some of the patient, their husband are Imam and they are like Allah said we should have many children as possible…why are you spacing them."* ***(PHC1P5)***

5.3.3.1.4. Category 3.1.4: Language barriers

Language barriers was mention by some respondents in this current study. They felt that the diverse ethnic groups appeared to hinder the motivation to use PPFP, as per the following extract:

> *"…when the provider and the client does not understand each other maybe they are of different language and the client does not even can't speak English and the provider too doesn't understand what the client is saying and all this will be a problem."* ***(PHC1P3)***

A respondent mentioned that the unavailability of an interpreter compounded the issue of a language barrier, as per the following extract

"Personally, the one I have experienced here, that has been a barrier is language you found out that, am a Yoruba man, and you found out an Hausa client and there is no availability of an interpreter to communicate your information and so this becomes a problem." ***(PHC1P6)***

5.3.3.2. Sub-theme 3.2: The influence of social support systems

The influence of certain individuals, especially those with prominent roles, such as husbands (Men), community leaders, and religious leaders, was regarded as a major challenge to promoting the use of PPFP.

5.3.3.2.1. Category 3.2.1: Negative attitude and poor sensitisation of men

The respondents reported on the mens' lack of knowledge about FP, which resulted to their negative attitude towards the promotion of PPFP. The following extracts refer:

"And some of them (men) they don't even understand what F/P is saying that the wife will become promiscuous, there is a license for promiscuity for the wife that if the wife begin to do F/P if she have any man friend outside they are not going to know if she is having any extra marital affairs because she is not going to get belly (pregnant) from anybody ***(PHC2P6)***

"The men hardly follow their wives for the F/P clinic it could be due to the fact that the husband is ignorant" ***(P1P1)***

"…most of the husband belief that any women that do the FP they can lead to promiscuity, or make the husband sterile or make the wife sterile for life." **(PHC2P2)**

"Another thing is their husbands some mothers like they really wish to do this FP method but they will be telling you if my husband finds out my husband will not like it. So there are some occasions that you will have inserted the FP method probably implant now and the patient will have to come back maybe in one

weeks or two weeks' time saying if her husband finds out that she did FP and that will lead to something else." ***(PP4)***

"...some of the men will say, haa my wife will not do it O No, No, no if she do it now she will be following another man she know that she will not have baby but if she is not doing it she will not go and meet another man because she know that she will get pregnant and you are not the owner of the pregnancy." ***(PHC2P3)***

"*Another challenge is that ee the man complains that after FP that the woman will now start spotting (bleeding) all the time, so it is not easy for him to penetrate again."* ***(PHC2P1)***

Interestingly, the respondents' responses also revealed the poor sensitisation of the men, which indicated that they did not assign their full concentration and attention to the teaching of FP to the men, on the few occasions that they would have contact with them, as per the following extract:

It is only during when their wife delivered, we are opportune to see them during delivery or labor ward we do at times put family planning to them ***(PilotP1)***

The respondents admitted to providing inadequate health education to the client, as per the following extracts:

*"My client was not accepting the method she has choosing in the first place so ee, I have not really passed the information, I have not really passed the information to her very well since her husband have asked her to come back to me****." (PHC2P1)***

5.3.3.2.2. Category 3.2.2: Challenges in motivating the community/religious leaders

The respondents reported that they essentially had difficulty with motivating the community and religious leaders, because of the socio-cultural beliefs they have concerning the use of FP, as per the following extracts:

"It is always difficult to convince the person (The religious and community leaders) so that is one of the challenges." ***(PilotP2)***

"One of the challenges still come down to their culture, their religion and--these things are interrelated so it still affects the community leaders just the same way it affects the religious leaders." ***(PilotP3)***

"And also, most of them are rigid in what they belief in so it is very hard in convincing them." ***(PilotP5)***

The respondents acknowledged that the religious leaders do not even have the inclination and knowledge to practice FP, or to persuade their followers, as per the following extract:

"Also, to add to it, most of. the religious leaders don't even practice FP themselves, so they find it difficult to even convince their members, since they are supposed to live by example, they don't practice FP." ***(PilotP5)***

5.3.4. Theme 4: Suggestions and training needs for improvement in the promotion of PPFP

This theme comprises four categories, namely: (i) Training sessions in interpersonal relationship skills, communication skills, as well as attitudinal change for nurses; (ii) Training in personal development and/or providing emotional support to nurses; (iii) Organising counselling and group information sessions with fathers (Men); and (iv) Organising health education for community and religious leaders is of paramount importance.

5.3.4.1. Sub-theme 4.1: Training needs of nurses for promotion of PPFP

Suggestions for better ways of motivating PP women for the improved use of PPFP were directly related to the challenges identified in Theme 3.

5.3.4.1.1. Category 4.1.1: Training sessions in interpersonal relationship skills, communication skills, as well as attitudinal change for nurses.

Training via workshops for interrelationship improvement, as well as communication, was overwhelmingly supported by all respondents. The respondents described the behaviour and attitude of nurses as amateurish. The responses revealed that they lacked good interpersonal relationships. They were of the opinion that the quest to train the nurses was to address their unprofessional character and behaviour toward the PP women, who require their services.

> *"...we need training on how to communicate with our patient, some of us we have non-chalant attitude we talk to our patient anyhow, so how we will be able to control ourselves."* ***(PHC2P3)***

> *"We need training on our behaviour to the client, our character is almost the same thing then the way you present yourself, the way you discuss with them, so that is the type of the training we supposed to be having how to relate with your client, how to relate with your patient, that is most important training we supposed to be having."* ***(PHC2P5)***

Some of the respondents reported on the need for training to improve the interpersonal relationships of nurses and their clients. The following extracts refer:

> *"There is need for training on inter personal relationship because if there is no good interpersonal relationship you and your client won't be able to flow well because if you are not relating well with your patient definitely your patient will not open up to you so when we have training on how can we relate with our patient and things like that I think it will go a long way to help us to interact well with our patient and by so doing our patient will feel more comfortable and they will be able to tell us what is going on."* ***(PilotP4)***

"How we can improve on personal interpersonal relationship is through training on interpersonal relationship and workshop and ehn seminar because is very very important if you go for training we will be able to learn more and update us because you know the first approach to patient is very very important if patient coming for the first time and you don't relate with them very well they won't have confidence in you and that one have put a bridge between you and the patient so is very very important." ***(PHC1P3)***

"And how to build good interpersonal, there is need for training on good interpersonal relationship, we should be training on how to relate with our client so that they can be able the communication so that the communication skill can be effective." ***(PHC2P6)***

One respondent reported on the need for the constant training of nurses for improvement and sustainability, as per the following extract:

"The training should be continuous because if I go for training before two months you will see it in me. I will be vibrating because the training is in me but after some time it will come down then I will go back to my normal attitude, but if I go for training every 6 months so before that first training has gone down, I will go for another one so before you know it, it become part of me because it is something I have been doing 2,3, years it will become part of me, so it is not something I will do for some time then stop so is not training you will do once then you stop and you forget it." ***(PHC2P3)***

Some of the respondents' responses indicated their dire need for training on the process of communication, to enable them to influence the behaviour of the PP women, to improve the use of PPFP. The following extracts refer:

"Communication is a complex subject which and all the nurses in the primary healthcare must go for the training because it is

just a word that can demoralizes the patient and can make the patient not to go for the FP, so communication is essential for all the nurses and the FP providers." ***(PHC1P3)***

"…we have the need for good interpersonal relationship with our client, how to be able, the various method and the technique to be able to deliver the communication skill effectively and how to deal with the people irrespective of their class whether they are middle class, social class or the higher class and how to even, that training will help to know the individual difference how to deal with the people with different ego and ability to be able to create that rapport with them." ***PHC2P6***

*"In F/P the nurses need the training on how to improve the PPFP. In such way we are talking about the communicate skill, during the training we will learn more on how to interact how to communicate with the people living in the rural area like the people living in Epe local government area, number two interpersonal relationship you will know how to behave, how to behave to the client." (****PHC2P2)***

5.3.4.1.2. Category 4.1.2: Training in personal development and/or providing emotional support to nurses

One respondent reported on the negative behaviour of some nurses, who projected violence, related to personal matters, onto their clients, while on duty. However, they acknowledged the need to train nurses on how to deal with personal issues, and work-related issues, teaching them coping mechanisms to enable them to control themselves, when faced with a stressful situation. The following extract refers:

"How we will be able to control even when the patient make us to be so angry how we will be able to control our anger so that we don't allow our anger or emotions to control us. Some of us when we have issues at home, we bring it to work and we transfer

*the anger or aggression on the client so which really push the client off so what we need is training to improve." (**PHC2P3)***

Some of the respondent's responses indicated the need for training on how to deal with situations, as part of being active and emotionally balanced:

*"Okay. There is need for training because training help like it help to improve our knowledge and by having adequate knowledge been exposed to new information it helps you serve the patient better ---If you have adequate knowledge you will be able to provide them with appropriate and recent information." (**PilotP3)***

*"We need training on how we will be able to draw our client close to us for them to be able to pour out their mind to us and so whatever we tell them they will be able to crap something from it and take to the health education that we are given to them." **(PHC2P3)***

*"During training we get to known new things and how we can go about it to improve our ways of doing things." **(PilotP4)***

*"There is training need is important for us the nurses because as they said knowledge is power when nurses are empowered during workshop or conferences, they will be able to pass the right information to the right people." (**PilotP2)***

One respondent explicitly raised the issue of constant training for updated and improved service performance.

*"What we need is training as she has said we need training and not that we train this year now then next year we stop, we need continuous training, so that they will enlighten us on what is the new trends in dealing with our client." **(PHC2P1)***

5.3.4.1.3. Category 4.1.3: Organise counselling and group information sessions with fathers (Men)

The respondents admitted that the men lacked any knowledge of family planning, and acknowledged the need for them to be educated properly about FP. The following extract refers:

> *"They (the Men) have never heard something like this O, the F/P program, I think it will improve when they listen to the reason why they did not approve FP." (**PHC2P3)***

The respondents' responses revealed that they were aware of the need to educate the men. However, it was mentioned that updating their knowledge on how to educate men was of utmost importance.

> *"Going for workshops and seminars and training will help us to socialise with the men on how to encourage their wives to come for FP." (**PHC1P5)***

One respondent suggested that the men could be educated on issues relating to FP. However, the respondent clarified that the advice would be given to men, who chose to participate, as per the following extract:

> *"We can organize men program…the one that come we counsel them…talk to them the important of FP…why they need to do the FP, and the advantages and disadvantages of FP." (**PHC1P3)***

5.3.4.1.4. Category 4.1.4: Organize health education for community leaders and religious leaders of paramount importance

Some respondents explained that they held monthly, or annual ward meetings with community and religious leaders. They suggested that, at these meetings, they could simply mention family planning, and subsequently, the decision to either accept or reject, would be their choice. The following extracts refer:

*"During community dialogue we do invite the religious men the chief Imam community leader to attend the meeting and chip in FP to them to be aware of what is going on." (**PilotP1)***

*"...maybe Once in a month okay or once in a year during community dialogue when we have program, we do invite the leaders and ward health committee members." **(PilotP1)***

*"The major way we convince the community leader is just--only talk to them the decision lies within themselves to have a change of heart." (**PilotP3)***

Similarly, one respondent expressed the need to extend the knowledge of FP to the community and the religious leaders. The respondent also reported on the unprofessional behaviour of the nurses, who rudely addressed their clients, indicating once more, the need for training.

*"All this training and seminars we are going to be having, we should include all this ward committee so that they too will have the same training with us. We should have all the facilitators that will be able to demonstrate to us how we are going to do because some of the nurses…the way you talk, you drive them away, the way you squish your face. So that is why I said we need demonstration in our training." (**PHC2P5)***

5.3.5. Summary

The respondents' responses in all the groups reflected that they were fully aware of the need to motivate PP women and provide support systems for PPFP. They have highlighted some challenges attached to motivating these target groups, and suggested broadly what should be done. However, they acknowledged a lack of skills to implement promotional health strategies, to address these challenges.

5. 4. SECTION 2: DESCRIPTION OF THE STUDY RESPONDENTS: NURSE MANAGERS

Three focus group discussions were conducted, at three selected primary health centres, with a total of 18 respondents. The respondents comprised two ethnics groups, namely, Yoruba and

Igbo. Their ages ranged from 30 to 60 years. The majority were female respondents, who provide family planning services (See Table 5.3). They were assigned numbers for easy identification, and to ensure confidentiality and anonymity. Similarly, consent was obtained from each respondent before the commencement of every discussion. All the FGDs were conducted in a conducive environment, and every respondent participated fully in all the discussions.

Table 5.3: Biographic-data of nurse managers in the focus group discussion

Primary Healthcare Centers (PHC`s)	NUMBERS OF RESPONDENTS/GENDER	AGES OF RESPONDENTS	Area of practice	Ethnicity
PHC 3 =6 PHC 4=6 PHC5=6	Male= 2 Female=16	30-42 = 7 45—55=4 56—60=7	Family planning provider	Yoruba= 17 Igbo=1
18	**18**	**18**		**18**

Table 5.4: Nurse managers' themes, sub-themes and categories

Themes	Sub-themes	Categories
1. Communication skills to motivate PP women for PPFP	1.1. Health Education about PPFP	1.1.1. Providing communication on FP by means of group talk
		1.1.2. Reminding mothers of previous FP information during antenatal, immunisation clinics and outreach programmes
		1.1.3. Practices regarding conducive environment for counselling/educating about PPFP.
2. Interpersonal relationship skills to motivate PP women for PPFP	2.1. Skills to create a good relationship	2.1.1. Establishing rapport by means of listening
3. Challenges/Issues in promoting PPFP.	3.1. Issues in motivating the PP women	3.1.1. Lack of enough manpower resources.
		3.1.2. Some nurses not dedicated to nursing
		3.1.3. Influence of religious/cultural beliefs
	3.2. The influence of social support groups	3.2.1. Negative attitude of men
		3.2.2. Challenges in motivating the community and religious leaders
4. Suggestions for improvement in the promotion of PPFP	4.1. Training needs of nurses for the promotion of PPFP	4.1.1. Training sessions for nurses in interpersonal relationships and communication skills, as well as attitudinal change
		4.1.2. Training in personal development and providing emotional support
		4.1.3. Organising counselling and group information sessions with fathers (Men)
		4.1.4. Organising health education for community leaders and religious leaders of paramount importance

5.4.1. Theme 1: Communication skills to motivate PP women for PPFP

In this theme, one sub-theme was generated, namely, health education about PPFP. In addition, three categories emerged: (i) Providing communication on FP by means of group talk; (ii) Reminding mothers of previous FP information during antenatal, immunisation clinics, and outreach programmes; (iii) Practices regarding the conducive environment for counselling/educating about PPFP.

5.4.1.1. Sub-theme 1.1: Health education about PPFP

The respondents in this group reported that the communication skill they used to motivate the PP women, was health education, which was usually conducted through group discussions.

5.4.1.1.1. Category 1.1.1: Providing communication on FP by means of group talk

The spontaneous answers from most of the respondents, on the question of communication skills to motivate PP women to use FP, were that health education was the motivating communication method they used to promote the use of PPFP. The respondents' responses revealed that they focused majorly on providing knowledge regarding the benefit (advantages) and disadvantages of family planning. Additionally, their responses revealed that their attention was more on a discussion, as a method of communicating and health education. This discloses a lack of client participation and a deficient method of dispersing health education to the client. The following direct quotations illustrate:

> *"Mostly the communication skill should start during the antenatal period, what they expect you explain to them. So just tell them the disadvantages and advantages of FP."* ***(PHC3P3)***

> *"…explain to the individual the advantages and disadvantages."* ***(PHC4P6)***

> *"We tell them as in we advise them on the f/p. I mean we advise them on the f/p that is on ground the ones that they are supposed to use immediately they deliver babies…"* ***(PHC4P2)***

"…we talk to them, and we try to tell them what FP entails then they choose the ones they actually prefer among them." ***(PHC3P6)***

Some respondents shared the same view of using health education as a communication skill. There was a perception among the respondents that explaining and discussing FP to the PP women was enough to motivate them, as per the following extracts:

"The communication skill is mostly health education and we start from the ANC because at this time, most of the mothers, they are interested in knowing more about their health." ***(PHC3P1)***

"Health education is the communication skills we use in getting the attention of the women the PP women in adopting Family planning (FP) and that is during the Antenatal clinic or during child welfare clinic." ***(PHC3P6)***

Most of the respondents' responses revealed that the health information was focused more on the advantages and disadvantages of FP.

"Sometimes when given them health talk about the different types of f/p that we have we tell them the advantage and disadvantage." ***PHC4P4***

"As she rightly said during ante-natal we need to familiarize the patient with what f/p is the advantages and the various types of f/p method that is available." ***PHC4P3***

5.4.1.1.2. Category 1.1.2: Reminding mothers of previous FP information during antennal, immunisation clinics, and outreach programmes

Reminding and repeating previous health information provided, two basic principles are required for change in behaviour, and they are paramount in promoting health education (Haleem et al., 2015). The responses of some

respondents indicated the idea, but not always the practice. The following are some of the direct quotations:

> *"...if we can after the delivery process most of these women before they had these pregnancies have already been told of the F/P method so going over it again is just like recreating what they already know it make the process a little bit easier for the midwife."* ***(PHC5P6)***

> *"Ideally most of them they don't deliver in government hospital but they will try to bring their children or their babies to the clinic for immunization and when they come, we will try to stress about the family planning."* ***(PHC4P2)***

> *Health education to PP mothers, during antenatal clinic, during child welfare clinic then_if maybe at outreach if we go for outreach if you see them you can give health education, then during maybe seminars or workshop* ***(PHC3P2)***

5.4.1.1.3. Category 1.1.3: Practices regarding conducive environment for counselling/educating about PPFP.

The initial responses from some of the respondents reflected on the requirements for a conducive environment. Their reports revealed lapses in some practices to ensure a conducive environment, an example of which is privacy. The following extracts refer:

> *"The maintaining privacy when you are giving your message or listening to what you are trying to say, so but if there is privacy, may be a room set up for that and you as the nurse and the client are the only one that are inside that place, they will be able to listen very well."* ***(PHC3P5)***

> *"...when the environment is ok any communication that you want to give to the patient, the patient will be able to understand what you are telling the patient."* ***(PHC5P2)***

Some of the respondents expressed their opinion regarding the need for a respectable approach to the PP women, which simply indicated a failure to provide a welcoming environment. The following extracts refer:

> *"...we need to be friendly, so when they have that confidence in you, they can open up."* ***(PHC4P6)***

> *"Any environment that is not conducive for a client that client is just setting down for setting sake or hearing sake but she will not take anything home."* ***(PHC4P6)***

5.4.2. Theme 2: Interpersonal relationship skills to motivate PP women for PPFP

One category that emerged from this theme is: Establishing rapport by means of listening

5.4.2.1. Sub-theme 2.1: Skills to create a good relationship

Several respondents indicated that before attempting to inform the PP women on the use of PPFP, the nurses firstly needed to acquire the skill of creating a good relationship.

5.4.2.1.1. Category 2.1:1: Establishing rapport by means of listening

Listening skill is a vital tool when considering interrelationship (Islam et al., 2016). Effective interpersonal relationship skill is a determinant factor of the acceptance of care, as it clarifies uncertainties, and promotes healthy relationships among people, which is vital for social and mental health (Islam et al., 2016). Good interrelationship skill forms the basis for the illumination and understanding of unclear circumstances between the caregiver and the client, including social support for family members (Narayanamoorthi, 2019). Some respondents identified listening, to establishing a relationship. However, most of the responses from the respondents, in answer to the questions on how to promote interpersonal relationships, revealed how it should be done, and not how it is done. Similarly, their responses indicated poor knowledge of interpersonal skills. Hence the need for training. The following are some of the direct quotations:

"There should be good interpersonal relationship during ante-natal (ANC), during labour and during delivery explaining to them about the types of F/P so that they can make their choice." ***(PHC5P4)***

"Promotion of interpersonal relationship start ante-nataly that is we need to be friendly, so when they have that confidence in you, they can open up." ***(PHC4P6)***

"As a nurse we shouldn't be biased then we should have a listening hear because some might want to tell us about what they have heard about the method." ***(PHC3P5)***

"After I have talk to the postpartum mother about the F/P and for her to make an inform choice, it is best to listen to her responses in order to make an inform decision about the F/P choice she might want to do thank you." ***(PHC5P5)***

A respondent reported the lack of good interaction

"...the interaction is not enough we interact with them but the interaction is not well ok enough for now." ***(PHC5P2)***

5.4.3. Theme 3: Challenges/issues in promoting PPFP

This theme comprises three categories, namely: (i) Lack of enough manpower resources (ii) Some nurses not dedicated to nursing, and (iii) Influence of religious/cultural beliefs

5.4.3.1. Sub-theme 3.1: Issues in motivating the PP women

While considering the motivating factors used by nurses to promote the use of PPFP, the nurses in this current study expressed their views on certain issues that hinder the motivation of the PP women.

5.4.3.1.1. Category 3.1.1: Lack of enough manpower resources

Manpower resources is a vital tool in achieving organisational goals. For some people, additional work responsibilities are regarded as a threat, or work overload, while some may view the same situations as simply a task (Norris, Didymus, & Kaiseler, 2017). Most of the respondents reported on

the work overload, inadequate time, and the negative attitude of nurses. They also felt that there was a need for them to address the behaviour of nurses, despite the nature of the job. The following extracts refer:

> *"…with the attitude and shortage of manpower generally now in most of health facility, I think we can improve on our relationship with our client."* ***(PHC3P4)***

> *"Just as the other nurse said work load also triggers the action of the nurses…but at the same time we just have to work on ourselves also, in as much as there are hardworking one (nurse) there are also the lazy ones (nurse) too." (**PHC5P6)***

Some respondents reported on the unfriendly attitude of nurses, the work overload, and time management, as per the following extracts:

> *"The health worker (nurse) some can be very hostile due to the work load like maybe we are having immunization today we schedule today for immunization and some people are coming for F/P due to the work load the attitude of the nurse will be very bad with the client due to the work load." (**PHC5P2)***

> *"The factors that affect the patient and the health workers, the nurse is mostly the attitude and work overload- some people with little stress, they become so aggressive." (**PHC3P4**)*

> *"It is the work load, the nurses are over stress--that is like, the time management is actually affected. Sometimes some of them spend one or two hours before they access the services that they have come for, so it is actually one of the major factors." (**PHC5P5)***

5.4.3.1.2. Category 3.1.2: Some nurses are not dedicated to nursing

Not being dedicated to work, significantly influences a negative impact in work progression (Blattner & Franklin, 2017). The respondents' responses revealed some of the nurses' poor attitude to work. Their responses also

revealed that some nurses lacked the passion for their nursing care work, as per the following direct quotations:

> "*The health worker (nurse) some can be very hostile."* ***(PHC5P2)***

> *"Sometimes you find out that some client will come to the clinic and client will be telling you that this will be the fourth or fifth time they have being coming and that each time they come they will always tell them to come back or they will always have one reasons or the other so some of the attitude of the nurses too are actually not good."* ***(PHC5P5)***

> ***"****I will say the attitude of the nurses always put them off, (the client off) their attitude to work some will not come to work at the right time and the client might have been coming and coming and she is tied and she cannot continue because each time she will come she will not meet the nurse on duty so it pouch them away."* ***(PHC5P4)***

> *"… We have different way that we use to relate to people like at times face alone can even let patient not to, from there for example you say eni suru shenipe ..abe (Can you wait? as you can see--) so from there the patient will just withdraw, and say I am coming, that coming they will just go that coming they will not come back again."* ***(PHC3P4)***

The majority of the respondents also confirmed what others have stated about the negative attitude of some nurses. They were of the opinion that such an attitude invites negative feedback from the client, and denigrates their nursing care work. The following extracts refer:

> *"Okay! If I will respond to that I will say our personality defers and I think majority of the nurses, they get to project what they face and pass their aggression on the patient."* ***(PHC5P6)***

"The interaction between nurses and client may not be that effective because of our attitude." ***(PHC4P4)***

"...some of the health workers at the F/P unit need to be kind and generous and very polite ***(PHC5P3)***

"...we are not patient enough, it can affect the interpersonal relationship between we the nurses and the patients when we are not patient enough to deliver the message, the person we are trying to deliver the message to will not understand if we are not patient enough." ***(PHC3P5)***

5.4.3.1.3. Category 3.1.3: Influence of religious/cultural beliefs

The respondents in this current study referred to religious and cultural beliefs as a major hindrance to the acceptance of family planning, as the following direct quotations illustrate:

"...they will tell you their religion is not in support of it ..they will not accept it because of what they have learned in their religion so they are not ready to listen and that is one of the issues for them not to accepting F/P." ***(PHC4P5)***

"Their religious does not support F/P they will tell you that their religion does not support it." ***(PHC4P3)***

The response of one of the respondents revealed that some of the religious leaders lack adequate knowledge about F/P, as per th following direct quotation:

"...well, like the religious leaders not all of them that has knowledge about F/P some go against it and some accept it." ***(PHC4P6)***

This respondent referred to the challenges of fear of complications, as well as cultural beliefs. However, this could also be construed as a lack of adequate information to the women regarding the possible complications associated with F/P. The following extracts refer:

"*Another thing that I notice in my course of duty that reduce the client flow in F/P clinic is the fear of complications and also return to fertility and basically cultural belief, some people belief that F/P reduce their fertility rate or it might affect their reproductively.*" ***(PHC5P6)***

Some respondents reported on the barriers of cultural and religious beliefs and its impact on the women to increase childbearing, as the following extracts reveal:

"Some is religion aspect; some will tell you that her own religion does not permit it and is a sin when they do FP like the catholic. Even there are some Muslim set that believe that God has given them the children and so they will have to bring those children out." ***(PHC3P3)***

"*We have different culture in this our Nigeria, some culture still belief that if their children are not up to 10 (children) they have not given birth to children.*" ***(PHC4P3)***

5.4.3.2. Sub-theme 3.2: The influence of social support groups

The influence of certain individuals, especially those with prominent roles, such as husbands (Men), community leaders, and religious leaders, was regarded as a major challenge to promoting the use of PPFP.

5.4.3.2.1. Category 3.2.1: Negative attitude of men

A respondent reflected on the negative attitude of the men, as follows:

"We hardly see them (The men) except when they (The women) have issues and they ask their husband to follow them but once there are no issues they don't come." ***(PHC5P5)***

The responses of the respondents revealed insufficient sensitisation of the men, as follows:

"At times if they come like that --we can try to give the barrier method like condom, we say Mr. so, so, will you like to take this male condom to use for your wife when you get home if he like he will just take." ***(PHC4P2)***

"Let them know that these methods are free especially for men --so let them know that basically the male condom is free so let them know that it is free so I think that should motivate them too to come around to come and pick a method, since I have been going to the F/P clinic to work I have only seen a man come for a FP method and that is still male condom so their client flow is not as much as that of the female so they just need an encouragement." ***(PHC5P6)***

5.4.3.2.2. Category 3.2.2: Challenges in motivating the community and religious leaders

Religious beliefs have been identified as one of the constraints that dissuades the community and the religious leaders from promoting the use of PPFP, as the following extract affirms:

"Some of them (The community and religious leaders) their religious does not support FP they will tell you that their religion does not support it." ***(PHC4P3)***

The response of the respondents revealed that the community and the religious leaders lacked good information about FP, which could help them to change their minds about promoting the use of FP. The following extract refers:

"…well like the religious leaders, not all of them that has knowledge about FP, some go against it and some accept it." ***(PHC4P6)***

5.4.4. Theme 4: Suggestions for improvement in the promotion of PPFP

Four categories emerged from this theme, namely: (i) Training sessions for nurses in interpersonal relationship and communication skills, as well as attitudinal change; (ii)

Training in personal development and providing emotional support; (iii) Organiing counselling and group information sessions with fathers (Men) and (iv) Organising health education for community leaders and religious leaders of paramount importance

5.4.4.1. Sub-theme 4.1: Training needs of nurses for the promotion of PPFP

All the respondents in this group shared the same concern regarding the training needs of the nurses on how to improve their promotion of the use of PPFP.

5.4.4.1.1. Category 4.1.1. Training sessions for nurses in interpersonal relationship and communication skills as well as attitudinal change

Training, using workshops for improvement in interrelationships, as well as communication, was overwhelmingly supported by all the respondents. They acknowledged the indispensable need for training on interpersonal relationships and communication. They admitted that they needed to be trained, which will enable them to acquire the knowledge to reduce their deficiencies in motivating the PP women, and the social group, to promote the use of PPFP. The following direct quotations clarify:

> *"We need training to improve our skill on communication skill how to improve our relationship how to encourage the other group of people like the religious group, to key into F/P services and also to encourage to improve the awareness of mother's in-laws and mothers on how to encourage our client to patronize our services."* ***(PHC3P1)***

> *"...we need training on communication skills on how best we can give PPFP services to our patient and how to maintain a good interpersonal relationship with our client, I think when we are well equipped based on the training, we will know how to give the best management to our patient on PPFP."* ***(PHC3P6)***

The same view for improvement was also supported by two more respondents:

> *"If we want to improve our communication skill, I think there is need for retraining of health workers on communication skill*

*because for anything to work the communication the health worker must understand what communication is all about." **(PHC3P1)***

*"Training need is very important to improve our communication skills and to improve our interpersonal relationship with the client and also to give effective communication." **(PHC5P4)***

5.4.4.1.2. Category 4.1.2: Training in personal development and/or providing emotional support to nurses

One respondent explicitly raised the issue of training, to support burdened nurses, which was also implied in sub-theme 3.1, regarding the lack of manpower resources. The response of the respondents established the fact that some of the nurses lacked coping mechanisms, as per the following extract:

*"…we as health professionals, we know we have different temperament, some people can work under stress, while some people cannot work under stress, some people with little stress, they become so aggressive--I think we can improve on our relationship with our client." **(PHC3P4)***

Other respondents acknowledged the need for nurses to be well informed, and to keep abreast of new information, continuously, for possible personal development, as per the following extracts:

*"As we all know it is very important and paramount in whatever we do, there should be upgrading of one's knowledge, on new technique, new idea and new method that might be available at the same time--to update ourselves." **(PHC4P1)***

*"I think in order to improve, learning is key too as in for the nurses we should keep on learning all the time-- learning is changing every day." **(PHC4P3)***

"Training is needed in order to improve the standard of the nurses." ***(PHC3P4)***

"Training is very important to improve our knowledge and we will be able to update ourselves." ***(PHC3P3)***

*"Training is very good for us in order to help us to build more on the knowledge we have before and to help us to have more insight into what we are doing." (****PHC3P2)***

This following respondent also affirmed the need to be well informed, and ready to accept whatever challenges that may arise in the course of duty:

*"We need training to improve our skill if we are trained and skilled enough even to tell our client to accept the method. We should be more current on new trends because they are likely to asked questions that if they punch you off track, they will not be able to accept us they will see you as some body that is not capable of taking care of their family planning services so it will discourage them but if you are somebody that is conversant with what you are doing and you know you are skill enough to answer their questions and deal with them more so on interpersonal relationship, because it goes a long way." (****PHC3P1)***

5.4.4.1.3. Category 4.1.3: Organize counselling with fathers (Men)

The response of the respondents indicated the need to offer proper education for men, to encourage their support of FP.

*"Since I have been going to the FP clinic to work I have only seen a man come for a F/P method and that is still male condom so their client flow is not as much as that of the female so they just need an encouragement." (****PHC5P6)***

*"I think the men should be educated on that f/p." (****PHC4P6)***

*"We don't. see the men we hardly see them except when they have issues and they (the women) ask their husband to follow them but once there are no issues they don't come." (**PHC5P5)***

5.4.4.1.4. Category 4.1.4: Organize health education for community leaders and religious leaders of paramount importance

Some respondents referred to the monthly ward meeting that they held with the community and the religious leaders. They mentioned that, during that event, the communication about family planning was focused on the fact that family planning was free. They also conveyed the same messages at the outreach events, by offering free condoms and informing the public that family planning was free.

*"Each ward here in our local government we have ward health committees so during this meeting monthly meetings we tell them about F/P that it is free." (**PHC5P1)***

*"So, our outreach we asked our health workers to hold the condom so that when they reach the community they can easily distribute and easily distributed and tell them the benefit of the F/P." **(PHC5P3)***

Community and religious leaders were reported as gatekeepers and significant people in communities; therefore, the respondents suggested that they should be used in forums to organise counselling, as well as to inform and promote health education on FP:

*"We can involve the influential people in the community like in form of organize seminars, from there they have the knowledge and they can also encourage their women." (**PHC3P3)***

*"The community leaders need to be motivated because there is no way you can gain access to the community even if you gain access they might not want to listen because you are not part of them because they believe in their leaders." (**PHC3P5)***

5.4.5. Summary

The respondents recognised some deficiencies in their skills of motivating PP women to use FP, and also reflected on some challenges. However, they repeatedly indicated a need of training for nurses in communication, interpersonal relationships, and a proper counselling process for social groups, such as the men, the community leaders, and the religious leaders, for them to support the use of PPFP.

5.5. SECTION 3: DISCUSSION OF THEMES OF BOTH STAFF NURSES/MIDWIVES AND NURSE MANAGERS

In this section, the researcher presents the discussion of the findings across the two groups of respondents (staff nurses/midwives and the nurse managers). The Information, Motivation, and Behavioural skills model was employed as a guide. This section aimed to assess the motivating factors nurses used to promote the use of PPFP, as well as identify ways to improve the use of PPFP by women. The themes from both groups were vertically placed for cross-references to identify the horizontal categories. The respondents from both groups shared the same views, as the themes generated were the same. The vertical themes and the associated horizontal categories are presented in Table 5.5.

Table 5.5. Summary of themes involving staff nurse/staff midwives, nurse managers, and the horizontal categories

Staff nurse/staff midwives' themes	Nurse managers themes	Horizontal categories
Theme 1: Communication skills to motivate PP women for PPFP	Theme 1: Communication skills to motivate PP women for PPFP	Methods used to motivate PP women was by: Providing communication through health education by means of discussion, reminding them of previous information, while also included are the practices relating to a conducive environment for counselling
Theme 2: Interpersonal relationship skills to motivate PP women for PPFP	Theme 2: Interpersonal relationship skills to motivate PP women for PPFP	Interpersonal skill to motivate the PP women was influenced by: Establishing rapport by means of listening
Theme 3: Challenges/Issues in promoting PPFP.	Theme 3: Challenges/Issues in promoting PPFP.	Challenges in promoting the use of PPFP was influenced by: Inadequate manpower resources; negative attitude of the nurses; religious/cultural influence; poor sensitisation; and the negative attitude of a social support group, which involves the men, the community leaders, and religious leaders
Theme 4: Suggestions and training need for improvement in the promotion of PPFP	Theme 4: Suggestions and training need for improvement in the promotion of PPFP	Training needs for nurses in communication, interpersonal relationships, attitudinal change, emotional support for personal development, organising counselling and health education sessions for men, community leaders, and religious leaders were identified

5.5.1. Methods used to motivate PP women was by: Providing communication through health education by means of discussion, reminding them of previous information, while also included are practices relating to a conducive environment for counselling

The purpose of this section is to evaluate the methods of communication skills and health education used by nurses to motivate postpartum women towards the promotion of PPFP. Communication skill has been described by various authors (Carr, 2017) as a vital tool required to deliver evidence-based, supporting quality care, to improve the patient-care experience. The skill encourages interdisciplinary collaboration. It is considered a valuable tool, used to allow individual patients, or groups, to share in health decisions that concern them (Back, Fromme, & Meier, 2019). The purpose is to share information, using various approaches.

The fact about communication and interpersonal skills is that they are well known for problem solving, which is required for a productive social life. Additionally, to a large extent, the skills contribute to the coping ability of an individual (Narayanamoorthi, 2019). Health education provides a wide range of functions in the health promotion domain. It provides the individual, groups, and community members, with opportunities to acquire knowledge (Sharma, 2021). It is a strategic tool, aimed at working closely with individuals or groups, either in healthcare facilities, or community settings, using multiple methods of teaching, to promote health, as well as prevent diseases and disabilities. Health education focuses majorly on behavioural change (Allen, Auld, Logan, Montes, & Rosen, 2017). In addition, good communication skills are required to convey ideas with others during health education activities (Khan et al., 2017).

In this current study, the communication skill used by nurses to motivate the PP women was described as the application of health education. The method of education used by the nurses, when carrying out this health education, was mainly through discussions. This method of teaching and communicating with the PP women could be described as teacher-centred, not a client-centered method of communicating health education. In addition, the findings revealed that the health education provided by nurses was mostly on the advantages and disadvantages of family planning. This simply reveals a lack of vital information needed to enhance motivation and behavioural change.

However, health education encompasses activities such as the use of brochures, pamphlets, the use of video, demonstrations, delivering lectures, facilitating role play, simulation, analysing and reflecting case studies, as well as engaging the learner in full participation and discussions (Sharma, 2021). In this current study, the findings revealed inadequate communication, and a poor range of health education, as a method of communication. The description of effective communication revolves around four dimensions, namely: i. verbal, nonverbal, and listening skills; ii. conflict management and negotiation; iii. collaboration and teamwork; and iv. cross-cultural skills (Hardjati & Febrianita, 2019).

The findings of a study conducted in North Jordan, concurs with the findings of this current study. The results revealed inadequate communication between the midwives and the clients (Okour, Saadeh, & Zaqoul, 2017). The findings of a study conducted by Sibiya (2018) are similar to the findings of this current research, revealing that the essential element of communication skills, for effective health education, was lacking among most nurses. Additionally, the findings revealed that nurses need to make further efforts continuously, to improve their communication skills. These are clear directives in meeting the need of the client, and ensuring an enabling working environment (Hardjati & Febrianita, 2019). However, the training need for nurses on the effective communication processes, and different approaches to health education, were highlighted.

The findings revealed how the nurses attempted to remind the women of the initial message about FP, as a way of motivating the PP women. However, their responses indicated that they were attempting to do so, but not necessarily practicing it. This may be due to the disconnection between theoretical knowledge and clinical practice, which implies the inability to transfer conceptual knowledge to clinical practice, and may be attributed to limited knowledge on the practical application of the promotional communication process. Basically, promotional communication on motivation such as reinforcement, encompasses interdisciplinary collaborations, and embraces a range of care that activate patient action. Additionally, it includes patient-centred care and patient autonomy, which encourages patient participation. Similarly, it empowers the patient by actualising positive health outcomes (Carr, 2017). To date, there has been a disconnection

between theoretical knowledge and clinical practice, especially in family planning services (Klainberg, 2014; Oyetunde & Nkwonta, 2014).

Essentially, the role of persuasion and reinforcement has been established as good motivating factors in social development (Tikka, Laitinen, Manninen, & Oinas-Kukkonen, 2018), while reinforcement activities, as a dimension of persuasive communication, are designed to maintain and strengthen existing behaviour (Stiff & Mongeau, 2016). Regarding the practices about conducive environment, some respondents acknowledged the need for a respectable and friendly attitude, as well as a well-improved environment for health education and counselling. However, the findings revealed the disrespectful and unfriendly attitude of the nurses toward their clients. It is documented that a conducive learning environment is the heart of promoting motivation and starts with the creation of an atmosphere of respect, by attempting to make the client feel comfortable (Falk, 2016). However, according to Eshiet, Jackson, and Akwaowoh (2016), most healthcare providers are unfriendly and disrespectful. Similarly, the findings revealed lapses in maintaining privacy.

In corroboration with the findings in this current study, regarding lapses in maintaining privacy, a study conducted in North Jordan also identified the lack of separate space for counselling, which might hinder the full participation of the client, and the flow of information may be influenced negatively (Okour et al., 2017).

5.5.2. Interpersonal skill to motivate the PP women was influenced by: Establishing relationship by means of listening

An interpersonal relationship is about the input of thought with others. The skill is a unique tool to ascertain service performance. A good interpersonal relationship is a vital strategy for motivating clients. It gives the client opportunity to negotiate in health matters. It also allows both the client and the healthcare provider to be co-partner in the decision. This means that the healthcare provider's ability in problem-solving is improved and the client becomes more empowered (Arnold & Boggs, 2019).

The responses of some respondents revealed lapses in the interpersonal relationship of nurses with their clients. However, some nurses acknowledged listening skills as an approach to address interpersonal relationships, and also felt the need to improve their

interpersonal relationships. The scope of interpersonal relationship skills has been described by many authors. Islam et al., (2016) stated that the space of interpersonal relationships encompasses listening, empathy, optimism, as well as perceived observational skills. According to Mencl, Wefald, and van Ittersum (2016), the core characteristics of interpersonal skills involve, collaborative effort with others, including the cooperative attitude of individuals, sense of leadership, social influence, empathy, and social connection. Similarly, a modified cooperative attitude of an individual tends to improve the willingness to contribute and accept responsibility, while a collaborative effort improves collective determination, and leadership ability improves performance (Islam et al., 2016). The awakening of the skills ensures concern for others and, most likely, improves a social connection, in which the relationship becomes meaningful. A poor provider/client interpersonal relationship could be attributed to a lack of effective communication.

In a study conducted in sub-Saharan Africa, the findings revealed that the nurse-patient interaction was extremely poor (Kwame & Petrucka, 2020). In another study conducted in Nepal, the majority of the respondents (15 out of 24) revealed that they were not satisfied with the care they received, stating that they did not receive proper interpersonal relationships, and proper information from the provider, during the PPFP clinic (Puri et al., 2020). This indicates the need to train the nurses on interpersonal communication skills. It is evident that such support would improve the provider-client relationship.

5.5.3. Challenges in promoting the use of PPFP was influenced by: inadequate manpower resources; negative attitude of the nurses; religious/cultural influence; poor sensitisation; and the negative attitude of a social support group, involving the men, the community leaders, and religious leaders

In this current study, several factors were identified as barriers in promoting the use of PPFP, for example, the negative attitude of nurses, inadequate manpower resources, religious and cultural factors, including the negative attitude and poor sensitisation of men, the religious and community leaders. The findings from the study revealed the negative attitude of nurses to work, including inadequate manpower resources and work overload experience. The attitude of the nurses was described as unpleasant behaviour. Such deficits are in contrast with professional ethics, while being open-minded, courteous, as well as showing temperateness and understanding, are good values of professionalism (Chadwick & Gallagher, 2016). However, some respondents felt that

there was a need to address the behaviour of the nurses, despite the nature of their job, as addressing the negative actions of the nurses could have a positive, lasting effect on the individual's emotional functioning and wellbeing. The result of a study conducted in rural Tanzania, which revealed the disrespectful and abusive attitude of nurses to women accessing healthcare services (Webber, Chirangi, & Magatti, 2018), is similar to the finding in this current study, regarding the negative attitude of the nurses. Being sensitive to women's needs is a strategic move to quality healthcare services.

Challenges reported about work overload experience may be attributed to inadequate manpower resources. This experience may have a negative influence on service delivery in healthcare facilities, which is to be expected because of a fewer number of staff attending to a larger group of clients. Several factors are associated with inadequate manpower and work overload in workplaces; examples include stress, which is understood as a lack of control over work-related or personal life conflict (Bhatti, Bhatti, Akram, Hashim, & Akram, 2016). These experiences should be understood as work stressors that could have a contrary effect on the individual. Work stressors could be termed as unfavorable circumstances that occur within a job or organisation, which necessitate adaptive and coping mechanisms by the worker (Norris et al., 2017). A study conducted in Uganda supports the current study findings. It indicated that inadequate manpower resources and work overload are inseparable, as they are mostly seen in public facilities, and such experiences negatively influence the demand for family planning (Wandera, Kwagala, Nankinga, Ndugga, Kabagenyi, Adamou, & Kachero, 2019).

The respondents in this current study reported insufficient time as a factor that hindered the promotion of PPFP. This may be attributed to the impact of inadequate manpower resources. In a situation where there is not enough manpower to work within a limited space of time, the implication is that the few available work-force might not be able to accomplish the task within the set period. However, it is documented that self-organisation of individuals, through prioritisation, and using the available time accounts for a positive work outcome. Kharkheli (2019) asserts that time organisation requires self-organisation by prioritising what needs to be done within the available period.

Some of the respondents in this current study mentioned religious and cultural beliefs as barriers in promoting the use of PPFP. Socio-cultural beliefs about family planning remain an important societal concern of many communities. In this current study, it was

revealed that the men, the religious leaders, and the community leaders do not support the use of family planning, due to their religious and cultural beliefs. According to them, family planning harms women's fertility. They regard the practice to be against the will of God for them. This may be attributed to a lack of adequate knowledge and poor sensitisation of these groups of people. This finding concurs with the finding of a study conducted by Patra and Singh (2015), in which most of the respondents affirmed the barriers of religious and cultural affiliation to the use of FP, and its influence on fertility. There is a clear fact that the interface between belief and the practice of family planning, greatly requires professional tactfulness (Duah & Yeboah, 2017). Therefore, skills acquisition, application of knowledge, and wisdom, are essential elements needed to bridge the disconnection between socio-cultural beliefs and acceptance of family planning.

The findings in this current study also reflected on the poor support from the social support systems, namely, the men, the religious leaders, and the community leaders. It shows that these groups of people lack substantial knowledge on how to support women in matters relating to family planning. However, they suggested the need for proper empowerment and orientation of men, including the religious and community leaders. Several studies have contended on the inability of healthcare providers to adequately involve men and another support group in the promotional use of family planning (Koffi et al., 2018). The involvement and participation of men and other support groups in family planning, are central for the improvement in the delivery of family planning services. In addition, Koffi et al., (2017) also confirmed the finding of this current study. The findings revealed that men lack the necessary information, to enable them to participate in promoting the use of family planning.

5.5.4. Training needs of nurses in communication, interpersonal relationships, attitudinal change, emotional support for personal development, organising counselling and health education sessions for men, community leaders, and religious leaders, were identified

In this current study, it became clear why the nurses requested a high demand for training. This was essentially aimed at improving the approaches used to promote the use of PPFP. The training need was based on the identified challenges, among which was the unprofessional behaviours exhibited by the nurses. Relating to the training need for

nurses on interpersonal relationship skills and communication skills, a majority reported about the deficiencies in the communication process and interrelationship skills. Some reported the disrespectful behaviour of some nurses, while the findings also indicated that some nurses spoke crudely to their patients. This indicates that there are lapses in the communication process and interpersonal relationships; consequently, the need exists to address the identified lapses.

This assertion conforms to the findings of previous studies about the unfriendly relationships, and the negative behaviour by professionals toward their clients (Ebrahimi, et al., 2015; Cannaerts, Gastmans, & De Casterlé, 2014). In addition, a study conducted by Sibiya (2018) indicated that nurses do not demonstrate effective communication skills with their clients. However, the findings further indicated the impact of training nurses in promoting effective communication. In another study conducted in sub-Sahara, the findings indicated that most of the nurses lacked effective communication skills, neglected patient needs and concerns, and abused, as well as humiliated the clients, especially in a primary healthcare setting, in most of the public hospitals (Kwame & Petrucka, 2020). However, the findings further highlighted the need to train nurses in communication skills, and interpersonal relationships, to address the lapses in interrelation-communication skills, as well as the disrespectful behaviour and negative attitude that was mostly exhibited by the nurses (Kwame & Petrucka, 2020). Relational-communication skills, in terms of respect for human dignity, is a vital ethical value in nursing practice (Hosseinabadi et al., 2020).

Another key issue that was identified was the aggressive attitude of some nurses when faced with any stress. The term stress is regarded as an umbrella that encompasses stressors, evaluations, and coping, of which emotions is the key point. Stress is understood as a continuing development of events that occur within one environment, as the individual strives to cope with the circumstances (Norris et al., 2017). This is an indication that nurses need training on how to control themselves to balance work situations and personal conflicts, which were affirmed by the majority. The aim was to improve their behaviour and relationships with their clients, as well as to be emotionally balanced. Correspondingly, interventions for continuous training and evaluation of nurses are a necessity in nursing practice (Engel & Prentice, 2013).

The finding in this current study also revealed that men lack good knowledge of family planning, as well as their negative attitude and poor support for family planning. The actions and decisions of men have been observed to greatly influence the behaviour and decisions of women in the acceptance of family planning. With this perspective, motivating the men is central to the promotion of family planning.

A study conducted in Southern Ethiopia indicated the negative attitude of men towards family planning, and the findings revealed a lack of knowledge about family planning (Tamiso, Tassew, Bekele, Zemede, & Dulla, 2016). Similarly, a study conducted in Northwest Ethiopia reported that men lack appropriate information about family planning, and have a negative attitude towards FP (Kassa, Abajobir, & Gedefaw, 2014). Another study conducted in Bahir Dar City implied the poor knowledge of men and their poor support for family planning (Toure, Walle, & Alamrew, 2014).

However, the training need of empowering men to support the promotion of PPFP was indicated. Additionally, the findings revealed that the community and the religious leaders were poorly motivated, as well. Besides, they also lacked adequate knowledge about family planning to help them support and promote the use of family planning. Therefore, the requirement of informing and providing proper health education to the community and the religious leaders were highly supported. Since the opinions and decisions of this set of people in the community were key, organizing health education sessions for counselling and informing them was of paramount importance.

5.6. SUMMARY

In this chapter, the researcher presented the findings from the qualitative analysis. Evidence from the study revealed the negative attitude of the nurses in the promotion of PPFP. The findings also revealed that the nurses lacked certain abilities to motivate social groups, namely men, community leaders, and religious leaders to support the PP women. However, the nurses acknowledged a lack of skills to implement promotional strategies to promote PPFP. Consequently, they suggested the need for training on how to motivate the PP women for the promotion of PPFP.

CHAPTER 6

TRIANGULATION OF THE RESULTS FROM QUALITATIVE AND QUANTITATIVE PHASES

6.1. INTRODUCTION

In this chapter, the researcher presents the triangulation of the findings from the qualitative and the quantitative phases. A concurrent mixed-method approach was used in this current study. Following the independent analysis and discussions of the two data sets, the findings were presented in a tabular form to compare the results, using the key construct of the IMB Model (Fisher et al., 2003), which is Information, Motivation and Behavioural skills as a guide (See Table 6.1). The rationale was to substantiate, confirm and support the findings revealed from both phases. According to Warfa (2016), in the concurrent triangulation design, the researcher seeks to establish the relationship of the qualitative and quantitative results, following the independent analyses of the two data sets. Such an approach clarifies and establishes the justification for the outcome of the study. Similarly, the process of triangulation tends to increase validity, by seeking to confirm the results from the qualitative and quantitative methods. In addition, this suggests that the complementary approach uses the research findings from one method to enhance, and further clarify, the findings of the other (McLaughlin, Bush, & Zeeman, 2016). The findings from the qualitative study (staff nurse/staff midwives and nurse managers) as well as the findings from the quantitative study are included in this chapter. In addition, the researcher presents the triangulation of the results, from the quantitative and qualitative findings, in Table 6.1, followed by a discussion on the triangulation of the findings. In Table 6.2, the researcher presents the key findings, as well as an outline of the required improvements, and finally, a summary of the findings.

6.2. FINDINGS FROM THE QUALITATIVE PHASE

6.2.1. Staff nurses/staff midwives

- Information

  The findings from the responses of the staff nurses/staff midwives revealed that the teaching method used to motivate the women during health education was

through group discussions. Their responses revealed a lack of client participation, indicating an inadequate method of teaching during health education, which was suggestive of inadequate information (see category 1.1.1: *PHC1P1, PHC2P5, PilotP2, PHC2P3, PHC2P6*).

The nurses' focus, while dispensing health information about family planning, was mostly on its advantages and disadvantages, with less emphasis on other useful information, which also indicated a lack of adequate information that may have affected the women's understanding and decisions (see category 1.1.1: *PHC1P, PHC2P1*)

The nurses acknowledged the need to organise counselling and group information sessions with men, religious leaders, and the community leaders, because, according to the findings, men had poor knowledge of PPFP, which may be associated with inadequate information that they had received about PPFP (see categories 3.2.1: *PHC2P6*; 4.1.3 and 4.1.4: *PHC1P5, PHC2P3, PHC1P3, PilotP3*).

- Motivation

The findings from the responses of the staff nurses/staff midwives, on interpersonal relationships revealed how it should be conducted, and highlighted that they had not been practicing the ideal, which was indicative of poor motivational strategies. Consequently, it highlighted the need for the training of nurses (see category 2.1: *PHC2P4, PHC2P4, PHC1P2*). The nurses acknowledged their training needs in personal development, which indicated the need for them to be empowered with motivational strategies, to promote PPFP (see category 4.1.2: *PHC2P3, PHC2P3, PilotP4*).

The nurses identified their lack of promotional motivation, such as poor interpersonal relationships, poor communication skills, and poor attitude; and consequently, recommended training sessions that would address the identified challenges (see category 4.1: *PHC2P3, PilotP4, PHC1P3, PHC2P6, PHC2P2*). The nurses acknowledged that their interpersonal relationships and communication skills were inadequate, which was evidenced by the high demand

for communication skills training, and indicative of poor motivation (see category 4.1.1: *PHC2P3, PilotP4, , PHC1P3, PHC2P6, PHC2P2*)

- Behavioural Skill

  The findings from the responses of the staff nurses/staff midwives revealed that some of the nurses displayed a nonchalant and aggressive attitude toward the PP women. This was indicative of poor attitudinal behaviour, which may have negatively affected the behavioural skill of the PP women, regarding the use of PPFP (see category 3.1.2: *PHC2P3, PHC2P2, PHC2P5*). One of the nurses specifically acknowledged that her communication with the PP women was not well established, which resulted in poor listening, and their lack of understanding. This indicated poor interpersonal relationships and poor communication, which may have negatively affected the behavioural skill of the women (see category 2.1.1: *PHC1P5*).

  The nurses highlighted that the impact of the shortage of manpower, as well as inadequately allotted time, may have negatively affected the behavioural skill of the women to use PPFP, which may be due to inadequate care (see category 3.1.1: *PHC1P1, PilotP2*).

6.2.2. Nurse managers

- Information

  The findings from the responses of the nurse managers revealed that the approach they used in educating the PP women, to motivate them during health education, was through group talk. However, this does not promote client participation sufficiently due to inadequate methods of teaching during health education, which is suggestive of providing inadequate information (see under category 1.1.1: *PHC3P3, PHC4P2, PHC3P6*). In addition, the finding revealed that the nurses focused mostly on the advantages and disadvantages of PPFP, with less emphasis on other useful information, which implied a lack of adequate information. Ultimately, this may have affected the women's understanding and facilitated the negative decisions of the PP women (see category 1.1.1: *PHC4P4, PHC4P3*).

  Additionally, the findings revealed the need to organize counselling and group information sessions with men, religious leaders, and the community leaders,

because of the provision of inadequate information about PPFP to the men and the religious/community leaders (see category 4.1.3: *PHC3P6, PHC4P6, PHC3P3, PHC3P5*).

- Motivation

The findings from the responses of the nurse managers regarding interpersonal relationships indicated how personal relationships should be conducted, and highlighted that they had not been practicing the ideal, which was indicative of poor motivational strategies. Consequently, the need existed for the training of nurses (see category 2.1.1: *PHC5P4, PHC4P6*). The nurses acknowledged their training needs for their professional development and emotional support. This emphasised the need to empower nurses with motivational strategies to promote PPFP (see category 4.1.2: *PHC3P4, PHC4P1, PHC4P3, PHC3P3, PHC3P2, PHC3P1*). The need to train the nurses due to their lack of motivational strategies, such as poor interpersonal relationships, poor communication skills, and poor attitude (see category 4.1.1: *PHC3P1, PHC3P6, PHC3P1, PHC5P4*) Additionally, the findings revealed the negative attitude of men, which may have been associated with the poor motivation of men (see category 3.2.1: *PHC5P5, PHC5P6, PHC4P3, PHC4P6*).

- Behavioural skill

The findings from the responses of the nurse managers revealed that some of the nurses were unfriendly, with a hostile attitude. Potentially, such an attitude could negatively influence the behavioural skill of the PP women to use PPFP (see category 3.1.1: *PHC5P2, PHC3P4,* also under category 3.1.2: *PHC5P2, PHC5P5, PHC5P4, PHC3P4, PHC5P6, PHC4P4, PHC5P3*). In addition, one of the respondents specifically reported that her interaction with the PP women was inadequate (*PHC5P2*), which may have negatively affected the behavioural skill of the PP women.

The nurses highlighted that the impact of the shortage of manpower, as well as inadequately allotted time, may have negatively affected the behavioural skill of the women to use PPFP, which may be due to inadequate care (see under category 3.1.1: *PHC5P5, PHC3P4, PHC5P2*).

6.3. FINDINGS FROM THE QUANTITATIVE PHASE

The findings from the quantitative survey revealed that 95.6% of the respondents reported group discussions as the most frequently used method for the dissemination of postpartum family planning information (see Table 4.8). However, the findings revealed that the PP women were not informed about certain useful PPFP facts. Information on the risks of the non-use of FP, the consequences of unplanned pregnancy, and the procedures to follow, in the event of side effects after the use of any FP methods, were never communicated to many of the women (see Tables 4.10 and 4.11). These are all indicative of inadequate information. Additionally, the findings revealed that the PP women did not understand the information on family planning that was conveyed to them (see Table 4.14), which indicates poor communication and inadequate motivation, with the potential of negatively affecting the decisions of the PP women.

According to the findings, the PP women were not given the opportunity to participate in discussions during health education (see Table 4.14), or communicate their concerns to the nurses, which indicates non-client involvement and an inadequate teaching method of conveying health information. Ultimately, it appears that the discussions were never centred on the women, which implies a lack of adequate communication and motivation (see Table 4.14). Additionally, the findings revealed that the PP women had never observed the nurses providing health education to the men (their husbands) in the clinic, indicating a lack of promotional motivation for men, as well as the religious and community leaders (see Table 4.10).

Another finding revealed that the nurses failed to use a friendly tone of voice when communicating with their clients (see Table 4.14). Consequently, the PP women were of the opinion that they failed to received satisfactory care from the nurses (see Table 4.14), which could be associated with the poor negative attitude of the nurses that may also negatively affect the decision of the PP women to use PPFP. According to the findings, the PP women needed to improve their behavioural skills regarding the use of PPFP. However, these needs were challenged by certain factors, namely, the nurses' attitude, the fear of side effects, the fear of the negative consequences after the use of family planning, as well as religious and cultural factors (see Tables 4.15 and 4.16). All these factors contributed towards the poor motivation of the PP women, the men, as well as the community and religious leaders.

Table 6.1: Triangulation of results (Quantitative and Qualitative finding)

Information Motivation and Behavioural skill model (IMB model)	Quantitative findings	Qualitative findings	Concluding statement
Information	The mode of dissemination of postpartum family planning to the PP women was mainly through group discussions. The findings revealed a lack of an adequate method of teaching during health education (Table 4.8)	Nurses disseminated PPFP health information through group discussions mainly (Theme 1 on communication skills to motivate the PP women for PPFP). The findings revealed a lack of an adequate method of teaching during health education.	A lack of sufficient method of teaching during health education.
Information	The PP women were not informed about certain useful PPFP facts. According to the findings, information on the risks of non-use of FP, the consequences of unplanned pregnancies, and the procedure to follow, in the event of side effects after the use of any methods, were never communicated to many of the women, (Tables 4.10 and 4.11), indicating inadequate information. Additionally, the nurses discussed the advantages and disadvantages of FP mainly, with scant emphasis on any other vital information. These are all indicative of inadequate information.	The nurses, while conveying health information about FP, were focused mainly on the advantages and disadvantages, with less emphasis on other useful information. This indicated a lack of adequate information, and may have affected the women's understanding, as well as their decision to use FP (Theme 1 on communication skills to motivate the PP women for PPFP).	Inadequate health information and poor teaching methods.
Information	The PP women remarked that they did not understand the information on FP that was conveyed to them (see Table 4.14 on the report of the participants' assessment of the adequacy of PPFP information), which indicates poor communication skills. This has the potential of negatively affecting the PP women's decision to use FP.	The nurses acknowledged that their communication with the PP women was not well established, which resulted in poor listening and the lack of understanding by the women. This indicated poor communication skills, which may negatively affect the decision of the women (see category 2.1.1: *PHC2P4*)	Poor communication skills
Motivation	The PP women remarked that the messages they had received during health education, were unclear, which indicates poor communication skills and inadequate motivation (see Table 4.14)	The nurses acknowledged that the communication process was inadequate. This was evidenced by the high demand for training in communication skills (see sub-theme 4.1 on training needs of nurses for promotion of PPFP), indicative of poor motivation.	Poor communication skills
Motivation	PP women were not given the opportunity to participate in discussions during health education, which indicates that the discussions were teacher-centred, and not client-centred. It also demonstrates poor interpersonal relationships, as well as inadequate health education methods of teaching. These are indicative of poor motivation (See table 4.14)	The nurses gave health talks mostly by discussion (see category 1.1.1). This is a teacher-centred approach to communication, which indicates poor interpersonal relationships and poor motivation.	Poor interpersonal relationships and the lack of an adequate method of teaching during health education.

Motivation	The PP women remarked that they had never observed the nurses conveying health education to the men (Ttheir husbands) in the clinic, indicating that the social group lacked adequate knowledge of PPFP, due to poor motivation (see Table 4.10).	The nurses acknowledged that the men, including the religious and community leaders, had poor knowledge of PPFP, indicating the inadequate motivation of this group of people (see category 3.2.1 on negative attitude and poor sensitisation of men; category 4.1.3; and category 4.1.4) They were poorly motivated and sensitised; therefore, the need to empower the nurses to provide PPFP health education to the social group.	Lack of adequate methods to motivate the social group of people for the promotion of PPFP. This is evidence by the social group's lack of PPFP knowledge. Hence, the need to empower the nurses to provide PPFP health education to the social group.
Behavioural skill	The PP women remarked that the nurses did not use a friendly tone when communicating with them (see Table 4.14), which is indicative of poor interpersonal relationships that could negatively influence the behavioural skill of the PP women, regarding the use of PPFP.	The nurses acknowledged that some of the nurses display a nonchalant and aggressive attitude towards the PP women (see category 3.1.2 on the negative attitude of nurses, which is indicative of poor behaviour that may negatively affect the behavioural skill of the PP women, regarding the use of PPFP.	Poor interpersonal relationships.
Behavioural skill	The findings revealed that the PP women did not receive adequate information from the nurses, which could be because the nurses never allowed them to communicate their concerns to them. This could have affected their behavioural skill in the use of PPFP. (see Figure 4.2)	The nurses acknowledged that some of the nurses were not dedicated to nursing (see category 3.1.2), which may negatively affect the behavioural skill of the PP women in the use of PPFP.	Poor interpersonal relationships.
Behavioural skill	A large percentage of the PP women remarked that they did not receive satisfactory care from the nurses (see Table 4.14). This could be associated with the poor negative attitude of the nurses, which is also indicative of stressful work situations that may negatively affect the behaviour of the PP women to use PPFP.	The nurses acknowledged the influence of the shortage of manpower, namely, work overload, and the aggressive attitude of nurses. (see category 3.1.1 on lack of enough manpower, and category 3.1.2 on the negative attitude of nurses). This is indicative of stressful work situations which may negatively affect the behavioural skill of the women to use PPFP.	Stressful work situation and poor coping mechanisms; therefore, the nurses needed training on ways of coping with difficult situations.
Motivation	The PP women needed to improve their behavioural skills to enhance the use of PPFP. However, these needs have been challenged by certain factors, namely, the nurses' attitude, the fear of side effects, the fear of the negative consequences resulting from the use of FP, as well as religious and cultural factors. All these are related to poor communication and poor motivation. (see Tables 4.15 and 4.16 on previous use and non-use of FP).	The nurses identified the lack of promotional motivation and recommended training needs for nurses in areas that would address the identified challenges to motivate the PP women and improved the use of PPFP (See theme 4 on suggestions for improvement in the promotion of PPFP).	The conclusive need for training nurses was highly suggested by all the respondents.

6.4. TRIANGULATION OF THE FINDINGS

Triangulation is a mixed-method approach used to strengthen the credibility and validity of research findings (Johnson et al., 2017). Credibility denotes the trustworthiness of the research study, while validity refers to the extent to which a study precisely reflects the phenomenon that is being investigated. The triangulation of multiple sources of data assists in the elimination of biases that may arise from the use of a single method. Importantly, the triangulation of the data offers confirmation of the findings from both datasets. Additionally, it provides an explanation of the research study, as well as the issues in human behaviour (Noble & Heale, 2019).

In this current research, the integration of the findings from the quantitative and qualitative data sets was achieved by using the triangulation mixed-method approach. The purpose was to obtain a better understanding of the research problem, as well as provide an explanation and clarification of the results, to establish a quality research study. According to Almalki (2016), triangulation of the findings offers the opportunity for the justification and clarification of results from diverse research methods. In addition, it enhances the quality of the research study.

The findings from both the quantitative survey and qualitative analysis revealed that the mode of disseminating PPFP information was mostly by discussion, indicating an inadequate method of teaching and conveying PPFP health information (see Table 4.8 and theme 1 on communication skills to motivate the PP women towards PPFP). According to Allen et al., (2017), the aim of health education is to influence positive health behaviour, using various teaching methods, including group discussion, one-on-one sessions. In addition, it could include demonstrations, delivering lectures, and facilitating role-play (Sharma, 2021). Such applications are required for a better learning experience. The findings also revealed that both the PP women and the nurses concurred that most of the nurses are unfriendly, with a nonchalant attitude towards their clients, which indicates a lack of respectful client care, as well as a negative attitude (see Table 4.14 and category 3.1.2 on the negative attitude of nurses). In contrast, nursing ethics is a discipline that encompassed a wide range of values; one of which is to treat the client respectfully, without compromising his/her dignity (Chadwick & Gallagher, 2016).

The majority of the PP women in this current study remarked that the messages they had received from the nurses during health education had been unclear to them (see Table 4.14 on the report of participant's assessment of the adequacy of PPFP information). Similarly, the nurses acknowledged that the communication with the PP women was not well established (see category 2.1.1: *PHC2P4***),** indicating inadequate communication and poor motivation. Islam, Nasira, Pritom, Kumar, & Rabbi (2016) assert that, to achieve a good interpersonal communication process during social interaction, effective communication skills are required.

The triangulation findings also revealed that both the PP women and nurses acknowledged that the men, including the religious and community leaders had poor knowledge of PPFP (see category 3.2.1 on the negative attitude and poor sensitisation of men; also see category 4.1.3 and Table 4.10). In addition, they acknowledged the aggressive attitude of the nurses, which could be related to the transfer of aggression from their personal issues and work overload (see Table 4.14 and category 3.1.2). The need for stress management training was identified to teach nurses how to cope with difficult situations in the workplace.

In this current study, the process of triangulation was the display of findings from the two databases, which were presented in tabular form, highlighting the similarities from both datasets. They were arranged in a horizontal axis alongside the key concept (IMB) model (see Table 6.1, relating to the triangulation of results from the qualitative and quantitative findings). According to Rai (2018), the cross-corroboration of the results, through triangulation, naturally increases the strength of the findings, and consequently provides better outcomes. Similarly, the feedback generated from the triangulation of various data, increases confidence in the findings. Such an approach also assists in the identification of priority areas for quality improvement in service delivery (Johnson et al., 2017). Similarly, the mixing of data sets describes the extent to which, as well as the point at which, both the quantitative and the qualitative data merge. Ultimately, such integrated data could be used to inform the second phase of this current research study, which is the theoretical phase, or the framework that guides the research design and development (McLaughlin et al., 2016).

Subsequent to the triangulation and integration of both findings, the practice-oriented framework by Dickoff et al., (1968) was used as a research guide (see Chapter 7). Thereafter, the concluding statements of the integrated findings were used to address the identified

deficiencies; consequently, leading to the development of the training programme for professional nurses, on how to promote the use of PPFP.

Table 6.2: Key findings and outline of required improvement

Key findings from the triangulation of quantitative and qualitative data analysis	Outline of required improvement
1. Lack of sufficient method of teaching during health education	**1.** Empower the nurses on different teaching methods during health education to enhance the learning experience
2. Poor interpersonal relationship (see category 3.1.2 on the negative attitude of nurses: *PHC2P3, PHC2P2, PHC2P5, PilotP4, PHC5P5, PHC5P4, PHC4P4). Also see* Table 4.14**.**	**2.** Need to improve on interpersonal relationship
3. Poor communication skill	**3.** To establish effective communication as a vital requirement for promoting the use of PPFP.
4. Lack sufficient strategies to motivate the social group of people for the promotion of PPFP. This is evidence by the poor knowledge of the social group about PPFP	**4.** To empower nurses to equip the social group of people on the knowledge of PPFP (men, community/religious leaders)
5. Stressful work situation due to work overload. Evidence by Aggressive attitude of nurses	**5.** Equip nurses with knowledge and skills on how to manage work-related stress

6.5. SUMMARY

The findings revealed that the PP women had poor learning experiences, due to the nurses' traditional method of disseminating health information, which was mostly by means of discussion, indicating insufficient teaching methods. Evidence from the findings also revealed that the PP women received inadequate information about PPFP. Both the PP women and the nurses acknowledged that the communication process was inadequate, which, it was assumed, may negatively influence the PP women's decision to use PPFP. In addition, it was understood that the teacher-client-centred relationship indicated poor problem-solving ability and poor motivation.

The PP women and the nurses conceded that the insensitive attitude of the nurses towards the PP women could be a factor that hindered the behavioural skill of the PP women, as well as their compliance to use PPFP. The nurses attributed their insensitive attitude to challenges, such as work overload, due to a shortage of manpower resources, which they considered stressful circumstances. Similarly, challenges with religious and cultural beliefs, as well as the poor attitude of men and community leaders, were discussed extensively, and suggestions regarding the need to train nurses to deal with these identified challenges, were duly supported by the respondents.

CHAPTER 7

APPLICATION OF THE PRACTICE-ORIENTED THEORY

7.1. INTRODUCTION

In Chapters 4, 5, and 6, the researcher discussed the findings of the situational analysis from Phase 2. In this chapter, the researcher describes the application of the Practice-Oriented Theory of Dickoff et al., (1968), as a guide in the development of the training programme for professional nurses on how to promote the use of PPFP**.** This theory has been described as a theoretical guide, as well as a systematic explanation of events, in which concepts of activities are identified (Ngulube, 2018). It has also been referred to as a logically interrelated set of ideas (Ngulube, 2018). The use of this theory in nursing provides a systematic means of collecting data to describe and predict nursing practice, rendering nursing practice more purposeful, by stating the specific goal **(**McEwen & Wills, 2019), which could be explained in a graphical, or a narrative form (Tamene, 2016). According to McEwen and Wills (2019), research theory and practice are interrelated in nursing, of which the elements are key factors in evidence-based nursing practice.

In this current study, the findings from the situational analysis, provided direction on ways of promoting the use of PPFP. In the process of developing the training programme for professional nurses to improve the use of PPFP, the prescribed list of activities indicated in the practice-oriented theory (Dickoff et al., 1968, p. 422, also cited in McEwen & Wills, 2019) was used as the logical guide, as per the 6-point list of prescribed questions and activities:

1. Who or what performs the activity? (Agent)
2. Who or what is the recipient of the activity? (Recipient)
3. In what context is the activity performed? (Context)
4. What is the energy source for the activity? (Dynamics)
5. What is the guiding procedure, technique, or protocol of the activity? (Procedure)
6. What is the end-point of the activity? (Terminus)

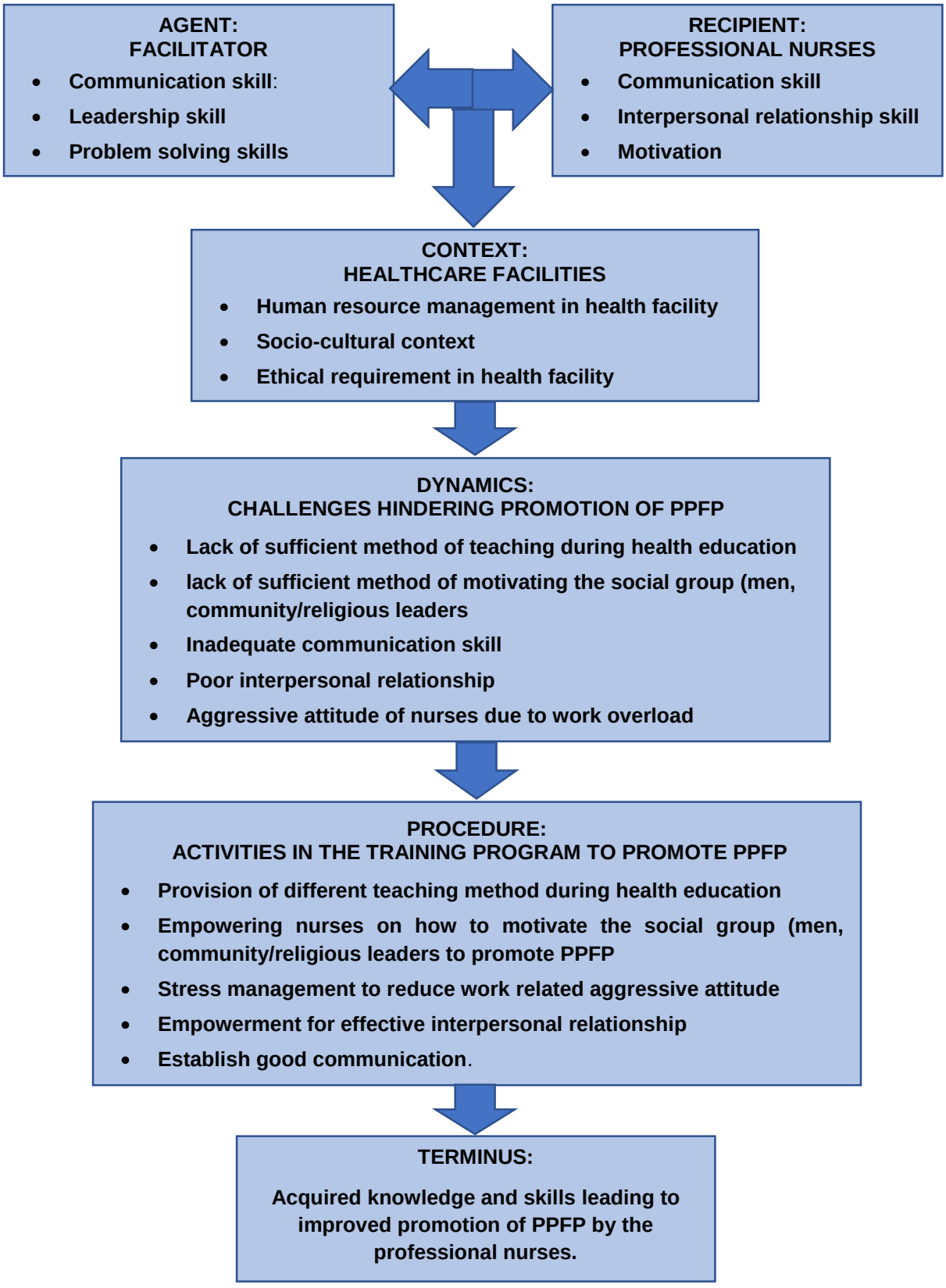


Figure 7.1: Reasoning map of the training program for professional nurses for the promotion of PPFP

Source: Adapted from Dickoff et al., (1968)

7.2. AGENT

According to Dickoff et al., (1968, p. 422), the agent is regarded as the person who performs the activity. In this current research, the agent is regarded as the facilitator, who possesses the necessary skills, knowledge, and abilities required, to equip and empower the professional nurses, to promote the use of PPFP. The agent plays the role of a planner in a given activity (Chen, Lakhmani, Stowers, Selkowitz, Wright, & Barnes, 2018). According to Ito (2018), a facilitator is defined as the person who organises activities to be accomplished, and coordinates, as well as leads. he/she is also referred to as the person who simplifies procedures, making them more convenient and coherent, to enable the participants to achieve the desired goal.

The facilitator could be someone, who is an expert within the organisation and possesses the necessary knowledge and skill to guide the participants during the design stage of the professional programme development. Alternatively, he/she could be an external individual with the necessary skills and knowledge (Becuwe, Tondeur, Pareja Roblin, Thys, & Castelein, 2016). Therefore, in order to achieve the capacity of the agent, as the facilitator for the training programme in this current study, the following characteristics should be ensured:

7.2.1. Communication skills

Effective communication is a vital ethical value in the nursing profession that promotes health outcomes (Sibiya, 2018). The aim is to notify, arouse interest, explore, and update, to bring about behavioural change (Hosseinabadi, Momtaz, Shahboulaghi, Abbaszadeh, Kamrani, & Pournia, 2020). The facilitator`s role requires active and effective communication with the recipient (professional nurses) to empower them. This is a vital professional strategy to establish a good teaching and learning experience (Needham, McMurray, & Shaban, 2016). Additionally, the facilitator should be able to utilise various communication strategies, such as verbal, and nonverbal communication, including feedback mechanisms, as well as good listening skills. Effective communication is the extent to which clarity of information is ascertained for better understanding by the participants (Sibiya, 2018).

Needham, McMurray, and Shaban (2016) stated that the facilitation role requires that the facilitators exhibit excellent communication and interaction skills, when dealing with learners. Such an approach is essential to the achievement of good teaching and learning experience.

Similarly, effective communication, by way of persuasion, assists in strengthening existing behaviour (Stiff & Mongeau, 2016).

7.2.2. Leadership skills

For effective facilitation, the facilitator should possess leadership skills. The responsibilities of the facilitator, as a leader, include the ability to mentor and manage people, as well as resolutely provide an enabling environment that would ensure meaningful teaching and learning experiences (Becuwe et al., 2016). The facilitator should be knowledgeable about providing the necessary skills and knowledge to the recipient (professional nurses), enabling them to address the challenges that hinder the adequate promotion of PPFP (McFadden et al., 2020).

According to Moodie (2016), leadership skills involve the ability to guide, or influence people, as well as the ability to inspire the confidence of people. The skill is fundamentally about developing people's skills, to become better and more effective health professionals in the provision of healthcare services.

7.2.3. Problem-solving skills

Problem-solving skills refer to the ability to use logic in solving real-life problems, and subsequently, making meaningful decisions (Gunawan, Harjono, Sahidu, & Herayanti, 2017). During the learning process, the agent, as the facilitator, should be committed to guiding the professional nurses to solve problems and learn independently. Such abilities enhance the critical thinking and self-directed learning abilities of the professional nurses to actualise the desired goal. The findings from this current study revealed that the professional nurses lacked certain abilities to solve problems, regarding the promotion of PPFP (see Chapter 6).

Therefore, the facilitator should assist the professional nurses to develop the skills to solve problems and make appropriate decisions on how to promote PPFP. Salinitri, Wilhelm, and Crabtree (2015), as well as Couto, Bestetti, Restini, Faria-Jr, and Romão (2015), view problem-based learning as an educational strategy to improve educational learning abilities, to promote clinical reasoning, and encourage self-directed learning.

7.3. RECIPIENT

According to Dickoff et al., (1968, p. 422), the recipient is the person(s), who receives (receive) the activity. In this current study, the professional nurses are the recipients, who would receive the knowledge and skills from the agent, who facilitates the PPFP training programme. They are involved in the provision and promotion of PPFP; therefore, the skills are required to enable them to promote and improve the use of PPFP. The training programme for the professional nurses are necessary due to the following: firstly, the findings from the quantitative and the qualitative analysis (see sections 6.2 and 6.3) revealed certain inabilities of the professional nurses to promote the use of PPFP. In addition, during the focus group discussion needs assessment, the professional nurses (recipients) disclosed their training needs regarding communication skills, interpersonal relationship skills, and motivational skills for emotional support (see Theme 4 on suggestions to improve the promotion of PPFP). Consequently, it is expected that the nurses possess valuable skills and knowledge to be able to address the promotional deficiencies.

7.3.1. Communication skills

Communication skills are identified as core competence required in the delivery of healthcare services, to improve both client and provider satisfaction. However, the skill could be improved through effective training for efficiency and better health outcomes (Back, Fromme, & Meier, 2019; Boissy et al., 2016). The recipients are expected to be involved and benefit from the training programme, for the purposes of equipping them to communicate effectively. Additionally, they should be able to use various communication techniques, such as good listening skills, verbal and non-verbal communication, including good feedback mechanisms, to establish clarity of information and ensure a good relationship.

7.3.2. Interpersonal relationship skills

The recipients are expected to acquire the necessary interpersonal relationship skills to enable them to interact socially and effectively with their clients. Islam et al., (2016) define interpersonal skill as the application of the intellectual communication process, during social interaction, to influence positive effect. Good interpersonal interactions are fundamental in building strong relationships; therefore, nurses, as recipients, need to develop good interpersonal relationship skills. They should be able to value and respect the opinions of their clients, while establishing a mutual relationship.

7.3.3. Motivation

Motivation refers to the process in which urges, drives, strivings, and needs, control the behaviour of human beings (Sandhe & Joshi, 2017). The recipient (professional nurses) needed to be equipped with various motivational skills, aimed at empowering them with the necessary knowledge and abilities, to enable them to promote the use of PPFP. Once the skills are acquired, they should be emotionally balanced, committed, and determined to take greater responsibilities, by initiating appropriate direction and guidance, to achieve excellence in promoting PPFP. Ultimately, motivation relates to developing the desire, aspirations, and good sense of encouragement, through a persistent effort, to attain a desired goal (Sandhe & Joshi, 2017).

7.4. CONTEXT

According to Dickoff et al., (1968), context is regarded as the place, where the activities occur. In this current study, the context was the healthcare facilities, where knowledge and services of PPFP services are provided to the PP women. In addition, they were the settings where the study was conducted in Epe Local Government area in Lagos state.

According to Van Dijk (2015), context is regarded as an organisational environment in the form of a setting, where specific roles are established. In addition, it is viewed as a social environment that involves social norms and ethics. To ensure improved healthcare facility/outcomes, it is important to address the activities that occur at the healthcare facility. Such activities include the following:

7.4.1. Human resource management in a health facility

Human resource management is principally concerned with the manner in which people are managed within the work environment. The focus is directly linked to the development of the employee through training, for the acquisition of skills and knowledge for possible improved performance (Lendzion, 2015). Therefore, for human resources to address the challenges of motivating the PP women, which was reflected in category 3.1.1, equipping them with the necessary skills and knowledge beccomes a necessity. This approach would not only enhance their coping mechanisms, the skills and knowledge acquired from the training would also improve their problem-solving ability to address challenges in the workplace. Motkuri and Mishra (2020) observes that

adequate training of manpower in the workplace is an essential tool for effective health outcomes in the healthcare setting. Similarly, Van Dijk (2015), acknowledges that the context, which is the physical environment where the activity occurs is a knowledge base area. Such an environment should be conducive to learning. In the context of this current study, the facilitator should secure an enabling environment that enhances the effective training of human resources for effective outcomes. This will, not only improve their performance, but also facilitate a good relationship between the healthcare provider and the client; consequently, improving health outcomes.

7.4.2. Socio-cultural context

The social environment, regarded as the context (Van Dijk, 2015), is the environment in which the recipients (professional nurses) are expected to interact and collaborate effectively with members of the community, as effective collaboration remains a vital tool that ensures shared understanding and commitment (Stroud & Hopkins, 2016). The limitations shared by the professional nurses during the focus group discussions revealed the poor support and the negative attitude of the community and religious leaders, due to their socio-cultural beliefs regarding the use of PPFP (see category 3.2.2). The nurses are expected to understand the social context, in terms of the socio-cultural influence of the use of PPFP. They need to be mindful of their shared responsibilities in a multicultural environment, to ensure effective interaction and collaboration with the community and the religious leaders, to achieve the set goal. Ultimately, the religious/community leaders are regarded as the community gateway, with access to members of the community, and the ability to deliver information to healthcare providers and their congregation. Therefore, collaborating with these groups of people has been described as a great success in health promotion, as well as in health programmes (Rivera-Hernandez, 2015).

The nurses are expected to promote the use of PPFP to the PP women in the primary healthcare centres. They are also expected to collaborate with the opinion leaders in the community, namely, the religious and community leaders, in order to gain their full support in the promotion of PPFP.

7.4.3. Ethical requirement in a health facility

According to Van Dijk (2015), context is regarded as the norms that are expected in an organisational setting. In the context of this current study, ethical norms relating to ethical

approval for permission in the study setting, including ethics approval, were sought (Appendices 4, & 6 for approval letters from Lagos State Primary Healthcare Management Board and Appendix 5 for UWC's Ethics Clearance Letter). According to Sah (2015), ethics are social norms that are considered to be fairness, justice, rights, and responsibilities, which are expected to be maintained in the work environment. It also forms the basis on which relationships are built, and such values are communicated to the employer through a code of conduct and training (Sah, 2015). As indicated in chapter 2, it is the expectation that activities in the work environment promote ethical behaviour. To ensure standardisation of practice in the work environment, it is required that the professional nurses apply ethical values, when dealing with PP women; however, simultaneously, they should ensure moral principles and responsibilities, such as respecting the opinion of the PP women, ensuring healthy behaviour that safe guard the women, their families, and other members of the community. According to the Nursing and Midwifery Council of Nigeria (NMCN, 2019), nurses in Nigeria are expected to maintain moral and ethical obligations, while discharging their professional practice. Additionally, Poikkeus et al., (2014) explain that, in clinical practice, achieving quality nursing care in healthcare facilities requires a sound professional ethical approach.

7.5. DYNAMICS

Dickoff et al., (1968) define dynamics as the energy source for the activity. In this current study, the energy source for the activities were the challenges that interfered with the professional nurse's ability to promote the use of PPFP. The identified challenges from the findings were centred around the following: the lack of adequate methods of teaching during health education; the aggressive attitude of the nurses due to work overload; their inadequate communication skills; poor interpersonal relationships; and the lack of adequate methods of motivating the social group (men, community/religious leaders). Consequently, in order to promote the use of PPFP, the need arose to address challenges outlined by the respondents during the needs assessment.

7.5.1. Lack of adequate methods of teaching during health education

Teaching methods are processes through which the educator provides learning experiences to the learner for improved performance (Dorgu, 2016). The nurses' method of conveying PPFP health information, as indicated by the respondents, was mainly

through discussions. Additionally, most of the respondents stated a lack of clear information (see Chapter 6), which potentially, could hinder good learning experiences by the PP women. Therefore, there was a need to explore different methods of teaching to convey health information to the PP women, to enhance their participation and promote good learning experiences.

7.5.2. Lack of an adequate method of motivating the social group (men, community/religious leaders

The findings from the respondents revealed the negative attitude of the social group (men, community and religious leaders) towards the promotion of PPFP use. The findings also highlighted the poor knowledge of PPFP that these groups of people had acquired (see Chapter 6). These are contributory factors that hinder the promotion of PPFP, which may be associated with poor motivation. According to Bhuvanaiah and Raya (2015), motivation plays a vital role in commitments to action, due to its stimulating effect.

However, the determining factor of motivation may depend on variations, such as intrinsic or extrinsic factors. Intrinsic motivation is driven from within the individual, while extrinsic motivation is externally driven (Bhuvanaiah & Raya, 2015). Various studies have revealed diverse strategies, through which people could be motivated (Hardcastle, Hancox, Hattar, Maxwell-Smith, Thøgersen-Ntoumani, & Hagger, 2015; Vellone et al., 2017). These studies explain the motivational interviewing method of motivation, as a counselling method that is used to guide and cause the individual to take action. Such methods assist in strengthening personal motivation, for the purposes of influencing behavioural changes.

7.5.3. Inadequate communication skills

Communication skill is the ability to convey clear and concise information, which could be achieved through an effective listening and feedback mechanism (Carr, 2017). Effective communication skill could be in verbal and nonverbal form. Verbal communication entails voicing the exact words, while nonverbal communication involves messages, such as gestures, facial expressions, postures, and a different tone of voice. However, both verbal and nonverbal are used to understand the emotional state and attitude of the client (Suen, Hung, & Lin, 2020).

The findings of this current study revealed that the message the PP women received about PPFP during health education was unclear to them, which is indicative of inadequate communication. However, according to Sibiya (2018), effective communication is regarded as a vital requirement to promote the use of PPFP, because where no proper process and channels of communication exist, addressing the concerns of the PP women becomes near impossible.

7.5.4. Poor interpersonal relationship skills

According to Hardjati and Febrianita (2019), interpersonal relationship skills refer to competencies used to building a relationship, which is goal-directed behaviour. It forms the basis of most actions and decisions occuring in the work environment, which may positively or negatively impact both the individual attitude, as well as that of the organisation (Bodika & Aigbavboa, 2018). The respondents in this current study reflected on the poor interpersonal relationships of the nurses and their clients (see Chapter 5). Their negative attitude and poor interpersonal relationships with the clients were regarded as barriers to the promotion of the use of PPFP. Therefore, it was deemed necessary to equip them with the necessary skills and knowledge to address such challenges. The respondents also recommended training for nurses on interpersonal relationships (see sub-theme 4.1).

7.5.5. Aggressive attitude of nurses due to work overload

According to Ferris, Yan, Lim, Chen, and Fatimah (2016), workplace aggression refers to deliberate or involuntary negative actions that have a detrimental effect on the victim. This could be associated with the lack of control, related to conflict in the workplace (Bhatti, Bhatti, Akram, Hashim, & Akram, 2016), which, in addition, may be due to poor job satisfaction that includes hostile verbal and nonverbal behaviours by the employee in the workplace (Ferris et al., 2016). Such events could instigate physical, mental, and behavioural responses. However, the nonchalant attitude of the nurses towards their work, as well as their negative attitude were highlighted as barriers to the promotion of the use of PPFP (see Chapter 5). In this regard, a need existed for the implementation of adaptive measures, as well as coping strategies for the nurses to address the identified challenges.

7.6. PROCEDURE (Activities of the training programme to promote PPFP)

According to Dickoff et al., (1968), procedure refers to the guiding process, technique, or protocol of the activity. The authors further stated that, viewing nursing activity from this vantage point, is to regard procedure from the aspect of the activity. In this current study, the procedure was the activities in the training programme. The role of the facilitator, during the various activities of the training programme, was to deliver information, using various teaching methods, such as lectures, demonstrations, and role play, to empower the professional nurses with the necessary skills, knowledge, and capabilities, to ensure their competence in the promotion of PPFP. The development of the content of the training programme was based on the outcome of the findings from the situational analysis in Phase 2 (see Chapter 6), as well as the justification from the literature review on the currently available methods of promoting PPFP. In this current study, the following five factors were addressed in the training programme:

7.6.1. Provision of different teaching methods in promoting PPFP services

Teaching is the act of imparting knowledge to improve performance. According to Dorgu (2016), as well as Murugesan (2019), the various teaching methods and educational materials required, to facilitate effective teaching and learning experiences, include lecture methods, discussion methods, role-playing, demonstration methods, as well as visual aids materials (brochures, pamphlets, and videos). In this current study, the PP women indicated that the method most used to disseminate PPFP information to them was the discussion method; however, they were not allowed to asked questions (see section 4.4.1 and Table 4.8). The nurses also confirmed that the method they used to convey information to the PP women was mostly by discussion (see Chapter 5). Evidently, this method was inadequate in providing a good learning experience, did not encourage client participation, and was not a problem-solving approach, instead, it was teacher-centred and not a client (learner) oriented approach. Based on this deficiency, the researcher ensured that the content of the training programme included various teaching methods, alongside the vital teaching aids material, to facilitate client-centredness, as well as promote problem-solving abilities. The application of the various teaching approaches was aimed at empowering professional nurses to attain proficiency in the provision of meaningful PPFP information to the PP women.

7.6.2. Empowering nurses on how to motivate the social group (men, community/ religious leaders) to promote PPFP

According to Adedini, Babalola, Ibeawuchi, Omotoso, Akiode, and Odeku (2018), religious and community leaders are influential stakeholders in the community, capable of influencing decision-making on issues related to the adoption of PPFP. To address the reluctance of the men and religious/community leaders to support the promotion of PPFP, the researcher ensured that the content of the training programme established a necessary protocol of empowering professional nurses with strategies to expand the knowledge base and ideas of the men, as well as the community/religious leaders, for them to support the PP women in the use of PPFP. According to Orji and Moffatt (2018), various motivational strategies exist, for example, persuasive motivation, monitoring motivation, feedback, and social support method of motivation. In addition, the researcher ensured that the training programme content incorporated promotional activities with clearly defined roles and responsibilities, including a social support system in the form of persuasion through campaign measures, to ensure improvement in the use of PPFP.

7.6.3. Stress management to reduce work-related aggressive attitude

Work-related stress is the hurtful sensitive reaction that occurs when the demanding nature of the job is overwhelming, and cannot be compared with the ability of the worker (Akweenda, Cassim, & Karodia, 2016). The training programme was developed to empower the professional nurses to manage their stress and work-related stress, to address the challenges of aggression and negative attitude that were reported by the respondents (see Chapter 5) The researcher ensured that the necessary skills and knowledge of coping strategies, to address stressful work conditions, were incorporated into the training programme.

As it is the legitimate right of the PP woman to be provided with satisfactory healthcare, it became crucial to empower the professional nurses adequately, for them to cope under stressful conditions in the workplace, and render respectful client care, instead of being aggressive.

7.6.4. Empowerment for effective interpersonal relationships

According to Narayanamoorthi (2019), interpersonal relationship skills remain a vital source for successful social support. It ensures a harmonious relationship that promotes

mental and social wellbeing, as well as positive behavioural change in the workplace. The training programme incorporates professional ethical values, such as good listening skills, as well as effective communication in its content, as these are key concepts in achieving effective interpersonal relationships. Additionally, it is considered to influence behavioural changes, and improve client satisfaction.

7.6.5. Establish good communication

According to Sibiya (2018), effective communication plays a vital role in the health outcome of the client. This author adds that nurses are expected to improve in their communication skills continuously, to influence behavioural change, positively, as well as client satisfaction. The respondents in this current study acknowledged that their communication process was inadequate (see Chapter 5), and based on the prevailing circumstances regarding their communication challenges, the need arose to empower professional nurses with effective communication skills.

To address the communication challenges, highlighted by the respondents, the researcher, therefore, ensured that the training content embraced the necessary skills and knowledge for effective communication, for example, verbal and nonverbal communication skills; good listening skills; as well as good interpersonal skills. According to Suen, Hung, & Lin (2020), effective communication skills in the workplace not only ensure the effective exchange and feedback of information, but it is also acknowledged as a vital element needed for improved job performance, to achieve organisational goals. Additionally, effective communication encourages the participation of the client in decisions that relate to their health (Carr, 2017).

7.7. TERMINUS

According to Dickoff et al., (1968), the terminus is the end-point of the activity. In this current study, the terminus was the aspect that defined the outcome of the activity. Dickoff et al., (1968, p. 428) further stated that, to view the endpoint of the activity, is to consider the terminus, from the perspective of the accomplishment of the activity that was performed by the agent, and to ascertain whether the expected goal was attained or not. The familiarisation of the professional nurses with the various skills and knowledge that have been provided, should enable them to use the new empowerment to act independently and promote the use of PPFP.

7.7.1. Acquired knowledge and skills leading to the improved promotion of PPFP

With the knowledge and skills acquired from the training programme, it is anticipated that the professional nurses would improve in their roles and responsibilities of providing the necessary promotional strategies, to motivate the PP women, as well as the social support group, to promote the use of PPFP.

The empowerment for the professional nurses with the various promotional strategies for the improved use of PPFP, was ascertained through the diverse exposures to the content of the training programme. Using their acquired skills, knowledge, and capabilities, the nurses are expected to uphold professional ethical values in clinical practice, such as good interpersonal relationship skills, good communication skills, as well as an attitudinal change, to enhance quality healthcare delivery. Empowering the professional nurses was also achieved through their participation in the validation process for the general evaluation, to determine the usability, adequacy, relevance, applicability, and usefulness of the training programme. Several benefits have been linked to the outcomes of participation in the training programme; examples include consistency in job performance, as well as greater job satisfaction (Jaworski, Ravichandran, Karpinski, & Singh, 2018).

7.8. SUMMARY

In this chapter, the researcher presented the application of the activities, listed in the theory Dickoff et al., (1968), in this current study. The theory was a theoretical guide that provided a reasoning map towards the development of the training programme. The characteristics of each of the prescribed lists indicated by Dickoff et al., (1968), such as agent (facilitator), recipient (Professional nurse), context (work environment), dynamics, procedure, and terminus have been described in detail. However, special attention was drawn to the dynamics related to the challenges hindering the promotion of PPFP, and the procedure, which was the procedural activities for the training programme.

CHAPTER 8

DEVELOPMENT OF THE TRAINING PROGRAMME

8.1. INTRODUCTION AND PURPOSE

The development phase of the training programme constituted Phase 4 of the programme development by Meyer and Van Niekerk (2008). The inclusion criteria to select the content of the training programme was based on the final triangulated findings from the quantitative and qualitative situational analysis of Phase 2, as well as corroboration from literature. The findings from the triangulation in this current study revealed that the nurses lacked certain motivational skills and abilities to promote the use of PPFP (see Chapter 6).

The identified challenges (Dynamics), reflected in (6.2 and 7.5), include the lack of an adequate method of teaching during health education, poor communication skills, poor interpersonal relationships, insufficient strategies to motivate the social group of people, which was evidenced by the social group's lack of PPFP knowledge, and the stressful work situation, due to work overload. The findings highlighted the need to train the nurses, with the view of equipping them with the necessary skills and abilities to deliver quality healthcare services to the PP women. The development of this training programme took into account certain training programme research principles, namely: purpose, learning theory, the requirements for an effective training programme, the assessment criteria and specific outcome (Table 8.2), as well as the expected outcome. The main purpose of the study, therefore, was to develop a training programme for professional nurses, to empower them with various strategies, to improve their skills, knowledge, and capabilities to promote the use of PPFP.

8.2. EDUCATIONAL LEARNING APPROACH

The Educational Learning Theory, used in this training programme for professional nurses to promote PPFP, departed from the principles of Adult Learning Theory, which include Kolb's (1984) Experiential Learning, and Knowles (1980) Adult Learning theory. According to Morris (2020), adult experiential learning incorporates new and challenging experiences, based on challenges situated in the work environment. Additionally, learners (professional nurses) are expected to respond to such challenges that are identified in workplace. In this current study,

the facilitator plays an important role of providing knowledge and skills, based on the identified challenges, and aimed at empowering the learners (professional nurses) with novel solutions to address the identified challenges, situated in the work environment (discussed further in modular sections 8.5 to 8.9).

8.2.1. Kolb's Experiential Learning

Kolb (1984, chapter 2, p. 49) defines learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience". According to Morris (2020), Experiential Learning Theory is regarded as a learning cycle experience, in which the learner engages in learning experiences within the social context, which is the work environment. The learning process utilises a participatory and collaboratory effort to achieve a good learning experience.

Kolb (1984) further indicates that the learning process appears in stages, which involves the act of experiencing, reflecting, thinking, and acting on observed challenges in the work environment. Consequently, four learning abilities are stipulated, namely, *concrete experience abilities*, *reflective abilities*, *abstract abilities*, and *active experimentation abilities* (McCarthy, 2016; Morris, 2020). In this current study, the various modules provided, were based on the observed challenges (as discussed in sections 8.5 to 8.9), to provide the adult learners (professional nurses) with an effective learning experience, and subsequently, empower them to reflect, think, and act upon the observed challenges, identified in the work environment.

8.2.1.1. Concrete experience abilities

According to Kolb (1984), concrete experience is viewed as experiences that occur in the social environment in which the learning takes place. The process of adult learning involves the learner's ability to think and solve a problem. This is made possible by engaging the learner in various learning experiences. In this current study, the various modules presented in the training programme expose the recipients (professional nurses) to diverse teaching and learning experiences. The aim is to empower them to think, in order to solve the problem of the challenges that are reflected in the study (see discussion on dynamics in section 8.5)

8.2.1.2. Reflective observation

According to Asfeldt, Purc-Stephenson, and Hvenegaard (2017), reflection plays an important role in the learning process, and is vital in facilitating the learning experience. To effectively solve problems emanating from the context (study setting) during the learning process, it is important to reflect on the observed situation in the study setting. Through reflective observation in experiential learning, learners could solve the problem in the study setting (Morris, 2020). In this current study, the exposure and knowledge acquired during the learning process, provided background knowledge for the learners to reflect and think, critically. Such learning experiences assist them to find solutions to problems within the work environment

8.2.1.3. Abstract conceptualisation

Abstract conceptualisation is resultant from the critical reflection, based on the experience obtained from concrete experiential learning (Morris, 2020). Adult professional nurses in this current study were exposed to new knowledge. The acquired skills are expected to assist them in transforming their abstract concept to solve problems that are observed in the work environment.

8.2.1.4. Active experimentation

Kolb (1984) asserts that active experimentation involves the use of ideas to make decisions and solve problems that are situated in the study context. This style of learning abilities requires that the professional nurses incorporate logical reasoning, as they think, as well as reflect on the knowledge acquired, and subsequently, make the necessary decisions to address the observed challenges.

8.2.2. Knowles' Adult Learning Theory

To resolve, or improve an individual's ability in any social conflict, or struggle, re-education is required (Maddalena, 2015). In this current case, the instrument by which abilities could be improved is the teaching-learning situation (Nicolaides & Marsick, 2016). Consequently, a training programme that considers new learning content for improved practice in the promotion of PPFP was developed for professional nurses.

Knowles' (1978) Adult Learning Theory affirms that learning is a life-long goal, which would be understood at the adult level (Kelly, 2017). The application of Adult Education Theory is suited in this current study, as the professional nurses and nurse managers are all adults. The training programme for professional nurses on how to promote the use of postpartum family planning becomes relevant in addressing the challenges that hinder the promotion of PPFP in their workplace.

In this current study, Knowles' (1984) theory of learning was applied to meet the need of the professional nurses in the promotion of PPFP. The adult learning perception of Knowles, Holton III, and Swanson (2014) is focused on competence, rather than the old process of controlling, or changing behaviour that is applied in child learning. Additionally, the adult learning approach of Knowles et al., (2014), seeks to inspire the adult learner to improve quality service delivery (Maddalena, 2015). His premise is based on the following six conventions:

1. The need to know: The content of the training programme (as discussed in sections 8.5 to 8.9) was provided with the aim to motivate professional nurses to know and acquire more knowledge. The package of the training programme is expected to reflect new knowledge, so that professional nurses could produce self-driven initiatives.

2. Self-concept: Learning is self-centred through life situations. As the professional nurse increases in knowledge to address the situations in the workplace, his/her self-concept moves from one of being a dependent personality, towards one of being a self-directed human being. Teaching the adult professional nurses various motivation strategies (as discussed in sections 8.5 to 8.9) seeks to promote their self-awareness, and improve creativity, leading to improvement in the promotion of PPFP.

3. Experience: Experience is the richest resource, as the professional nurses continue to engage and accumulate a growing reservoir of experience, due to the exposure to the various teaching and learning provided. The acquisition of new methods and skills, gained through the training programme, would equip them to deliver better services. Similarly, teaching would offer the professional nurses the

opportunity to evaluate themselves on what they had learned, as well as what should be retained or changed.

4. Readiness to learn: As an individual matures, his/her readiness to learn becomes increasingly oriented to the developmental tasks of his/her social roles. Adult learners, such as professional nurses, have a deep need to be self-directing. Teaching the adult professional nurses would ensure the development of new skills, and the recognition of their full range of decisions and approaches needed to improve the promotion of PPFP.

5. Orientation to learning: As an individual matures, his/her orientation towards learning, shifts from one of subject-centredness, to one of problem solving-centredness. The content of the training programme would enhance the professional nurse's world-view on problem-solving ability, as he/she embraces new knowledge to address the challenges in his/her work environment (as reflected in section 8.5)

6. Motivation to learn: As an individual matures, the motivation to learn becomes internally driven. The diverse content in the training programme is expected to empower the professional nurses, promote their self-learning, and motivate them to promote the use of PPFP.

Source: Maddalena (2015)

8.3. REQUIREMENTS FOR AN EFFECTIVE TRAINING PROGRAMME

Training refers to an organised process of communicating information, through which people acquire more knowledge, skills, and abilities to solve problems. The need for training and upgrading staff knowledge in the workplace remains vital, due to unceasing technological advancement (Thabit, Aissa, Ahmed, & Harjan, 2016). Therefore, when considering a training programme for effective career development, certain requirements are needed, including: needs assessment, training objectives, delivery styles, delivery mode, audience, and content development (Thabit et al., 2016). In this current study, the requirement for the training programme, concerning sections in Practice-Oriented Theory by Dickoff et al., (1968), which guided the training programme, is reflected in Table 8.1.

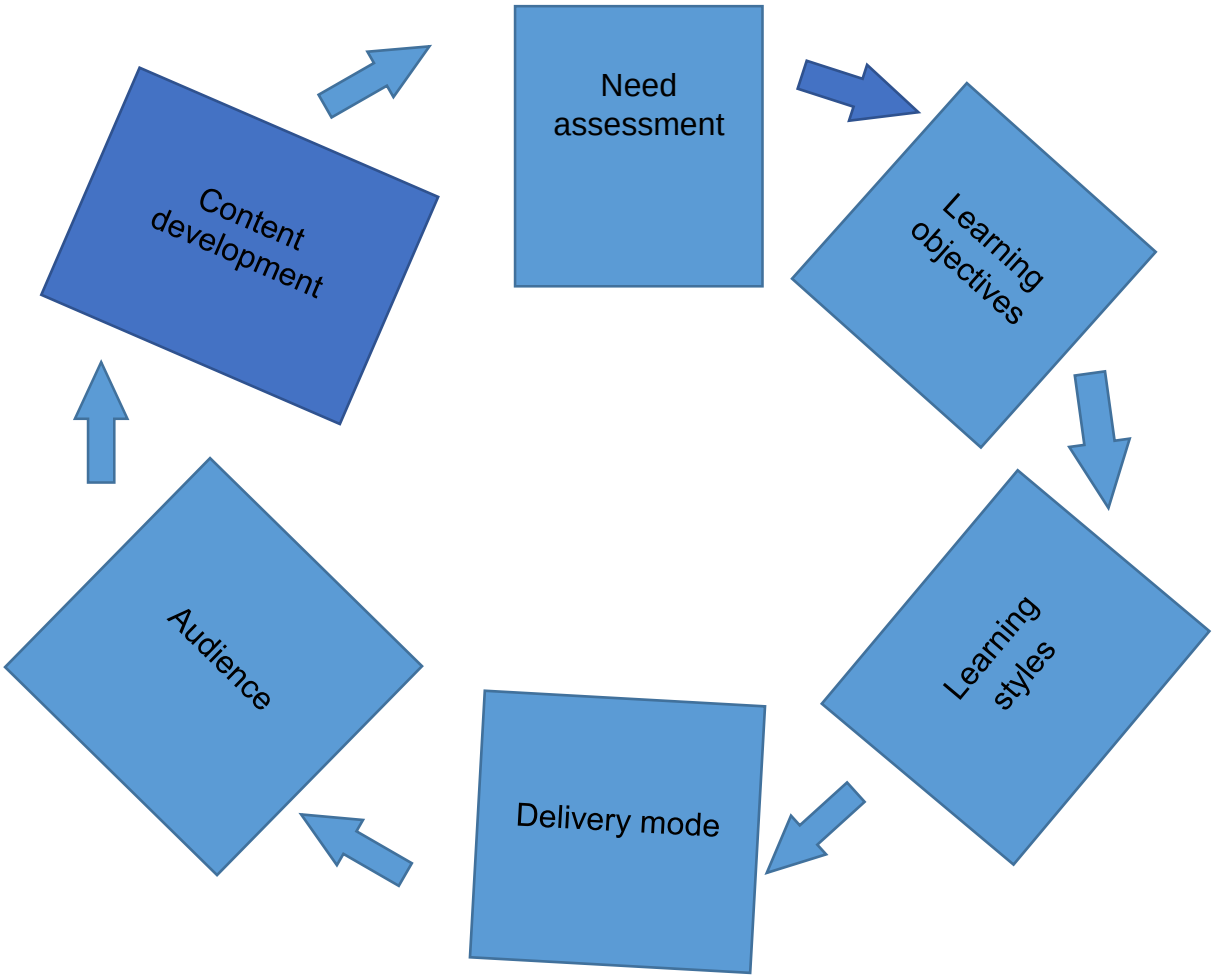


Figure 8.1: Requirements for the training programme

Table 8.1: Requirements for the training programme: needs assessment, learning objectives, learning styles, audience, and content development

Needs assessment	The initial step in the current training programme was to engage in situational analysis. The findings from the needs assessment revealed the training needs of professional nurses for the promotion of PPFP (This was reflected in Theme 4 on Suggestions for improvement in the promotion of PPFP). However, the training need was based on certain identified challenges (see Table 6.1 and section 7.5: Dynamics).
Learning objectives	The objectives were developed based on the identified challenges militating against the promotion of PPFP. The challenges are reflected in the theoretical guide of this training programme (section 7.5: Dynamics). The objectives of the training are to: • Empower nurses with knowledge of diverse teaching methods for PPFP services. • Improve interpersonal relationship skills in the promotion of PPFP. • Empower nurses with the necessary skills and knowledge on how to manage work-related stress to improve PPFP services. • Empower nurses with strategies to motivate the social group of people for the promotion of PPFP. • Establish effective communication skills in promoting PPFP.

Learning styles, such as visual verbal learning styles.	Learning styles is a vital factor when developing a training programme. Examples include: visual and verbal learning styles. **Visual learning styles** are able to stimulate quick understanding, and is best achieved with graphics, pictures, and figures (Moser & Zumbach, 2018). In this current study, learning styles, such as posters, leaflets, role play, and demonstration methods of teaching were incorporated into the training programme. This is reflected in the theoretical guide (See sections 7.6.1 and 8.5). **Verbal learning styles:** For this approach, learners learn best in spoken instruction, such as listening to lectures. Verbal learning styles were incorporated in the current study. Learners are provided with various verbal learning styles, such as lectures and discussions learning styles (See sections 7.6.1 and 8.5).
Delivery mode	Delivery mode refers to the way of conveying information to the learner (Thabit et al., 2016). In this current study, the role of the facilitator, during the various activities in the training programme, is to deliver information, using a variety of teaching methods, such as lectures, demonstrations, and role-play (See section 7.6 and Chapter 8)
Audience	The audience in this current training programme was the professional nurses, who are involved in the provision of PPFP. They are the recipients of the training programme (see section 7.3).
Content development	Content development involves the development of topics that need to be taught for the purposes of bridging the identified gaps **(**Thabit et al., 2016). In this current study the training content was centred on the identified gaps (see section 7.5), and the following modules were developed in sections (8.5 to 8.9). Module 1: Teaching method to promote PPFP services. Module 2: Interpersonal relationship skills in promoting PPFP. Module 3: Stress management to improve PPFP services. Module 4: Strategies required by nurses to motivate the social group of people for the promotion of PPFP Module 5: Communication skills in promoting PPFP (see sections 7.6, and 8.5 to 8.9) Regarding the terminus (section 7.7), which is the endpoint of the activity of the theoretical guide used in this current study. It is expected that, with the exposure of the professional nurses to the content of the training programme, they could improve in the services they rendered to the PP women for effective promotion of PPFP.

8.4. EXPECTED OUTCOME OF THE TRAINING PROGRAMME

The professional nurse, who has acquired the necessary skills, knowledge, and capabilities, through various empowerment training programmes, is expected to develop motivational strategies to promote postpartum family planning. The expected outcome should include:

- The ability to utilise diverse teaching methods that are centred on client-care;
- Improved strategies to motivate the social group of people (men, community/religious leaders) in the community, because they are the influential people, who could encourage the PP women to use PPFP;

- Improved communication skills;
- Improved interpersonal relationships; and
- The ability to cope in a stressful work environment.

Table 8.2: Specific outcome and assessment criteria for the developed modules of the training programme

Specific outcome	Assessment criteria: The nurses should be able to:
Demonstrate diverse teaching skills using various methods of teaching	• Identify various teaching methods • Indicate knowledge of roles and responsibilities in implementing various teaching methods • Indicate the benefits of effective education
Demonstrate effective interpersonal relationships	• Describe the process to achieve good interpersonal communication • Identify the requirement for effective active listening • Appreciate the benefits of a good interpersonal relationship
Identify sources of work-related stress, know the effect and apply the technique acquired to cope with work overload	• Recognise sources of stress • State effect of stress • Indicate knowledge of various techniques to manage stress • Cope and reduce the stress level in the workplace
Use various strategies to motivate the social group of people and provide them with the necessary knowledge on PPFP	• Recognise strategies to motivate the social group of people • Identify the efficacies of different PPFP and when to commence • Equip the social group of people with facts regarding PPFP
Identify effective communication skills and communicate effectively with the PP women	• Know various modes of communication • State sources of communication • State component of communication • Describe the process to achieve effective communication skills

Table 8.3: Summary of the training programme layout

Module	Learning content	Performance objectives	Delivery mode	Expected Timeline	Expected Outcome
MODULE 1: Teaching methods for PPFP services	**Study Unit 1.1:** Lecture method to improve PPFP	Explain lecture method of teaching for improved use of PPFP	Discussion, lecture, group and individual demonstration	Three hours (30 minutes for questions and answers)	To identify various methods of teaching that could be used to convey PPFP information To know their roles and responsibilities when conveying PPFP information To recognise the benefits of the various teaching methods in the promotion of PPFP
	Study Unit 1.2: Demonstration method of teaching to improve PPFP	Show practical demonstration on demonstration method of teaching for improve PPFP			
	Study Unit 1.3: Discussion method of teaching to improve PPFP	Explain discussion method of teaching for improved PPFP services			
	Study Unit 1.4: Role play method of teaching to improve PPFP	Demonstrate role play method of teaching in PPFP services			
	Study Unit 1.5: Visual aids material	Show practical example of visual aids material for improved PPFP services			
	Study Unit 1.6: Audio-visual aids material in promoting PPFP	Show practical examples of audio-visual aids material use in promoting PPFP services			
MODULE 2: Interpersonal relationship skills to promote PPFP	**Study Unit 2.1:** Communication skills to improve interpersonal relationships.	Explain interpersonal communication skill	Discussion. Lecture and group exercise on listening skills	Two hours ((30 minutes for questions and answers	To identify interpersonal communication skills used in promoting interpersonal relationship To know the listening skill in promoting interpersonal relationship
	Study Unit 2.1: Listening skills to improve interpersonal relationships.	Discuss listening skill Explain requirement of a good listener Identify benefits of active listening			
MODULE 3: Stress management to improve PPFP services	**Study Unit 3.1:** Concept of stress	Explain the concept of stress.	Lecture and discussion on stress management	Two hours ((30 minutes for questions and answers)	To Identify sources of work related stress To know the effect of stress due to work overload To know the various techniques, use in managing stress to promote PPFP To know how to cope and reduce stress in promoting PPFP
	Study Unit 3.2: Sources of stress in work environment	Classify the sources of stress.			
	Study Unit 3.3: Effects of stress on nurses due to work overload	Explain effect of stress on nurses.			
	Study Unit 3.4: Strategies for work-related stress management to promote PPFP	Explain various approaches for work-related stress management to promote PPFP services.			
	Study Unit 3.5: Coping skills to promote PPFP	Explain different coping mechanisms to promote PPFP services.			

MODULE 4: Strategies required by nurses to motivate the social group of people for the promotion of PPFP	**Study Unit 4.1:** Strategies to motivate the social group to promote the use of PPFP	Discuss different motivational strategies to promote the use of PPFP	Lecture on strategies to motivate the social group of people. Discussion on the efficacy and time to commencement of PPFP. Lecture on facts about PPFP	Three hours (30 minutes for questions and answers)	To know the various strategies to motivate the social group of people for them to support the use of PPFP To identify the various forms of PPFP, according to their efficacies and the time of commencement To demonstrate and equip the social group of people with the knowledge of PPFP
	Study Unit 4.2: Efficacy of PPFP methods and time of commencement	Explain the efficacy and time to commencement of the various forms of PPFP			
	Study Unit 4.3: Facts about PPFP	Discuss on facts regarding the various forms of PPFP			
MODULE 5: Communication skills for the promotion of PPFP	**Study Unit 5.1:** Verbal communication skills	Discuss verbal communication in the promotion of PPFP	Discussion and demonstration	Two hours (30 minutes for questions and answers)	To communicate effectively To demonstrate good listening skills
	Study Unit 5.2: Non-verbal communication skills	Discuss non-verbal communication in the promotion of PPFP			
	Study Unit 5.3: Listening skills	Demonstrate listening skills			

8.5. MODULE 1: TEACHING METHODS TO PROMOTE PPFP SERVICES

This aspect deals with various teaching methods of conveying PPFP information to the PP women.

Purpose of the module: The purpose of the module is to empower the nurses with the various methods of teaching during health education that could be used to promote the use of PPFP.

Process outcome: Nurses will be equipped with the various teaching methods to convey PPFP information to the PP women.

Expected learning outcome: At the conclusion of the module the nurses should be able to:

- Identify the various methods that could be used to convey PPFP health information to the PP women.
- Know their roles and responsibilities, when conveying PPFP health information.
- Recognise the benefits of the different teaching methods in promoting PPFP

Timeline: Three hours (30 minutes for questions and answers)

- Study unit 1.1: Lecture methods of teaching to improve PPFP
- Study unit 1.2: Demonstration methods of teaching to improve PPFP
- Study unit 1.3: Discussion methods of teaching to improve PPFP

- Study unit 1.4: Roleplay methods of teaching to improve PPFP
- Study unit 1.5: Visual aids material for teaching to improve PPFP
- Study unit 1.6: Audio-visual aids material use to improve PPFP

8.5.1. Introduction

Teaching is the deliberate, professional engagement with the learner for the purposes of imparting knowledge. It involves the systematic application of different teaching methods, such as the lecture method, facilitating role-play or simulation, demonstration, and discussion. In addition, it involves the use of teaching and learning materials, such as audio and visual aids in form of brochures, pamphlets, and videos (Dorgu, 2016; Zhao, Pandian, & Singh, 2016). According to Dorgu (2016), teaching is the effort introduced to assist the learner to attain the necessary skills and knowledge, using various teaching methods, to enable the learner to adopt a change of attitude and behaviour. The teaching methods include the use of the lecture method, role-play, demonstration, discussion, and also involves the use of visual and audiovisual aids, such as pamphlets and videos (Dorgu, 2016). Similarly, health education is the provision of health information, using various learning approaches, aimed at impacting health (Abiodun, Olu-Abiodun, Sotunsa, & Oluwole, 2014).

8.5.1.1. Benefits of effective education

- It assists learners to attain a healthy lifestyle.
- It guides the client to replace ignorance through knowledge awareness.
- It provides the learner with sufficient awareness.
- It assists in an attitudinal change, to live the best life possible.
- It promotes desired behavioural change.
- It improves the learner's sense of responsibility.
- It assists in guiding the learner on problem-solving abilities.

8.5.2. Study unit 1.1: Lecture method of teaching to improve PPFP

The lecture method of teaching is an interactive way of conveying PPFP information and ideas to a large number of PP women. The lectures are usually delivered in a formal way

by the educator (professional nurse), who is the core resource person. This method of teaching is anticipated to improve the understanding of the learner. It is expected that the nurses provide a lecture, in an organised manner, for the purposes of empowering the postpartum women with enough skills and knowledge, to enable them to make a well-informed choice in health-related matters, regarding the use of PPFP.

8.5.2.1. Benefits of lecture method of teaching to improve PPFP

- The lecture method of teaching the PP women provides detailed clarification of facts regarding PPFP.
- The lecture method allows the delivery of information to a large group of people, such as the PP women.
- The lecture method offers an opportunity to discuss many issues that may be of great concern to the PP women.
- The lecture method offers an opportunity for PP women to learn together.

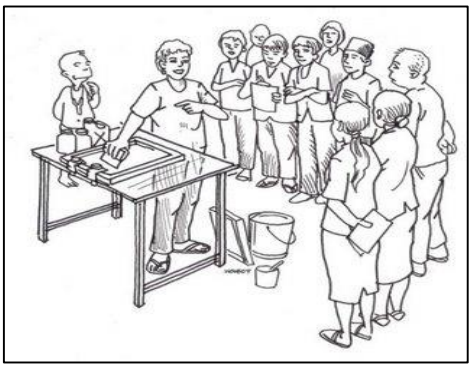
ROLE OF THE FACILITATOR IN THE LECTURE METHOD OF TEACHING

The lecture notes and the visual aids materials should be well prepared before the commencement of the lecture. The outline of the lecture should be written on the selected visual aids material, such as a flip chart or cardboard; the reason being to convey the idea to the PP women, as well as further buttress the message. A proper introduction of the topic is expected. The content of the lecture should be well-planned, to ensure that the information is adequate enough to clarify issues.

During the lecture, the voice of the facilitator should be loud enough for clarity of information, while the lecture should be stimulating to the PP women. This could be achieved by citing relevant examples imaginatively. Engage the PP women during the teaching and learning process by asking questions to ensure full participation and to confirm their understanding. Lecture materials should be challenging enough to inspire the PP women to achieve a positive educational outcome.

8.5.3**.** Study unit 1.2: Demonstration method of teaching to improve PPFP

The demonstration method of teaching is used to share knowledge with individuals or groups of people, such as the PP women. The method is based on learning through observation and practice, during which the learner is educated, in a step-by-step approach, on how to perform a task. It is an active learning process that stimulates the critical thinking of the PP women. This method of teaching aims to assist the PP women in developing the skill to be able to do what is taught. This method of teaching in nursing practice facilitates the learning process, improves practical practice, and forms the basis of a good learning experience. It also improves the learner's knowledge and attitude.



ROLE OF THE FACILITATOR

Before the commencement of the demonstration, it is expected that the facilitator would plan effectively, especially the materials needed for the demonstration, prepare all the required materials, and ensure that the proper functioning of the equipment to be used in the demonstration session. This may have the potential to attract the interest of the learner; and consequently, facilitate education by making learning more effective. Additionally, the facilitator should ensure enough space, with a good view, for easy practice by the client. Background knowledge of the learner, related to the topic, should be established. During the demonstration, the steps to be followed should be well outline. A proper introduction is expected. Greet the client and provide explanations, as the demonstration procedes. This should be done in a simple manner, using visual aids or models, in a step-by-step manner, for better understanding during the demonstration:

- Ensure that everyone can have a good view of the demonstration
- Carry out the demonstration skillfully
- Work within time limit
- Maintain eye contact with your client

- Discourage distractions
- Encourage the client to asked questions
- Practice, practice, practice
- Ensure proper supervision

8.5.4**.** Study unit 1.3: Discussion method of teaching to improve PPFP

The discussion method is a teaching strategy that involves interactions between the facilitator and the learner. This method may take the form of the teacher leading, or the learner (PP women) leading the session. However, the intention is to address an issue, or for problem-solving. This teaching method allows for mutual responses between the facilitator and the learners, as well as among the learners, during which the learners have the opportunity to participate in the teaching and learning process. It is characterised by all learners being offered an equal opportunity to participate, and exchange ideas with each other.

Evidently, when PP women are actively involved in the teaching and learning process, their level of motivation to learn is likely to increase. Consequently, learning becomes more interesting to them, which eventually leads to improved PPFP.

8.5.4.1. Benefits of discussion method of teaching to improve PPFP

- It allows the learners to improve in their values and attitudes.
- It offers an opportunity for the learners to become more active in the teaching and learning process.
- It promotes active contribution to their learning.
- It offers an opportunity for the learners to participate in the teaching and learning process.
- It offers the chance for the learners to share ideas on a general topic.

ROLE OF THE FACILITATOR

Before the commencement of the discussion, the facilitator needs to spend quality time, planning for the discussion. This requirement is to develop sufficient knowledge about the topic to be discussed, to attract an easy and effective flow of ideas. Begin with the introduction of the topic to the learners. Explain the importance of the discussion method of teaching. Allow the learners to participate, to clarify issues using their critical thinking, as well as contribute to their learning. During the discussion, use questioning, listening, and response strategies, to stimulate the learner's interest, in order to improve their concentrations and contributions. In addition, encourage diversity of opinion among the group members. This would make the discussion more interesting for the learners, thereby improving productivity**.** At the conclusion of every discussion summarise what has been discussed.

8.5.5. Study unit 1.4: Role play method of teaching to improve PPFP

Roleplay is a method of teaching and learning, in which knowledge is obtained through acting, using real-life situations. The actors are expected to act naturally since there are usually no written instructions for the activities. Therefore, the teaching is about life situations that any member of the group may have experienced.

The purpose of this method of teaching is for the learners to make sense of the acting out real-life situations, to further understand and develop more competence on how such situations could be addressed when encountered. An example could be finding ways of addressing poor attitudinal character. Exposure to such experience may assist the learner with various strategies for behavioural change.

8.5.5.1. Benefits of role-play method of teaching to improve PPFP

- Roleplay has the potential to improve both personal and professional growth, due to experience gained through exposure to acting in a particular life situation.

- It could assist learners with self-reflection.
- It provides a platform for a better understanding of a particular life situation, as well as how such a problem could be addressed.
- It could improve learner motivation.
- It could provide a platform to stimulate the learner to positive health actions.
- It could increase the learner's awareness of a particular life situation.
- It could assist in the acquisition of more skills and knowledge.
- Roleplay could provide a platform for attitudinal change.
- It could provide a platform to learn in a relaxed environment, and consequently, enhance the creativity of the learners.
- It could allow improvement in a real-life situation.
- It could improve the learners' ability to reflect on their practice.

ROLE OF THE FACILITATOR

Get all the volunteers ready and well prepared for the role play. Sensitise the participants on the topic that is about to be addressed. Using the role-play method, the facilitator should assign different roles, or characters, to the volunteers for role-playing. They are expected to act naturally because there are usually no written or instructions to follow. The other members of the learners should be encouraged to reflect on the situation that is been presented. At the end of the presentation, a brief discussion on what they had learned should be conducted.

8.5.6. Study unit 1.5: Visual aids material method of teaching to improve PPFP

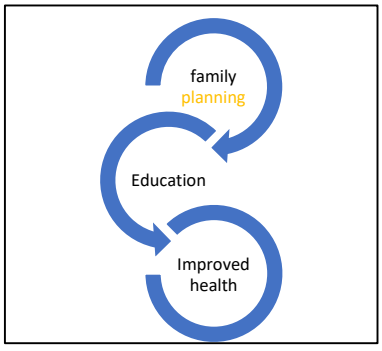
Visual aids are teaching and learning approaches that use learning materials. They may be presented in the form of posters, leaflets, or flipcharts, on which illustrative messages

of a particular topic are provided, to enhance teaching and learning. These materials consist of symbols and words that transmit ideas to both literate and illiterate individuals.

The purpose of this approach is to teach and strengthen the idea. For example, posters, leaflets, or flipcharts that contain information and symbols about the various methods of postpartum family planning. Such illustrative information could stimulate the client's interest and provide rapid understanding.

8.5.6.1. Benefits of visual aids material method of teaching

- It emphasises the ideas of the message.
- It provides rapid attention to the message.
- It enhances the key point of the message.
- It improves the creativity of the learner.
- It promotes rapid understanding of the message.
- Learning is made interesting through visual aids.



ROLE OF THE FACILITATOR

When learning materials, such as posters, leaflets, or flipcharts, are used for teaching and learning purposes, the facilitator should confirm that the posters, flipcharts, or leaflets, have relevant illustrative information about the topic. Such messages and symbols should be bold enough for quick views. Words and illustrations should be brief and simple enough, and if possible, in a local language for quick understanding to both the literate and illiterate individuals. In addition, the messages should correspond with the symbols.

8.5.7. Study unit 1.6: Audio-visual aids material method of teaching to improve PPFP

Audio-visual aids are methods of teaching that combine both observation and listening experience to acquire skill and knowledge in a teaching and learning environment, using mediums, such as television, films, or video. These mediums are the devices that are able to stimulate the sensory organs of the individual, namely, the ears and eyes. The purpose is to transmit an idea and motivational health information. They could also offer a clear and quick understanding of the message.

8.5.7.1. Benefits of audio-visual aids material method of teaching

- Audio-visual aids deliver the message within a short time.
- The learning process is fast.
- They arouse active reasoning.
- They provide a quick understanding of the message.
- They enable the learner to learn by looking and listening.
- They could be used to achieve learning without the personal contact between the facilitator and the learners.

ROLE OF THE FACILITATOR

Get the appropriate audio-visual materials ready and confirm that they are in good working condition. The professional nurses should carefully select topics to be presented through the audio-visual aids, and ensure that they are relevant topics to address the needs of the learners. Allocate role instructions before commencing the audio-visual, for example, to maintain a noise free environment. During the procedure pause from time to time, to offer explanations and clarifications. In addition, support the audio-visual aids with explanations for further reinforcement of the teaching. The nurses should encourage the PP women to reflect on what has been presented, for a better understanding. At the conclusion of the audio-visual aids presentation, the facilitator should evaluate the learners by asking questions based on the topic, to assess whether learning has transpired.

8.6. MODULE 2: INTERPERSONAL RELATIONSHIP SKILLS TO PROMOTE PPFP

This module is focused on interpersonal communication skills, as well as listening skills that are required to promote the use of PPFP.

Purpose of the module: The purpose of this module is to assist nurses to improve their interpersonal relationships with the PP women, by equipping them with knowledge regarding interpersonal relationship skills.

Process outcome: Nurses will acquire knowledge, skills, and an attitude change in their interpersonal relationships, which will placate the PP women, and consequently promote PPFP.

Expected learning outcome*:* At the conclusion of the module nurses should be able to

- Identify the interpersonal communication skills required to improve interpersonal relationships, in order to promote PPFP.
- Use the acquired listening skill to improve interpersonal relationships, in order to promote PPFP.

Timeline: Two hours (30 minutes for questions and answers)

- Study unit 2.1: Communication skills to improve interpersonal relationships.
- Study unit 2.2: Listening skills to improve interpersonal relationships.

8.6.1. INTRODUCTION

Interpersonal relationship skills are regarded as the quality traits required to enable a good relationship between two or more individuals (Islam et al., 2016) To achieve a good interpersonal relationship with the PP women, certain skills need to be considered, namely, good communication skills, and good listening skills. However, it is also important that nurses maintain professional ethical values, as they are key concepts in achieving a good interpersonal relationship with the PP women. These values include respectful client care, ensuring the right of the client, and maintaining confidentiality

8.6.2. Study unit 2.1: Communication skills to improve interpersonal relationships

Active communication is the root of good interpersonal relationships (Bach & Grant, 2015). It could promote mutual understanding and a sense of satisfaction for the PP women. Similarly, with a lack of mutual understanding, due to poor interpersonal communication, problems of misinterpretations are bound to occur. Therefore, in order

to achieve good interpersonal communication with the PP women, the following characteristics remain vital:

- Promote shared understanding by using a good voice tone when communicating. This could be achieved by maintaining an acceptable moderate tone of voice that is not loud and not low.
- Use simple and clear language for clarity of information. This also requires the need to think before executing the message.
- Deal respectfully with the PP women. Use words that are not offensive.

These characteristics have the potential to promote interpersonal relationships.

8.6.3. Study unit 2.2: Listening skills to improve interpersonal relationships

One of the qualities of good interpersonal relationships is the ability to listen to the PP women during any interactions. Even when the opinions of the women do not appear to be appealing, handling interactions through active listening, enhances a good interpersonal relationship. In addition, therefore, poor listening skills in situations where interactions occur, could lead to misinterpretation of information, which do not favour good interpersonal relationships.

8.6.3.1. Requirements of a good listener that promotes interpersonal relationships

- A good listener seeks clarification of information for a better understanding.
- A good listener focuses on what is being said during interactions, to make a positive correction.
- A good listener does not feel threatened in any way during interactions, but instead is calm, which enhances good interpersonal relationships.
- A good listener is attentive to the other person's views during interactions, which encourages good interpersonal relationships.
- A good listener uses body language, such as the nodding of the head, and direct eye contact, when interacting, which indicates active interest in what is being discussed, and encourages good interpersonal relationships.

- A good listener does not interrupt others during conversations, instead they provide opportunities for others to voice their opinions, which promotes good interpersonal relationships.
- A good listener demonstrates emotional concern during interactions with others, which enhances good interpersonal relationships.

8.6.3.2. Benefits of active listening in the promotion of PPFP services

- Active listening helps individuals to learn from others.
- It improves self-esteem.
- It boosts the individual's confidence.
- It promotes a sense of well-being.
- It assists in identifying a problem.
- It improves knowledge and understanding.

ROLE OF THE FACILITATOR

To promote interpersonal relationships, nurses, as facilitators, should be encouraged to present a welcome facial expression towards their clients at all times, when engaged in direct interactions with them. The rationale is that any form of negative gesture, or any form of non-verbal communication, such as negative body language, or unnecessary eye movement, could hinder interpersonal relationships. They should, in their non-verbal communication, strive to ensure healthy communication that promotes mutual understanding during any interactions. They should ensure confidentiality, by keeping the secrets of their clients. Nurses, as facilitators, should be encouraged to exhibit good listening skills and effective communication skills during every interaction with their clients, which includes:

- Not being judgmental;
- Paying attention to the clients during any conversations;

- Exhibiting a good communication style when communicating with their clients;
- Encouraging freedom of speech, instead of interrupting the clients during any conversation;
- Maintaining professional ethical values, which is fundamental in promoting good interpersonal relationships with the clients. These values include:
    - ❖ Respectful client care.
    - ❖ Confidentiality.
    - ❖ Right to privacy.
    - ❖ Being honest with their clients at all times.

8.7. MODULE 3: STRESS MANAGEMENT TO IMPROVE PPFP SERVICES

This module focuses on techniques to manage stress, including the coping mechanisms to reduce stress and improve PPFP services

Purpose of the module: The purpose of this module is to empower nurses with the necessary skills and knowledge on how to manage work-related stress, to cope effectively, as well as maintain psychological and social well being.

Process outcome: Nurses will be empowered to acknowledge work-related stress and apply the necessary coping skills to deal with such stress.

Expected learning outcome: At the end of the module the nurses should be able to:

- Identify sources of work-related stress;
- State the effect of stress;
- Know the various techniques used to manage stress; and
- Cope and reduce stress due to work overload

Timeline: Two hours (30 minutes for questions and answers)

- Study unit 3.1: Sources of stress in the work environment

- Study unit 3.2: Effects of stress on nurses due to work overload
- Study unit 3.3: Strategies for work-related stress management to promote PPFP
- Study unit 3.4: Coping skills to promote PPFP

8.7.1. INTRODUCTION

Stress is an emotional experience arising from the pressure that is beyond the individual's capabilities, which could be due to work-related or personal issues conflicting with work. Stress has the potential to influence the mental and the psychosocial health of the individual negatively. It could also have a negative impact on work relationships; consequently, leading to reduced organisational work outcomes. However, although stress is acknowledged as a public health concern, stress could be positive or negative. The positive perception of stress occurs when it stimulates and strengthens the person to take positive actions that could lead to greater achievement. On the other hand, when the condition at work is perceived as a stressor, for example work overload, which starts to affect the professional nurse's personality and work output negatively, such a situation becomes harmful to the nurse. Although, what may be stressful to one individual, may not be the same for another person, which may be due to individual differences, in terms of the level of exposure, personality, and the coping technique that is applied (Hoboubi, Choobineh, Ghanavati, Keshavarzi, & Hosseini, 2017; Sarafis et al., 2016).

Stressful work experience has far-reaching consequences for nurses, considering the nature of the profession, and that the majority of the nurses are female, who are mostly faced with multi-tasking, and personally conflicting roles, namely: a mother, a career woman, and a homemaker. These roles most likely may conflict with their professional work experience; therefore, the nurses should become acquainted with the necessary skills and knowledge to be able to deal with work-related stress at any point in time. No matter how low the level of stress, it could be risky, especially when it remains unresolved over time (Vitale, Varrone-Ganesh, & Vu, 2015).

8.7.2. Study unit 3.1: Sources of stress in the work environment

This is classified under the following: 1. working conditions; 2. organisation issues; 3. working environment; and 4. personal factors.

8.7.2.1. Working conditions

- Prolonged working hours;
- Insufficient time for breaks;
- Monotonous work;
- Too many roles to assume;
- Too much work expected to be accomplished;
- Fewer workers attending to a greater work demand; and
- Poor flexibility in the work place.

8.7.2.2. Organisation issues

- Lack of involvement in administrative decisions;
- Inadequate communication among workers;
- Poor salaried that do not match the nature of work;
- Inadequate social support;
- Poor interpersonal relationships;
- Limited human resources;
- Inadequate material resources;
- Poor career progression.

8.7.2.3. Working environment

An unsuitable environment due to:

- Persistent noise;
- Air pollution;
- Flooding; and
- overcrowding.

8.7.2.4. Personal factors

- Hostile family;

- Poor personality;
- Poor economic empowerment;
- Ill health;
- Physical challenges; and
- Conflicting home matters.

8.7.3. Study unit 3.2: Effects of stress on nurses due to work overload

Accumulated stress that is unresolved has a negative effect on the total wellbeing of the worker, including:

- Increase heart rate;
- Increased fat buildup in the abdomen;
- Poor eating habits, which could lead to obesity or underweight;
- Fast breathing and shortness of breath;
- Back pain;
- A gastrointestinal condition, such as increased stomach acid secretion;
- Sleeping disorder;
- Chronic inflammation;
- Depression; and
- Headaches.

8.7.3.1. Effects of stressful work experience

- Reduced productivity;
- Decreased job satisfaction;
- Poor interpersonal relationships with clients and colleagues;
- Mental health may be a challenge; and
- Poor social life.

8.7.3.2. Signs and symptoms of stress

(a) Emotional signs include:

- Anxiety;
- Easily irritated;
- Anger; and
- Fluctuation in moods.

(b) Psychological signs include:

- Poor concentration; and
- worrying.

(c) Physical signs include:

- Increase blood pressure;
- Fluctuations in weight;
- Recurrent infections;
- Gastrointestinal problems; and
- Body aches and pains.

(d) Social signs include:

- Alcohol and drug dependence.

(e) Behavioural signs include:

- Inadequate self-care.

8.7.4. Study Unit 3.3: Strategies for work-related stress management to promote PPFP

In a situation where there is work overload the nurses should:

- First of all, acknowledge that the task is beyond their capability;
- Be able to identify the signs of overtiredness, and seek help on how to address the stressor;
- Plan by prioritising and engaging with the most vital tasks;

- Take one step at a time when dealing with the issues;
- Be involved in decision making;
- Improve communication with the PP women and with their colleagues
- Engage in relaxation, such as deep breathing exercises;
- Engage in meditation, avoiding any distractions when meditating, which has the potential to reduce stress;
- Ensure regular exercise, which plays a vital role in decreasing most of the symptoms linked with a physical and mental complaint;
- Pay attention to their own self-care needs, which is essential for a healthy spirit, mind, and body; and
- Seek support from reliable friends and relatives, to assist in managing stress.

8.7.5. Study Unit 3.4: Coping skills to promote PPFP

According to Papathanasiou, Tsaras, Neroliatsiou, and Roupa (2015), the acquisition and utilisation of coping skills, such as time management skills, problem-solving skills, and anger management skills, are vital in the alleviation of stress in workplace environment.

8.7.5.1. Time management skills to promote PPFP

Time management for nurses simply implies the ability to plan what needs to be done in an organised manner by working smarter, rather than harder (Nayak, 2018). When the tasks of work become overwhelming the following strategies should be employed:

- The nurses should have a good understanding of the tasks;
- They should separate the tasks, in order of priorities, which will enable the nurses to determine tasks that could be delayed;
- They should concentrate on the most pressing needs and engage with them, one after the other. This should be done with the specification of a time limit; and
- Once the time elapses, they should take a break to rest and refresh to reduce the level of stress; consequently, increasing their level of productivity.

8.7.5.2. Problem-solving skills

The following points are fundamental, when using problem-solving skills to address stress management. The initial course of action, is to identify the source of the problem, which may require concentration on a certain inquiry, to ascertain the cause of the problem. The nurse should start to reflect on the possible solutions to the problem, which may require active communication with reliable individuals, such as family members or friends, to seek for guidance. Once a different opinion has been sought, the subsequent step is taking the necessary action through appropriate decision–making. In addition, the nurses should reflect on the experience and the decision taken, to re-evaluate the decision taken, as well as avoid exacerbation of the problem.

8.7.5.3. Anger management skills to promote PPFP

As a professional nurse, when faced with conditions of anger, the first step is to remain calm, not hostile, and instead adopt positive actions to demonstrate control over the situation. In a stressful situation, the nurse should pause and reflect on the situation, before verbalising any words. or even taking any action. This has the potential of effecting a peaceful resolution. Nurses should control their temper by engaging in relaxation, such as deep breathing exercises, and expressing positive remarks to reduce the tension. Seeking help from reliable friends or relatives, will release a great deal of the tension. Additionally, the nurses should learn to forgive, and not retaliate against those who offend, which will help to avoid any semblance of harm that could be injurious to the individual's psychological well being.

ROLE OF THE FACILITATOR

The facilitator should use the lecture or discussion method of teaching to convey stress management information. Nurses should be empowered to understand and identify the sources, as well as the signs and symptoms of stress. In addition, they should know the effects of stress on the individual, as well as the organisation, and address such situations, using the most appropriate techniques.

The facilitator should clarify the various techniques available to manage stress, including, prioritising a schedule of work to be completed, and executing the tasks step-by-step. The various coping skills, such as time management skills, problem-solving skills, and anger management skills should be clarified to reduce stress. Nurses should be encouraged to form good interpersonal relationships, as the level of interaction has a significant impact on emotion; the better the interaction, the greater the reduction in stress. They should also be encouraged to improve in their attitude, in order to maintain good relationships.

The facilitator should encourage the nurses to improve in their communication with their co-workers, to maintain a healthy working invironment. They should also be encouraged to take care of their personal life, which includes their physical and emotional health, as it will strengthen them psychologically, and increase their resilience to stress.

Nurses should be encouraged to adopt self-defense methods, such as relaxation, and engage in routine exercise, which helps to boost their energy, improve focus, and maintain a healthy mind and body. They should be encouraged to make good choices of food, eat a balanced diet, in small, but frequent, meals, which is vital, to reinforce the immune system of the body to withstand any stress. Alcohol should be taken in moderation, as little alcohol may assist in reducing stress and worry. The nurses should be encouraged to get enough sleep, which may improve their emotional balance, as insufficient sleep may result in susceptibility to stress.

The nurses should be encouraged to plan their work schedule, by prioritising what needs to be done, which would assist in maintaining a sense of self-control. Consequently, the professional nurses should manage the available time effectively. maintain a balance between work and relaxation, and avoid doing too much at the same time. They should also commence work early, to complete tasks with ease, instead of rushing, which may lead to stress. The nurses should be encoureaged to delegate some of their tasks, avoid unnecessary stress, and participate in decision-making at work.

8.8. MODULE 4: STRATEGIES REQUIRED BY NURSES TO MOTIVATE THE SOCIAL GROUP OF PEOPLE TO PROMOTE THE USE OF PPFP

This aspect deals with strategies required by nurses to motivate the social group of people to promote PPFP.

Purpose of the module: The purpose of this module is to:

1. Equip nurses with strategies to motivate the social group of people to promote PPFP.
2. Empower nurses to equip the social group of people with knowledge of PPFP.

Process outcome: Nurses will be equipped with various strategies to motivate the social group about the promotion of PPFP.

Expected learning outcome: At the end of the module the nurses should be able to:

- Know various strategies to motivate the social group of people, for them to support the promotion of PPFP;
- Identify the various forms of PPFP, according to their efficacies, as well as the time of commencement.
- Demonstrate and equip the social group of people with the knowledge of PPFP.

Timeline: Three hours (30 minutes for questions and answers)

- Study unit 4.1: Strategies to motivate the social group to promote the use of PPFP, including conducting campaigns among them in churches and mosques, sending invitation letters to them for discussions about PPFP, using mobile phones to inform them about PPFP, and using role play as a motivational strategy to promote the use of PPFP.
- Study unit 4.2: Clarification about the efficacy of PPFP methods and time of commencement
- Study unit 4.3: Facts about PPFP.

8.8.1. INTRODUCTION

The social group of people, namely the men, the community and religious leaders, are influential people in the community. They are capable of using their influential power to persuade members of the community (Gichuru, Kombo, Mumba, Sariola, Sanders, &

Van der Elst, 2018). Therefore, collaborating with them and educating them about matters related to health promotion remain vital (Rivera-Hernandez, 2015).

In this current study, the strategies required by nurses to motivate the social group, for them to promote the use of PPFP in the community, include: conducting campaigns in churches and mosques to promote the use of PPFP; sending invitation letters to the social group for discussions about PPFP, as a motivational strategy to promote the use of PPFP; the use of mobile phones to promote the use fo PPFP; and motivation through role play to promote the use of PPFP. This module also includes the efficacy of various PPFP methods, the time of commencement, as well as the facts about PPFP.

8.8.2. Study Unit 4.1: Strategies to motivate the social group to promote the use of PPFP

This section is focused on the following strategies that could be used to motivate the social group of people to promote the use of PPFP.

8.8.2.1. Conducting campaigns in churches and mosques to promote the use of PPFP

Empowering the leaders of congregations in churches and the mosques, remains a vital tool in promoting the use of PPFP. Due to their prominent positions they could effectively motivate their followers into possible compliance with the use of PPFP, as most members follow the instructions from their leaders. Therefore, dissemination of postpartum family planning information through churches and mosques could serve as a motivational strategy for the promotion of PPFP. This approach appears to be an ideal avenue, through which knowledge about sexual and reproductive health, as well as teachings about PPFP, including the benefits of child spacing to the mother and child, could be disseminated. In addition, misconceptions relating to family planning could be addressed during such occasions, providing opportunities for both the PP women and the social groups, who are averse to family planning, due to their religious beliefs. As they acquire knowledge about post-partum family planning, this awareness has the potential of significantly decreasing the rate of teenage pregnancies, as well as unwanted pregnancies among married women.

8.8.2.2. Sending invitation letters to the social group for discussions about PPFP as a motivational strategy to promote the use of PPFP

Letter of invitations, for discussions about PPFP, could be sent to the social groups of people, including the men, religious and community leaders in the community, via the postpartum women, who attend the clinic. These invitations should be dispatched about three to four weeks in advance, while the date and time should be highlighted. Additionally, a reminder via written letter, or a mobile phone, should be sent, a few days before the due date for the meeting. Importantly, the duration of the meeting should be strictly stipulated and followed, to encourage further compliance to meetings. During such occasions, discussions should be centred solely on issues around post-partum family planning.

8.8.2.3. The use of mobile phones to promote the use of PPFP

Mobile phones could be used as a motivational strategy to promote the use of PPFP, and possibly achieve the following goals:

- Provide postpartum family planning information through text messages and recorded voice messages to the social group;
- Remind them of important meetings;
- Disseminate PPFP information to the hard-to-reach people in the community;
- Address certain misconceptions about PPFP; and
- Offer the opportunity for direct counselling at the most convenient times.

8.8.2.4. Motivation using role play to promote the use of PPFP

The process of role-playing, where real-life situations regarding postpartum family planning are presented, could be used as a motivational strategy, through which the promotion of PPFP could be achieved. When learners are exposed to learning using role-playing, it encourages the learner to self-reflect on similar situations. Experience gathered from such exposure could teach the learner to address similar situations in real-life, and facilitate change. Besides, role-playing is fun, as well as relaxing, which would allow the learner to develop additional skills, such as problem-solving skills; thereby improving their decision-making ability.

Additionally, it is an avenue to acquire a better understanding of the real-life situation that is presented, assist in attitudinal change, and improve motivation to positive action.

ROLE OF THE FACILITATOR

Nurses should be encouraged to send reminder letters to the social support groups, about one week before the scheduled date of any meeting for discussions about PPFP. The venue for the meeting should be adequately prepared for everyone's comfort and relaxation, to ensure stressless learning. Educational materials to aid learning should be made available. The facilitator should be well prepared and professional, to address any matters related to PPFP, including the concerns of the people. The use of both visual and audio-visual aids on various occasions should be encouraged. Additionally, on that occasion, good communication and listening skills should be exercised strictly, for information clarity and understanding. The nurses should apply problem-solving skills to address the needs of the people. In these situations, the problem should be clarified without delay. Subsequently, the alternatives should be discussed, and suggestions offered for possible solutions. Finally, the best possible options should be selected. The faciltators should be encouraged to keep to the time scheduled closing of the meeting.

8.8.3. Study unit 4.2: Efficacy of PPFP methods and time of commencement

The various PPFP methods, according to their effectiveness and time of commencement, are as follows:

8.8.3.1. The most efficient PPFP methods

- Intrauterine devices
- Implants
- Female sterilization
- Male sterilization

8.8.3.2. Efficient PPFP methods

- Progestin-only injectable

- Lactational amenorrhea
- Progestin-only pills
- Combined oral contraceptive pills

8.8.3.3. Less efficient PPFP methods

- Male condoms
- Female condoms

8.8.3.4. Least efficient PPFP methods

- Withdrawal or coitus interruptus
- Emergency contraception

8.8.3.5. Time of commencement of PPFP

The time of commencement of PPFP, for both breastfeeding women and non-breastfeeding women, are as follows:

- Condoms and male sterilization: Commenced from 48 hours after delivery to 12 months.
- Female sterilization: Commenced from 48 hours to 3 weeks, or from 6 weeks to 12 months.
- Intrauterine device (IUD): Commenced within 48 hours, or wait till 4 weeks to 12 months.
- Diaphragm and cervical cap: commenced from 6 weeks to 12 months.
- Emergency contraception: Commenced from 4 weeks to 12 months.

8.8.3.6. Time of commencement for breastfeeding women

The lactational amenorrhea method could be commenced immediately after delivery to 6 months. Thereafter, they could commence on progestins only from 6 weeks to 12 months. while combined-estrogen and progestins use could commence from 6 months to 12 months. The withdrawal method could be commenced at any time after sexual activities are reestablished.

8.8.3.7. Time of commencement for non-breastfeeding women:

- Progestin-only: Commenced from 48 hours to 12 months.
- Combined estrogen and progestin: Commenced from 3 weeks to 12 months

8.8.4. Study Unit 4.3: Facts about PPFP

Postpartum family planning (PPFP) is the initiation of a family planning method in the first 12 months after delivery, aimed at preventing unintended pregnancies, as well as pregnancies that are too closely-spaced (Elweshahi, Gewaifel, Sadek, & El-Sharkawy, 2018). Most women are unaware of their fertile days; consequently, they become vulnerable to unintended pregnancies. Therefore, timely commencement of any method of PPFP is required to prevent any associated risk of unwanted pregnancy. The *most efficient methods* are intrauterine devices, implants, female sterilization, and male sterilization.

8.8.4.1. Intrauterine devices

There are two types of intrauterine devices, namely, the copper-bearing, and the hormone impregnated intrauterine devices (Smith-McCune et al., 2020).

8.8.4.1.1. Copper-bearing intrauterine device

The copper-bearing intrauterine device is a flexible plastic frame with copper sleeves or wire around it. When inserted into the vaginal canal, it drapes over the cervix into the vagina. Preferably, the IUD should be inserted a few days after menstruation, to rule out pregnancies. However, during the postpartum period, it should be inserted any time within 48 hours post-delivery. Should the IUD not be inserted at this time, it should be inserted between 4 weeks and 6 months post-delivery. The copper-IUD is one of the most effective methods of family planning (Shah, 2018).

Mode of action:

It releases chemical substances that hinder the mobility of the sperm cells.

8.8.4.1.2. Hormonal impregnated intrauterine device

This type of PPFP is the progestin hormone impregnated IUD. It contains the hormone progestin, which is slowly released into the cervix, when inserted

through the vaginal canal. It is also one of a most effective methods of family planning ((Tjernlund et al., 2015). The bleeding pattern is less, compared to the copper-bearing IUD (Rowe et al., 2016).

Mode of action:

The effect of the hormone works by thickening the cervical mucus, thereby making the cervix hard, and consequently, hinders the sperm deposited in the vagina from entering into the cervix. Also, the effect of the hormone alters the lining of the uterus, making implantation impossible (Nwadike & Villines, 2018).

Effectiveness:

It is one of the most effective methods of family planning.

Side effects:

Some women may complain of irregular bleeding patterns around the third and sixth months after insertion. In addition:

- Heavy bleeding may be prolonged;
- Cramps and pain, which may be associated with the bleeding

Benefits:

- Protects against the risks of unwanted pregnancy;
- Protects against cancer of the inner lining of the uterus; and
- Protects against cancer of the cervix.

Health risks:

This is uncommon; however, it may be a contributory factor to anemia, due to the monthly heavy bleeding, which may be experienced by some women, especially women with a history of reduced iron in the blood. A pelvic inflammatory disease may develop if the woman has gonorrhea when IUD is inserted, although these cases are rare.

Complications:

This is rare; however, the wall of the uterus may be punctured during the insertion of the IUD, or by the instrument.

Advice about the side effects:

This should be accesses before the insertion of the IUD, and the PP women should be advised that:

- They could expect some bleeding, or irregular spotting, cramping, or pain; however, changes in the bleeding pattern and the cramps are no signs of illness;
- Such bleeding is mostly reduced after some months; and
- If bleeding becomes worrisome, please return to the facility.

Addressing common misconceptions about intrauterine devices

Intrauterine devices:

- Do not increase the risk of contracting STIs or HIV;
- Do not make a woman infertile;
- Do not cause birth defects;
- Do not cause cancer;
- Do not move to the heart;
- Do not cause uneasiness in women; and
- Could be used by all women of reproductive age

The intrauterine devices should not be used by women under the following conditions:

- Ovarian cancer;
- Sexually transmitted diseases, at the time of insertion;
- HIV disease condition; and
- A woman between 48 hours to 4 weeks post-delivery.

8.8.4.2. Implants

Implants are plastic rods that are impregnated with the progestin hormone. The various types are *jadelle*, comprising 2 rods, *Implanon NXT*, comprising 1 rod, and

levoplant, comprising 2 rods. Implants are a long-lasting method of family planning. No known health risks are associated with implants. They are among the most effective methods of family planning (Jacobstein, & Polis, 2014; Royal College of Obstetricians & Gynaecologists, 2015).

Mode of action

It works by thickening the cervical mucus to hinder the sperm from entering the cervix. Insertion of implants could be done within 48 hours post-delivery, and does not interfere with lactation, because the hormone progestin works by altering the normal function of the cervix, to prevent pregnancy.

Side effects

- Slight changes in bleeding patterns;
- Prolonged bleeding;
- Irregular bleeding;
- Mood changes
- Headaches

Benefits

- Protects against the risks of pregnancy
- Protects against iron-deficiency anemia

Addressing common misconceptions on implants

Implants do not:

- Hinder fertility;
- Cause ectopic pregnancy; or
- Remain permanently in the woman's body.

8.8.4.3. Female sterilization

The female sterilization method is a permanent form of family planning. It is performed surgically, during which the fallopian tubes are blocked to prevent the fertilized eggs from uniting with the sperm along the fallopian tubes. This procedure is performed on women who do not intend to bear any more children,

and it could be executed around 48 hours to 3 weeks post-delivery, or from 6 weeks to 12 months. It is one of the most effective methods of family planning, with no associated side effects (Brito, Healthline Medical Network, & Gotter, 2018; Royal College of Obstetricians & Gynaecologists, 2015).

Benefits

May help protect against ovarian cancer and pelvic inflammatory disease.

Health risks

The health risks are rare; however, but women may complain about the effect of anesthesia.

Addressing common misconceptions on female sterilization

Female sterilization does not:

- Cause hormonal imbalance;
- Interfere with the woman sexual behaviour; or
- Result in changes in bleeding patterns;

8.8.4.4. Male sterilization

Male sterilization, also known as a vasectomy, is a surgical form of family planning, performed on men who do not intend to father any more children. During the procedure, the two *vas deferens* of the tubes are blocked. The aim is to prevent the sperm cells from entering into the semen. Male sterilization could commence from 48 hours to 12 months post-delivery. This method of family planning may not be effective until 3 months after the surgical intervention, due to the possibility of traces of sperm in the semen. Therefore, the semen needs to be evaluated for, at least, the first 3 months after the procedure. Complications are rare, and it is one of the most effective methods of family planning (Royal College of Obstetricians & Gynaecologists, 2015; Shattuck, Perry, Packer, & Quee, 2016).

Side effects

There are no side effects.

Benefits

- Protects against the risks of pregnancy;

Addressing common misconception on male sterilization

Male sterilization does not:

- Interfere with sexual function;
- Result in disease conditions; or
- Protect against the sexually transmitted disease infection.

The *efficient methods* of PPFP include Progestin-only injectable, Lactational amenorrhea, combined oral contraceptive pills, and progestin-only pills

8.8.4.5. Progestin-only injectable

The *progestin-only injectable* is a contraceptive injection that contains of the hormone progestin. The most commonly use contraceptive is Depo-Provera. Its use could commence from 6 weeks till 12 months after delivery for women, who are breastfeeding fully. However, women, who are partially, breastfeeding could commence 48 hours, or any time around the first 12 months, post-delivery. This method of family planning is one of the effective methods (Payne, 2015; Royal College of Obstetricians & Gynaecologists, 2015).

Mode of action

Once injected, it works by preventing the release of eggs from the ovaries, thereby hindering ovulation.

Side effects

Within the first 3 months, the PP women may experience:

- Irregular bleeding; and
- Prolonged bleeding.

Benefits

- May protect againstI iron-deficiency anemia; and
- May reduce sickle cell crises.

Addressing common misconceptions of progestin-only injectable

It does not:

- Interrupt an already existing pregnancy;

- Result to infertility.

8.8.4.6. Lactational amenorrhea

This method of family planning is temporary and provides protection against pregnancy within 6 months after delivery. Lactation amenorrhea is one of the effective methods of family planning, and has no associated side effects (Idris, 2017). However, its effectiveness also depends on the following:

- The woman is breastfeeding day and night;
- The menstruation has not return; and
- The baby is less than 6 months old.

Benefits

- It protects against the risks of pregnancy

8.8.4.7. Combined oral contraceptive pills

Combined-oral pills are composed of combined-estrogen and progestin hormones. Women, who are breastfeeding, should start on this contraceptive between 6 to 12 months post-delivery, because of the estrogen content, which may interfere with breastfeeding, by reducing the production of breast milk. However, women who are not breastfeeding could start from 3 weeks to 12 months. The use of combined-oral contraceptives is one of the effective methods of family planning. Common side effects that may be associated with combined oral contraceptives, include nausea and a slight headache ((Royal College of Obstetricians & Gynaecologists, 2015).

8.8.4.8. Progestin-only pills

This method of contraception is also referred to as mini-pills, which is safe for breastfeeding women. It is composed of the progestin hormone, and breastfeeding women could could start on this contraceptive from 6 weeks to 12 months. However, non-breastfeeding women could start on it from 48 hours after delivery to 12 months post-delivery. Progestin-only pills are one of the effective methods

of family planning (Lopez, Grey, Stuebe, Chen, Truitt, & Gallo, 2015; Royal College of Obstetricians & Gynaecologists, 2015).

Mode of action

The action is centred on the thickening of the cervix, which hinders ovulation by altering the menstrual cycle.

Side effects

- Nausea;
- Irregular bleeding;
- Prolonged bleeding;
- Headaches; and
- Dizziness

Benefits

- Protection against the risks of pregnancy;

Addressing common misconceptions on progestin-only pills

Progestin-only pills do not:

- Result to infertility;
- Delay return to fertility;
- Result in gastrointestinal problems for the newborn; or
- Result to drying up of the mother breast milk.

The less efficient methods include Male and Female condoms.

8.8.4.9. Male condoms

The male condom offers dual protection, as it protects against pregnancy and STIs, including HIV. It is made of thin latex rubber. For perfect use, it requires the cooperation of the male and female. The male condoms can be used from 48 hours up to 12 months post-delivery. It is one of the less effective methods of family planning, with no side effects (Royal College of Obstetricians & Gynaecologists,

2015; Stover, Rosen, Carvalho, Korenromp, Friedman, Cogan, & Deperthes, 2017).

Benefits

- Protects against cervical cancer;
- Protects against infertility;
- Protects against the risks of pregnancy; and
- Protect against STIs and HIV.

Common misconceptions on the male condom.

It does not:

- Interfere with sexual functions; and
- Cause sterility and impotence in men.

8.8.4.10. Female condoms

The female condom is made of a thin transparent film in the form of latex or polyurethane, with flexible rings on both ends, and fits well loosely into the vagina. Cooperation between partners is required before use (Smith & Wilson, 2017). Female condoms can be used within 48 hours to 12 months post-delivery. It is one of the less effective methods of family planning, and requires the cooperation of both partners (Royal College of Obstetricians & Gynaecologists, 2015)

Mode of action

A female condom forms a barrier and prevents the semen from reaching the vagina; consequently, preventing pregnancy. Additionally, it prevents sexually transmitted infection (STIs), including HIV, from reaching both spouses, and carries no associated health risks

Side effects

There are no side effects

Benefits

- Protects against the risks of pregnancy; and
- Protects against STIs and HIV.

Common misconceptions of the female condom.

It does not:

- Cause health problems for women;
- Melt in the woman's body

The least efficient methods include withdrawal or coitus interruptus, and emergency contraceptives.

8.8.4.11. Withdrawal or coitus interruptus

The withdrawal method is when the man withdraws his penis from the vagina during sexual intercourse at the point of ejaculation. It is one of the least effective methods of FP and can be initiated at any time once the woman resumes intercourse. There are no associated side effects and it does not protect against sexual infection. In addition, it does not interfere with breastfeeding (World Health Organization Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP), Knowledge for Health Project, 2018).

8.8.4.12. Emergency contraception

Emergency contraception is initiated after unprotected sexual intercourse. It is either in the form of progestin, or a combination of progestin and estrogen. It is one of the least effective methods of PPFP (WHO/RHR and Johns Hopkins Bloomberg School of Public Health/CCP, Knowledge for Health Project, 2018).

Mode of action

Emergency contraception prevents ovulation.

Side effects

- Alteration in bleeding patterns, which may be slight;
- Abdominal pain;
- Headaches;
- Nausea

Benefits

- Could prevent the occurrence of pregnancy, especially when taken within 5 days after unprotected sexual intercourse; and
- Could help to prevent pregnancy in cases of rape.

Common misconceptions about emergency contraceptive.

It does not:

- Result to abortion; and
- Cause birth defects

8.9. MODULE 5: COMMUNICATION SKILLS FOR THE PROMOTION OF PPFP

Communication skills simply implies the ability to communicate effectively to promote a good understanding of PPFP (WHO, 2013). Various strategies to promote exceptional communication for effective promotion of PPFP are as follows:

- Verbal communication skills
- Nonverbal communication skills
- Active listening skills and Interpersonal communication

Purpose of the module: The purpose of this module is to empowered nurses to develop better communication skills by providing the necessary information on communication skills.

Process outcome: Nurses will acquire the necessary knowledge and skills to communicate effectively with the postpartum women.

***Expected learning outcome*:** At the end of the module nurses should be able to:

- Identify effective communication skills

Timeline: Two hours (30 minutes for questions and answers)

- Study unit 5.1: Communication skills

8.9.1. Introduction

Communication is an interactive process that involves the exchange of information, or the sharing of facts/ideas between two or more people. It encompasses the sender, the message, and the receiver (Arnold & Boggs, 2019). Communication skill, in the

promotion of PPFP, is fundamental to promote a healthy flow of information, to establish a good relationship with the PP women for better decision making. Such skill entails the ability of the professional nurse to transmit information, in a manner that is well valued, using adequate strategies to achieve the desired goal (Cooper, 2014).

8.9.2. Study unit 5.1: Communication skills

Communication skills simply implies the ability to communicate effectively, in this current instance, to promote a good understanding of PPFP information. Various strategies to promote effective communication for the effective promotion of PPFP are as follows:

- Verbal communication skill
- Nonverbal communication skill
- Listening skill
- Interpersonal communication

8.9.2.1. Verbal communication skill

This type of communication occurs when interaction transpires between two or more people by means of talking (Arnold & Boggs, 2019). To achieve effective communication through verbal communication, the nurses should be attentive. This implies that, when conveying the message or information, during interaction with the PP women, there is a need to consider the women's point of view. The nurses should be able to communicate effectively by presenting clear and concise information, when interacting with the PP women. They should ensure that statements used during the interaction, is such that the feelings of the PP women are not hurt, as any form of hurtful words could lead to disengagement in the interaction by the PP women.

In addition, professional nurses should be open-minded. They should be confident to ask probing questions to ascertain whether the PP women had understood the messages (Cooper, 2014; Sibiya, 2018). They should interact calmly with the PP women, and not be aggressive during their interaction with the PP women, which implies not considering the feelings of the women. During verbal communication,

the nurses should practice good active listening skill. They should be able to present information in a well organised way, for good understanding, and demonstrate interest in what matters to the PP women

8.9.2.2. Nonverbal communication skills

This method of communication is used to convey messages through unspoken words. It is used to transmit feelings, as well as to improve attitude. This method of communication has the potential to support verbal communication; however, it could also be used as a substitution for verbal messages, thereby enhancing the meaning of the message. It entails the use of body language in the form of various postures, signals, facial expressions, including distinctive tones of voice (Phutela, 2015).

When engaging in any of the above mentioned nonverbal communication, it is important to observe the following, in order to achieve effective communication. When using facial expressions, the nurses should maintain good eye contact, and active listening should be maintained. They should avoid any form of distractions, such as the use of mobile phones during nonverbal communication. They should project the right signal to communicate their message, and show interest in nonverbal communication, by smiling. They are also expected to ensure calmness

8.9.2.3. Listening skill

Active listening is another means of communicating with people, and involves both verbal and nonverbal communication. The verbal aspect of active listening may involve asking related questions and responding to the question appropriately during the interaction. This indicates that the person is paying attention during the discussion. While nonverbal listening occurs when the individual demonstrates active listening by use of body language, for example, rotation of the eyes, as a form of visual listening (Jahromi, Tabatabaee, Abdar, & Rajabi, 2016). Active listening also entails the ability of the learner to reflect at the end of the discussion, by paraphrasing what transpired in the course of the discussion. Such actions further indicate active listening. The following are some of the qualities of a good listener:

- A good listener (professional nurses) should show interest during interaction, by asking questions;
- A good listener encourages others opinions, to understand their point of view, during any interaction;
- A good listener should not interrupt the client during any interaction;
- A good listener should be focused and calm during any interaction;
- A good listener welcomes the feelings of others;
- A good listener exhibits active listening by allowing others to complete their speech before replying;
- A good listener should communicate calmly and not being aggressive during any interaction with the PP women; and
- A good listener should be respectful of the clients' views, to achieve a good relationship.

8.9.2.4. Interpersonal communication

This method of communication involves the transmission of ideas or information through verbal and nonverbal communication (Wood, 2015). It involves a two-way method of communication, with an active discussion between both parties. This method of communication can be transmitted, using interactive discussions, through face-to-face interactions, and can also occur during telephone talks with the PP women, or through body language, such as facial expressions or text communication. The various channels mentioned have diverse purposes. However, to achieve effective interpersonal communication, the following values should be considered:

- When using body language, in the form of nonverbal communication, the nurse is required to maintain good body posture, as well as good eye contact. Likewise, the nurse should avoid any form of negative body language, such as folding of the arms or legs, avoiding direct eye contact,

or shifting of the eye. Such expressions are indications of the lack of interest, and do not promote good interpersonal communication.

- Effective interpersonal communication requires that, during verbal communication, good negotiation should be established between the nurse and the PP women. The ability to negotiate and reach a compromise, indicates respectful client care, and also shows the PP women that nurses have regard for their interest. Similarly, the murses must maintain good response, and avoid interruption during verbal communication, to achieve effective interpersonal communication.

- Active listening is required for effective interpersonal communication. This implies that the nurses need to be completely attentive, and not distracted, during any interaction with the PP women. They should be able to reflect, by paraphrasing, what was said during the interaction. The ability to do this, is an indication of active listening, and therefore, clarifies good understanding.

ROLE OF THE FACILITATOR

The facilitator should encourage the nurses to engage in good communication skills, through active listening during any interactions with the PP women. The nurses should convey clear and concise information during verbal communication, to ensure a good understanding of the message. They should also communicate calmly, without being aggressive during any interaction. The facilitator should encouraged the nurses not to interrupt the PP women during any discussion session, as well as ensure respectful client care during any interaction. Nurses should pay attention to the PP women, when they are talking during any engagement with them, and offer an appropriate response. Nurses should be urged to use positive body language, such as good posture, maintaining good eye contact, and a smile, as nonverbal communication during any open discussion. In addition, they should avoid closed body language because such expression indicates a lack of interest.

8.10. VALIDATION FOR FUTURE PROGRAMME

According to Kihn and Ihantola (2015, p. 10), validation is regarded as "a process not easily separated from the ongoing efforts of researchers to develop explanations as research projects unfold". Additionally, it is observed as the general process of evaluating performance (Eker et al., 2018). The purpose being, to unfold the authenticity of the findings (Kihn, & Ihantola, 2015).

In this current study, 5 phases of PDM by Meyer and Van Niekerk (2008) were adapted (See Figure 3.4). However, only 4 of the phases were used, namely: the preliminary phase 1; situational analysis (phase 2); Phase 3, which is the design Phase; and Phase 4, the development phase. The validation phase, which is phase 5, falls outside the scope of this current study, as the aim was to develop a training programme. Besides, studies have also indicated that, due to the modification of phases in intervention research, only the effective elements would be included in the intervention programme, as it is unnecessary to use all the phases in an intervention research study (Du Preez & Roux, 2008; O'Cathain et al., 2019).

Consequently, it is anticipated that, for future programmes, a team of experts would execute the validation for future implementation. This team of experts would include experts in the field of family planning and maternal and child using validation criteria. According to Kihn and Ihantola (2015), to achieve validation in a research study, certain criteria need to be met, namely: relevance, adequacy, applicability, and usefulness. This also aligns with Chinn and Kramer (2011, as cited in McEwan & Wills, 2019), who also favoured the use of validation tools that are based on certain criteria, such as relevance, usefulness, adequacy, clarity, simplicity, and accessibility.

8.11. SUMMARY

The development of the training programme was embarked on, based on the findings of the situational analysis, which revealed a certain lack in the professional nurses' abilities to promote PPFP. Consequently, the researcher was committed to follow the required principles of programme development, which included the purpose of the training programme, educational learning theory, situational need assessment, learning objectives, learning styles, delivery mode, audience, and content development. Five (5) modules were developed with the aim of empowering the professional nurses to promote PPFP.

CHAPTER 9

SUMMARY, LIMITATION, RECOMMENDATION, AND CONCLUSION

9.1. INTRODUCTION

In this chapter, the researcher presents the summary and conclusion of this current research study, as well as the limitations of the study, the unique contributions of the study, and recommendations for nursing practice, nursing education, and further nursing research.

9.2. SUMMARY

In this study, the researcher aimed to develop a training programme for professional nurses to promote the use of postpartum family planning (PPFP) in Epe local government area of Lagos State in Nigeria. This was aimed at improving the service delivery of the professional nurses, to influence the positive decision of the postpartum women, regarding their use of PPFP. To achieve the aim, 4 phases of the PDM by Meyer and Van Niekerk (2008) were used.

9.2.1. Phase 1: Preliminary phase

In this phase all the necessary documentations for ethical approval was sought before the commencement of the situational analysis

9.2.2. Phase 2: Situational analysis

In this phase, the researcher engaged in data collection, which was conducted in two stages, using a quantitative and qualitative approach. The quantitative survey collected data related to the first two objectives of the study, namely:

- Objective 1: To examine the information received by postpartum women related to the use of PPFP.
- Objective 2: To identify factors that influenced the behavioural skill of postpartum women.

The qualitative data was collected to address objective 3, using a focus group discussion.

- Objective 3: Explore and describe the motivating factors used by professional nurses to promote PPFP.

The situational analysis in phase 2 of the PDM was conducted to provide a complete and accurate description of the research problem.

9.2.3. Phase 3: Design phase

In this phase, the findings of Phase 2 were used to inform the design phase. The findings were triangulated and culminated, using the IMB construct as a key concept (See section 6.2). This provided the opportunity for the researcher to identify relevant concepts to be considered during the development of the training programme. The design was enhanced based on the culminated findings. Additionally, the prescribed list of activities indicated in the practice-oriented theory by Dickoff et al., (1968) provided a reasoning map as a guide towards the development of the training programme (See Chapter 7).

9.2.4. Phase 4: Development phase of the training programme:

The objective of this phase was to develop a training programme for professional nurses, to promote and improve the use of PPFP. The selected content of the training programme was based on the findings of the triangulation of the situational analysis in Phase 2. The findings revealed that professional nurses lacked certain skills and abilities, required to promote PPFP. Their challenges included insufficient teaching methods to promote PPFP, poor communication skills, poor interpersonal relationship skills, a stressful work environment due to workload, and the inability to adequately motivate the social group of people, namely men, religious and community leaders. During the development of the training programme, certain principles were taken into consideration, such as purpose, learning theories, and the requirement for an effective training programme The content of the training programme constituted five modules, as follows:

- Module 1: Teaching methods to promote PPFP services;
- Module 2: Interpersonal relationship skills in the promotion of PPFP;
- Module 3: Stress management to improve PPFP services;
- Module 4: Strategies required by nurses to motivate the social groups of people for the promotion of PPFP; and

- Module 5: Communication skills in the promotion of PPFP

9.3. LIMITATIONS

The study was a constrained in many ways. Firstly, the study findings were restricted to one Local government area in Lagos State, out of the 20 Local governments in the state, which may probably have affected its transferability to other settings. However, since the training programme was developed for professional nurses, its applicability, therefore, could be used as a source for other areas, based on further investigation.

In this current study, 6 primary healthcare centres were initially selected, but only 5 centres participated in the quantitative survey, due to the unavailability of the participant in the fifth centre. This affected the total number of the respondents, as the initial calculated sample size was 319, while only 297, eventually, were involved. Additionally, it was a difficult task to select the required number of participants for the FGD appointment. Frequently, only a few nurses were on duty; some were either off duty, while others had taken annual leave. Therefore, most scheduled dates and times for the FGD sections were re-scheduled, while some were canceled due to the inability to attract the required number of participants.

To address this challenge, the researcher returned to the Primary Healthcare Board, to request permission to access one other primary healthcare centre for the FGD. The lengthy waiting time for another letter of approval, to access the new primary healthcare centre, was a challenge. Another limitation was time and financial resources. Although the training programme was developed for nurses in Epe Local Government in Lagos State, Nigeria, it could be used in other settings, while following due protocol on the applicability.

9.4. UNIQUE CONTRIBUTIONS OF THE STUDY

The development of the training programme for professional nurses, to promote the use of PPFP, is a key contribution to the body of knowledge in the nursing profession; particularly in the area of maternal and child health. Firstly, this current study is aligned with meeting the expected healthcare delivery of the professional nurse, through continuous professional development (WHO, 2018). This study offers the necessary skills and knowledge to the professional nurses, to empower them to address the challenges reflected in the research findings, which provided a new view on the motivational strategies in PPFP promotion.

This study is also unique because it seeks to explore the opinion of the postpartum women and the professional nurses through quantitative and qualitative research approaches, as no study that is tailored to meet the FP need of the PP women has been conducted in this manner, among professional nurses and PP women. Even though the literature has revealed various interventions used to promote the use of PPFP, none has considered the methodological approach used in this current study, to develop a training programme for professional nurses to promote the use of PPFP. In addition to its methodological uniqueness, multiples theories, such as behavioural theories, practice-oriented theory, and learning theory, were used, which provided a good understanding of the research, and added quality to this current research study.

9.5. RECOMMENDATIONS

The following recommendations are offered, based on the findings:

9.5.1. Primary healthcare management board

The researcher recommends that the primary Healthcare Management Board, in collaboration with the Federal Ministry of Health, strengthen the nurse's workforce by employing more staff to reduce the work overload. In addition, the facilities should be provided, with the necessary teaching aids materials, such as audio-visual aids and models for teaching.

9.5.2. Nursing practice

The researcher recommends the need for regular professional updates, through steady training and continuous professional development. This is necessary, to ensure both professional and personal development. The researcher recommends that professional nurses organize education on postpartum family planning to the social groups of people, which include the men, religious, and community leaders, using a multi-disciplinary teaching approach. This should be conducted regularly, in addition to the general meetings with the community leaders.

The researcher recommends that the professional nurses ensure a healthy environment in which to promote PPFP. It is also recommended that the professional nurses ensure the presence of healthy communication and interpersonal relationships among staff, as well as the client in the work environment.

9.5.3. Nursing education

The research findings revealed that most methods used by the nurses, when educating the PP women, is a nurse-centred approach. Therefore, it is recommended that nursing education and clinical nursing practice embrace more client-centredness, which promotes a participatory approach.

9.5.4. Nursing research

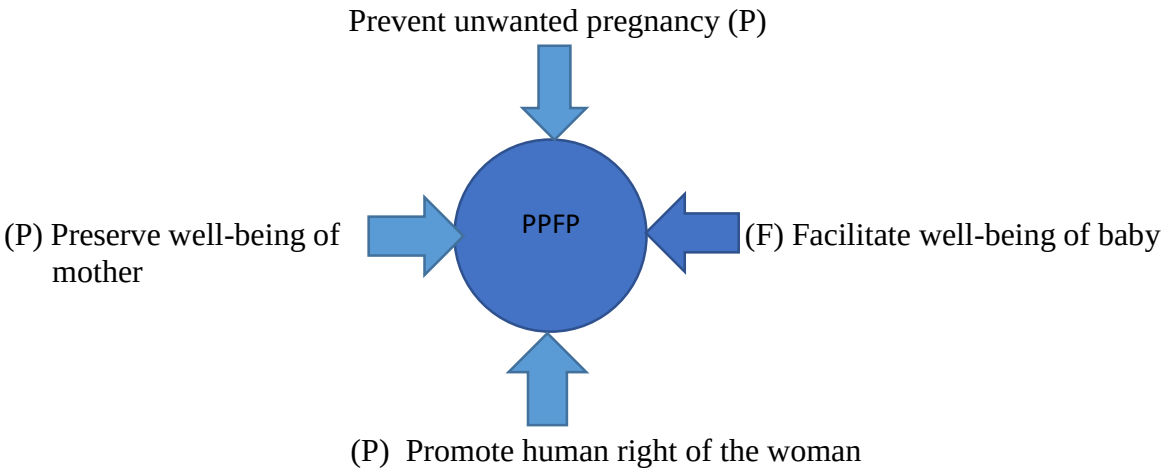
The researcher proposed to prepare future research for the validation of the training programme. The researcher recommends the need for further research to submit the training programme for evaluation. This process is expected to refine the training programme further.

9.6. CONCLUSION

Over the years, studies have revealed the persistent low use of postpartum family planning. The findings of this current study revealed that professional nurses lack certain skills and abilities to promote the use of PPFP. Consequently, empowering the nurses with the necessary motivational skills becomes vital. The researcher is committed to developing a training programme, based on the challenges reflected in this current study. The researcher presented the limitations and offered recommendations to improve nursing education and nursing practice, as well as recommendations for further nursing research.

In this study the key message around the acronym of PPFP is as follows:

P	**PREVENT UNWANTED PREGNANCY**
P	**PRESERVE WELLBEING OF MOTHERS**
F	**FACILITATE WELLBEING OF BABY**
P	**PROMOTE HUMAN RIGHT OF THE WOMAN**



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APPENDICES

APPENDIX 1: Questionnaire for postpartum women

Thank you for taking your time to complete the questionnaire. Please after the completion of the questionnaire you are expected to seal the questionnaire together with the consent form in self-address envelope and keep it ready for collection by the researcher or the research assistant. The time will be 20-30 minutes.

SECTION A: Socio-Demographic Information

Instruction: Please respond to each item by marking (√ or x)

S/N	Items	Response	Code
1.	What is your age as at your last birthday?	.....Years	
2.	What is your religion?	1. Christianity 2. Islam 3. Traditional 4. Pagan 5. Other: specify	1 2 3 4 5
3.	What is your ethnicity?	1.Yoruba 2. Ibo 3. Hausa 4. Others specify.....	1 2 3 4
4.	What is your marital status?	1. Married 2. Single 3. Divorced 4. Widowed 5. Living together but not married	1 2 3 4 5
5.	What is the highest educational level you completed?	1.No formal schooling 2. Primary School: 3. Secondary School 4. College 5. University	1 2 3 4 5
6.	What is your primary occupation?	1. unemployed 2. self employed 3. Salaried earner 4. Farmer 5. Housewife	1 2 3 4 5
7	What is your income per month?	N……:……K	

SECTION B: Reproductive Health Data

Instruction: **Please respond to each item by marking (√ or x)**

No	Items	Response
8	How many pregnancy/pregnancies have you had in your lifetime?	……pregnancy/pregnancies:
9	How many of your children were born alive?	
10	Have you terminated unwanted pregnancy before?	1.Yes 2. No
11	If yes to Q10, what was your reason for the termination of the pregnancy (pregnancies)?	
12	What is the age of your new born baby?	Months ------- weeks -------- Days -----
13	What is the age of the child before the new baby?	Years -------- Months --------
14	How many years after this new baby do you plan to have another child?	…….. Years
15	How many children do you intend to have to complete your family?	…….. Children
16	Where did you deliver your new born baby?	1. At home 2. Primary healthcare clinic 3. Private hospital 4. Traditional home

SECTION C: The following section will ask questions about the medium you received information about postpartum family planning.

Please provide the correct response to the following questions by ticking (√) where appropriate.

S/N	Items	Response
17	Where did you first hear the information about family planning?	1. Media 2. Radio 3. Health facility. (clinic) 4. Community. (outside the facility
18	When were you exposed to the messages in the clinic?	1. Before delivery 2. Immediately after delivery 3. Within 6 weeks to one year after delivery
19	How did the nurses pass family planning information to you? (Please tick as applicable to you)	1. Group discussion 2. One-on-One 3. Use of video 4. Role play 5. Demonstration 6. Others specify---------- (Please select as it applies)
20	What language (Languages) does the nurse use when passing family planning information to you?	1. English only 2. Yoruba only 3. Ibo only

		4. Hausa only 5. English and Yoruba 6. English and Ibo 7. English and Hausa 8. Others specify

SECTION D: This section will ask questions on specific facts received from nurses on postpartum family planning methods

21. Which of the following methods of Family planning were told by nurse that you can use immediately after childbirth to 12 months after childbirth?

Please tick (√) as many as you have been told.

S/N	ITEMS	Tick (√)
I	Female sterilization	
Ii	Male sterilization	
Iii	Female condom	
Iv	Male condom	
V	Pills	
Vi	Intra uterine Device (IUCD)	
Vii	Injectable	
Viii	Implant	
Ix	Diaphragm	
X	Emergency contraceptives	
Xi	Foam/Jelly	
Xii	Lactational Amenorrhea	
Xiii	Standard day/ Cycle beads	
Xiv	Withdrawal method	
Xv	Rhythm	
Xvi	Others specify: _____	

SECTION E: The following section will ask specific questions on information you receive on postpartum family planning

	Items	Never	Sometimes	Most times	Always
22	Does the nurse informed you on the risks involve if you do not use family planning after delivery to space your child birth?				

23	Does the nurse inform you about the consequences of unplanned pregnancy?				
24	Have you been informed about the benefits of using family planning after delivery?				
25	Have you been informed about the side effects that relate to any of the methods of family planning?				
26	Were you informed about what to do if there is any side effect after the use of any methods?				
27	Did you receive information on family planning with your husband in the clinic?				
28	Does the nurse give family planning information to both the adolescent mothers and adult mothers at the same time in the clinic?				
29	Does the nurse give information on family planning to the parents of the adolescent mothers in the clinic?				
30	Does the nurse give you information on the impact of religion and culture relating to the use of family planning?				

SECTION F: The following section will ask questions on some fact about postpartum family planning methods

Please respond by ticking (√) as it applies to you: Did the nurses give you information on the following side effects of family planning methods?

	Items	Possible side effects	Yes	No	Don't know
31	Intra Uterine Contraceptives Device (IUCDs)	1.Irregular menstruation 2. menstrual pain			
32	Implant	1.Weight gain 2. Breast tenderness			
33	Injectables	1.Irregular bleeding 2. Breast tenderness			
34	Progestin-only pills (POP)	1.You may miss your period 2. Headache			
35	Diaphragm	You may have vaginal irritation			
36	Male/ female condom	Allergic reaction to latex (Your body may react to the condom rubber)			
37	Female/Male sterilization	You may have some pain few days after it is done			

Please respond by ticking (√) as it applies to you: Did the nurses give you information on contraindications (Who cannot use) of the following family planning method

	Items	Contraindications (Who cannot use) the following family planning method)	Yes	No	Don't know
38	Intra Uterine Contraceptives Device (IUCDs)	1. Having sex with more than one partner 2. Infection of the pelvic organs 3. Pregnancy			
39	Implant	1.Diabetes woman 2.Over weight			
40	Injectables	1.Jaundice 2. Liver diseases			
41	Progestin-only pills (POP)	1. Breast cancer 2. Diabetes			
42	Female/Male sterilization	1. Man/Woman without children 2. Man/Woman having not more than one child			

Please respond by ticking (√) as it applies to you: Did you receive the following information by the nurse about postpartum family planning?

	ITEMS	Yes	No	Don't know
43	Postpartum family planning method are those family planning that a woman can use immediately after delivery to 12 months after delivery to prevent unwanted pregnancy			
44	Natural family planning method is a way of preventing pregnancy without the use of drugs			
45	IUD prevent pregnancy by blocking the sperm to come in contact with the woman egg			
46	Condom can prevent STDs			
47	A woman who have done female sterilization will stop menstruation			
48	Emergency contraception is use for unprotected intercourse			

Section G: The following section will ask questions on how adequate the information you receive about postpartum family planning.

	Items	Never	Sometimes	Most times	Always
49	Do the nurses pass across information on postpartum family planning to you in the language you understand?				
50	Are the messages on family planning clear to you?				
51	Does the nurse permit you to ask questions when you do not understand?				
52	Does the nurse allow you to take part in the discussions during counselling?				
53	Do you understand the information giving to you on family planning by the nurses?				

54	Does the nurse separate the adult mothers from the young (adolescent) mothers when giving information on family planning in the clinic?				
55	The information given to you by the nurse does it motivate you to take decision on the use of family planning?				
56	Does the nurse listen to your needs when giving family planning information?				
57	Does the nurse respond to your needs when giving family planning information?				
58	Does the nurse use a friendly tone of voice when giving health information on family planning?				
59	Are you satisfied with the way the nurses counsel you on family planning?				
60	Would you recommend any one to this facility?				

Section H: The following section will ask questions on what influences your behaviour to use or not to use family planning.

No	Items	Response	Code
61	Have you ever used any method of family planning to avoid or delay pregnancy before?	1. Yes 2. No	1. 2.
62	If yes to Q61, who/what influences your decision to ever use family planning?	1. Friends 2. Parents 3. Husband 4. Nurses 5. My in-law(s) 6. To prevent pregnancy and STIs 7. Fear of unwanted pregnancy 8. Family planning is free 9. Others Specify	1 2 3 4 5 6 7 8 9
	PERCEIVED CHALLENGES		
63	If No, to Q61 what prevent you from the use of family planning? (*Select all that apply*)	1. I am afraid of its negative consequences 2. I don't know where to do it 3. No method is available 4. The attitude of the nurse 5. It can lead to illness or death 6. My husband disapproves of it 7. It is against my religion 8. It is against my culture 9. I am afraid of the side effect 10. Attitudes of the health workers is discouraging	1 2 3 4 5 6 7 8 9 10
64	Are you currently using any method of family planning to prevent or delay pregnancy?	1. Yes 2. No	1. 2
65	If yes to Q64, who/what influences your decision to use family planning?	1. Friends 2. Parents 3. Husband 4. Nurses 5. My in-law(s)	1 2 3 4 5

		6. To prevent pregnancy and STIs	6
		7. Fear of unwanted pregnancy	7
		8. Family planning is free	8
		9. Others Specify	9
	PERCEIVED CHALLENGES		
66	If No, to Q64 what prevent you from the use of family planning? (*Select all that apply*)	1. I am afraid of its negative consequences	1
		2. I don't know where to do it	2
		3. No method is available	3
		4. The attitude of the nurse	4
		5. It can lead to illness or death	5
		6. My husband disapproves of it	6
		7. It is against my religion	7
		8. It is against my culture	8
		9. I am afraid of the side effect	9
		10. Attitudes of the health workers is discouraging	10

Thank you for your time

APPENDIX 2: Yoruba translation of questionnaire for postpartum women

ÀTOJỌ ÌBÉÈRÈ FÚN ÀWỌN OBÌNRIN NÍ KÉTÉ LẸ́YÌN ÌBÍMỌ

Ẹ ṣeun fún àkókò tí ẹ lò láti dáhùn àwọn ìbéèrè wọ̀nyí. Ẹ jọ̀wọ́, lẹ́yìn tí ẹ bá ti dáhùn àwọn ìbéèrè wọ̀nyí, níṣe ni kí ẹ fi ìdáhùn yín àti fọ́ọ̀mù ìgbàṣe yín sí inú àpò-ìwé kí ẹ sì fi pamọ́ títí ìgbà tí olùṣèwádìí tàbí amúgbẹ́lẹ́gbẹ̀ẹ́ olùṣèwádìí yóò fi wá gbà á. Ogún sí ọgbọ̀n ìṣẹ́jú ní àkókò náà yóò jẹ́.

ABALA A: Àwọn ọ̀rọ̀ tó níí ṣe pẹ̀lú àwọn èèyàn àwùjọ

Ìfilọ̀: Ẹ jọ̀wọ́ ẹ fèsì sí àwọn ìbéèrè kọ̀ọ̀kan pẹ̀lú àmì (√ tàbí x)

Nọ	Àwọn Ìbéèrè	Èsì	Kóòdù
1.	Kini ojo ori re ni ojo ibi ti o se kehin?	Odun……	
2.	Kini ẹsin rẹ?	1. ẹsìn Kírísítẹ́ẹ́nì 2. Ẹ̀sìn Ìmàle 3. Ẹ̀sìn Ìbílẹ̀ 4. Àwọn ẹsìn kéékèèké 5. Òmíràn: ṣàlàyé	1 2 3 4 5
3.	Èyà wo ni yín?	1.Yorùbá 2. Igbo 3. Hausa 4. Ẹ̀yà mìíràn ----------	1 2 3 4
4.	Ipò wo ni o wà nipa ìgbeyàwó?	1.Abíléko̩ 2.Omidan 3.Mo ti ko̩ o̩ko̩ sílẹ̀ 4.Opó 5. A kàn jọ ń gbé ni a ò ṣàgbéyàwó	1 2 3 4 5
5.	Ìwé ẹ̀rí yín wo ló ga jùlọ?	1. cMi ò kàwé rárá 2. Ilé-ìwé alákọ̀ọ́bẹ̀rẹ̀: 3. Ilé-ìwé girama 4. 0Ilé-ìwé gíga 5. Yunifásitì	1 2 3 4 5
6.	Kí ni iṣẹ́ òòjọ́ yín?	1. Mi ò níṣẹ́ 2. Iṣẹ́ aládàáni 3. Iṣẹ́ oṣù 4, Àgbẹ̀ 5. Ìyàwó láìṣiṣẹ́	1 2 3 4 5
7	Elo ni owo osu re?	N……:……K	

ABALA B: Àkójọ èròjà fún àyẹ̀wò nípa ètò ọmọ-bíbí

Ìfilọ̀: E jọ̀wọ́ ẹ fèsì sí àwọn ìbéèrè kọ̀ọ̀kan pẹ̀lú àmì (√ tàbí x)

Nọ	Àwọn Ìbéèrè	Èsì
8	Ẹ̀ẹ̀melòó ni ẹ ti lóyún rí?	Oyún:
9	Mélòó nínú àwọn ọmọ yín ni ẹ bí láàyè?	
10	Ǹjẹ́ ẹ ti ṣẹ́ oyún tí ẹ kò fẹ́ rí?	1.Bẹ́ẹ̀ ni 2. Bẹ́ẹ̀ kọ́
11	Tí èsí ìbéèrè 10 bá jẹ́ bẹ́ẹ̀ ni, kí ni ìdí tí ẹ fi ṣẹ́ (àwọn) oyún náà?	
12	Kí ni ọjọ́-orí ọmọ tí ẹ ṣẹ̀ṣẹ̀ bí?	Oṣù--- Ọsẹ̀-------- Ọjọ́------
13	Ọmọ ọdún mélòó ni ẹgbọ́n ọmọ tí ẹ ṣẹ̀ṣẹ̀ bí?	Ọdún-------- Oṣù--------
14	Ọdún melòó lẹ́yìn ọmọ tí ẹ ṣẹ̀ṣẹ̀ bí yìí ni ẹ ń gbèrò láti bí ọmọ mìíràn?	Ọdún:
15	Ọmọ mélòó ni ẹ ń gbèrò láti bí ní ìdílé yín?	Iye ọmọ:
16	Ibo ni ẹ bí ọmọ tí ẹ ṣẹ̀ṣẹ̀ bí sí?	1. Ilé 2. Ilé ìwòsàn alábẹ́lé 3.Ilé-ìwòsàn aládàáni 4. Ilé ìgbẹ̀bí ìbílẹ̀

ABALA C: Abala tí ó kàn yìí máa dá lórí àwọn ìbéèrè nípa bí ẹ ṣe gbọ́ nípa ètò ìfètò sí ọmọbíbí ní kété lẹ́yìn ìbímọ.

Ẹ jọ̀wọ́ ẹ fèsì sí àwọn ìbéèrè ìsàlẹ̀ wọ̀nyí nípa lílo àmì (√) níbi tí ó yẹ́.

Nọ	Àwọn Ìbéèrè	Èsì
17	Níbo ni ẹ ti kọ́kọ́ gbọ́ nípa ọ̀rọ̀ ìfètòsọ́mọ-bíbí?	1. Nípa ètò ìròyìn 2. Rédíò 3. Ibùdó ètò ìlera. 4. Àwùjọ (yàtọ̀ sí ibùdó ètò ìlera)
18	Ní ìgbà wo ni ẹ bẹ̀rẹ̀ sí ní gbọ́ nípa àwọn ìròyìn náà ní ibùdó ètò ìlera?	1. Kí n tó bímọ 2. Kété tí mo bímọ tán 3. Ní àárín ọ̀sẹ̀ mẹ́fà sí ọdún kan lẹ́yìn tí mo bímọ tán.
19	Ọ̀nà wo ni àwọn nọ́ọ̀sì gbà láti fi ọ̀rọ̀ ìfètòsọ́mọ-bíbí tó o yín létí? (Ẹ jọ̀wọ́ mú èyí tó bá kàn yín)	1. Àpérò ẹgbẹ́ 2. Ojúkojú 3. Nípa ìlò fídíò 4. Ipa-kíkó 5. Ìṣàfihàn 6. Nípa àwọn ọ̀nà mìíràn ---------- (Ẹ jọ̀wọ́ ẹ mú u bí ó ṣe kàn yín)
20	(Àwọn) èdè wo ni nọ́ọ̀sì fi sọ nípa ọ̀rọ̀ ìfètòsọ́mọ-bíbí fún yín?	1. Èdè Gẹ̀ẹ́sì nìkan 2. Èdè Yorùbá nìkan

		3. Èdè Igbo nìkan 4. Èdè Hausa nìkan 5. Èdè Gẹ̀ẹ́sì àti èdè Yorùbá 6. Èdè Gẹ̀ẹ́sì àti èdè Igbo 7. Èdè Gẹ̀ẹ́sì àti èdè Hausa 8. Sọ tó bá jẹ́ nípa àwọn èdè mìíràn

ABALA D: Abala ìbéèrè yìí yo béèrè ti ó se kọ̀kọ̀ lati odo lóri ì nọ́ọ̀sì **fètò sí ọmọ-bíbí ní kété lẹ́yìn ìbímọ.**

21. Ewo ninu awon ilana fetosomobibi ni awon noosi so fun o wipe o le lo ni kete ti o bati bimo titi di osu kejila lehin ibimo?

Jowo dahun (√) iye ti a ti so fun o.

Nomba	Àwọn Ìbéèrè	(√)
I	Ìdènà ẹyin-ríró fún obìnrin	
Ii	Ìdènà ìṣẹ̀dá àtọ̀ fún ọkùnrin	
Iii	Rọ́bà ìdáàbòbò obìnrin	
Iv	Rọ́bà ìdáàbòbò ọkùnrin	
V	Oògùn ìdènà oyún	
Vi	Fiha (IUCD)	
Vii	Abẹ́rẹ́ ìdènà oyùn	
Viii	Ìlànà fífi irin sí apá	
Ix	Ade orun ile omo	
X	Ìlànà ìdènà oyùn pàjáwìrì	
Xi	Ohun-èlò tí ó ń pa àtọ̀	
Xii	Ìdènà oyún nípa fífún ọmọ lọ́yàn	
Xiii	Wíwo ìgbà/àkókò tí obìnrin le lóyún	
Xiv	Kí ọkùnrin má máa da àtọ̀ sínú obìnrin	
Xv	Ṣíṣọ́ àkókò nǹkan oṣù	
Xvi	Ẹ dárúkọ àwọn ìlànà mìíràn tí kò sí lókè_____	

ABALA E: Abala tó kàn yìí máa dá lóri àwọn ìbéèrè pàtò nípa àwọn ọ̀rọ̀ tí ẹ gbọ́ nípa ìfètò sí ọmọ-bíbíw ní kété lẹ́yìn ìbímọ àbísínwín.

	Àwọn Ìbéèrè	Rárá	Ẹ̀ẹ̀kọ̀ọ̀kan	Ọ̀pọ̀ Ìgbà	Ìgbà Gbogbo
22	Ǹjẹ́ àwọn nọ́ọ̀sì fi tó yín léti nípa àwọn ewu tó wà tí ẹ kò bá ṣe ìfètòsọ́mọ-bíbí lẹ́yìn tí ẹ bímọ tán?				
23	Ǹjẹ́ àwọn nọ́ọ̀sì fi tó yín léti nípa àwọn àtubọ̀tán oyún tí a kò bá fi ètò sí?				
24	Ǹjẹ́ wọ́n ti fi tó yín léti nípa àwọn àǹfàní tó wà tí ẹ bá ṣe ìfètòsọ́mọ-bíbí lẹ́yin tí ẹ bá bímọ tán?				

25	Ǹjé wǫ́n ti fi tó yín léti nípa àwọn ohun tí ó ṣeé ṣe kí ó ṣẹlẹ̀ léyìn tí ẹ bá lo èyíkéyìí nínú àwọn ọ̀nà ìfètòsǫ́mọ́-bíbí?				
26	Ǹjé wǫ́n sọ fún yín nípa àwọn ohun tí ẹ gbọdọ̀ ṣe tí ewú kankan bá ti ibi èyíkéyìí nínú àwọn ọ̀nà ìfètòsǫ́mọ́-bíbí jáde?				
27	Ǹjé èyin àti ọkọ yín ni ẹ jọ gbọ́ nípa ọ̀rọ̀ ìfètòsǫ́mọ́-bíbí ní ilé ìwòsàn bí?				
28	Ǹjé ìgbà kan náà ni àwọn nǫ́ọ̀sì ti sọ̀rọ̀ nípa ọ̀nà ìfètòsǫ́mọ́-bíbí fún àwọn ìyálǫ́mọ tí wǫ́n ṣẹ̀ṣẹ̀ bàlágà àti àwọn ìyálǫ́mọ tí wǫ́n jẹ́ adélébọ̀?				
29	Ǹjé àwọn nǫ́ọ̀sì fi ọ̀rọ̀ ìfètòsǫ́mọ́-bíbí tó àwọn òbí ìyálǫ́mọ tó ṣẹ̀ṣẹ̀ bàlágà létí bí?				
30	Ǹjé àwọn nǫ́ọ̀sì sọ̀ fún yín nípa ipa tí ẹ̀sìn àti àṣà le kó lórí ìlò ìfètòsǫ́mọ́-bíbí?				

ABALA F: Ni abala ti a wayi ao bere awon ibeere lori awon arigbamu nipa ifeto somobibi lehin ibimo.

Jowo dahun nipase amin yi (√) bi o se kan o : Nje awon noosi fun o ni ifitonileti nipa awon ise ti o lodi ti awon ilana ifeto somo bibi le se?

	Alakale	Si se e se ise ti o lodi	Beeni	Beeko	Emi ko mo
31	Fiha (IUCDs)	1.Inkan osu segesege 2. Irora ni akoko inkan osu			
32	Onigbere apa	1.Sisanra 2. irora ninu Oyan			
33	Alabere	1.Isun segesege 2. Irora ninu oyan			
34	Onikoro agbemi ti Progestini	1.O le ma ri inkan osu re 2. Efori			
35	Ade orun ile omo	Ole ni irira ni oju ara			
36	Rǫ́bà ìdáàbòbò obìnrin/ ọkùnrin	Ara re le se lodi si roba idaabobo (Fila dadi)			
37	Rau-rau	O le ni irora ojo die lehin igba ti o ba see			

Jowo dahun nipa lilo ami yi (√) bi o se kan o : Nje awon noosi fun o ni ifitonileti lori iselodi (Eni ti koye lati lo) iru awon liana ifeto somo bibi wonyi

	Alakale	Iselodi (Awon ti ko le lo) awon liana ifeto somo bibi wonyi	Beeni	Beeko	Emi ko mo
38	Fiha (IUCDs)	1. Nini ibalopo pelu ju eyo enikan lo 2. Kokoro isale ile omo 3. Oyun			
39	Onigbere apa	1.Obirin ti o ni ito suga 2. Sisanra ju			
40	Alabere	1.Ako iba			

		2.Aisan okan			
41	Koro agbemi progestini nikan	1. Jejere oyan 2. Arun ito suga			
42	Rau-rau	1. Okunrin/Obirin ti ko ni omo 2. Okunrin/Obirin ti ko ni ju omo kan lo			

Jowo dahun nipa lilo ami yi (√) bi o ti kan o : Nje o gba ifitonileti wonyi lati odo awon noosi ifeto somo bibi lehin ibimo?

	ALAKALE	**Beeni**	**Beeko**	**Emi ko mo**
43	Ilana ifetosomobibi lehin ibimo ni awon ifetosomobibi ti obirin le lo ni kete lehin ibimo si osu kejila lehin ibimo lati dena oyun ti a ko reti			
44	Ilana ifeto somobibi ti adayeba ni ona lati dena oyun lai lo oogun			
45	Fiha ndena oyun nipa didi ato lowo lati lati se alabapade eyin obirin			
46	Rọ́bà ìdáàbòbò le dena arun STDs			
47	Obirin to bat i se liana raurau yio dawo duro lati maa se inkan osu			
48	Koro agbemi idena oyun pajawiri ni a nlo fun ibalopo ti ko ni idaabo bo			

ABALA G: Abala yìí máa dá lórí àwọn ìbéèrè tó níí ṣe pẹ̀lú bí àwọn ọ̀rọ̀ tí ẹ gbọ́ ní kété lẹ́yìn ìbímọ ṣe wúlò tó.

	Àwọn Ìbéèrè	**Rárá**	**Èẹ̀kọ̀ọ̀kan**	**Ọ̀pọ̀ Ìgbà**	**Ìgbà Gbogbo**
49	Ǹjẹ́ àwọn nọ́ọ̀sì máa ń bá yín sọ̀rọ̀ nípa ìfètò sí ọmọ-bíbí ní kété lẹ́yìn ìbímọ pẹ̀lú èdè tí ẹ gbọ́ yékéyéké?				
50	Ǹjẹ́ àwọn àlàyé nípa ọ̀rọ̀ ìfètòsọ́mọ-bíbí máa ń yé yín?				
51	Ǹjẹ́ àwọn nọ́ọ̀sì a máa fún yín ní àǹfààní láti béèrè àwọn ohun tí kò bá yé yín?				
52	Ǹjẹ́ àwọn nọ́ọ̀sì a máa fún yín ní ààyè láti dá sí ìjíròrò ní àkókò tí wọ́n bá ń gbà yín ní ìyànjú?				
53	Ǹjẹ́ àwọn àlàyé tí àwọn nọ́ọ̀sì máa ń ṣe nípa ọ̀rọ̀ ìfètòsọ́mó-bíbi máa ń yé yín?				
54	Ǹjẹ́ àwọn nọ́ọ̀sì máa ń ya àwọn ìyálọ́mọ tí wọ́n kò tíì bàlágà sọ́tọ̀ sí àwọn tí wọ́n jẹ́ abilẹ́kọ tí wọ́n bá ń bá yín sọ̀rọ̀ nípa ìfètòsọ́mọ-bíbí?				
55	Ǹjẹ́ àwọn àlàyé tí àwọn nọ́ọ̀sì máa ń ṣe fún yín máa ń mú orí yín yá láti gbé àwọn ìgbésẹ̀ kọ̀ọ̀kan nípa ìlò ìfètòsọ́mọ-bíbí?				
56	Ǹjẹ́ àwọn nọ́ọ̀sì máa ń fi etí sílẹ̀ láti gbọ́ àwọn ẹ̀dùn ọkàn yín nígbà tí wọ́n bá ń ṣàlàyé nípa ìfètòsọ́mọ-bíbí?				
57	Ǹjẹ́ àwọn nọ́ọ̀sì máa ń dáhùn àwọn ìbéèrè tí ẹ bá bèèrè nígbà tí wọ́n bá ń ṣàlàyé nípa ìfètòsọ́mọ-bíbí lọ́wọ́?				
58	Ǹjẹ́ àwọn nọ́ọ̀sì máa ń fi ohùn tó fani mọ́ra bá yín sọ̀rọ̀ nígbà tí wọ́n bá ń ṣàlàyé fún yín nípa ìfètòsọ́mọ-bíbí?				

59	Ǹjé àwọn ọ̀nà tí àwọn nọ́ọ̀sì máa ń gbà láti gbà yín nímọ̀ràn nípa ìfètòsọ́mọ́-bíbí máa ń tẹ̀ yín lọ́rùn bí?				
60	Ǹjé ẹ tilẹ̀ le gba ẹlòmíràn níyànjú láti kópa nínú ètò yìí?				

ABALA H: Abala yi yio beere awon ibeere lori ihuwasi re lati lo tabi lati ma lo ifeto somo bibi.

Nomba	Àwọn Ìbéèrè	Idahun	koodu
61	Se o ti fi gba kan ri lo eyikeyi ninu ilana fetosomobibi lati dena tabi lati sun oyun siwaju?	1. Beeni 2. Beeko	1. 2.
62	Ti ibeere 61 ba je beeni, tani/kilo ti ipinu re lehin lati lo ifeto somobibi lehin ibimo?	1. Awon ore 2. Awon obi 3. Oko 4. Awon noosi 5. Awon ana mi 6. Lati dena oyun ati arun STIs 7. Eru oyun ti a ko fe 8. Ofe ni ifetosomobibi 9. Omiran so pato	1 2 3 4 5 6 7 8 9
	AWON IPENIJA TI A WOYE		
63	Ti idahun si ibeere 61 kini o di lowo lati lo ifetosomobibi lehin ibimo? (*Sa gbogbo eyi ti o ba baamu*)	1. Mo n beru sise lodi re 2. Mi o mo ibi ti mot i le se 3. Kos ilana ti o wa larowoto 4. Ihuwasi awon noosi 5. Ole yori si aisan tabi iku 6. Oko mi ko lowo si 7. O lodi si esin mi 8. Olodi si asa ibile mi 9. Eru abayori re n bami 10. Ihuwasi awon eleto ilera ko je ki n ni ife si	1 2 3 4 5 6 7 8 9 10
64	Ǹjé ẹ ń lo ọ̀nà ìfètòsọ́mọ́-bíbí kankan láti dènà tàbí fi ètò sí ọmọ-bíbí lọ́wọ́lọ́wọ́?	1. Beeni 2. Beeko	1. 2.
65	Ti idahun si ibeere 64 ba je beeni, tani/kini o ti ipinu re lehin ifetosomo bibi lehin ibimo?	1.Awon ore 2.Awon obi 3.Oko 4.Awon noosi 5.Awon ana mi 6.Lati dena oyun ati arun STIs 7.Eru oyun ti a ko fe 8.Ofe ni ifetosomobibi 9.Omiran so pato	1 2 3 4 5 6 7 8 9
	AWON IPENIJA TI A WOYE		
66	Ti idahun si ibeere 64 kini o di lowo lati lo ifetosomobibi lehin ibimo? (*Sa gbogbo eyi ti o ba baamu*)	1. Mo n beru sise lodi re 2. Mi o mo ibi ti mot i le se 3. Kos ilana ti o wa larowoto 4. Ihuwasi awon noosi 5. Ole yori si aisan tabi iku	1 2 3 4 5

		6. Oko mi ko lowo si	6
		7. O lodi si esin mi	7
		8. Olodi si asa ibile mi	8
		9. Eru abayori re n bami	9
		10. Ihuwasi awon eleto ilera ko je ki n ni ife si	10

Eseun fun akoko yin.

APPENDIX 3: Focus group discussion question guide

1. What communication skill do you employ to motivate the PP women when passing family planning information to them?
2. How do you carry out this communication on Postpartum family planning to them?
3. What communication issues do you encounter when communicating with these Postpartum women?
4. How do you think you can improve in your communication skill?
5. What are the training needs for nurses on communication skill?

2. INTERPERSONAL RELATIONSHIP

1. What do you do to promote interpersonal relationship with the postpartum women during your various contact with them?
2. What affect the interpersonal relationship between you and the PP women?
3. How do you think your interpersonal relationship with women can be improved?

3. SOCIAL SUPPORT.

1. How do you motivate the men for them to be able to support their wives on the use of postpartum family planning?
2. What do you do to motivate the community leaders and the religious leaders in order for them to promote the use of PPFP?
3. In what ways do you motivate the mothers and the mother's in-law of the postpartum women towards the promotion of the use of PPFP?
4. What are your experiences in motivating these social group of people?
5. What do you think can be done to improve in motivating this social group of people?
6. What are the training needs for nurses in promoting the use of PPFP?

APPENDIX 4: Letter of introduction to collect data from Epe Local Government Area of Lagos state

LAGOS STATE GOVERNMENT

LAGOS STATE
PRIMARY HEALTH CARE BOARD

LS/PHCB/1218/012

19th November 2018

The M.O.H
.....

LETTER OF INTRODUCTION

This is to introduce Omo-Ojo Betty, a PhD student of University of Western Cape, Department of Nursing, South Africa.

2. She has been granted approval to conduct her research titled "Development of a training program for Professional Nurses to promote the uptake of postpartum family planning in Epe Local Government Area, Lagos State.

3. She is to access the following Primary Healthcare [PHC] facilities: Epe, Afuye, Eredo, Ibowon, Odomola and Mojola PHCs.

4. Please accord her all the necessary support.

5. Thank you.

Odunaiya A.A
Assistant Chief State Counsel
For: Permanent Secretary

5, Taylor Drive, Off Edmund Crescent, Yaba. P.M.B. 21007, Ikeja, Lagos. Tel: 08183310819
E-mail: isphcboard2010@yahoo.com

APPENDIX 5: Ethics approval from the University of Western Cape, South Africa

UNIVERSITY of the WESTERN CAPE

OFFICE OF THE DIRECTOR: RESEARCH
RESEARCH AND INNOVATION DIVISION

Private Bag X17, Bellville 7535
South Africa
T: +27 21 959 4111/2948
F: +27 21 959 3170
E: research-ethics@uwc.ac.za
www.uwc.ac.za

31 July 2018

Ms B Omo-Ojo
School of Nursing
Faculty of Community and Health Sciences

Ethics Reference Number: BM18/4/15

Project Title: Development of a training program for professional nurses to promote the uptake of postpartum family planning in Epe Local Government area, Lagos State, Nigeria.

Approval Period: 26 July 2018 – 26 July 2019

I hereby certify that the Biomedical Science Research Ethics Committee of the University of the Western Cape approved the extension of the research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

PROVISIONAL REC NUMBER -130416-050

FROM HOPE TO ACTION THROUGH KNOWLEDGE

APPENDIX 6: Letter of introduction to collect data (focus group discussion) from Agbowa Primary Healthcare Centre in Ikosi-Ejirin LCDA

LAGOS STATE GOVERNMENT

LAGOS STATE
PRIMARY HEALTH CARE BOARD

LS/PHCB/DPRS/R/Vol.I/002

20th March 2019

The M.O.H
Ikosi-Ejirin LCDA

LETTER OF INTRODUCTION

This is to introduce Omo-Ojo Betty, a PhD student of the University of Western Cape, Department of Nursing, South Africa.

Shee has been given approval to conduct her study titled ''Development of a training program for Professional Nurses to promote the uptake of postpartum family planning in some PHCs in Lagos State''.

She is to access Agbowa Primary Healthcare Centre in Ikosi-Ejirin LCDA.

Please accord her all the necessary support.

Thank you.

Dr T.K Balogun
Director Planning Research & Statistics
For: Permanent Secretary

5, Taylor Drive, Off Edmund Crescent, Yaba. P.M.B. 21007, Ikeja Lagos. Tel: 08183310819
E-mail: lsphcboard2010@yahoo.com

APPENDIX 7: Certificate of forward and backward translation

DEPARTMENT OF LINGUISTICS, AFRICAN & ASIAN STUDIES

FACULTY OF ARTS
UNIVERSITY OF LAGOS
AKOKA, YABA, LAGOS, NIGERIA
Tel: 01 5454891-5 Ext: 1384
Email: afriasian@unilag.edu.ng

31st October, 2018

TO WHOM IT MAY CONCERN

The following forward translation (English to Yorùbá) and backward translation (Yorùbá to English) were done by a linguist who is also a bilingual professional of Yorùbá and English languages in the above named department.

Thank you.

Bisoye Eleshin, Ph.D.

APPENDIX 8: Request to administer questionnaire and to conduct focus group discussion

Mrs. Omo-ojo Betty Igbinoghodua
University of the Western Cape
Faculty of Community and Health Sciences
Department of Nursing
Private Bag x 17, Bell Ville
7535, South Africa
8th OCTOBER, 2018.

To: The Permanent Secretary
Primary Health Care Board
5, Taylor Drive,
Yaba.

OFFICE ... HEALTH SERVICE BOARD RECEIVED Sign ... Date 8/10/18 Time 2:39pm

Sir/Ma,

PERMISSION TO ADMINISTER QUESTIONNAIRE AND TO CONDUCT FOCUS GROUP DISCUSSION

I Mrs. Omo-ojo Betty Igbinoghodua a PhD student of the above institution hereby make a request to collect data from the postpartum women and the professional Nurses in six (6) selected primary health care facilities in Epe local Government Area in Lagos state. The primary health care are: Epe PHC, Afuye PHC, Eredo PHC, Ibowon PHC, Odomola PHC and Mojoda PHC.

The title of my study is Development of a training program for professional nurses to promote the uptake of postpartum family planning in Epe Local government of Lagos state, Nigeria. The aim of the study is to promote the uptake of postpartum family planning.

I will be very grateful for a favorable consideration of this request.

Attached are: Ethics clearance from University of the Western Cape, my chapters one to three, Letter of introduction and a sample of the questionnaire.

Thank you

Yours faithfully,

Omo-ojo Betty I.

APPENDIX 9: Request to conduct focus group discussion in Agbowa primary healthcare Centre

Mrs. Omo-Ojo Betty Igbinoghodua
University of the Western Cape
Faculty of Community and Health Sciences
Department of Nursing
Private Bag x 17, Bell Ville
7535, South Africa
12th March, 2019.

To: The Permanent Secretary
Primary Health Care Board
5, Taylor Drive,
Yaba.

OFFICE OF THE PERMANENT SECRETARY
LAGOS STATE PRIMARY HEALTHCARE BOARD
RECEIVED
Sign 12/3/2019
Date Time

Dear Sir,

REQUEST TO CONDUCT FOCUS GROUP DISCUSSION AT AGBOWA PRIMARY HEALTH CARE CENTER

Sequel to the approval given to me to conduct my research at Epe local government area of Lagos state, I wish to request for a replacement of one of the centers that I am to access which is Afuye Primary health care center which is under renovation. This is an unforeseen circumstance and I need to cover six (6) primary health care centers to enable me gather enough data.

I will be very grateful for your favorable consideration.

Attached is a photocopy of the letter of introduction.

Thank you.

Yours faithfully,

Omo-ojo Betty I.

APPENDIX 10: Information sheet for the postpartum women (English)

Project Title: Development of a training program for professional nurses to promote the use of postpartum family planning in Epe Local Government Area, Lagos State, Nigeria

What is this study about?

This is a research project being conducted by OMO-OJO BETTY IGBINOGHODUA, a postgraduate student of the University of the Western Cape. We are inviting you to participate in this research project because you are a postpartum woman and you use this facility, you can provide necessary information related to postpartum family planning. The purpose of this research project is to develop a training program for professional nurses in Epe Local Government area of Lagos state on how to improve the use of postpartum family planning among postpartum women.

What will I be asked to do if I agree to participate?

If you voluntarily agree to participate in this study, you will be asked to fill the informed consent form before commencement. You will also be requested to complete all the questions in the questionnaire which consist of 8 sections. And this may take 20-30 minutes. The study will take place at the facility. After the complete exercise by completing all the questions you are requested to seal the questions in an envelope and keep it ready for collection by the researcher or the research assistant

Would my participation in this study be kept confidential?

The researchers undertake to protect your identity, to ensure this, the information you fill in the questionnaire will remain confidential, the survey will be anonymous. By this I will take the following measures, no names will be written on the questionnaire and other collected data that may personally identify you. To ensure your confidentiality, data collected will be stored on a computer with a password that only the researcher will have access to. Likewise, the researcher report will be devoid of identifying information that can be linked to you. The data collected will be stored for at least five years after which they might be disposed of according to the protocol of UWC

What are the risks of this research?

Some risks may be anticipated in participating in this study since all human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. In the event of collecting Information you may be exposed to psychological discomfort due to the psycho-socio and cultural belief that is associated with the use of family planning. Therefore, the researcher will ensure that you are well informed before the commencement of data collection this is to allay your fears and anxiety and you are encouraged to inform me in the event of any discomfort

What are the benefits of this research?

This research is not designed to help you personally, but the results may help to learn more on how nurses can promote the use of PPFP through skill and knowledge acquired. It is hoped that in future the training program can inform other health care workers on how to deliver quality health services to the postpartum women towards the promotion of postpartum family planning.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at any time. If you decide not to participate in this research, or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by ***OMO-OJO BETTY IGBINOGHODUA.*** Registered as a Doctoral student in the school of Nursing at the University of the Western Cape.

If you have any questions about the research study itself, please contact
Omo-Ojo Betty Igbinoghodua GSM: +2348033151050; or E-mail: oduabetty@gmail.com

APPENDIX 11: Translated information sheet for the postpartum women (Yoruba)

ÌWÉ ÌFITÓNILÉTÍ FÚN ÀWỌN OBÌRIN TÍ O ṢẸ̀ṢẸ̀ BÍMỌ

Àkòrí Iṣẹ́-ìwádĭ: ÌDÁSÍLẸ̀ ÈTÒ ÌDÁNILẸKỌ FÚN ÀWỌN NỌỌSI LATI JẸKI ÈTÒ ÌFÈTÒSỌ́MỌBÍBĬ JẸ́ ÌTẸ̀WỘGBÀ LÁWÙJỌ NÍ AGBÈGBÈ ÌJOBA ÌBÍLẸ̀ ẸpẸ́ NÍ ÌPÍNLẸ̀ ÈKÓ, NÀÌJÉRÍÀ.

Kíni isé-ìwádi yí dá lé lórí?

Èyí jé isẹ́ ìwádi tí OMO-OJO BETTY IGBINOGHODUA ní yunifásítì Western Cape ṣe agbátẹrù rẹ̀. A npè ọ́ pé kí o kópa nínú isẹ́ ìwádi yi nítorípé o jẹ́ obìrin ti o ṣẹ̀ṣẹ̀ bímọ àti wípé o ṣe àmúlò ile isẹ igbebi yi, o le so ifitoniletiti o se koko nipa ifetosomobibi lehin ibimo. Ète ise iwadi yi nilati se agbekale eto idanileko fun awon ojulowo noosi ni agbegbe ijoba ibile Ẹ̀pẹ́ ni ipinle Eko lori bi igbelaruge se le wa fun ṣise ifetosomobibi lehin ibimo laarin awon obirinti o sese bimo.

Kíni ẹ máa sọ fún mi pé kín se tí mo bá gbà lati kópa?

Tí o bà gba lati kopa nínú isẹ́ ìwádi yi, A o so fun o lati fi owo si iwe mo gba lati je akopa ki o to lowo si. Bakan naa a o sọ fun ọ lati pari gbogbo ibeere ti o wa ninu iwe ibeere eyi ti o pin si ipa mejo. si le gba bi 20-30 iseju. Ise iwadi yi yi o waye ninu ile ise igbegbi. Lehin igba ti o ba setan nipa sise asepe didahun gbogbo awon ibeere a fe ki o fi iwe ibeere yi si nu apo iwe ki o lẹẹ pa ki o si pese rẹ silẹ fun dida pada fun oluwadi tabi igbakeji oluwadi

Ǹjẹ́ kíkópa mi nínú isẹ̀ ìwádi yi yi o jẹ́ ọ̀rọ̀ àsirí?

Àwọn oluwadi fi ọwọ́ sòyà lati da abo boo,lati se eleyi, iru eniti o je ati ifitonileti ti o o fi owo si ninu iwe ibeere yio je oro asiri,iwadi yi ati gbogbo ohun ti o ba le se afihan re ko ni ni oruko. A o fi amin ti o ni itumo si ori ìwe-idahun ati àwon ohun miran ti a fi ṣe iwadi èyí tí yoo jẹki oluwadi da iwe-ibeere olukuluku mọ.. Oluwadi nikan soso ni yoo ni ẹtọ si kọkọrọ idanimo rẹ. Lati ri wipe asiri re bo, awon ifitonileti ta kọ si inu iwe ni a o fi si ipamo ninu faili ti a o si fi sinu kabineeti ti a o si fi kọkọrọ ti pa. Awon akojopo ifitonileti ti a gba sinu ẹrọ ayara bi asa ni a o fi kokoro edidi si ti o je wipe oluwadi ati alabojuto oluwadi nikan ni yi o leto sii. Bakan naa, abajade oluwadi ko ni toka si ohunkohun ti o le se idamo re . Awon akojopo arigbamu ni a o fi si ipamo fun bi odun,marun o kereju lehin eyi a le da won sonu gege bi agbekale UWC.

Kíni àwọn ewu tí ó wà nínú ìwádĭ yi?

A le ni iwoye awon ewu kan ni bi a ti n kopa ninu ise iwadi yi ni won igba ti o je wipe gbogbo ibasepo awon eniyan ati oro siso nipa ara eni tabi elomiran gbe iwon awon ewu kan.A o se adinku iru ewu bẹẹ a o si gbe igbese logan lati ran o lowo ti o ba ni iriri inira, ni ona kona ni akoko ti o je akopa ninu iwadi yi. Ni igba ti a ngba ifitonileti lati odo awon obirin ti o ṣẹṣẹ bimo lori ifetosomobibi lehin ibimo o le ni imolara inira nipase imọ ọpọlọ to ni ṣe pẹlu olaju ati igbagbo adayeba ti o rọmọọ ṣiṣe ifetosomobibi.Nitorinaa oluwadi yio ri wipe oun ni imo ti o kun ju iwon ki o to bere ise iwadi eyi ni lati mu eru ati aniyan re kuro yi o si ni irusoke lati le so fun mi ti inira kinira ba wa bakan naa a o gba niyanju ni ona ti o tona a o si dari re si onimo okan fun itoju ati imoran ti o jinle.

Kíní àwọn ànfààní tí ó wà nínú isé ìwádi yí?

A o se iwadi yi lati ran ọ lọwọ ni iwonikan, sugbon abayori re le se iranlọwọ lati ni imo sii bi awon nọọsi ṣe le ṣe igbe laruge sise ifetosomobibi lehin ibimo nipase ipa ati ìmò ti won ni. Ireti wa pe ni ojo iwaju eto idanileko le la awon osise eleto ilera loye lori bi won se le maa se eto ilera ti o kun ju iwon fun awon ti won ntoju

Sé ó jé dandan kí n kópa nínú isé ìwádi yi àti pé sé mo lè jáwó níbẹ̀ nígbà kúgbà?

Jije akopa re ninu ise iwadi yi je iyonda ara re. Ole yan lati ma kopa ni igbakigba. TI o ba pinu lati ma kopa ninu ise iwadi yi, tabi ti o ba yowo kuro ni igbakigba, a koni da o lebi tabi ki o so anfaani ti o tọ si ọ nu.

Tí mo bá ní àwọn ìbéèrè nkó?

Ise iwadi yi ni a se agbekalẹ re lati owo ***OMO-OJO BETTY IGBINOGHODUA.Eni ti a da mọ gẹgẹ bi omo ile ẹko giga ikeko gboye dokita ,ẹka nọọsi ti ile iwe yunifasiti Western Cape.***

Tí o ba ni ibeere Kankan nipa ise iwadi yi fun ra re, jowo kan si:

Omo-Ojo Betty Igbinoghodua GSM: +2348033151050; E-mail: oduabetty@gmail.com

APPENDIX 12: Information sheet for the nurses (All discussions with nurses were in English only)

Project Title: Development of a training programme for professional nurses to promote the use of postpartum family planning in Epe Local Government Area, Lagos State, Nigeria.

What is this study about?

This is a research project being conducted by OMO-OJO BETTY IGBINOGHODUA, a postgraduate student of University of the Western Cape. We are inviting you to participate in this research project because you provide postpartum family planning services to the postpartum women in this facility and you can provide necessary information related to postpartum family planning. The purpose of this research project is to develop a training program for professional nurses in Epe Local Government area of Lagos state on how to improve the use of postpartum family planning among the postpartum women.

What will I be asked to do if I agree to participate?

If you voluntarily agree to participate in this study, you will be asked to fill the informed consent form before commencement. You will also be requested to participate in the focus group discussion. This section will involve the motivating factors you use in promoting the use of postpartum family planning. The time required will be 45- 60 minutes.

Would my participation in this study be kept confidential?

The researchers undertake to protect your identity, to ensure this, the survey will be anonymous. By this I will take the following measures, no names will be written on any data that may personally identify you. To ensure your confidentiality, tape record that will be taken during the focus group discussion will be strictly kept safe under lock and key. Data collected will be stored in a computer with a password that only the researcher will have access to and no other unauthorized access. Likewise, the researcher report will be devoid of identifying information that can be linked to you. The data collected will be stored for at least five years after which they might be disposed of according to the protocol of UWC

What are the risks of this research?

Some risks may be anticipated in participating in this study since all human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. In the process of collecting Information regarding your services relating to your facility such might exposed you to some emotional discomfort by disclosing information about your organisation. In this regards, the researcher will ensure that you are well informed before the commencement of the discussions and strict confidentiality will be maintained. Also in the event of any discomfort, you may be referred to the psychologist for further counselling.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help to learn more about how nurses can promote the use of PPFP through skill and knowledge acquired. It is hoped that in future the training program developed will be used to equip the professional nurses on the necessary skills needed to deliver quality health services to the postpartum women in order to improve the use of PPFP

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at any time. If you decide not to participate in this research, or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by ***OMO-OJO BETTY IGBINOGHODUA.*** Registered as a Doctoral student in the school of Nursing at the University of the Western Cape.

If you have any questions about the research study itself, please contact
Omo-Ojo Betty Igbinoghodua GSM: +2348033151050 or E-mail: oduabetty@gmail.com

APPENDIX 13: Consent form: for the postpartum woman

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-9592749 – Fax: 27 21-959 1385

E-mail: 3699368@myuwc.ac.za

CONSENT FORM: FOR THE POSTPARTUM WOMAN

Title of Research Project: Development of a training program for professional nurses to promote the uptake of postpartum family planning in Epe Local Government Area, Lagos State, Nigeria**.**

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate in my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name……..

Participant's signature…….

Date……

APPENDIX 14: Translated consent form: for the postpartum woman

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-9592749 – Fax: 27 21-959 1385

E-mail: 3699368@myuwc.ac.za

FỌỌMU ÌFỌWỌSI FUN ÀWỌN OBÌRIN TI O ṢẸ̀ṢẸ̀ BÍMỌ

Àkòrí Iṣẹ́-ìwádǐ: ÌDÁSÍLẸ̀ ÈTÒ ÌDÁNILẸKỌ FÚN ÀWỌN NỌỌSI LATI JẸKIN ÈTÒ ÌFÈTÒSỌ́MỌBÍBǏ JẸ́ ÌTẸ̀WỌ̀GBÀ LÁWÙJỌNÍ AGBÈGBÈ ÌJOBA ÌBÍLẸ̀ EPE NÍ ÌPÍNLẸ̀ ÈKÓ, NÀÌJÉRÍÀ.

Wọ́n ti ṣe alaye ise iwadi yi fun mi ni ede ti o ye mi. Wọn ti dahun ibeere mi lori ise iwadi yi. Mo mo ohun ti yi o je fun mi lati je olukopa mo si gba lati kopa ninu ife okan mi. Mo ni òye wipe enikeni koni se idanimo mi. Mo ni òye wipe mo le yọwo kuro ninu ise iwadi yi ni igbakigba lai so idi ati laisi iberu ohun ti o lodi tabi siso anfaani nu.

Orukoolukopa……..

Ibowoluolukopa…….

Ojo……

APPENDIX 15: Focus group confidentiality binding form for the professional nurses

UNIVERSITY OF THE WESTERN CAPE
Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-9592749 – Fax: 27 21-959 1385
E-mail: 3699368@myuwc.ac.za

FOCUS GROUP CONFIDENTIALITY BINDING FORM FOR THE PROFESSIONAL NURSES

Title of Research Project: Development of a training program for professional nurses to promote the use of postpartum family planning in Epe Local Government Area, Lagos State, Nigeria.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate in my own choice and free will. I understand that my identity will not be disclosed to anyone by the researchers. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits. I understand that confidentiality is dependent on participants' in the Focus Group maintaining confidentiality.

I hereby agree to uphold the confidentiality of the discussions in the focus group by not disclosing the identity of other participants

APPENDIX 16: Editorial Certificate

Idea Corporation t/a
AQUARIAN PUBLICATIONS

08 Febuary 2022

To whom it may concern

Dear Sir/Madam

RE: Editorial certificate

This letter serves to prove that the thesis listed below was language edited for proper English, grammar, punctuation, spelling, as well as overall layout and style by myself, publisher/proprietor of Aquarian Publications, a native English speaking editor.

Thesis title

DEVELOPMENT OF A TRAINING PROGRAMME FOR PROFESSIONAL NURSES TO PROMOTE THE USE OF POSTPARTUM FAMILY PLANNING IN EPE LOCAL GOVERNMENT AREA, LAGOS STATE, NIGERIA

Author

Omo-Ojo Betty Igbinoghodua

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