



Guidelines for midwives in offering holistic-focused antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town

by

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## **DECLARATION**

I, Anthea Carleen Jacobs, declare that the contents of this study, "Guidelines for midwives offering holistic antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town," represent my own unaided work and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.



**Signed**

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**Date**

## **ABSTRACT**

Pregnant women should feel safe, comfortable, and positive during the childbirth experience. Physical exercise during pregnancy can assist a woman to stay in shape and prepare herself for labour. Prenatal exercises (PNEs) are thus widely endorsed for pregnant women, especially in the private healthcare sector.

The holistic wellbeing of a woman – embracing the physical, emotional, mental, social and spiritual dimensions – should not be underestimated in considerations of maternal health can be enhanced by exercise. This study is concerned with pregnant women's experience of PNEs in a private prenatal facility in Durbanville, Cape Town, with a view to developing guidelines for midwives offering holistic antenatal classes.

A descriptive phenomenological research design was followed, rooted in the philosophy of appreciative inquiry. This involved conducting individual interviews after informed consent was obtained from participants. Heterogenic purposive sampling was conducted with participants who were at various stages of their pregnancy and had attended the exercises more than twice at the antenatal clinic. Data saturation determined the size of the sample of participants, with seven interviews being conducted. An interview guide with semi-structured questions was used and interviews – conducted in a private room – took no longer than 30 to 40 minutes. Fieldnotes were made with a digital recorder. Data analysis ensued, after the method of Colazzi (1978). Principles of trustworthiness and ethics were integrated throughout the research process.

The findings indicated that pregnant women were satisfied with the antenatal classes and experienced them as beneficial for them and their unborn children. A trusting relationship was formed with the midwife who led the holistic exercises. Participants felt a sense of emotional security as their feelings as pregnant women were recognised and supported.

Women found social joy in being together with others in a similar condition, with whom they could share their experiences and emotions. They developed a sense of belonging that enhanced their welfare.

It was concluded that a safe and informative environment should be created by a competent midwife, in which pregnant women could be themselves and develop a bond with others in an enjoyable journey towards being holistically prepared for childbirth.

**Key words:** prenatal exercises, holistic wellbeing, pregnant women, experiences, private clinic

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## **LIST OF ABBREVIATIONS**

AI: Appreciative inquiry

ANC: Antenatal class

PNEs: Prenatal exercises

“An antenatal class is a promising event that brings mothers together, enabling them to connect openly and honestly with one another to achieve change together”

Anthea Jacobs, 2023

## CHAPTER 1

### ORIENTATION TO THE STUDY

#### 1.1 INTRODUCTION AND BACKGROUND

A pregnant woman must be fully prepared for childbirth (Tavananezhad et al., 2022:2). Childbirth is a complex and often unpredictable event, but proper care, support, and planning during pregnancy can conduce to a safe and rewarding experience and result in greater satisfaction for women giving birth (Bell et al., 2022:2). The WHO (2023) strongly advocates making childbirth a positive experience for the mother. This is more likely if she pursues a healthy lifestyle during pregnancy, engaging in the right sort of physical activity (Ferrari & Joisten, 2021:1698). It is widely believed nowadays that a fulfilling childbirth experience can be enhanced for most women by the intervention of exercise (Krassovskaia et al., 2022:108). Pregnancy is a time during which exercises are needed, as they help to motivate women to maintain a healthy lifestyle and develop a positive self-image (Ribeiro et al., 2022:4).

Empowering pregnant women by providing them with educational knowledge and skills can lead to favourable outcomes, especially among women who exercise with professional healthcare providers (Szumilewicz et al., 2022:178). Maternal health literacy involves the acquisition of cognitive and social skills that enable women to better access, understand, and apply information to improve and maintain their health status and be fully prepared for childbirth and parenting (Tavananezhad et al., 2022:7).

The exercises that women can perform during pregnancy include cycling, walking, yoga, water exercises and strengthening the pelvic floor muscles to reduce urinary incontinence (De Castro et al., 2022:3). An individual plan can be designed with relevant activities to meet the health and fitness goals of the pregnant woman. In the case of high-risk pregnancies, a medical practitioner can prescribe appropriate exercise. Any such plan should address the pregnancy-specific conditions, based on previous health and exercise assessments, and consider the body adaptations and the pregnancy-related symptoms of each stage of pregnancy in order to provide safe and effective exercise (Santos-Rocha, 2022:2).

Exercises vary from person to person and can be beneficial to both the physical and psychological well-being of an expectant woman. Asmanidar and Emilda (2024:158) claim that the holistic wellbeing of a person includes physical health, emotional nurture, mental stimulation, social health, and spiritual wellness.

Physical exercise is defined as a planned, structured physical activity that is performed to improve the holistic wellbeing of an individual (Mohammed-Durosinlorun et al., 2022:114). Prenatal exercises (PNEs) are physical activities performed by pregnant women aimed at improving their overall health status before, during and after delivery (Mohammed-Durosinlorun et al., 2022:115). PNEs reduce unhealthy weight gain during pregnancy, alleviate back pain and promote the development of a positive self-image (Beyene et al., 2022:1).

It has been proven that physical activity in pregnancy is beneficial for the mother and her unborn baby as it lowers the risk of new-born complications such as neonatal adiposity (Szablewska et al., 2023:2) and maternal conditions such as postpartum depression (Brown et al., 2022:513). During pregnancy, there is an increase in the blood volume of the mother to accommodate the growing fetus (Mohammed-Durosinlorun et al., 2022:116). Adhering to light physical activity has proven to be both beneficial to the mother and unborn child us with regard to reduced risk of new-born complications and postpartum depression (Brown et al., 2022:513). *Physical* activity during pregnancy therefore reduces the risk of fetal macrosomia as well as large after gestational infants being born (Brown et al., 2022:515). Pregnancy is a precious period for a woman in her life cycle, and it is during this time that she experiences *emotions*, such as an increase in fear, stress and anxiety, not only for herself and her own health, but also for that of her unborn baby (Diotaiuti et al., 2022:3). Women feel much more in control *mentally* if they can control their behaviour and emotions during the process of labour. Such control should lead to the development of self-esteem that can promote self-growth as well as strengthen physical health for the birthing process (Van Poppel et al., 2022:2).

Antenatal care (also referred to as prenatal care) is the care provided to women during pregnancy aimed at achieving better health outcomes for both the mother and her

unborn baby. Antenatal care is essential to promote maternal health as it reduces maternal and infant morbidity and mortality (Van Pelt et al., 2023:2).

Being in good health is one of the main benefits for a woman adhering to a regular physical exercise programme during pregnancy. Despite all the benefits of antenatal classes (ANCs), there are many challenges in making them available to pregnant women. Offering exercises during antenatal care are often neglected because of staff shortages, high patient volumes and lack of knowledge (Ribeiro et al., 2022:6).

## **1.2 LITERATURE REVIEW**

An exercise regime can be seen as an empowerment programme with various dimensions to enhance the general wellness and ability of pregnant women to overcome health-related problems (Aliabadi et al., 2022:2). Prenatal exercises should be viewed from a holistic perspective (Zhu et al., 2022:3). Holistic wellbeing promotes one's humanity as well as one's health, creating a feeling of wholeness and inner freedom (Bergbom et al., 2022:783). A holistic perspective on pregnant women can be characterised in various ways. Andreu-Pejó et al. (2023:902) point to the biological, psychological, and social life changes that a woman undergoes during pregnancy, while Zhu et al. (2022:6) insist on the involvement of the physical, emotional, spiritual, social, and intellectual (mental) dimensions of a person. For the purposes of this study, the researcher identified four elements integral in a holistic approach to a woman's pregnancy, for purposes of this study; physical, social, psychological and spiritual.

Physical activity interventions (**physiological dimension**) have been shown to be successful in increasing an individual's quality of life across all races and age groups, and are highly recommended for most pregnant women (Krassovskaia et al., 2022:109). Physical activity throughout the pregnancy has been proven to be safe and beneficial to a mother and her unborn child (Yang et al., 2022:55). In healthy pregnancies exercises can protect the mother-to-be against the development of pregnancy-related complications (Santos-Rocha et al., 2022:2).

Women experience tremendous body changes during pregnancy (Meireles et al., 2022:2). The more expectant women engage in physical activity, the greater their placental functional capacity and blood flow. This contributes to oxygen and nutrient

uptake, stimulating fetoplacental growth (De Andrade Leão et al., 2022:204). On the other hand, a lack of exercise is associated with some of the main complications that women suffer from after pregnancy: pre-eclampsia, gestational diabetes and urinary tract infections (Beyene et al., 2022:3). Moreover, evidence suggests that exercise during pregnancy may have benefits for the unborn baby later on, in early child development (de Andrade Leão et al., 2022:205). A systematic review conducted by De Andrade Leão et al. (2022:205, 206) shows that exercise during pregnancy has no association with neonatal complications or other adverse childhood outcomes and can in later years lead to improvements in children's cognition, intelligence and language development.

Pre-eclampsia, gestational diabetes, urinary tract infections, anxiety and postnatal depression are major complications' women suffer from, after pregnancy due to a lack of exercise (Beyene et al., 2022:5). Exercises have shown to be protective against disorders such as preeclampsia and should be promoted due to several beneficial physiological adaptations (Krassovskaia et al., 2022:110).

Pregnancy is a special time in every woman's life. During this period, she experiences joyful emotions (**psychological dimension**) owing to the expectation of offspring. A woman's activities during pregnancy and her quality of life are influenced by various factors, including her emotional state, health situation, socioeconomic status, the involvement of her partner and support from family and friends (Bień et al., 2023:2).

Low self-esteem and increased anxiety are associated with a lack of empowerment among pregnant women (Aliabadi et al., 2022:5). Improving the health status of pregnant women and empowering them with knowledge and skills are crucial components of maternal healthcare. Women empowered intellectually during pregnancy can gain self-esteem, emotional wellbeing and a sense of control when it comes to decision-making about their own pregnancy and health.

By introducing expectant women to a prenatal exercise programme, the midwife or healthcare provider can instil a cheerful outlook and help combat psychological problems such as depression and anxiety (Bień et al., 2023:3). Postnatal depression, a severe complication that some women suffer from after pregnancy, has been

attributed to a lack of exercise (Beyene et al., 2022:8). A recent meta-analysis of randomised control trails (RCTs) shows the beneficial effects of physical exercise during pregnancy and the outcomes thereof, including a reduction in the odds of developing depressive symptoms and a depressive disorder (Cai et al., 2022:393).

Regarding the **social dimension**, pregnant women are particularly vulnerable to the onset or return of a mental illness because of elevated stress levels, lack of social support from their partner, family or friends, and reduced resiliency (Cai et al., 2022:395). Pregnant women are encouraged to be socially active by inviting friends to be actively engaged with them and/or joining group exercise sessions for increased social interaction (De Castro et al., 2022:2).

The human mind is very influential as it is arguably the power of knowledge that determines one's quality of life. From a holistic perspective, the mind is interrelated with the heart and soul (**spiritual dimension**) of a human being (Arroisi & Rahmadi, 2022:2). A negative body image and low self-esteem leading to depressive symptoms during this period can negatively affect the physiological and psychological health of both mother and unborn child (Meireles et al., 2022:5). Inculcating a positive mind around the body image during pregnancy should be an important part of prenatal healthcare. There is a need for the skilful education of women on how to understand, be mindful of and cope with the physiological changes that occur during pregnancy.

The benefits of exercise are evident in both the physical and psychological dimensions of the pregnant woman. A high degree of anxiety (emotions) can be associated with physical changes in the gestational period, quality of sleep, and performance of daily activities. These can all result in confusion, feelings of uncertainty and an inability to control certain emotions, further elevating the degree of anxiety (Diotaiuti et al., 2022:4). Prenatal exercises (PNEs) can alleviate fears associated with pregnancy and childbirth as they comfort the pregnant woman and her family by imparting scientific knowledge and insight into the changes taking place in her body. Findings have shown that PNEs enable a greater degree of birth satisfaction, strengthening the self-efficacy linked to childbirth and the mother's sense of control during birth (Diotaiuti et al., 2022:7).



In sum, pregnancy is a time in a woman's life when her need (and, often, desire) to pursue a healthy lifestyle increases, including a willingness to undertake physical activities and improve physical fitness. There is also a growing body of evidence demonstrating how physical activity can positively influence psychological wellbeing during pregnancy (Atkinson & Teychenne, 2022:22).

### **1.3 PROBLEM STATEMENT**

The WHO (2023) points out that there is a lack of understanding of what measures are required to enable pregnant women to feel safe, comfortable, and positive during the childbirth experience. One course of action to be taken before childbirth is *physical exercise*, to help a woman stay in shape and prepare her for labour (Rodrigues-Denize et al., 2024:2). Maternal health information enhances the *psychological and social skills* of pregnant women in accessing, understanding and evaluating information to maintain and improve their mental and emotional preparation for labour (Tavananezhad et al., 2022:9). Inadequate information from healthcare professionals about PNEs (psychological dimension) can hinder the engagement of an expectant mother in a prenatal exercise programme. Most public maternity services offer exercise sessions with follow-up antenatal visits that are mostly not weekly, while private maternity practices focus on stand-alone scheduled exercises in antenatal classes to deliver a more regular and holistic experience for the pregnant woman.

The researcher realised that the holistic nature of the pregnant woman who engages in exercises, should not be underestimated in maternal holistic well-being. It was unclear what the experiences of pregnant women were regarding their engagement in PNEs in private antenatal facilities before childbirth. The research questions posed were therefore:

- What are the best lived experiences of pregnant women undertaking prenatal exercises in a private nursing practice?
- How can midwives best support the holistic wellbeing of pregnant women undertaking prenatal exercises in a private nursing practice?

## **1.4 PURPOSE OF THE STUDY**

In this study, the researcher developed guidelines for midwives in offering holistic-focused antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town.

## **1.5 OBJECTIVES**

The objectives of this study were to:

- Explore the best lived experiences of pregnant women in undertaking prenatal exercises in a private nursing practice.
- Develop guidelines for midwives in offering holistic-focused antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town.

## **1.6 RESEARCH PARADIGM**

### **1.6.1 Research philosophy**

Individual researchers are free to choose which methods, techniques, and procedures of research will meet the purposes of the study (Creswell, 2018:6). Appreciative inquiry (AI) is the philosophy of investigation on which this study is based. An appreciative philosophy of research stems from AI, the invention of David Cooper in the early 1990s that harnesses the science of positive emotions and positive psychology for the greater good. Appreciative philosophy is rooted in the postmodern, constructivist approach to knowledge, in terms of which reality itself is a social construction generated by shared interpretations. AI is a

- reflection on positive experiences and a philosophical search for the meaning of reality through these experiences (e.g., of pregnant women who have undertaken prenatal exercises [PNEs] before childbirth).
- form of pragmatic discourse that replaces a focus on the problem with a focus on the successful elements of previous experience (e.g., of pregnant women undertaking PNEs).
- philosophy that seeks to identify the positive qualities of existence and their strengths (in this instance, regarding PNEs for pregnant women) (Reed, 2011).

## 1.6.2 Theoretical assumptions

The point of departure of this study was a set of principles based on the holistic nature of the support required by pregnant women through PNEs undertaken during antenatal classes. These principles or assumptions were:

- Prenatal exercises address the holistic nature, the whole person (pregnant women), regarding their physical, emotional, social, and spiritual well-being.
- Each pregnant woman has a unique experience of prenatal exercises offered in an antenatal class and their path to childbirth, which is influenced by their age, gender, culture, heritage, language, faith, relationship status, life experience and beliefs.
- A holistic approach focusses on a person's wellness and not just their illness or condition (Department of Health in the New South-Wales Government, 2020).

### 1.6.2.1 Definitions

#### **Pregnant woman**

Theoretical definition: The duration for a normal healthy pregnancy of a woman is forty (40) weeks. During this period, the expectant woman's body goes through major physiological physically, spiritual, and mentally changes (Yunitasari et al., 2023:2).

Conceptual definition: An expectant mother attending an antenatal class in a private clinic up to 36 weeks gestation, enhancing aspects of her physical, social, psychological and spiritual life towards holistic wellbeing during pregnancy. The word 'woman' referred to the 'pregnant women' in this report.

#### **Prenatal exercises**

Theoretical definition: 'Prenatal' is a synonym for 'antenatal' and the terms are used interchangeably in this study. "As adjectives the similarity can be seen in the meanings of antenatal and prenatal in that antenatal is occurring or existing before birth while prenatal is *being or happening* before birth". Another useful term is 'perinatal', denoting the entire time around pregnancy and birth, that is, the period from falling pregnant up to a year after giving birth.

Conceptual definition: Prenatal exercises (PNEs) are physical activities supervised by a professional nurse and midwife registered with the South African Nursing Council

that serve to enhance the physical, social, psychological and spiritual dimensions of the wellbeing of a pregnant woman before birth.

### **Antenatal classes**

Theoretical definition: Antenatal classes are a core element in maternity care and aim to help prepare pregnant women and their partners for birth through PNEs. The classes help build confidence and develop positive self-esteem in pregnant women, thus empowering them for labour, the birthing process and caring for the new-born (Olajimbiti, 2023:755). They are also known as parenting and birth classes (Boess, 2023:2).

Conceptual definition: Antenatal classes offer PNEs on a weekly basis at a private practice for women between 12 and 36 weeks pregnant.

To avoid possible confusion arising from the interchangeable terms 'prenatal' and 'antenatal', this study refers to 'prenatal exercises' and 'antenatal classes'.

### **Private practice**

Theoretical definition: In the healthcare environment, a private practice can be defined as a healthcare provider working independently from and not funded by the government (Boess, 2023:3).

Conceptual definition: A private healthcare setting, registered with the Board of Healthcare Funders for a Practice Code Number, at which a nurse or midwife registered at the South African Nursing Council offers prenatal exercises during antenatal classes.

### **1.6.3 Methodological paradigm**

The study was conducted within a qualitative approach to understanding the experiences of individuals undergoing a social or human phenomenon; in this instance, pregnant women undertaking PNEs.

It was assumed that the research would:

- seek to understand the unique aspects of the phenomenon rather than generalisable aspects.
- focus on a specific context, as the pregnant women and their experiences could not be separated from their holistic nature and context in which the antenatal classes were offered (Ribeiro et al., 2021:1).
- follow inductive reasoning in exploring human experiences (specifically, those of pregnant women attending antenatal classes) to gain a deeper understanding of those experiences.

The researcher was interested in making sense of the lived experiences of pregnant women during the process of attending the antenatal classes, rather than the outcome of performing the PNEs.

## **1.7 RESEARCH APPROACH AND DESIGN**

The research design refers to the overall plan that answers the research question and suggests how challenges that might arise during the study will be managed (Polit & Beck, 2021:75). According to Maree (2019:80), a research design is a strategy that moves from the underlying research assumptions of the study to specify the selection of participants, the data gathering methods used and the data analysis done. A qualitative research approach provided the means for the researcher to ascertain and understand the experiences and perspectives (Voorheis et al., 2023:2) of pregnant women undertaking PNEs in a private nursing practice. The researcher chose a descriptive, phenomenological design, to *explore and describe* the best lived experiences of pregnant women *in the context* of undertaking PNEs during pregnancy. Participants were interviewed using a semi-structured mode of inquiry.

- The exploratory design provided for studying a research problem that had not been clearly defined (Swedberg, 2020:17) and for exploring the research question. This study posed the question: “What are the best lived experiences of pregnant women undertaking prenatal exercises in antenatal classes in a private nursing practice?”
- The descriptive design was to describe the phenomenon as experienced by the participants in the natural context of the antenatal classes, without influencing the situation in any way (Siedlecki, 2020:8).

The researcher interacted with participants at a time when they were exercising within the antenatal class context (Maree, 2019:85).

A descriptive phenomenological design provided a framework for gaining insight into the lived experience of pregnant women engaged in PNEs. It enabled the researcher to explore in depth the richness and complexity inherent in the lives of participants (Gray & Grove, 2021:29) while bracketing – identifying and temporarily setting aside – her own assumptions (Squires, 2023:425). On the other hand, within an interpretative phenomenological design, the researcher would have gained a deeper insight into the experience of participants and understood how they made meaning out of their experiences (Coleman et al., 2022:672).

## **1.8 SETTING AND POPULATION**

This study was conducted in the setting of a private maternity and baby clinic situated in Durbanville, managed by a registered nurse and midwife who is also certified as an international childbirth educator.

A target population is the entire population in which the researcher is interested, comprising individuals with similar characteristics and experiences (Polit & Beck, 2021:307). The accessible population consists of those participants to whom the researcher has access, in this case, the pregnant women attending prenatal exercises at the chosen private nursing practice in Cape Town. Between 10 and 15 women attended weekly on a rotational basis, meaning that the accessible population was more than 30.

## **1.9 SAMPLING AND SAMPLE**

Sampling involves selecting a group of people, events or behaviours on which to conduct a study (Gray & Grove, 2021:44). It is a process whereby the researcher selects a sample of the accessible population, to obtain information regarding a phenomenon (prenatal exercises) in a way that represents the accessible population.

Non-probability, purposive sampling was utilised, with the researcher using her subjective judgement to assess and select participants who fulfilled the criteria of being

well-informed and prepared to talk about the phenomenon under study (Polit & Beck, 2021:312; Stratton, 2023:147). Purposive sampling also referred to as judgemental sampling was used, that refers to when the researcher specifically states the characteristics of the participants needed for this specific study and try to locate those participants with similar qualities (Polit & Beck, 2021:312). The researcher conducted heterogeneous purposive sampling that refers to sampling criteria set to seeks participants with a wide range of perspectives (Gray & Grove, 2021:331).

The sample for a rigorous qualitative study need not be as large as the sample for a rigorous quantitative study. For this study, a sample was drawn from the accessible population of pregnant women undertaking PNEs at the designated during pregnancy in the private sector. The researcher conducted seven interviews with participants at which point no new insightful data was obtained, to achieve the study purpose (Gray & Grove, 2021:329).

### **1.9.1 Eligibility criteria**

The researcher established criteria to determine whether a person qualified to be included in the sample (Polit & Beck, 2021:306).

#### *Inclusion criteria*

A woman

- between 12 and 36 weeks pregnant
- who is a primigravida patient attending antenatal classes offering exercises
- who has attended PNEs at a clinic for at least 2 visits during pregnancy
- who has attended a clinic in a private nursing practice in Cape-Town.

#### *Exclusion criteria*

A pregnant woman who has experienced any form of problems or complications during her pregnancy.

## **1.10 METHOD**

### **1.10.1 Interviews**

Interviews are focused conversations between the participant and the researcher that produce data in the form of words (Gray & Grove, 2021:403). Semi-structured individual interviews enabled the researcher to gain more detailed information from the participants about the phenomenon, while keeping the purpose of the study firmly in mind (Henriksen et al., 2022:10; Ruslin et al., 2022:23). Phenomenological interviews were used in this study as it drew the attention of the researcher to focus on the phenomenon (Henriksen, Englander & Nordgaard, 2022:10), namely the best lived experiences of women undertaking prenatal exercises in a private nursing practice. The researcher made use of an interview guide (Annexure C), which ensured that all the questions formulated were addressed in the interview.

### **1.10.2 Preparation of the field**

The private midwife allowed the researcher to visit the practice and explain the study using an information sheet (Annexure A). Pregnant women who met the criteria and who indicated to the midwife their willingness to partake in the study to the midwife at the clinic, were contacted to make appointments. Before participating they were required to sign an informed consent form (Annexure B).

### **1.10.3 Pilot interview**

According to Polit and Beck (2021:563), a pilot study is sometimes referred to as a preliminary study. It is usually conducted before the main study on only a small number of participants, aiming to investigate the feasibility of the study and to identify possible shortcomings in its methodology. Conducting a pilot interview had the advantage of identifying flaws in the research questions for the purpose of the study to be met (Brink, 2018:90). In the event, after the pilot interview no changes were made to the questions on the interview schedule.

### **1.10.4 Data gathering**

The researcher was the prime instrument for data collection using phenomenological interviews. She interviewed the participants, posing semi-structured questions to



encourage them to share their experiences rather than being guided by the opinions and views of the researcher (Polit & Beck, 2021:338). The researcher conducted individual semi-structured interviews, and posed two questions to participants, to explore their lived experiences while undertaking PNEs at a private practice. To respect the individual participant's privacy and confidentiality, the interviews were conducted in a room free from noise or disturbance and at a place and time that best suited the participant. Probing was done as neutrally as possible to prevent biased responses from the participants (Gray & Grove, 2021:262). As Maree (2019:109) cautions, the researcher needed to stay attentive to the responses of each participant, and if these strayed from the given topic, she needed to guide the participant back to the focus of the interview (Maree, 2019:109). As the interviews were digitally recorded, the researcher had more time to focus on the participants and the interaction between them. The interviews took between 30 and 40 minutes, and after each interview, the researcher made detailed reflective notes (Gray & Grove, 2021:262).

### **1.11 DATA ANALYSIS**

Data analysis enabled the researcher to answer the research questions by working through the data in an orderly and coherent manner (Polit & Beck, 2021:75). Colaizzi's (1978) method of data analysis was used in this study (described in Chapter 2), a robust and accurate process that ensured the trustworthiness of the results. The process of data analysis involved organising the data, conducting a preliminary read-through of the database, coding and organising themes representing the data, and forming an interpretation of them (Muzari et al., 2022:15).

### **1.12 DEVELOPMENT OF THE GUIDELINES**

The steps in guideline development recommended by the WHO (2023) and as adapted for this study, are described in Chapter 2.

### **1.13 TRUSTWORTHINESS**

To be relevant, all research conducted by the researcher should be trustworthy (Adler, 2022:598). Polit and Beck (2021:492) suggest four criteria for the establishment of trustworthiness in a qualitative research study: dependability, credibility, confirmability

and transferability (see also Enworo, 2023:372). Trustworthiness is described in Chapter 2.

#### **1.14 ETHICS**

Each aspect of a planned research study needs to be scrutinised to determine whether the rights of participants are fully protected (Polit & Beck, 2021:79). The Health and Wellness Science Research Ethics Committee at the Cape Peninsula University of Technology (CPUT) evaluated the proposal for compliance with standards of scientific scrutiny within the discipline (Polit & Beck, 2021:75). The researcher obtained ethical clearance (CPUT/HWS-REC 2023/H5) from the Committee (Annexure E). The researcher strove at all times to promote the integrity of the research and guard against any misconduct that might reflect on the institution (Creswell, 2018:92).

Permission was sought from the manager of a private practice, Nulife Maternity and Baby, to arrange for and grant access to the participants to be interviewed (Annexure D). Such permission was granted (Annexure F).

The principles of justice, beneficence, informed written consent, freedom to withdraw, confidentiality, anonymity and non-maleficence were implemented throughout the research study.

#### **1.15 SIGNIFICANCE OF THE STUDY**

Interventions in the form of prenatal exercises have permanent beneficial effects later in the mother's life. Maternal wellbeing and quality of life are improved when women engage in physical activity during pregnancy (González-Cazorla et al., 2024:2). If an expectant woman is equipped with knowledge and skills, she will make informed decisions about her health status and feel good about herself (Ribeiro et al., 2022:10). The results obtained from the study will provide midwives with more insight into the experience of women undertaking PNEs during pregnancy. Guidelines for midwives in offering holistic antenatal classes to pregnant women undertaking PNEs in private practice were formulated by the researcher.

## **1.16 CONCLUSION**

This chapter has introduced and provided some background to the phenomenon to be investigated. A brief account of the research design within the AI (appreciative inquiry) philosophy was provided. This design is appropriate to the enquiry into the best lived experiences of pregnant women undertaking prenatal exercises in antenatal classes at a private clinic. Principles of trustworthiness and research ethics were respected throughout the study. Although the study is population-specific, the premise of a healthy pregnancy also has implications for the family unit and the broader community.

## **CHAPTER 2**

### **METHODOLOGY**

#### **2.1 INTRODUCTION**

Methodology is the strategy or action plan which lies behind the choice and use of research methods, focusing on the why, what, where, from, when and how of data collection and analysis (Rore, 2023:22). The action plan provides the (philosophical) basis for the methodical production of knowledge and the use of specific research methods (Willmott, 2020:2). Methodology is the medium through which methods are logically implemented and engaged within distinctive research traditions (Willmott, 2020:2).

#### **2.2 PARADIGM**

A paradigm is a world view, a general perspective subsuming the complexities of the real world (Polit & Beck, 2021:14). It can be defined as a philosophical framework for understanding the world at its most crucial level, answering questions such as: what makes something original, is the perception correct and how does the change to reality occur? (Dybicz & Hall, 2021:2). Different paradigms exist, and each has an impact on how participants act in the world and how the researcher will gather data about the world (Ritter et al., 2023:5882).

Paradigms define the assumptions that researchers have about the nature of reality and knowledge (Ritter et al., 2023:5881). Postmodernism has been criticised for being too relativistic and overlooking the importance of objective knowledge (Aryal, 2023:112). However, qualitative research provides rigorous, theoretically sound, and rational techniques for the analysis of subjective and unclear phenomena (Bhangu et al., 2023:39). The researcher agreed that the postmodern paradigm embraces phenomenology in qualitative research (Dybicz & Hall, 2021:3). As a research paradigm, postmodernism emphasises an understanding of the social and cultural backgrounds in which knowledge is generated and how knowledge and power are linked (Aryal, 2023:111).

Within the postmodern paradigm, this study adopted a qualitative research approach, assuming that:

- the focus should be on individual meanings and the importance of rendering the complexity of a situation (Creswell, 2018:185), such as antenatal classes
- the aim should be to generate meanings from the data set collected in order to identify patterns and relationships to build a theory
- an inductive systematic approach is essential for analysing data as guided by the research objectives in the study (Ozone et al., 2023:2)
- a logical process should be followed whereby the data collected is analysed to establish a conclusion (Van Vo & Csapó, 2023:2).

Qualitative research was conducted to gain a deeper insight into the phenomenon under investigation, namely, lived experiences on prenatal exercises and included the gathering of rich data through seven participants in one organisation (clinic) (Rore, 2023:22). Semi-structured interviews enabled the researcher to gain deeper insightful information about the participants while focusing on the purpose of the study (Ruslin et al., 2022:24).

This qualitative research technique provided a lens for learning about a nonquantifiable and complex phenomenon (participants' experiences) through theoretically sound and rational analytical techniques for the analysis of phenomena and equip the researcher in studying complex phenomena (Sreekumar, 2023). Quantitative research would have focused on quantification in gathering and analysing data, involving statistical analysis that is based on numerical evidence to reach conclusions that are deduced from existing theories (Rore, 2023:22). Quantitative research generalises the findings from the sample to the research population (Rore, 2023:23). Qualitative research, on the other hand, utilises techniques of investigation that rely on nonstatistical and nonnumerical methods of data collection, analysis and evidence production (Bhangu et al., 2023:40; Sreekumar, 2023). The findings in this study, expressed in words, from interviews, helped the researcher to understand individual participants' subjective perceptions of the phenomenon under investigation. On the other hand, quantitative research would have gathered data about respondents through instruments such as questionnaires and checklists (Hatch, 2023).

The researcher was interested in the lived experiences of participants in their natural setting and how they made meaning of the experience of attending antenatal classes to participate in prenatal exercises (Hatch, 2023). The qualitative research approach is uncontrolled and aims to explore participants' behaviour in their natural context by the researcher gathering information (Hatch, 2023). On the other hand, quantitative research is used to confirm a theory or hypothesis and is used to investigate a person or event, and find explanations for observed patterns (Sreekumar, 2023).

In the qualitative approach, inductive reasoning was followed, that is a cognitive process in which particular data is gathered to establish a general conclusion and is closely aligned with scientific reasoning and problem-solving skills (Van Vo & Csapó, 2023:3). Inductive reasoning assists the researcher in acquiring knowledge through exercising logic and rationality, drawing conclusions, and solving problems (Wicaksono & Korom, 2023:2). In quantitative research, deductive reasoning is truth-preserving and conclusions can only be true or false (Castañeda et al., 2023:3). Deductive reasoning requires the researcher to focus on the logical structure of the reasoning and ignore its content (Castañeda et al., 2023:3).

Appreciative inquiry (AI) was the philosophy underlying the postmodern paradigm (Chapter 1). AI is defined as a narrative-based process of positive change (Van Graas & Gobbens, 2023:2). It is a dynamic approach that brings people together, enabling them to connect openly and honestly with one another to achieve change together (Van Graas & Gobbens, 2023:2).

### **2.3 RESEARCH DESIGN**

Phenomenology seeks to understand a phenomenon, including the lived experience of individuals that includes emotions such as happiness, anxiety and loneliness (Ataro, 2020:20). The assumption behind phenomenology is the essence to shared experiences and the researcher was required to enter an individual's life world and use the self to interpret the individual's experience (Ataro, 2020:21). The phenomenological approach was followed, as the focus was on real life experiences of participants (pregnant woman) and their interpretations of the world (Sreekumar,

2023), namely antenatal classes. This approach was used in this study as it enabled the researcher to gain deeper insight on (i) how the participants (pregnant women) experienced and made sense (meaning) of and (ii) reflected on their experiences (Dodgson, 2023:386), of undertaking prenatal exercises during pregnancy.

This study followed a descriptive phenomenological research design, which defines the lived experiences of individuals and reveal interpretations experienced by them (Wang et al., 2023). This design fits well for conducting nursing research as the focus is to explore complex affective (emotions) experiences of individuals (pregnant women), with the intention to understand their experiences and interpretations of the phenomenon under investigation (prenatal exercises) in this study (Dancot et al., 2023:939).

Descriptive phenomenology focuses on the exploration of how phenomena are experienced as they arise in an individual's consciousness (Leigh-Osroosh, 2021:1817). Originating from Husserlian philosophy (1983), descriptive phenomenology has evolved into a research framework which stays true to its philosophical underpinnings while attending to the epistemological (theory of knowledge) and ontological (nature of being) rigor required of empirical research (Leigh-Osroosh, 2021:1818). Descriptive phenomenology does not seek to create theories, nor illustrate individual truths, but rather to describe the structural core of psychological processes necessary for the phenomenon under study to be consciously lived (Leigh-Osroosh, 2021:1818). The researcher thus bracketed her own experience of the phenomenon and used a descriptive phenomenological approach to investigate the lived experiences of women attending antenatal classes to undertake prenatal exercises during pregnancy (Leigh-Osroosh, 2021:1819).

On the other hand, the interpretive phenomenological approach investigates the everyday experiences of participants while holding the researchers' preconceived assumptions about the phenomenon under investigation (Ismail & Kinchin, 2023:2). The interpretive phenomenological offers unique perspectives and theoretical frameworks for understanding daily lived experiences of participants (Ismail & Kinchin, 2023:2). This approach helped the researcher who focuses on the lived experiences of participants to gain broader insight into different methodologies enabling them to

adapt their research approach to the specific needs of the study (Ismail & Kinchin, 2023:3).

Within the descriptive phenomenological design, the study *explored and then described* the phenomenon within a *specific context*.

### *Exploratory design*

Exploratory research investigates an undefined problem (Elman et al., 2020:18), such as the lack of clarity regarding how pregnant women experience prenatal exercise. It is conducted to gain a better understanding of an issue or problem and seeks to clarify research questions rather than provide final and conclusive solutions to existing problems (Olawale et al., 2023:1384). The researcher did not intend to provide final answers to the research questions, but rather focussed on exploring the research topic in-depth (Olawale et al., 2023:1385). Exploring a phenomenon can serve as the foundation for the investigation of new research problems at a later stage (Olawale et al., 2023:1385).

### *Descriptive design*

Wahyuni et al. (2023:1242) point out that descriptive research adopts an inductive approach and uses qualitative data collection and analysis techniques to describe the experiences of participants in a study. A descriptive design enabled the researcher to gain an in-depth understanding, through conducting face-to-face interviews, of the participants' experiences of the phenomenon under investigation, by reflecting on the participants own words. As Wahyuni et al. (2023:1243) propose, the researcher stayed close to the data to share the first-hand experience of participants who undertook prenatal exercises during pregnancy. The descriptive design followed, gathered information about the specific phenomenon of pregnant exercising woman, to provide an overall summary of the phenomenon (Voorheis et al., 2023:3), by means of guidelines. The researcher described guidelines for midwives to address the holistic nature of the pregnant women undertaking PNEs in a prenatal private practice.



## Contextual design

Nguyen Ngoc et al. (2022:35) define a contextual design as one shaped by the environment in which the findings are framed. The researcher collected data in the natural setting of an antenatal clinic where participants engaged in prenatal exercises.

### 2.3.1 Setting

Qualitative researchers engage in a natural setting as they are interested in the context of people's lived experiences (Polit & Beck, 2021:62). Durbanville, Cape Town, is a semi-rural residential suburb (map below). There are five private practices in Durbanville offering antenatal classes (Baby and U, Durbanville Family Care Centre Breastfeeding Clinic, All About Babies, Magical Mums Clinic and Pro-Select Mother and Baby Clinic), each managed by a registered nurse and midwife. This study was conducted at one private maternity and baby clinic situated in Durbanville, managed by a registered nurse and midwife who is also certified internationally as a childbirth educator. This gave her a broader scope of competencies in midwifery than the midwives at the other four clinics.



Map 1: Durbanville in Cape Town

### 2.3.2 Population

A population is defined as a group of individuals confined to a geographical region or institution that have at least one characteristic in common – such as all pregnant

women undertaking antenatal classes in the Western Cape (Willie, 2022:521). A target population refers to all participants who meet the criteria specified for a research study (Willie, 2022:521), that is, the portion of the entire population whose characteristics are of interest to the researcher (Willie, 2022:522). The target population for this study comprised pregnant women in the northern region of Cape Town undertaking antenatal classes. The accessible population is that portion of the target population that the researcher had access to (Polit & Beck, 2021:307; Fetzer, 2020:447; Thacker, 2020:2). The accessible population in this study consists of women undertaking prenatal exercises at a private practice in Durbanville, Cape Town.

### **2.3.3 Sampling and sample**

The sampling process begins with defining the target population and choosing the unit of analysis or feature of interest to the researcher (Obilor, 2023:3).

#### *Sampling*

Sampling is the process of selecting a suitable sample or representative part of a population for the purpose of determining the characteristics of the entire population (Obilor, 2023:2). In quantitative research, it is the statistical process of selecting a subdivision of a population that are of interest to the researcher (Obilor, 2023:2). Non-probability sampling was employed, largely based on the researcher's ability to access the sample (Obilor, 2023:5). Non-probability sampling differs from probability sampling in that not everyone in the population of pregnant women had a known and equal chance of being selected to participate in the study (Sandstrom-Mistry et al., 2023:744).

Purposive sampling is the most time- and cost-effective sampling technique as it allows the researcher to use their own judgment when choosing particular members of a population to participate in the research study (Rebai, 2023:1045). Obilor (2023:5) concurs that this method of sampling is easier and cheaper (Obilor, 2023:5). Also known as selective, subjective or judgmental sampling, purposive sampling is frequently used in qualitative research, where the researcher wants to gain detailed knowledge about a specific phenomenon (Obilor, 2023:5). Purposive sampling

enabled the researcher to select a sample according to well-defined criteria based on her expertise and knowledge of the participants doing the exercises as the study conducted focussed on specific dimensions (Obilor, 2023:5). She deliberately chose a small sample to be able to focus in depth on the individuals concerned (Polit & Beck, 2021:312).

More specifically, the researcher used heterogeneous purposive sampling, also referred to as maximum variation sampling, which enabled her to use her own judgment in selecting participants with diverse characteristics to ensure maximum variability within the primary data (Rebai, 2023:1046). The pregnant women concerned were in various stages of pregnancy, undergoing unique changes in the dimensions of their wellbeing. On the other hand, homogeneous sampling would have focused on participants sharing similar geographic traits or specific characteristics that directly linked them to the research study (Fan et al., 2023). The researcher concurred with Fan et al. (2023), that homogeneous sampling should be used for selecting focus group participants.

### *Sample*

A sample is defined as a smaller representation of a larger group (Ravikiran, 2022). In this study, the sample comprised seven women who undertook prenatal exercises at a private practice. The participants were all healthy pregnant women with no underlying medical conditions. The sample is an unbiased subset of the population that represents the full population (Ravikiran, 2022).

Eligibility criteria also known as sampling criteria include certain characteristics that participants must meet to be included in the research study conducted (Gray & Grove, 2021:330). These criteria originate from the research problem, literature review, conceptual and operational definitions, and research design (Gray & Grove, 2021:331). Inappropriate eligibility criteria lead to insufficient recruitment and the failure of the study (Su et al., 2023:3), the researcher was satisfied that the eligibility criteria applied were reasonable and scientifically warranted (Su et al., 2023:3).

The eligibility or inclusion criteria required that participants be part of the target population (Gray & Grove, 2021:331), that is, be a woman who:

- was between 12 and 36 weeks pregnant
- was a primigravida (first unborn child) patient attending prenatal exercises in a antenatal class
- attended PNEs at a clinic for at least two visits during her pregnancy
- attended a clinic in a private nursing practice in Cape-Town.

Exclusion criteria are the characteristics that a participant possess that excludes them from the target population (Gray & Grave, 2021:331). This meant that a pregnant woman who had experienced any form of problem or complication during her pregnancy was excluded from the study.

### **2.3.4 Saturation in data gathering and analysis**

Qualitative studies can reach data saturation with a small sample (Hennink & Kaiser, 2022:2). Some studies refer to a typical sample size for data saturation in qualitative research of around 15 participants, when doing qualitative research, mostly referring to homogenous study populations (Hennink & Kaiser, 2022:3), not heterogenous sampling. In this study seven participants were included.

Data saturation generally refers to saturation in qualitative research, as it focuses on new information that emerges from the data and is assumed to relate to the data collection step in the research process. As Hennink and Kaiser (2022:4) observe, data saturation is the guiding principle for assessing the adequacy of purposive samples in qualitative research. There is, however, more than one type of saturation in research (Rahimi & Khatooni, 2024). The researcher decided to focus on data and meaning saturation. The reason for this is that data gathering, and data analysis occur simultaneously, and due to the analysis process may need further data collection. Thus, focusing solely on data saturation for judging saturation has inherent limitations (Rahimi & Khatooni, 2024).

The researcher first continued with data collection until *data saturation* was reached, a point in data collection and analysis where new data or information does not contribute significantly to addressing the research question, or when existing data is replicated (Saunders et al., 2018:1896). Secondly, determining meaning saturation

required a continuous process of sampling, data collection and analysis, looking at the diversity, clarity, and depth of the data. It was reached at the point of data collection and analysis when all emerging aspects of the phenomenon were completely understood and no new information regarding the meaning of the themes and categories was forthcoming. Hennink et al. (2017:592) state that *meaning* saturation requires judgment as to the completeness of the coding and a deep understanding of the data. The researcher continued with meaning saturation until themes and categories were no longer found or repeated (Yang et al., 2022:511).

### **2.3.5 Data gathering**

Data was collected between October and December 2023. Interviews were conducted with those participants who voluntarily consented to the study after reading the information sheet and signing the consent form. Data gathering is the process enabling the researcher to collect data from different sources, such as participant feedback (Javaid, 2023). In-person interviews between the researcher and a participant are seen as standard in qualitative research as they enable the researcher to attention to non-verbal cues as well as verbal ones (Thunberg & Arnel, 2022:758). Phenomenological interviews were a suitable method of collecting qualitative data in this study as they focused on the lived experiences of individuals (Henriksen et al., 2022:11). The researcher was guided by a methodological commitment to open-ended research questions (Bhangu et al., 2023:39).

Individual interviews with semi-structured questions were the mode of data collection. The researcher scheduled in-depth interviews with participants in which they were encouraged to express their views freely (Sreekumar, 2023). Semi-structured interviews, also known as guided interviews, are most apt for qualitative research as they are organised around open-ended questions (Gray & Grove, 2021:405). Open-ended questions enabled participants to elaborate on their experiences and feelings rather than limiting them to the 'yes' or 'no' answers invited by closed-ended questions. These interviews are usually done face to face and led by the researcher.

As Gray and Grove (2021:260) suggest, a therapeutic setting was created with the participant as the focus. The researcher developed a trusting relationship with the

participants and remained neutral throughout the interview process to avoid influencing the responses received (Zhang & Okazawa, 2022:1690). The researcher and participants maintained eye contact during the interview and felt comfortable in each other's company. Participants who feel at ease with the researcher are more likely to express their feelings freely and openly (Sreekumar, 2023).

Two open-ended questions were posed. Open-ended research techniques such as probing adopt an unbiased and exploratory approach in which information from the field are recorded and analysed to learn about the world (Bhangu et al., 2023:40). Participants were encouraged to talk freely and in response to the questions being asked and share their feelings and first-hand experiences (Polit & Beck, 2021:296).

Open-ended questions were followed up by probing and clarification by the researcher (Maree, 2019:108). Through probing the researcher gains more insight into a specific area of an interview (Gray & Grove, 2021:261). As the researcher posed questions she could observe if the body language of the participant corresponded with what the participants were saying by nodding her head. Participants must always be fully informed about this so that they are able to relax (Gray & Grove, 2021:262).

Interviews with only one participant could last from 30 minutes to an hour (Hill et al., 2022:2). According to Henry and MacIntyre (2024:4), interviews typically range from 40 to 70 minutes. The interviews in this study were of 30 to 40 minutes' duration.

Notes taken by the researcher to record and interpret observations are referred to as field notes (Polit & Beck, 2021:555). Field notes were written by hand during the interviews and transcribed shortly after each interview by the researcher (Bjerregaard Alrø et al., 2024:2). As recommended by Posselt et al. (2024:3), the researcher took field notes during interviews to document non-verbal elements such as interruptions or participants' gestures. Field notes taken during interviews by the researcher focused on the main topics (Hill et al., 2022: 2).

The qualitative data obtained from the interviews was digitally recorded with a digital recorder, with the recording device having been tested before the interviews commenced to ensure that it was in working order (Gray & Grove, 2021:405).

Interviews should be recorded because this enables the researcher to capture the data effectively and makes it easier for her to focus on the interview content and the verbal prompts (Hill et al., 2022:3). Recordings were kept in a safe place in the Cloud and only the researcher and her supervisors had access to it.

### **2.3.5 Data analysis**

The purpose of data analysis is to arrange and structure the data to extract meaning from it (Polit & Beck, 2021:552). Transcribing the data is a technical task that includes decision-making about data interpretation and presentation and is crucial for the data analysis phase. It requires close observation on the part of the researcher, involving repeated attentive reflection and viewing (McMullin, 2023:141). For academic purposes, verbatim transcription is the norm, capturing every word and sound uttered and non-verbal cues (fieldnotes). An independent transcriber also listened to the recordings, and with the researcher checked the transcriptions and reached consensus about the themes and categories.

Researchers using a descriptive phenomenological approach should consider using a method that is a clear and logical process through which the fundamental structure of an experience can be explored (Wirihana et al., 2018:32). Colaizzi's phenomenological methodology governed the data analysis (Praveena & Sasikumar, 2021:914). This methodology is viewed as accurate and robust and conducive to the credibility and reliability of the results (Wirihana et al., 2018:31). Its seven steps to rigorous data analysis enable the researcher to reveal emergent themes and their intertwined relationships (Praveena & Sasikumar, 2021:915).

#### *Step 1: Familiarisation*

The data familiarisation stage required the researcher to familiarise herself with the data by repeatedly reading the results of other studies in the context of their respective methodological frameworks (He et al., 2022:3829).

### *Step 2: Identifying significant statements*

The researcher identified extracted phrases directly referencing the phenomenon under investigation and gains deeper insight into the participants experience of the phenomenon (Zheng et al., 2023:3).

### *Step 3: Formulating meanings*

The researcher formulated meanings arising from the participants' experiences and perceptions (Ghalehnoei et al., 2022:2).

### *Step 4: Clustering themes*

After formulating meanings from significant statements, the researcher arranged them into thematic clusters. The clusters were then condensed into developing themes (Praveena & Sasikumar, 2021:914). The researcher clustered the identified meanings into themes that are common across all accounts. Again, the bracketing of pre-suppositions was crucial, especially to avoid any potential influence from existing theory (Praveena & Sasikumar, 2021:914).

### *Step 5: Developing an exhaustive description*

The researcher integrated all the results into an exhaustive description of the phenomenon. This was achieved by combining all the theme clusters, emergent themes and formulated meanings into a description to create an overall structure (Praveena & Sasikumar, 2021:915). The researcher wrote a full and inclusive description of the phenomenon, incorporating all the themes produced at step 4 (Praveena & Sasikumar, 2021:915).

### *Step 6: Producing the fundamental structure*

During this step, the findings were reduced to avoid repetitions and to formulate a clear and concise structure of meaning (Praveena & Sasikumar, 2021:916).

### *Step 7: Seek verification of the fundamental structure*

This final step of data analysis involved follow-up interviews with two participants aimed at validating the findings. This "member checking" elicits the representativeness of the emerged phenomenon with their experience (Praveena & Sasikumar, 2021:916).



The researcher returned the fundamental structure statement to two participants to ask whether it captured their experience. It proved unnecessary for the researcher to modify any steps in the analysis because of this feedback.

## **2.4 DEVELOPMENT OF THE GUIDELINES**

The adapted steps of the WHO (2023) regarding the use of qualitative research to strengthen guideline development were followed.

First, the scope of the guidelines was developed from the themes analysed from the data, and concluding statements were developed that corresponded with the themes.

Secondly, each guideline had to be motivated. A rationale for the theme was described with evidence from global or national literature, which made recommendations for the need of each guideline.

Thirdly, each guideline had to include specific actions to be taken by the midwife to enhance prenatal exercises. Actions to be considered by the midwife for implementation in antenatal classes were decided upon and recorded. These actions formed the propped the implementation processes for the guidelines.

## **2.5 TRUSTWORTHINESS**

Trustworthiness indicates whether the findings of a study are a true reflection of the data, from the viewpoint of the researcher and others who may have an interest in the research (Creswell, 2018:201).

### **2.5.1 Credibility**

Credibility refers to confidence in the truth and interpretation of the data (Polit & Beck, 2021:551). It examines how thoroughly and logically the data has been interpreted by the researcher (Enworo, 2023:372). Adopting a well-established research method, using a research design that fits in well with the research question and consulting literature relevant to the study, were among the strategies that the researcher implemented to ensure the credibility of the study (Maree, 2019:144).

Developing a relationship with participants and holding frequent meetings with the supervisors of the researcher further enhanced credibility (Maree, 2019:144). Participants confirmed whether the interpretation of what they had shared was correct using member checking, and further enhanced by the researcher who placed the phenomenon under scrutiny (Maree, 2019:144). Finally, the researcher held a meeting with the independent coder in order to achieve consensus on the final themes and categories.

### **2.5.2 Transferability**

According to Polit and Beck (2021:570), transferability refers to the extent to which qualitative findings can be transferred to other settings or groups. Transferability allows the researcher to make connections between elements of the study, their own personal experiences and research (Maree, 2019:144). The researcher is responsible for providing the reader with a detailed picture of the context and methodology only hereafter a similar setting can evaluate if the research is transferable to their context (Maree, 2019:144). So-called 'thick description' will provide the reader with a detailed account of the context, participants, and research design, so that the reader can make their own decision about transferability (Maree, 2019:144). The thick description also entails detailed description, purposive sampling, and data saturation. Thick description improves the transferability of research findings as it enables the researcher to evaluate their applicability to different contexts and settings (Younas et al., 2023:3).

### **2.5.3 Dependability**

Dependability (also known as consistency) is one of four criteria in qualitative research (Janis, 2022:240). In qualitative research the concept dependability is used rather than reliability (Maree, 2019:145). It refers to the stability of data over time and variations in conditions (Polit & Beck, 2021:552). When dependability is absent, credibility cannot be fully achieved (Enworo, 2023:373). Dependability is demonstrated through choosing the correct research design and implementing it carefully (Maree, 2019:145). In this study, dependability was enhanced by triangulation of the data with field notes and observations, and maintaining an audit trail (Enworo, 2023:374). The transcripts and field notes were kept as evidence of the real data.

#### **2.5.4 Confirmability**

Confirmability is the degree of neutrality of a study, or the extent to which its findings are shaped by the participants and not the bias, motivation, or interest of the researcher (Maree, 2019:145). For the criteria of confirmability to be achieved, the findings did reflect the viewpoints of the participant and not that of the researcher (Polit & Beck, 2021:550). The findings and interpretation of the data was linked to each other (Enworo, 2023:375), from which the development of guidelines was conducted. An independent coder was used, processed the raw data and the final themes and categories were reached by mutual agreement. The supervisors also scrutinised the findings and the outcome of the report.

### **2.6 ETHICS**

Research ethics regulate the standards of conduct for scientific researchers (WHO, 2023). According to Cornock and Rees (2023:3), the researcher is guided by various ethical frameworks to ensure that the dignity, rights and welfare of participants are respected. All research involving human beings should be reviewed by an ethics committee to ensure the appropriate ethical standards are being adhered to (WHO, 2023).

Participants were required to sign a consent form agreeing to the provisions of the study before they provided data (Creswell, 2018:188). The classes were under the supervision of an experienced midwife who had the competencies to deliver a baby, diagnose complications and offer safe and correct antenatal classes.

#### **2.6.1 Principle of justice**

The principle of justice informs participants' right to be included in a study (through equitable eligibility criteria), to be treated fairly and to enjoy privacy (Barrow et al., 2022). The participants in this study were selected without prejudice and purely for reasons directly related to the research problem (Varkey, 2021:17). The roles of the researcher and the participants were clearly identified and respected throughout (Gray & Grove, 2021:161).

### **2.6.2 Principle of respect for a person**

Also known as human dignity, the researcher to protect participant autonomy, and did not disclose information about the study participants. Participants have the right to self-determination and to decide for themselves whether to participate or not participate in a research study (Barrow et al., 2022). Participants, in this study voluntarily partook and were free to withdraw at any stage of the research process. Participant autonomy and anonymity are aspects of their right to human dignity. A trusting relationship was established with participants and their experiences were heard without interruptions or negative comments.

### **2.6.3 Principle of beneficence**

The principle of beneficence emphasises the advantages of the research for the holistic wellbeing of the participant. The principle emphasises the ethical commitment of the researcher to the benefits of the research, including protecting the rights of the participant (Cheraghi et al., 2023:89). The latter includes the participant's right to be protected from exploitation or harm, by (for example) being exposed to sensitive questions (Barrow et al., 2022; Varkey, 2021:18).

### **2.6.4 Informed written consent**

The ethical principles of voluntary participation and protecting the participants from harm are formalised in an informed consent form (Varkey, 2021:18). In this study, an information sheet accompanied the informed consent form, and explained the purpose of the study, the type of data to be gathered and the right to withdraw. The researcher ensured that the participants understood this information.

### **2.6.5 Confidentiality and anonymity**

Confidentiality and anonymity are principles guaranteeing that all personal information obtained from participants is kept private and therefore a trusting relationship was established between the researcher and participants (Kang & Hwang, 2023:1). The core purpose of South Africa's POPI legislation (South Africa. Act 4, 2013) in a research context is to make sure that if personal identifiers need to be collected, they must be stored in a secure, access-controlled location to prevent the data being used

by third parties. The researcher was obligated not to share any confidential information obtained from the participants without their consent and only the researcher, independent coder and supervisors of the study access to the information (Varkey, 2021:19). Data was saved in the Cloud, password protected, and fieldnotes were scanned and kept in a locked cupboard. All data will be destroyed after 5 years by deleting the files on the cloud and shredding the fieldnotes.

### **2.6.6 Non-maleficence**

Non-maleficence is a core ethical principle, meaning no harm must be done to respondents agreeing to participate in the study (Varkey, 2021:20). Non-maleficence acts as a person-centred constriction on a concern to promote overall benefit of participants included in this study (Varkey, 2021:18). This principle directs the researcher to do no harm to participants (Barrow et al., 2022). The risks and benefits of the research must be carefully assessed and weighed up against each other, and any risks to participants should be kept to a minimum (Varkey, 2021:18). As evidence of the voluntary and informed nature of the interviewees' participation in the research, the researcher will keep the consent form for at least five years after the study has been completed.

## **2.7 CONCLUSION**

A qualitative descriptive design was used in the study by the researcher focusing on the methodology followed in the study. A clear background provided an understanding of the context of the problem from which research questions emerged. The purpose of the study aligned with the topic and the objectives formulated. An appropriate design was chosen with individual interviews that were correctly conducted. An appropriate data collection method led data analysis, issuing in meaningful themes. Every effort was made to ensure the trustworthiness of the results, and throughout the research all relevant ethical principles were respected.

## CHAPTER 3

### FINDINGS

#### 3.1 INTRODUCTION

Data analysis is the logical and systematic process of sorting and classifying the data collected. This process involves four key steps: immersion in the data, coding, creating categories, and the identification of themes (Bano et al., 2024:8). This chapter addresses the first objective of the study, to explore the best lived experiences of pregnant women undertaking prenatal exercises in a private nursing practice.

#### 3.2 PARTICIPANTS

Seven participants who engaged in prenatal exercise sessions during pregnancy agreed to participate in the study. Semi-structured interviews were conducted with them in November and December 2023. Each participant signed a consent form to voluntarily participate in the study after being informed about its purpose and ethical safeguards (Annexure A, Information sheet). The participants included in the study attended antenatal classes at the private clinic.

Human pregnancy is divided into three trimesters: the first trimester begins on the first day of the woman's last normal menstrual period and lasts until the end of 12 weeks' gestation. The second trimester is from 13 weeks' gestation up until 28 weeks, and the third trimester from 29 weeks to 40 weeks' gestation (Novelia & Evelianti, 2024:87; Shi et al., 2024:203).

Participants in the study were female and aged between 30 and 41. Gestational age varied between 22 and 35 weeks, meaning that the women were in their second and third trimesters.

Table 3.1 Displays demographic data about the seven participants and how many prenatal exercise sessions they attended.

Table 3.1: Demographics of participants

Participant	Age	Gender	No of children	Employed	Race	Exercise sessions attended
P 1 (Pilot)	36	Female	2	Acupuncture practitioner	Indian	5
P 2	31	Female	1	Student	White	8
P 3	41	Female	3	Nurse	Coloured	4
P 4	35	Female	2	Cashier	Coloured	5
P 5	37	Female	1	Administrator	White	6
P 6	32	Female	1	Housewife	African	5
P7	30	Female	2	General worker	Coloured	5

### 3.3 THEMES AND CATEGORIES

Four main themes emerged from analysis of the data gathered in the seven interviews. The storyline of the themes indicated a safe and informative environment created by a competent midwife in which pregnant women could holistically be prepared for childbirth, be themselves and develop a bond with others in an enjoyable journey.

Theme 1 was about the women's satisfaction at the existence of exercises offered in an antenatal class, of benefit to both expectant mother and baby. Women experienced joy and gratitude when engaging in prenatal exercises, which had a positive effect on their and their unborn babies' health. Theme 2 focused on building a trusting relationship with the midwife who offered mothers holistic support during the exercises. The psychological sense of safety created by the feeling of being holistically fulfilled as a pregnant woman was the burden of Theme 3. Participants felt a sense of emotional security and wellbeing that comes from feeling completely fulfilled as a pregnant woman. Socially enjoyment of the togetherness with others in a similar condition was indicated in Theme 4. By engaging and connecting with other expectant mothers, participants found joy in sharing experiences and emotions that created and a sense of belonging that enhanced their wellbeing through this shared journey.

Table 3.2: Themes and categories

Theme	Category	Sub-category
1. Happiness at the existence of exercises in classes that are beneficial to mother and baby	1.1 Initial decision-making to join exercise group for physical wellbeing	
	1.2 Starting physical movement in a place that has significance for the mother	1.2.1 A variety of flexible mobility exercises for relief of uncomfortableness with support from the midwife
2. Built a trusting relationship with the midwife who supports mothers holistically	2.1 Feeling holistically fulfilled and safe as a pregnant woman	
	2.2 Planning positive general outcomes through exercising	
	2.3 Creating positive feelings and behaviour when conducting exercises and addressing the pregnancy-specific conditions	
	2.4 Pregnant women are committed to conducting exercises independently	
3. Psychological safety that is created by a feeling of being holistically fulfilled as a pregnant woman	3.1 An empowering shift in focus that inspires mothers to relate to their pregnancy	3.1.1 Fostering a good self-image
	3.2 Being scientifically prepared for childbirth and parenting	3.2.1 Reflecting on family moments and new beginnings during the journey to give birth
	3.3 Developed independence and strength to continue with new habits learned during classes	3.3.1 Exposure and access to educational knowledge leading to health literacy
	3.4 Feeling safe to share stories between mothers having the same experience	3.4.1 Openness in sharing stories that are unique and similar
4. Socially enjoying the togetherness with others in a similar position	4.1 "It was nice", was favourable experiences among women in building interpersonal social relationships	



### 3.4 FINDINGS

#### 3.4.1 Theme 1: Happiness at the existence of exercises in classes that are beneficial to mother and baby

Hadjigeorgiou (2023) defines happiness in this context as a state of joyfulness associated with wellness, where individuals experience positive feelings like excitement. Pregnancy and childbirth are one of the most important events in a woman's life, when she might experience joy but at the same time, an increased level of stress and anxiety (Kowalska, 2023:2). Antenatal educational classes are essential in preparing expectant women, their partners and family for childbirth and parenthood. They focus on increasing knowledge about pregnancy, physical activity and coping strategies to positively influence the birthing process (Alizadeh-Dibazari et al., 2023:3).

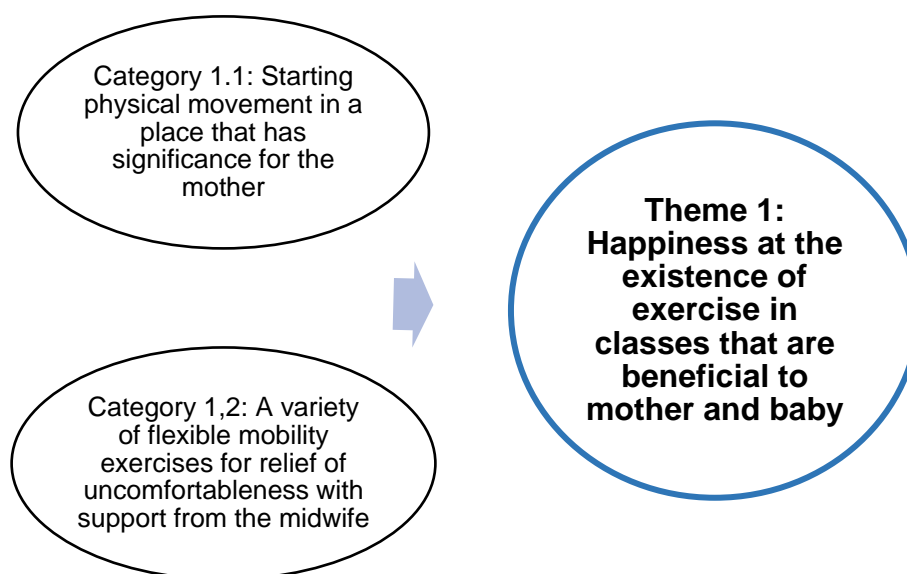


Figure 3.1: Theme 1: Happiness at the existence of exercise in classes that are beneficial to mother and baby

Happiness in pregnancy reduces depression and anxiety, and happier women have a greater ability to engage in prenatal exercise in classes because of their higher self-esteem and sense of personal control (Hoseini et al., 2020:1). Theme 1 was illustrated by an enthusiastic participant who sought opportunities to broaden her knowledge about prenatal exercises and pregnancy and made instant contact with the midwife about the availability of these classes.

*“I was having one of those sleepless nights and I was browsing on social media, and I came across on Facebook. Yes, and I immediately send a direct message just to see when the next exercise classes is available. And that is where I came.”* (Moving hands and nodding head.) (P4)

The participant ascertained the benefits of antenatal classes. Classes provide health education about common problems that occur during pregnancy. Prenatal education improves a woman’s mental health during and after pregnancy, reducing maternal stress, fear of childbirth and the anxiety that frequently results in insomnia (Chen et al., 2023:2).

An enjoyable aspect of antenatal classes is the physical movement that they offer, in a place that has significance for the mother to improve overall well-being. Physical activity during pregnancy is associated with physical and mental health benefits and can reconnect women with their new bodies (Lesser et al., 2023:2). One participant was sure that increasing her knowledge about her physical wellbeing during pregnancy would lead to better physical health:

*“I saw this and I read ... some research about why we should do it, and then I decided that it is actually going to be beneficial to me.”* (P2)

Engaging in prenatal exercises has positive consequences, both for the mother and her unborn child, including an improved birth experience and the formation of a close bond between them (Remvik-Larsen et al., 2023:2). According to Okafor and Ter Goon (2021:5), women who receive information regarding prenatal exercise from their healthcare providers gain confidence and are motivated to maintain optimal physical health throughout pregnancy.

Another way of creating an enjoyable environment is by offering a variety of flexibility and mobility exercises for the relief of discomfort, with support from the midwife. Exercise activities identified as safe and beneficial during pregnancy include walking, stationary cycling, aerobic exercises, swimming, resistance and stretching exercises (Benyian, 2024:2).

Various flexible and mobility exercises for the relief of physical discomfort were introduced by the midwife and experienced as enjoyable by the participants:

*“There were different exercises that we did... she [midwife] was very nice and confident, and she made us feel very comfortable. She was confident it was because she identified at various stages in the pregnancy which exercises would be suitable for us to do.”* (Smile as she speaks about the midwife and exercises.) (P3)

Pregnancy is often accompanied by physical discomforts such as joint stiffness and neck, shoulder, and back pain (Langah et al., 2024:456). Exercise in pregnancy is safe for both mother and foetus and helps to minimise the risk of developing pregnancy-related complications such as gestational diabetes, hypertensive disorders, foetal macrosomia, and prenatal depression (Ribeiro et al., 2022:12). The World Health Organisation (WHO) recommends that all healthy pregnant and postpartum women should undertake regular physical activity of at least 150 min per week under the supervision of a registered midwife, including a variety of aerobic and muscle-strengthening exercises (Harmsworth et al., 2023:56).

#### **3.4.1.1 Category 1.1: Initial decision-making to join exercise group for physical wellbeing**

Exercise during pregnancy is considered safe and beneficial as it improves the health of the mother and the wellbeing of the unborn baby. Engaging in regular prenatal exercise relieves stress and allows women to enjoy nature, lose weight, decrease their blood pressure and gain self-confidence (Cooper & Yang, 2023). It improves the woman’s overall health, and the health of her unborn child, reducing common discomforts and preparing her body physically for labour and delivery (Cooper & Yang, 2023).

An important finding was that women needed more information about their physical wellbeing. For instance, one participant indicated that she was not aware that she could exercise during her pregnancy:

*“I want to try to deliver normally and so we also try to include exercise. I am taking this exercise because I did not know of this. I was not educated like uhm (thinking) pregnant women can exercise because, I mean, if you are pregnant,*

*you cannot go to the gym because they know they must do low impact exercise.” (Shaking her head and moving hands.) (P6)*

A lack of awareness of prenatal exercises and associated physical inactivity in pregnancy can lead to negative outcomes such as excessive weight gain, hypertensive disorders, gestational diabetes mellitus and postpartum depression (Syed Nor et al., 2022:2).

Information reached one participant by word of mouth:

*“I’ve heard so many nice stuff about the antenatal exercises. I hope it is going to advantage me during the labour process. And according to the previous patients in or what I have experienced with really, really helps you emotionally and physically.” (P5)*

According to Okafor and Ter Goon (2021:6), the main obstacle to engaging in prenatal exercises is the shortage of information forthcoming from healthcare workers. The midwife is, or should be, the primary educator for women during pregnancy (Dlamini & Dlamini, 2024:2). The findings also indicate that there is a specific lack of attention paid to primigravid women. This absence of health education regarding physical activities, deprives them of the benefits of exercising during pregnancy (Bayisa et al., 2022:4).

Participants mentioned that they read or came across information about exercise through the media:

*“I saw this and I read ... some research about why we should do it, and then I decided that it is actually going to be beneficial to me.” (P2)*

*“I was having one of those sleepless nights and I was browsing on social media, and I came across on Facebook. Yes, and I immediately send a direct message just to see when the next exercise classes are available. And that is where I came.” (P5)*

Participant 2 highlighted the importance of being informed about prenatal exercises as she was not aware of their benefits:

*“More women should be aware of, you know, about these types of exercises because in my first pregnancy I was not even aware that you get this actually ... something that is called prenatal exercises. If it were beneficial to me and the woman that that's in my group, that would be beneficial to any other pregnant woman.”* (Moving hands as she explain that she was not aware of the exercises during pregnancy.) (P2)

The participants suggested that all expectant women should be made aware of prenatal exercises through health education administered during routine antenatal care visits. Participants who undertake prenatal exercises with a midwife for the first time can start with 30 minutes a day for five days per week (Belachew et al., 2023:2). Hearing of the personal experiences of others can contribute to knowing about the benefits of engaging in prenatal exercises and making informed decisions about personal physical health (Kilpatrick et al., 2024:2).

The findings indicated that some pregnant women were already comfortable and committed to doing exercises for their physical wellbeing. One participant was used to being active and exercising, so wanted to keep fit and active during her pregnancy:

*“I would consider myself as someone that is quite active. So, I used to love my yoga and my hiking and my walking, so that was my means of exercise that I would do quite often.”* (Smiling and nodding her head.) (P1)

The participant indicated that exercise was part of her normal daily routine when she was not pregnant and seemed aware of the importance of this for her general health. At antenatal classes, expecting mothers are made aware of the important benefits of engaging in physical activity during pregnancy (Bayisa et al., 2022:3). The classes empower women to continue – or adopt – a physically active lifestyle during pregnancy and enhance their understanding and attitude of the importance and benefits of engaging in exercises (Okafor & Ter Goon, 2021:3).

A health-conscious woman participates in physical activity before, during and after pregnancy to achieve better health outcomes for herself and her unborn child (Laudańska-Krzemińska & Krzysztozek, 2024:2). Participant 4 indicated that

exercising was part of her lifestyle and that she was committed to continuing to engage in these activities during pregnancy:

*“So, when I found out even before the pregnancy, I started to exercise and joined the gym. When I found out I was pregnant, I still continued to go to the gym.” (P4)*

Being physically active during pregnancy helps to prevent common minor disorders such as heartburn, constipation, back pain and insomnia (Knudsen et al., 2024:3).

Prevention of pregnancy-related complications due to physical inactivity is one of the objectives of prenatal exercise in classes (Belachew et al., 2023:2). Participant 2 was made aware by the midwife of the impact of exercises on her wellbeing, and she realised that engaging in prenatal exercises would minimise the risk of developing pregnancy-related complications as she had a family history of chronic illness.

*“I have a family history of diabetes as well as cardiovascular health problems like blood pressure and the professional nurse explained to me that these prenatal exercises will also protect me ... help to lower my blood pressure and improve my cardiovascular health.” (P2)*

Prenatal exercise plays a significant role in maternal health, promoting better maternal outcomes and decreasing the burden of preventable pregnancy-related complications (Okafor & Goon, 2021:6).

One participant did the prenatal exercises during pregnancy as it aided her spiritual wellbeing:

*“I did my yoga religiously, so it's something that I am passionate about and that I want to maintain.” (Laughing.) (P1)*

The importance of maintaining an exercise habit, as pointed out by P1, is confirmed by Cooper and Yang (2023), who encourage women engaging in regular physical exercise to continue with their regimen during pregnancy. Aerobic exercises including yoga and walking are considered safe and most beneficial, as they involve the heart pumping oxygenated blood to the working muscles (Cooper & Yang, 2023).

The decision by Participant 3 to attend the exercises in the classes was based on staying fit to continue a family history of exercise:

*“As a family, we do exercise a lot, but my husband and I just felt that I needed to do antenatal classes just to see if there is any information that I missed that could help us during the pregnancy and during labour, just to make sure that me and the baby is fit and healthy during the whole process.” (P3)*

The participant (P3) mentioned the interest of her husband in her wellbeing. Husbands and partners were invited, to attend ANC's to learn how best to support their pregnant partner in these exercises. Emotional support from partners reduces stress and anxiety in expectant women, and together they experience a greater satisfaction in their relationship (Atif et al., 2023:2).

The findings indicated that pregnant women need support and motivation from others to continue to exercise. Group exercise sessions are therefore to be recommended for enhancing social support, health, and overall well-being of these expectant women (De Castro et al., 2022:6). According to Participant 2, it was not easy for her to commit to prenatal exercise, but she became accustomed to it because of the support she received from the midwife and other expectant mothers in the class:

*“When I first started it, it was very difficult for me, but the support that I have got from all the women in the group, especially the midwife, they, you know, they were very encouraging and supportive. So, they made the exercises even much better.” (Moving hands as she talks.) (P2)*

Pregnant women's adherence to a group-based exercise session is greater than their adherence to an individual exercise programme (Weng et al., 2024). Prenatal exercise sessions that are informed, planned and supervised by a midwife re-emphasise the importance and benefits of engaging in these activities (Laudańska-Krzemińska & Krzysztozek, 2024:2).

#### **3.4.1.2 Category 1.2: Starting physical movement in a place that has significance for the mother**

The best conditions for women to participate in prenatal exercises are provided by a meaningful context (Storli et al., 2024:540). The setting of antenatal classes has a

significant impact on the health and happiness of both the pregnant woman and her unborn child (Gupta et al., 2024:372).

The environment should be clean, well ventilated, comfortable, and safe for women to engage in prenatal exercises (Santos-Rocha et al., 2022:178). Participants in this study described the environment in which the exercise sessions were held well-equipped and peaceful:

*“The environment was very nice and therapeutic and then as it goes on you become relaxed because when you enter, I was very tense, so when I went out of there, I was very much relaxed.”* (Sighs with relief.) (P5)

*“When you enter the place, the walls are very educative. They educate you about the pregnancy. The colours were very nice. It was calming, relaxing as I said. And they were equipment. Like the ball to do the pelvic floor when you sit on comfortable chairs.”* (Looks excited and moves her hands in the air.) (P5)

*“The mood, the mood is up and down because we are faced with different things like family’s stress, financial stress, work stress, so the exercise sessions it helps keep us calm to. To relax if we if we are in the safe environment that she creates for us, so this is our safe space for pregnant women where we can just relax, relate and distress.”* (Shaking her head.) (P6)

A considerable number of women experience anxiety and fear during pregnancy relating to the child birthing process. Several topics are covered during sessions including routine care and focusing on coping mechanisms for physical and mental strain (Spiby et al., 2022:2).

The participants were impressed with the venue and felt comfortable using the equipment. Pregnancy is a special time in a woman's life, and a congenial environment that makes her feel special will help her sustain a cheerful outlook towards the exercises. Various topics are covered during sessions, including routine care and coping mechanisms for anxiety, fear, and physical and mental strain (Spiby et al., 2022:2). Antenatal classes are thus a learning opportunity regarding pregnancy, prenatal exercise, labour and the postpartum period (Novelia & Evelianti, 2024:90). The classes aim to achieve better health outcomes for expectant mothers and their unborn babies (Laudańska-Krzemińska & Krzysztozek, 2024:1).



A participant confirmed that they had sufficient space to perform the exercises and could easily engage with each other:

*“The room was a nice, bigger room. OK, but I like the fact that we were a small group, and it was more intimate, and we could relate to each other.” (P3)*

The prenatal exercise sessions were planned group activities for pregnant women to expand their knowledge and skills around pregnancy, prenatal exercise, labour, and the postpartum period (Novelia & Evelianti, 2024:90).

*Sub-category: A variety of flexible mobility exercises for relief of uncomfortableness with support from the midwife*

Pregnancy is a period when significant physiological and psychological adaptations take place in a woman’s body to support the developing foetus (Rodgers et al., 2024).

Mulenga and Kabwe (2024:2) in a study, found that participants gained benefits by participating in prenatal exercises. A participant shared her positive experience, mentioning the competency of the midwife in creating a comfortable environment in which a variety of exercises were offered to women in different stages of pregnancy, according to their needs:

*“There were different exercises that we did... she [midwife] was very nice and confident, and she made us feel very comfortable. She was confident it was because she identified at various stages in the pregnancy which exercises would be suitable for us to do.” (P3)*

The positive experience of P3 echoes the findings of a study in which midwives were found to display competence and confidence by being able to demonstrate various exercises to pregnant women to achieve a desirable outcome (Yezengaw et al., 2024:735). According to R2488 (South Africa. South African Nursing Council, 1990), a registered midwife shall guide, support and instruct a pregnant woman when conducting prenatal exercises, in preparation for labour.

Pregnant women should be encouraged to start and continue with activities such as walking, stretching and pelvic floor exercises (Uzelpasacı et al., 2024:1). One of the

participants said that she felt prepared for childbirth, as her stress and anxiety were reduced by stretching exercises:

*“It's definitely good (stretching) for my stress and my anxiety, especially now with the birth coming up ... and that adds to, you know, muscle aches and stuff like that.” (P1)*

Phiri et al. (2024:17) confirm that walking and pelvic floor exercises are the most common form of exercise, however women should perform these activities at home on a daily basis.

Another participant favoured *stretching exercises*, although her stage of gestation made it difficult to do some of these exercises:

*“Some were a little bit harder than others at times because I do have sort of lower back pain and the baby's lying quite low. So, I've experienced some difficulties in some of the exercises. But I love the stretching exercises as well as the ball and the slow movements.” (P1)*

Participants indicated that exercises addressed the *neck and feet* for stress and pain relief. Neck and feet exercises for stress and pain relief. This period in a woman's life is often associated with anticipation and joy but also introduces various physical discomforts such as neck and shoulder which can also be associated with stress related issues (Langah et al., 2024:457). Participants mentioned exercises addressing their physical *neck* discomfort to relieve their stress:

*“When we did the neck and muscle exercise, ... we are doing the leg raising and the leg rolling exercises for leg strength and stuff. So, it was nice.” (P5)*

*“You know, after a long day at work, you would feel a little bit tense. So, the neck exercises help to relieve some of those stresses.” (P3)*

*“Yes, the neck exercises cause one's neck tend to get stuff. Yes, and very painful full of knots. So that also helped and relieved all the knots, and you get almost feel like the stress is melting away.” (P7)*

A participant confirmed the contention of Langah et al. (2024:457) that strengthening and *stretching* exercises are effective in relieving muscle pain and simultaneously reducing stress and anxiety:

“It's good (stretching) for my stress and my anxiety, especially now with the birth coming up ... and that adds to, you know, muscle aches and stuff like that. “  
(P1)

An enjoyable stretching activity involved Pezzi or Pilates balls. A participant enjoyed the creative ball activities of engagement with other mothers:

*“We did some ball exercises and then there was also pelvic tilts that we did lots of slow movement. Uhm yeah. And then also some on the mat. Some movement on the mat as well, stretching.”* (Think about different exercises.)  
(P1)

*Strength building* was also a focus in exercises. The first focus was the arms and legs for muscle strength. According to one of the participants:

*“Then we also did the leg exercises and the arm exercises, which focused on your muscle building. You know, when you are pregnant, you get fatter and then you feel like your arms your muscles is like flabby and it is like hanging just there. So, with this arm exercises, it helps to shape those muscles. Give it a nice shape, you know, and then you feel better.”* (Points to her legs and move arms as she is demonstrating the exercises.) (P3)

Another way of building strength was by lifting objects correctly:

*“...she would tell us like we should not be lifting heavy things. She showed us how to lift things. If I were doing something wrong or right, you know she could easily tell me how to do things properly.”* (P4)

*Foot exercises* were introduced and demonstrated by the midwife to lessen the oedema experienced by the women:

*“We also did feet exercises. and those help to decrease the swelling of the feet at night and to elevate, she showed us how to elevate the feet.”* (Looking at her feet and lifting it.) (P3)

Oedema of the lower limbs is a common complaint during the third trimester and occurs in about 75% of pregnant women. Oedema in the legs is mainly caused by increased pressure of the uterus on the inferior vena cava, which inhibits the return of blood from the legs to the heart (Aprianti & Oktavia, 2024:433). Elevation of the lower

limbs and soaking the feet in salt water have proven to be effective in reducing this condition.

*Cardiovascular exercises* improve heart functioning and blood circulation and contribute to physical health and wellbeing during pregnancy (Guinhouya et al., 2022:160). Participant 2 mentioned that blood circulation exercises and stretching for various parts of the body were beneficial:

*“We did circulatory exercises, which is of the leg and of the stretching exercises of the arm the leg and the neck. So, these exercises, they strengthen the muscles, the calf muscles.”* (Looks at legs and smiles.) (P2)

By engaging in prenatal exercises, participants enhance blood flow to the muscles, reduce muscle stiffness and promote flexibility in their bodies (Belachew et al., 2023:1). Engaging in regular physical activity during pregnancy increases uteroplacental blood flow, resulting in more oxygenated blood being delivered to the fetus for optimal growth and development (Guinhouya et al., 2022:160).

Exercises focused on *posture* combined with breathing: by focusing on their breathing, participants improve oxygen flow to the body, reduce stress and enhance relaxation.

*“It improved my back pain. Yeah. And then she also advised on good posture on how good on how I need to stand and to sit, just to prevent to bend and we also did some breathing exercises.”* (Smiling and touching her back and attempting to sit properly in the chair.) (P2)

Maintaining a good posture during pregnancy reduces the incidence of urinary incontinence and lower back pain and is associated with better birth outcomes (Siriwardena et al., 2024:278).

Proper *breathing* techniques practised antenatally empowered participants to remain calm and in control during labour and to focus on the birthing process:

*“I think they prepare you also for the birth and she was emphasising a lot about the breathing as well and I enjoyed the breathing exercises the most and also, they were doing in the exercises they were showing us also the different birthing positions.”* (P4)

*“We did breathe exercises. Which I found extremely informative with regards to how can I say now (thinking) during labour.” Participant continued; “When before you have contractions, once the pain starts. Then you are breathing deeply, and then you breathe out slowly.” (P3)*

Prenatal breathing exercises facilitate spontaneous vaginal delivery and shorten the duration of labour. These exercises enable the woman to control her response to labour and adjust her breathing levels as labour progresses (Boobpamala et al., 2024:72). This observation is supported by data obtained from Participant 3, who said that she, by breathing deeply when thinking about the upcoming birthing process, learned how to remain calm and relaxed.

*“We did breathe exercises. Which I found extremely informative with regards to how can I say now (thinking) during labour.” Participant continued; “When before you have contractions, once the pain starts. Then you are breathing deeply, and then you breathe out slowly.” (Breathing deeply in and out.) (P3)*

A sense of calmness occurs in women undertaking breath exercises. Breathing exercises stimulate the parasympathetic nervous system, enhancing oxygenation in the maternal blood circulation and releasing endorphins that decrease the heart rate, which in turn induces calmness (Issac et al., 2023:2).

### **3.4.2 Theme 2: Built a trusting relationship with the midwife who could support mothers holistically**

In Theme 2, which has four categories, participants indicated that they established a strong and trusting bond with the midwife who provided comprehensive antenatal classes. These classes holistically addressed their wellbeing as pregnant women.

Pregnant women should trust a midwife offering them exercises, which can be built upon her exhibiting certain competencies. For delivering high-quality care to expectant women, the International Confederation of Midwives (ICM) has set global standards of competency for midwifery. These include demonstration of the knowledge, skills and professional conduct requisite for individuals to be recognised as midwives. The competency framework includes offering antenatal classes (Tallam et al., 2022:4).

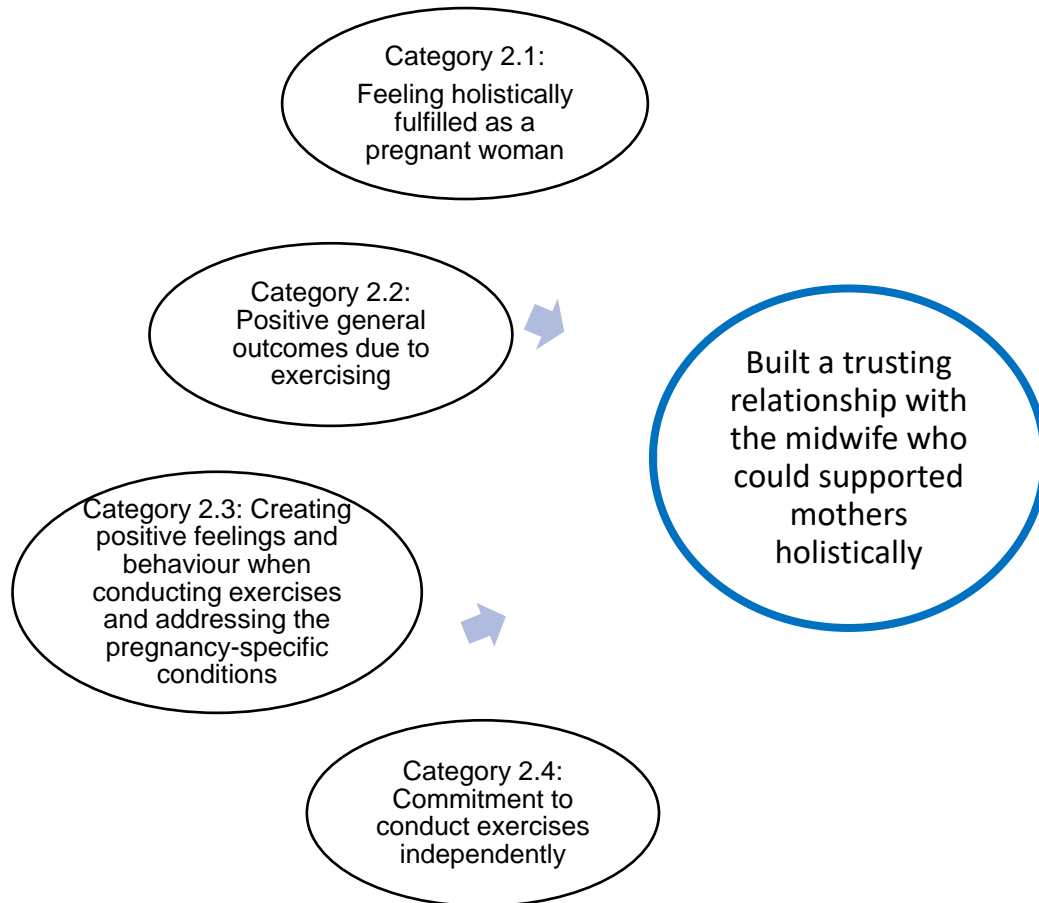


Figure 3.2: Theme 2: Built a trusting relationship with the midwife who supports mothers holistically

The participants felt that the exercise sessions were presented by a skilled midwife who engendered trust and focused on demonstrating physical activities effectively to prevent physical harm:

*“The best was the person that was giving the classes. And she knew what she was talking about, like she would first tell us what the exercise is and why and then show us how to do that specific exercise.” (Looks very excited.) (P4)*

Participant 2 testified to the competency of the midwife in caring for her as a pregnant woman:

*“I feel that she was quite knowledgeable, I think. She knew what she was talking about. She made me feel quite safe and. You know, taken care of like. I feel like she knew what she was, what she was doing and where she is coming*

*from. She was also experienced speaking about her own experiences, which made it quite personal as well. She spoke clearly. We could understand what she was saying and very relatable, personable.”* (Moving hands and nodding head.) (P2)

A successful relationship between the midwife and the women promotes trust and satisfaction, and the continuity of a caring approach is a key facilitator thereof (Almorbaty et al., 2023:1327).

#### **3.4.2.1 Category 2.1: Feeling holistically fulfilled and safe as a pregnant woman**

Information about prenatal care, exercises and related matters must be correctly conveyed, enabling women to develop holistically through gaining knowledge, developing a positive attitude and acquiring effective skills for having a healthy pregnancy and delivery (Hall et al., 2023:77).

P5 felt content and optimistic in receiving comprehensive information and being able to *socialise* with mothers from diverse cultures:

*“My best experience was getting myself educated, feeling better spiritually and mentally and getting some nice experience with other people socialising with them at different levels because like I say, we are all from different ethnic groups and different socioeconomic status.”* (Putting hand on chest.) (P5)

The midwife offered the exercises as a means of *preventing physical harm* from coming to the pregnant women. Information about the importance and benefits of prenatal exercises was conveyed to participants by the midwife in clear and simple terms, that ensured that they understood the physical correctness of conducting prenatal exercises:

*“So, she helps you, by encouraging you, telling you what to do, what exercises you must do during what time, what stage in the labour. Yes, I will remember everything she said.”* (Nodding her head.) (P3)

As the primary care giver, a midwife should provide high-quality maternal and newborn information that improves the overall satisfaction of women engaging in prenatal exercises. This includes practical information on *physical* conduct and care for the self:

*“It was very informative, like when she was telling us about, like, how we supposed to walk when we are pregnant, how our posture should be and how we should sit and sleep and stuff like that... .” (Moving hands.) (P4)*

Useful information like this minimises the women’s risk of developing physical disorders during pregnancy (Luo et al., 2024:4).

Correctly prescribed prenatal exercises are important for maintaining the health and wellbeing of expectant women (Jahan & Anaiba, 2023:2). P7 noted that the midwife assisted, supported and encouraged participants to engage in appropriate physical activity during pregnancy, aimed at improved overall maternal health:

*“She does support you very well during the exercise, so that you don’t hurt yourself. You do not break anything. You are now carrying another human being. So, if you are out of order, you may harm the baby as well. The exercises we did was safe for us as pregnant mummies and also safe environment.” (P7)*

The same participant further stated:

*“She gave me all the information that is needed on what type of exercises is safe in the pregnancy.” (P7)*

In addition to the physical benefits of exercise, the women felt socially accepted:

*“A down to earth sort of character and yeah funny. And yeah, you could just relate to her. I thought she was a lovely, lovely lady.” (Looks at researcher and smiles.) (P2)*

Along with social needs, the fulfilment of safety needs was mentioned. A participant felt safe in the group with the midwife nearby:

*“So, I felt that I was quite supportive and I was, you know, safe. And I was not going to fall off the ball or pull the muscle or you know that type of thing.” (P1)*

*“She was showing us how to do it, so she was also engaging with us. It was not just the sort of tell. And then you must do it. She was right there with us her tekkies and, you know, engaging with us physically to show us exactly how things are done and how it should be done and engaging with us.” (P1)*



The pregnant women also experienced *psychological* wellbeing. Participants felt uplifted by sessions with the midwife:

*“The way she had addressed us was in a respectful manner and she did not criticize us when we were, ... maybe doing the exercises in the wrong way. She would rather encourage us than criticize us.”* (P2)

*“It is like preparing you mentally for what is to come, you know, because they were talking about when the pain comes, what you should do and how you should breathe.”* (Pointing to her head.) (P4)

Another participant was gratified by how the midwife accepted the way she did her exercises:

*“It’s on your own pace. So, there is no rush in it. It is not let you now have to be a fitness guru. It’s only preparation for the labour process and to make it comfortable during labour so you don’t have to have so much strength to doing all of the exercises.”* (P5)

Prenatal exercises improve psychological wellbeing, instil a positive mindset, reduce symptoms of anxiety and enhance a woman’s quality of life (Boisseau, 2022:160).

### **3.4.2.2 Category 2.2: Planning positive general outcomes through exercising**

Engaging in regular physical exercise during pregnancy has many advantages that enhance the overall health and performance of women (Brown et al., 2024:2). Participants had feelings of satisfaction and relief, and experienced less anxiety while engaging in these prenatal exercise sessions as this could minimize their risk of developing pregnancy related complications.

The findings indicated that exercises combat fatigue and promote relaxation: one participant confirmed this:

*“I’ve realized we realized that the exercises that improves the fatigue, so we no more tired yeah and it’s the exercises brings a form of relaxation, so we are able to relieve the stress yeah.”* (P2).

Another participant experienced joy and relief from pain:

*“I enjoyed this. The slow-moving exercises purely because you know fast movement is a bit difficult for me currently. But also, the ball. The ball brings a lot of relief and. Takes away a lot of pressure. In my pelvic bone area.”* (Smile and point to pelvic area.) (P1)

Exercises lifted the spirit of this participant:

*“I do suffer from lower back issues. So, I think it worked for me in that regard, especially the stretching as well. And after each session I would felt so much better and relief. So and so much more relaxed as well.”* (P1)

Exercises worked as a stress reliever, as some anxiety about the pregnancy was shared by all the women nearing the birth process:

*“And then when I found out that I was pregnant with a child, the anxiety started again. But now it is much better now that I am doing the exercises.”* (Smiling and rubbing her tummy.) (P4)

*“Physically, yes, because the exercises that was, uhm ,, demonstrated to us, it really works. It helps you to relieve the stress and agony that you do have. You do get anxious when you think on delivering time is very close now.”* (P7)

Prenatal exercises have a positive effect on the mental health of pregnant women, especially through reducing anxiety (Gökbulut et al., 2024). Exercise during pregnancy improves the physiological, psychological, and mental functioning of women (Liu et al., 2023:2).

Participants experienced a sense of relief physically and emotionally while undertaking prenatal exercise.

*“Physically, yes, because the exercises that was, uhm demonstrated to us, it really works. It helps you to relieve the stress and agony that you do have. You do get anxious when you think on delivering time is very close now.”* (Nods her head and smiles.) (P7)

Pregnancy-related anxiety is different from general anxiety and could involve concerns about birth and labour, the physical wellbeing of both the mother and the unborn baby,

resources and upcoming parenthood (Gökbulut et al., 2024). Engagement in prenatal exercises reduced anxiety in participants.

Feelings of fatigue yielded to feelings of relaxation:

*“I’ve realised we realised that the exercises that improves the fatigue, so we no more tired yeah and it’s the exercises brings a form of relaxation, so we are able to relieve the stress yeah.” (P2)*

Maternal fatigue is a common problem reported by expectant women. Mental fatigue affects the memory and physical fatigue is related to the depletion of energy (Yan et al., 2024:2).

One participant thought the exercises helped her cope with self-consciousness about her physical appearance by focusing on how they benefitted her body:

*“Well, basically, it helps with me not gaining too much weight, you know, and the oedema or the swelling. So, I’m very conscious about that.” (P2)*

A feeling of greater energy in the gestation period was experienced:

*“It provides more energy for women to cope with the growing demands of the baby.” (P2)*

*“I started doing the prenatal exercise class. It feels better now. I feel like I have more energy. I do not feel like I am tired all the time... I am moving more and doing more stretching and stuff like that.” (Moving hands.) (P4)*

Physical activity in pregnancy stimulates the whole body and has multiple benefits for maternal and foetal health, enhancing energy while regulating weight (Laudańska-Krzemińska & Krzysztozek, 2024:3).

Prenatal exercises increase joint mobility, improve circulatory function by strengthening the heart and blood vessels, and reduce the risk of developing hypertension and pre-eclampsia (Laudańska-Krzemińska & Krzysztozek, 2024:4).

### 3.4.2.3 Category 2.3: Creating positive feelings and behaviour when conducting exercises and addressing pregnancy-specific conditions

During pregnancy, a woman should make healthy lifestyle decisions such as engaging in prenatal exercises that are beneficial to herself and her unborn baby (Ku et al., 2022:2). Changes in emotions occur during pregnancy. Participants experienced hormone-related mood swings that later improved:

*“Initially I was constantly tired and, I experienced morning sickness. So, I noticed when I thought doing the exercises it improved my mood with reduced the mornings sickness.” (P2)*

*“It put my emotions in a very good place. I had more control over it and I didn't cry as much as I used to.” (P5)*

*“Exercise help with the baby blues to have a positive mindset at the end of the day.” (P7)*

These remarks indicate that appropriate prenatal exercises improve the mood of participants, alleviate discomfort and enhance their quality of life. Women undergo various physiological and psychological changes during pregnancy, including fluctuations in hormonal levels, morning sickness, insomnia, increased psychological stress and other health concerns (Mei et al., 2024:381, 382). Participants highlighted mood swings:

*“So those exercises also help to lift your mood.” (P3)*

*“It put my emotions in a very good place. I had more control over it. I didn't cry as much as I used to.” (P5)*

*“I was really embarrassed about this (bladder uncontrolled), but now I am more confident. I am eager now to do the exercises.” (Laughing.) (P2)*

The exercises increased the confidence of the women:

*“I was really embarrassed about this (bladder uncontrolled), but now I am more confident. I am eager now to do the exercises.” (P2)*

Engaging in physical activity during pregnancy is a positive experience, not to be avoided (Ambika & Vijayalakshmi, 2023:3).

The participants were enthusiastic and committed to the prenatal exercises, which brought enjoyment:

*“But for me it's something new. It's remarkably interesting and very challenging. I find it very fun (laughing), and the activities keep you busy and you tend to laugh a lot... .” (P5)*

*“It was fun in the beginning you were very sceptical. Like for me, the other two mothers did have previous experience like for me it was like something very new, and I thought it's going to be difficult to adjust and do the exercises. I thought it's going to be harmful because all the exercises you always see on the TV's always seem so harmful and it took a lot of strength and muscle with this. It was very calming.” (Moving hands and pointing towards the television.) (P5)*

Physical behaviour changed, as sleeping *patterns* improved:

*“I am also able to sleep better (moving hands) That was experience sometimes. So, sleeping is also much better.” (P2)*

Prenatal exercises assist expectant women with better sleeping patterns, reduced stress and improved mood (Alnawwar et al., 2023:2).

#### **3.4.2.4 Category 2.4: Pregnant women are committed to conduct exercises independently**

Participants evinced a cheerful outlook and increased wellbeing, and were motivated to carry on with physical activity even after having their baby:

*“These exercises really motivate me, and I just want to do more of this exercise. That is why I have decided, and I have pledged that after I've delivered. I will continue with the exercises and maybe take it up a notch higher.” (Smiles.) (P6)*

Engaging in regular physical activity during pregnancy improves physical and psychological well-being of expectant women (Phiri et al., 2024:18).

One participant appreciated the positive outcomes of the exercises, both physical and mental. At 36 weeks into her pregnancy, she observed:

*“I haven't completely stopped with my exercises. There are still stretches that I do. Especially before bedtime and then in the mornings. I'm going back to the tiredness now so it's I'm not completely on it like I used to be, but definitely from time to time, especially when I start getting thinking that it's probably the baby now engaging, I suffer from nerve pain, Sciatica or something, so especially when it when it comes to those times then I definitely make sure that I do my exercises.”*  
(Moving hands and shakes her head.) (P1)

The encouragement to adopt healthy behaviours received in the antenatal classes, such as undertaking physical activity motivates mothers to continue with physical activities (Rockliffe et al., 2021:614). The supportive role of the midwife in terms of her encouragement, promotion of healthy lifestyle habits and management of physical discomfort motivated a participant to continue with her exercises. She was committed to including prenatal exercises in her daily routine to minimise discomforts and maintain optimal physical health:

*“It really helped with the with the stiffness of the legs and my neck and I am still doing the exercises like daily here at home, so it does help even if I am just doing it for half an hour a day.”* (Moves her neck side to side.) (P4)

Participating in regular standard physical activity prenatally helps to prevent the risk of pregnancy complications and ease discomforts, e.g., back pain (Grace et al., 2024:178).

### 3.4.3 Theme 3: Psychological safety that is created by a feeling of being holistically fulfilled as a pregnant woman

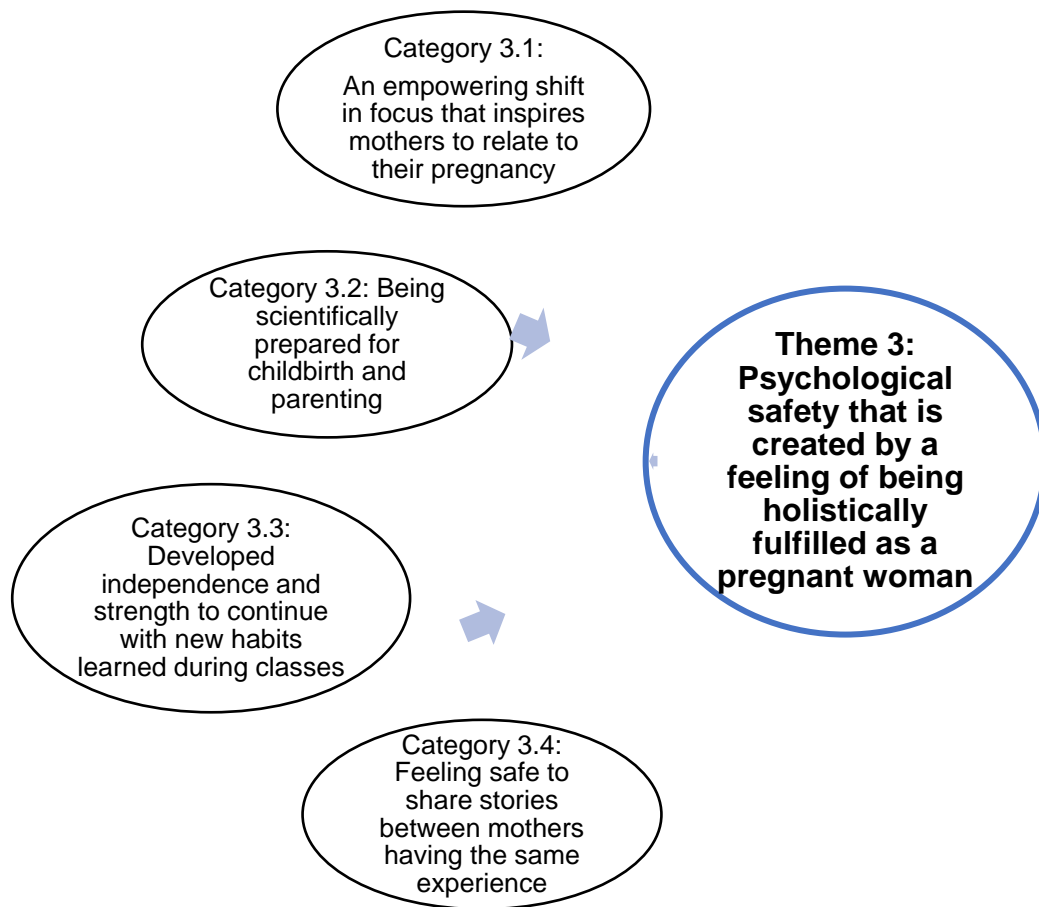


Figure 3.3: Theme 3: Psychological safety that is created by a feeling of being holistically fulfilled as a pregnant woman

The expectant women who engaged in prenatal exercises felt safe, supported and respected. They experienced feelings of joy and increased confidence, all of which had a positive effect on their psychological wellbeing during pregnancy (Benyamini et al., 2024:3).

Participants felt fulfilled physically, emotionally, socially and safe during pregnancy when undertaking prenatal exercises that positively affected their overall well-being.

### **3.4.3.1 Category 3.1: An empowering shift in focus that inspires mothers to relate to their pregnancy**

Participants had a positive change in perspective during prenatal exercise in the classes that enabled them to connect and engage more deeply with the journey of their pregnancy. The midwife should include health education during the exercise sessions, resulting in the participants' development of awareness, knowledge and positive attitudes toward prenatal exercise (Jahan & Anaiba, 2023:5). According to one participant:

*“Also, that these classes, they make you to feel empowered man some way you are in control of everything. It makes you feel like you can be in control of the whole thing.”* (P3)

By gaining knowledge through these prenatal exercises participants felt more prepared and in control of their pregnancy, acquiring confidence and empowerment to manage the upcoming birth successfully. Participants who engaged in prenatal exercises reported that they were able to connect more deeply with their pregnancy and felt physically and psychologically supported by the midwife offering the exercise sessions (Okafor & Ter Goon, 2021:4).

Confidence and empowerment were experienced by engaging in prenatal exercises and [participants wanted to share their knowledge and experience with others:

*“I will know what to do during labour, where I feel like they are at a disadvantage. So yes, that is what I mean with empowerment. And I can maybe also share some of my knowledge with them [other mothers].”* (Nodding her head.) (P3)

The midwife should ensure that women who engaged in prenatal exercises are equipped with adequate knowledge and skills about the importance, benefits and safety that enable them to make informed choices that are beneficial to the overall well-being of mother and unborn baby (Jahan & Anaiba, 2023:5).

By taking control of their pregnancy journey, participants were able actively to participate in the prenatal exercises and make informed decisions regarding their health and wellbeing. Some other views:



*“While doing these exercises during pregnancy I became more knowledgeable and the exercises it helps me to feel a little bit light in weight. Yes. And I also lost two kilogrammes (smiling).” (P6)*

*“You are better prepared mentally, having a positive mind going into the pregnancy. I feel more empowered and positive. I am ready for this thing. I will be in control of what is going to happen.” (P3)*

*“So yes, and I am so I am very confident now about my body and I feel like I have a sense of control now. And I am committed to this these exercises.” (Nodding head.) (P2)*

Prenatal exercise improved participants’ confidence, emotional and physical wellbeing, and sense of control. Participating in prenatal exercise enhances the physical and mental health of women and reduces excessive weight gain (Negash & Alelgn, 2023:2).

Embarking on a journey of the prenatal exercises enabled the participants to see themselves in a new light, physically and mentally:

*“It boosts my self-confidence actually and it was a natural flow for mother, and I could be myself. I learned a lot and one of the stuff I learn a lot is it your body doesn't make you perfect, it's who you are. And strength doesn't come from a perfect body. I need to love myself, to love my child, and this few sessions with this instructor and the group really uplifted me quite a lot.” (Moves hands and smiles.) (P5)*

*“I am not afraid of my body anymore. I was not afraid of how I looked. Because the exercise made me feel positive. It made me feel good about myself and I have a different mindset Now. I have the courage to get up.” (P6)*

*“Exercise help with the baby blues to have a positive mindset at the end of the day.” (P4)*

Prenatal exercises promote the self-concept and mental wellbeing of participants. Midwives and other healthcare professionals play a key role in educating, guiding and supporting expectant women in adapting to the change in lifestyle (Laudańska-

Krzemińska & Krzysztozek, 2024:2). A study by Ma et al. (2023:6) concludes that prenatal exercise programmes specifically designed for expectant women, together with information, reassurance, motivation and professional support, increase understanding, reduce anxieties, increase self-confidence, and develop physical strength.

### **Subcategory 3.1.1: Fostering a good self-image**

Maintaining a positive self-image during pregnancy is not finally about physical appearance but about how women feel about themselves during this period. Women undergo physical and psychological changes that are inevitable. Participants who engaged actively in prenatal exercises can adapt to the changes well and can be satisfied with their physical appearance (Linde et al., 2022:3). One participant mentioned the example of her weight problem:

*“It [exercise] also improves my self-image because I was very concerned about gaining the extra weight because I did not want to gain weight. At my first booking the midwife, she discussed with me that my BMI does indicate that I'm overweight, so she also advised on exercises.” (P2)*

Participant 2 was anxious about gaining weight, but undertaking prenatal exercise minimised this weight gain, which positively impacted her self-image. Excessive weight gain during pregnancy increases the risk of developing various complications such as diabetes and hypertension that adversely affect the health of the mother and her unborn baby. Maintaining a healthy lifestyle by engaging in prenatal exercise can help prevent uncontrollable weight gain (Dikgale et al., 2024:2).

Participants were initially very self-conscious about themselves. One participant stated:

*“I notice that we all just feel like we have to start exercising because we are very self-conscious in our pregnancy.” (Shy face.) (P4)*

Participants highlighted the emotional and practical challenges they encountered as a result of the weight gained during pregnancy, which negatively impacted on their self-confidence and dissatisfaction with physical appearance. One participant stated:

*“You know the body changes. You are getting fat. And then you feel you are not attractive anymore. You cannot even reach to tie your shoelaces. All these things, your clothes do not fit you anymore.”*

(Looks at researcher and nods her head.) (P3)

A lack of knowledge associated with low socio-economic status is among the main reasons why women gain excessive weight during pregnancy (Dikgale et al., 2024:2). The midwife ensured that the participants were equipped with sufficient knowledge about the health benefits of engaging in prenatal exercise to achieve the best possible outcomes.

Participant 5 further acknowledged that discussing body image and self-confidence is a sensitive topic for women: she initially felt shy and lacked confidence, but engaging in prenatal exercises boosted her self-esteem and made her feel better about herself:

*“Not that I'm saying anything, women because it's a very sensitive topic. It touched on your self-confidence, me you feel very poor about yourself, and you shy. When I entered the room there was no confidence. But the room lifts you up anyway, and the people inside of the room. So, when I started the exercise, I feel much better about myself. I enjoyed the pregnancy up until now, which was not with my previous one.”* (Smiles.) (P5)

Participants can identify prenatal exercise as a source of enjoyment and time to focus on themselves (France-Ratcliffe et al., 2022:3).

Some participants found that the exercises helped them feel in control of the pregnancy, including its culmination in childbirth:

*“You are better prepared mentally, having a positive mind going into the pregnancy. I feel more empowered and positive. I am ready for this thing. I will be in control of what is going to happen.”* (P3)

*“So yes, and I am so I am very confident now about my body and I feel like I have a sense of control now. And I am committed to this these exercises.”* (Nodding head.) (P2)

Participants started to see themselves in a positive new light:

*“It boosted my self-confidence actually and it was a natural flow for mother, and I could be myself. I learned a lot and one of the stuff I learn a lot is it your body doesn't make you perfect, it's who you are. And strength doesn't come from a perfect body. I need to love myself, to love my child, and this few sessions with this instructor and the group really uplifted me quite a lot.” (P2)*

*“I am not afraid of my body anymore. I was not afraid of how I looked. Because the exercise made me feel positive. It made me feel good about myself and I have a different mindset Now. I have the courage to get up.” (Makes eye contact and nod head.) (P6)*

In sum, prenatal exercises offer various health benefits to expectant women and by encouraging participants to incorporate prenatal exercises into their daily routine stimulates the adoption of an active lifestyle. Setting realistic expectations and monitoring the progress of engaging in these prenatal exercises are key principles to be used by the midwife to ensure the sustainability of physical activity (Uluoz et al., 2023:3).

#### **3.4.3.2 Category 3.2: Being scientifically prepared for childbirth and parenting**

The United Nations' Sustainable Development Goal 3 focuses on health and wellbeing and reducing maternal mortality during childbirth. The midwife plays an important role in ensuring safe antenatal, intrapartum and postpartum care (Karningsih et al., 2022:22). By providing continuous health education during prenatal exercises in antenatal classes the midwife can ensure that participants doing the exercises are fully informed about the birthing process and the transition to parenthood (Avignon et al., 2023:2). The birthing ball exercises increase maternal energy, relax pelvic floor muscles and shorten the process of labour. Participants felt confident and prepared for the upcoming birthing process. The increase in their self-confidence can enable mothers to make informed decisions about achieving optimal health for themselves and their unborn baby (Karningsih et al., 2022:23).

*“You are better prepared mentally, having a positive mind going into the pregnancy. I feel more empowered and positive. I am ready for*

*this thing. I will be in control of what is going to happen.”* (Serious facial expression.) (P3)

Participants felt mentally and physically empowered and prepared for the birthing process as their confidence increased while participating in the prenatal exercises. Karningsih et al. (2022:23) state that prenatal exercises combined with health education session assists mothers to be feel in control of their emotions, relieve anxiety, minimise uncomfortableness and empower couples in their transition to parenthood.

Participants developed independence and strength and grew determined to continue with new habits learned during the prenatal exercise sessions, enthusiastically accepting this positive change in their pregnancy journey. Al-Mutawtah et al. (2023:3) write that support from the midwife and immediate family during prenatal exercises reduces physical and emotional stress experienced by participants leading to improved well-being of both the mother and unborn. According to one of them,

*“I am looking forward to the birthing process. Yes, I feel that I can. I will be in control, and I will know what to do now because of these exercises. I just hope I do not forget.”* (Laughing) (P3)

The participant could express excitement and confidence about the upcoming birthing process because of the skills and knowledge acquired during the prenatal exercises. Diezi et al. (2023:3) confirm that engaging in prenatal exercises and discussions with the midwife could positively impact the women satisfaction with childbirth. By actively participating in prenatal exercises participants can gain more information about physical activities which help them feel more informed and prepared for the birthing process.

The midwife ensured that participants were equipped with sufficient knowledge about physiological and psychological adaptations during pregnancy to be prepared for childbirth. Through this initiative participants felt empowered and could make informed decisions pertaining to their own health. Participants can establish a trusting relationship with the midwife during the prenatal exercises offered in antenatal classes as they can feel supported and happy with the quality of care that are provided (Doherty et al., 2023:3).

### **Subcategory 3.2.1: Reflecting on family moments and new beginnings during the journey to give birth**

Pregnancy is a precious period in a woman's life and an experience often shared with a loved one, as together they experience feelings of joy and excitement to welcome a new member to the family.

One participant longed to have a partner during classes:

*"So, I think there is the only downfall that I actually experienced regarding when we had to bring people along and then I didn't have anyone and then but yeah, and most times then it would be the other mothers that would come along and you know, assist me." (Strokes her chin.) (P2)*

The involvement and support of loved ones contributed to a participant's having happy shared moments:

*"They [family and husband] are very supportive. They help with the exercises they ask me about it, and we also practise it at home, so they are very supportive. Especially my husband ... he is very active. So, we exercise a lot, maybe just 10 to 15 minutes each night." (P3)*

Family members can thus be actively involved in supporting and encouraging the participant to continue with prenatal exercise at home. This can be crucial to their managing their weight gain and maintaining a healthy lifestyle (Santos-Rocha et al., 2022:4).

Participant 2, originally from the Northern Cape, took proactive steps in seeking support from others in a similar position by joining the prenatal exercise sessions:

*"... my family members, they are all back at home. So I decided to ease things for me, I decided to join an prenatal exercise." (Sad face.) (P2)*

Participant 2 recognised the importance of engaging in prenatal exercise for the health of herself and her unborn baby, as well as for the support she gained from others who in a comparable situation. Women with sufficient knowledge about prenatal exercises

and a good support system are happy and eager to engage in these activities (Belachew et al., 2023:3).

Support and guidance from the midwife offering the prenatal exercises and the other expectant mothers in the antenatal class promote physical health, reduce anxiety and stress and increase maternal knowledge (Dai et al., 2024:2).

#### *Subcategory 3.3.1: Exposure and access to educational knowledge leading to health literacy*

Participants were provided with health education about the benefits of engaging in prenatal exercises and this empowered them to make informed decisions about achieving better health outcomes. This journey was not focused only on achieving good physical health as a comprehensive approach was used to address physical, psychological, and social dimensions during pregnancy. It was experienced:

*“She would demonstrate it to us and then we would do it together or she would let another mother come in front and also demonstrated to us so that we would know.” (Facial expression of excitement.) (P2)*

*“She also showed us from her experience how to do it. She demonstrated and she explained to us the benefits of these exercises.” (P3)*

The midwife used a hands-on interactive approach to demonstrate the form and benefits of prenatal exercises to facilitate participants’ learning and understanding. The prenatal exercises offered by the midwife should be supervised, convenient, enjoyable and tailored to participants’ needs by trimester of pregnancy (Wirtu, 2024).

#### **3.4.3.3 Category 3.4: Feeling safe to share stories between mothers having the same experience**

The environment in which the prenatal exercise sessions were conducted made participants feel safe to share their experiences with others undergoing similar challenges. Participants can feel connected to the midwife and each other during the exercise sessions, which can engender feelings of empowerment and security

(Turkmani & Dawson, 2024:3). They could openly discuss their thoughts, feelings and challenges without judgment:

*“Now I feel like it was a safe space to speak about intimate things I feel this exercise and pregnancy journey it's. As a personal thing, so not many people would want to sort of speak and openly about it.”*

(Looking relieved.) (P1)

Participants felt comfortable and secure in sharing intimate details about their pregnancy with other expectant mothers. They were appreciative of the environment the midwife provided to enable them to feel comfortable and at ease during the prenatal exercise sessions. The midwife should adopt a holistic approach to deliver quality care as she took their physical, emotional and spiritual wellbeing into consideration when conducting the prenatal exercises (Turkmani & Dawson, 2024:4).

#### *Subcategory 3.4.1: Openness in sharing stories that are unique and similar*

The prenatal exercises should create an opportunity for pregnant women to come together in a group setting to share their experiences with others in a supportive environment (Nagesh et al., 2023:260). The participants found comfort in sharing and comparing experiences, including the benefits of prenatal exercises, as they welcomed an environment of openness and connection.

*“My best experience I would say was sharing.”* (P3)

*“So at least I can also know share it with other people (Kegel exercises), other antenatal mothers, umm, if they also so maybe, perhaps experienced the same (urine leaking)?”* (Looking relieved.)

(P2)

*“More relaxing and more interesting knowing that there are people that are experiencing going through the same that are experiencing.”*

(Calm voice.) (P2)

Participants found joy and fulfilment in sharing their pregnancy journey with the midwife, other expectant mothers and members of their families. Sharing experiences during the prenatal exercise sessions created a benign sense of belonging, empathy



and understanding. Engaging in prenatal exercises made participants feel supported, in control, safe and respected. A positive experience makes pregnant women feel joy and have a positive impact on their psychosocial well-being (Leinweber et al., 2023:362).

By supporting each other during the exercise sessions participants can experience a sense of companionship and a shared understanding (Mabetha et al., 2022:3). It connected participants as they openly shared their experiences and challenges and developed coping mechanisms to overcome these challenges together:

*“For those of us that are employed umm, complained the about the same symptoms, about the back pain and the cramps and we have all realized that we are doing the exercises even after work even before work.” (Thinking.) (P2)*

*“I was scared about post-natal depression because it's a common thing. That is also one of the stuff that were exchanged during our conversations as mothers.” (P5)*

*“You can relate with one, with all the obstacles you encountered during the pregnancy, irrespective if it is financially, emotionally, physically.” (P5)*

Social support during the prenatal exercise sessions not only improves the health of the mother but contributes to a sense of belonging and stability, resulting in improved self-esteem, reduced stress and minimal risk of developing mental health disorders (Al-Mutawtah et al., 2023:5). The bond formed between participants and the midwife during the prenatal exercises provides a supportive environment where they felt encouraged and empowered as they navigate the journey of pregnancy (Mabetha et al., 2022:5).

Participants felt motivated to prioritise their physical wellbeing and bond with other expectant mothers with similar problems during the prenatal exercise sessions:

*“I really liked speaking about my experience and then also listening what other people are struggling with.” (Pointing to ear.) (P1)*

*“...now it's not that you are keeping the emotions to yourself. You let go. Of it, you talk about it. So now it's like you're handling it. You release it. You talk about it. And then you also discover that you're not alone, dealing with all of those stuff.” (Moving hands.) (P5)*

By sharing their emotions and physical symptoms, participants released tension, felt supported and realised that they were not alone during pregnancy:

*“You know most when you're pregnant, your emotions are all over the place (moving hands).” (P5)*

*“I think you know when you are pregnant you have a lot of mood changes, and you are happy then you are sad. Yes, then you feel new energetic. Then you just feel like you want to sleep all the time. So yes, those type of feelings we could share and advise each other on.” (P3)*

The sharing of experiences between participants seemed to help control mood changes. Merely knowing that others were going through similar emotional changes during pregnancy was comforting.

Women from different social and ethnic backgrounds participated in the prenatal exercises:

*“And we are different races. So, there's no restriction to race, which is very nice, ... as we encounter now different cultures and beliefs.” (P5)*

This can create a shared experience of being united and in harmony, with participants happy to support and strengthen each other (Malmström et al., 2022:4). They were particularly comfortable sharing personal experiences and thoughts when the group was small and intimate:

*“When the group is a little bigger and yes, sometimes you feel a little bit shy, and you do not disclose really how you feeling? And yes, so but because we were just three or a small group, we talked freely to each other about our experiences and about the different stages of pregnancy. And what was bothering us yes.” (Nodding head.) (P3)*

*“We're actually 6 mothers, [different age groups] the instructor like to keep it small so she can have more time and can attend more to our needs during the practice session.” (P5)*

The midwife preferred smaller groups for the prenatal exercise sessions as it allowed her to pay individual attention to the needs of participants. In the small exercise group setting, participants developed a greater sense of trust in and support for each other, creating a safe space for open and honest communication. Participants can improve their knowledge, skills and felt confident to continue with physical activity during pregnancy (Hyvärinen et al., 2022:3).

#### **3.4.4 Theme 4: Socially enjoying the togetherness with others in a similar position**

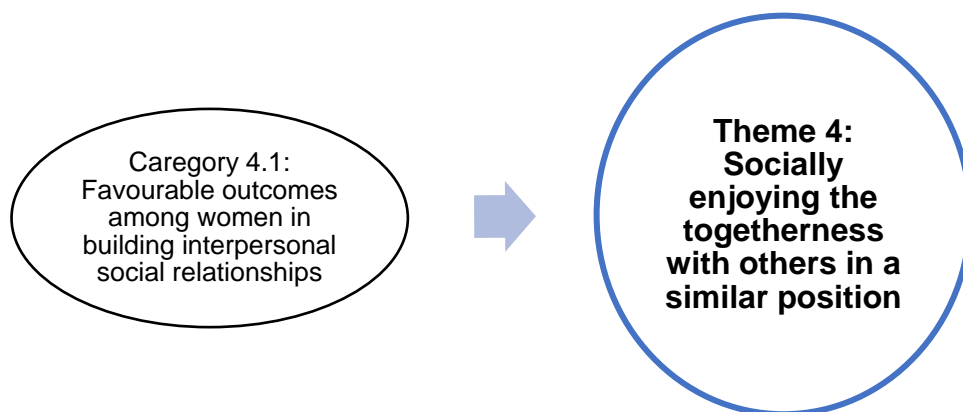


Figure 3.4: Theme 4: Socially enjoying the togetherness with others in a similar position

Engaging in prenatal exercises brought participants physical, emotional, and spiritual satisfaction (Lin et al., 2023:2). Being together – togetherness – in a positive and enriching social environment, participants could bond, share their experiences, offer advice, and find comfort in knowing that they were not alone in their journey:

*“Togetherness, being together with other people. And seeing how we could really rely on each other.” (P7)*

The participant valued the sense of unity and connection that came from doing the exercises with other pregnant women, emphasising the importance of mutual support

and reliance within a group setting. The midwife should create a welcoming environment where participants could support each other to reach their goals together (Craig et al., 2023:3736).

#### **3.4.4.1 Category 4.1: “It was nice”: favourable experiences among women in building interpersonal social relationships**

Participants experienced heightened increased social support, emotional wellbeing and overall satisfaction in working together on building and maintaining meaningful connections. Engaging in prenatal exercise positively impacted their overall experience of antenatal care. Dedication to the exercises plus their relationship with the midwife and other mothers can foster a supportive and collaborative environment for the duration of their pregnancies (Hibusu et al., 2024:2).

Special memories of new friendships emerged between participants as they engaged in the prenatal exercises together:

*“I just feel that being with other women and hearing their stories in the group. I feel like we can support each other, and I feel supported just by knowing what they what they went through, and we could connect like that. And it was. It was something really nice.” (Smiles.) (P4)*

This participant found the connection and support received from other mothers in the group to be a positive and enriching experience. The midwife aimed at empowering women through the prenatal exercise class to make informed decisions about physical activity in pregnancy and beyond (Taylor et al., 2024).

The prenatal exercises offered participants the opportunity to be part of a supportive community with similar interests that come together to improve their well-being during pregnancy. Similarly, another said:

*“And being part of something, being part of a community, it felt good.” (P1)*

A welcoming, and supportive environment were created by the midwife and participants felt comfortable and at ease to join the group exercise sessions (Peralta, Yager & Prichard, 2022:808).

Prenatal exercises were a special and unique experience for expectant women as they engage in activities that was safe and beneficial to their overall well-being:

*“I loved speaking to other mothers. It is not often that you actually get in contact with other pregnant women also, so I enjoyed having the mutual experience with other ladies. And as well as the midwife itself, yeah.” (P1)*

Participant 1 enjoyed engaging with the other mothers in the group and highlighted the support and guidance received from the midwife in the prenatal exercises. Prenatal exercises are an effective strategy that increase maternal physical activity levels of participants, improve mental well-being and providing an opportunity for socialization between participants (Silva-Jose, Nagpal, Coterón, Barakat & Mottola, 2022:2).

Prenatal exercises enabled participants to connect and relate, sharing experiences and supporting one another during their pregnancy journey:

*“All the pregnant women we could socialise, we could share our experiences and our concerns. So, we were able to relate to each other and you know share the experience, assist one another, and support one another.” (P1)*

*“I got the opportunity to engage with other pregnant ladies that are experiencing, which situations are more or less the same or have been through the same experience.” (P6)*

New friendships emerged:

*“Look, I it was good for my mental health also. At the time and like I said, it was nice to engage with the community. Also, the fact that I recently moved from Namibia, so I do not have any friends, so it was also it was good for my mental health and so. To interact with other people also.” (P1)*

Engaging in the group exercises not only improved participants' physical health but also contributed to improved mental wellbeing. Reciprocally, social engagement boosted the physical activity levels of the participants and encouraged them to maintain a healthier lifestyle (Hovland et al., 2023:3).

Social interaction between participants and their partners at the antenatal classes made the activity more enjoyable. Active partner involvement during prenatal exercise sessions is an effective strategy to enhance both maternal and newborn health outcomes (Van Lonkhuijzen et al., 2023:2).

*“He attended twice with me, OK, because due to work commitment, the other ones he couldn't. For him was a very fun experience and it was exciting for him to see that ladies and their partners can get together and. It also gave him a positive outlook on swollen legs and stuff like that we experience as pregnant women.”* (Laughs aloud.) (P7)

Having a supportive partner empowers women to deal with the challenges of pregnancy, such as maintaining optimal physical health and following a nutritious diet needed for the wellbeing of both mother and unborn baby (van Lonkhuijzen et al., 2023:3).

*“She [midwife] advised us that, we could invite a partner, and, in my case, my partner was like you know in another province so he could never attend.”* (P2)

*“We could bring our partners, but sometimes, you know, as life goes on, the partners can't always come with you. And maybe one of us is without a partner then she [the midwife] really assist with the exercises.”* (P5)

The partners of some participants could not attend the prenatal exercise sessions because of other important commitments, but the midwife ensured that the women on their own received particular support and guidance. The participants generally experienced a sense of connectedness with the midwife as they were physically and emotionally supported and made to feel safe, knowing that they were in the care of a competent healthcare provider.

### **3.5 CONCLUSION**

Engaging in prenatal exercises had a positive impact on the physical, psychological and emotional health of pregnant women. Prenatal exercise offered various benefits that improved the overall wellbeing of the mother and her unborn baby. Data obtained from participants showed that they sought opportunities to broaden their knowledge about the exercises and how to access antenatal classes. The women interviewed

expressed how this engagement in physical activity brought happiness and joy. They appreciated the opportunity to be part of a community in which they could share experiences and motivate each other to commit to the exercises during the pregnancy period and beyond. The area where the exercise sessions were conducted was pleasingly spacious and well-appointed. Support and guidance from the midwife led to a trusting relationship with participants. The exercise sessions offered addressed their individual needs at various stages in their pregnancies. The women gained confidence, felt prepared and were looking forward to the upcoming birth.

## CHAPTER 4

### CONCLUSIONS, GUIDELINES, RECOMMENDATIONS, AND LIMITATIONS

#### 4.1 INTRODUCTION

The findings of the study have provided general insight into the experiences of pregnant women attending antenatal classes. This chapter focuses on the second objective of the study, which was to develop guidelines for midwives offering holistic antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice. Safe and beneficial prenatal exercises can contribute to the physical, psychological, social and spiritual wellbeing of women during pregnancy.

#### 4.2 CONCLUSIONS

The underlying storyline of this study was that feelings of happiness and wellbeing were engendered among a diverse group of pregnant women by a holistic approach to prenatal exercise. These were diverse in behaviour, cognitive, social and spiritual development, through movements. Pregnancy is a precious but potentially difficult period in a woman's life as it is accompanied by physical, emotional and psychological changes. Engaging in prenatal exercises had numerous benefits for both the mother and the developing baby. Participants learned to bond with other mothers who shared the same journey and the midwife who conducted the antenatal classes. While physically engaging in these prenatal exercises, the participants were able to share their thoughts and feelings without being judged or feeling ashamed. The sessions lifted their mood and overall wellbeing, even bringing them joy and fulfilment.

The first theme addressed the participants' happiness at the existence of exercises offered in classes, seen as a setting beneficial to both mother and baby. The antenatal classes offered a holistic approach to maintaining an active lifestyle during pregnancy, and as such were perceived as not only physically rewarding but also serving to enrich mindfulness and enhance mental awareness.

Participants showed enthusiasm for obtaining overall wellbeing. Mothers-to-be experienced the benefits of exercising and were able to address their fears regarding their increasing discomfort as the pregnancy progressed.



The midwife empowered participants with knowledge and skills during the exercise sessions which enabled them to make informed decisions regarding their own physical health. They were able to develop coping mechanisms to minimise common discomforts during their pregnancy. They were glad to acquire more knowledge about the benefits and importance of engaging in exercise during pregnancy, and about how such exercise could help with frequent discomforts such as urinary incontinence, back pain, swelling of the lower limbs and neck stiffness. Participants engaged in various exercises to address specific areas of discomfort, aimed primarily at improving muscle strength and relieving back pain.

In Theme 2, the findings indicated that the midwife established a trusting relationship with participants through antenatal education, focusing in part on safety when engaging in exercise. Women felt content *spiritually and mentally*, and enjoyed interaction with other mothers from different backgrounds. Experiences shared among them and the clear instructions from the midwife made the women feel safe and cared for while doing the prenatal exercises. The women indicated that the exercises relieved stress, improved their mood and enhanced their overall wellbeing. They gained confidence and were keen to continue exercising independently at home. Guidance and support from the midwife motivated the participants to maintain a healthy lifestyle during pregnancy.

Theme 3 addressed *the psychological safety* that was created by a feeling of being holistically fulfilled as a pregnant woman in all aspects of her life. Participants experienced a sense of psychological security and comfort as they were holistically guided in all aspects of their pregnancies by the midwife, other expectant mothers, partners and families.

Sharing experiences with other women attending the prenatal exercises created a feeling of empowerment, a positive self-image and a sense of being in control of their pregnancies. This support, coupled with the motivation and guidance received from the midwife, improved the women's self-confidence and helped them feel more at home in their pregnant bodies. The exercises in the classes thus prepared participants for childbirth both physically and emotionally. The classes fostered a sense of

camaraderie and understanding that contributed to overall wellbeing during pregnancy.

Theme 4 indicated that participants enjoyed the togetherness with others in a similar position and experienced feelings of satisfaction from being part of this community of support. Sharing similar experiences, interests and circumstances brought the participants together and formed supportive social bonds among them. There were new friendships and a sense of belonging to a community with shared interests. Partners were also invited to the exercises offered in classes, which gave them insight into and a sense of involvement in the pregnancy. The group activity yielded valuable lessons and experiences that enriched the lives of participants and their partners.

The midwife should continue with future classes that extend beyond pregnancy, as the participants were keen to continue the journey. By considering the suggestions in the Guidelines, below, the midwife can improve future classes to better address the needs and preferences of the participants and ultimately create a more engaging and fulfilling experience for everyone interested and involved.

### 4.3 GUIDELINES

Four guidelines were developed from the themes of the data analysis (Table 4.1).

Table 4.1: Themes and categories

Themes	Guidelines for the midwife
Theme 1: Happiness at the existence of exercises in classes that are beneficial to mother and baby	Guideline1: Encourage mothers to attend prenatal exercises that bring happiness and are beneficial to mother and baby
Theme 2: Establishing a trusting relationship between the midwife and clients, to support pregnant women holistically.	Guideline 2: The midwife should establish a personal trusting relationship with each pregnant woman, and offer safe physical exercises that address the holistic needs of mothers
Theme 3: Psychological safety that is created by a feeling of being holistically fulfilled as a pregnant woman	Guideline 3: The midwife should promote the psychological empowerment of women in pregnancy through antenatal classes
Theme 4: Socially enjoying the togetherness with others in a similar position	Guideline 4: The midwife should maintain a socially healthy environment in which the pregnant women feel comfortable and can identify with other pregnant women

### **4.3.1 Guideline 1: Encourage mothers to attend prenatal exercises that bring happiness and are beneficial to mother and baby**

#### *4.3.1.1 Rationale*

Undertaking prenatal exercises improves the wellbeing of expectant women and is an effective means to prevent and manage pregnancy-related health complications (Santos-Rocha et al., 2022:5). According to Regulation 2488 from the South African Nursing Council (South Africa. SANC, 1990), prenatal exercises offer a range of benefits contributing to the wellbeing of the pregnant women and her unborn child. Regular prenatal exercises improve cardiovascular health, strengthen the pelvic muscles that are actively used during delivery, manage back pain and have a positive impact on the mental health of the mother. The South African Maternal, Perinatal and Neonatal Policy (South Africa. Maternal, 2021) intends frontline healthcare providers like midwives to play a part in improving maternal health during the antenatal period and beyond.

This policy and the Guidelines for Maternity Care in South Africa (South Africa. Guidelines, 2016) state that engagement in regular physical activity during pregnancy is beneficial for the health of the mother and also plays an important role in the wellbeing of the developing foetus. Prenatal nursing care, according to the International Council of Nurses (ICN, 2017), focuses on improving prenatal care facilities to decrease maternal mortality worldwide. Among the functions of these facilities is the provision of antenatal classes.

The UN's Sustainable Development Goal 3 is one of 17 goals focusing on promoting health and wellbeing and reducing maternal mortality (Roser, 2024). Prenatal care is one of the key elements in reducing the number of maternal deaths. Expectant women should be attended to by a skilled healthcare worker who can provide safe, quality care. Antenatal care is a preventive healthcare that includes medical checkups, advice on maintaining a healthy lifestyle through prenatal exercises, and information on maternal physiological and psychological changes (Daly et al., 2024:2). It aims to prevent health problems during pregnancy and support the wellbeing of both mother and child. The World Health Organisation (WHO) refers to Respectful Maternity Care (RMC) as care that should be provided to all women that does not compromise their

confidentiality, dignity and privacy, while ensuring freedom from harm and mistreatment, enabling them to make informed decisions, and assuring them of continuous care from labour through to childbirth (Cantor et al., 2024).

According to R2488 (Regulations relating to the conditions under which registered midwives and enrolled midwives may carry on their profession), the South African Nursing Council (South Africa. SANC, 1990) recommends that all expectant women receive at least four antenatal visits to check and monitor the wellbeing of both mother and baby. The WHO also recommends a minimum of four antenatal visits for all pregnant women, of which the initial visit should occur in the first trimester of pregnancy (Van Pelt et al., 2023:3).

#### *4.3.1.2 Implementation of Guideline 1*

The following actions must be performed by the midwife in respect of Guideline 1:

##### *Starting physical movement in a place that has significance for the mother*

- By incorporating safe and appropriate prenatal exercises into their daily routine women can experience a range of benefits that contribute to a healthier and more fulfilling pregnancy journey (González-Cazorla et al., 2024:3).
- A variety of flexible mobility exercises should target different areas of the body of the pregnant women, for specific reasons. Women should point out to the midwife the specific areas of discomfort being experienced (Sánchez-Polán, 2023:2). Exercises to focus on include breathing exercises that calm and help women to control their emotions, creative ball, neck, leg and feet exercises, stretching exercises and pelvic floor exercises that strengthen major muscles involved during the bearing down process when delivering the baby.
- The midwife should ensure that the women with identified physical discomfort participate in decision-making to develop an individualised prenatal exercise plan. This engagement ensures that an expert midwife recommends safe and suitable exercises. The midwife should refer the women to a medical practitioner in any situation of risk or when they are unsure of which action to take.

- A person-centred approach in developing an exercise plan helps women to set achievable goals during the exercises in offered in the classes. The midwife should request the women to commit to attending regular sessions.
- The exercises should be executed under the guidance and supervision of the (preferably advanced) midwife to ensure that they are performed safely and correctly. By incorporating prenatal exercises into routine antenatal care, the midwife guides women towards healthier lifestyle choices, including maintaining a healthy weight during pregnancy (Charnley et al., 2024:2).
- Women are to communicate any improvement in comfort because of the prenatal exercises, for ongoing support from the midwife.

*Initial decision-making to join exercise group for physical wellbeing*

- Expectant women who consider joining a prenatal exercise group are encouraged to enquire during routine antenatal care about the availability of this in their area. The midwife should reinforce awareness about prenatal exercises and their benefits during consultations with expectant women (Negash & Alelgn, 2023:4).
- Before a woman enrolls in a prenatal exercise programme, a consultation session with the midwife is necessary as the midwife can provide guidance on the benefits and safety of engaging in physical activity during pregnancy.
- Pregnant women should be informed during routine antenatal care about the benefits of engaging in prenatal exercise. They should be encouraged to join exercises offered in antenatal classes because they focus not only on physical health but also on psychological wellbeing and preparing women mentally for the upcoming birth and adaptation to parenthood.
- Health promotion interventions conveying information regarding prenatal exercises are an effective strategy to increase women's knowledge of these exercises and enhance the level of physical activity among them (Marini et al., 2023:2).

### **4.3.2 Guideline 2: Establishment of a trusting relationship with a midwife in a healthcare facility**

#### *4.3.2.1 Rationale*

A trusting relationship between a midwife and the pregnant woman in her care requires open communication, trust, respect and a shared decision-making process. This improves the expectant mother's satisfaction during antenatal care and birthing experience (Almorbaty et al., 2023:1328).

As outlined in the Maternal, Perinatal and Neonatal Health Policy (South Africa. Maternal, 2021), it is important that all healthcare professionals involved in providing maternal care ensure that the services offered to expectant mothers and their partners are ethically correct. The care provided must be safe and free from harm, while also being delivered with respect, compassion and empathy towards the women.

The relationship between the midwife and pregnant women is fundamental to the delivery of high-quality antenatal care. The Nursing Act, No. 33 of 2005 (South Africa. Nursing, 2005) highlights the crucial role of trust between nurses and patients. Trust is a cornerstone of nursing and is built by following strict rules of professional behaviour and ethical principles. A good interpersonal relationship with the midwife contributes to a positive experience during the prenatal exercise sessions (Bingham et al., 2023:712).

#### *4.3.2.2 Implementation of actions under Guideline 2*

The following actions must be performed by the midwife according to Guideline 2:

##### *Provide effective information*

- Explain the benefits of engagement in prenatal exercise in clear and simple terms to the woman as this makes her feel informed and involved in decision-making regarding her own health.
- Encourage weekly meetings between the woman and midwife who is offering the prenatal exercises the woman to establish a continuous relationship with the midwife and be kept updated about the latest information on prenatal exercises and their benefits.

- Women should also be encouraged to take regular breaks between conducting their daily exercises so as not to be overwhelmed by the new experience. They are more likely to enjoy the exercise sessions as a result. If a woman misses a class do not focus on it as negative behaviour, and rather show an understanding of circumstances and encourage her to stick to her newly made decision to improve her wellbeing.

#### *Open communication*

- Encourage open communication with the midwife so that women feel more comfortable about expressing themselves and connecting with the midwife on a deeper level of sharing more personal experiences.
- The midwife actively listens and shows respect for the women's difficulties, ideas and preferences during the classes, remembering that each woman is a unique human being with different perceptions and needs. She thereby creates a safe, supportive and non-judgmental environment where women feel comfortable to express their personal and sometimes awkward thoughts and concerns.
- Individual on-demand consultations could be scheduled with the midwife to provide guidance and support based on the needs of the woman. Referrals to be made when necessary.
- Encourage women to engage in prenatal exercises to experience positive outcomes such as improved physical health, increased energy levels, enhanced mood, good sleep patterns and overall wellbeing.
- Provide support and guidance to help women feel "safe" in conducting appropriate prenatal exercises by being next to her side while conducting the exercises and observing if exercises are being done correctly.
- Women should be encouraged to set goals specifically related to their fitness level and interest and engage in activities that they enjoy and find motivating.

#### *Building a trusting relationship*

- Trust will be enhanced by showing respect for the privacy of the women, who feel shy about the changes in their bodies and about being adequately clothed during the movements. Hold individual conversations in a private space without

disturbances and maintain confidentiality around any aspects that the pregnant women share with the midwife.

- Respect shown by the midwife towards the women during the initial engagement allows them instantly to form a strong connection. Use good interpersonal and communication skills as this facilitates the relationships between the midwife and the women (Almorbaty et al., 2023:1328).
- The midwife should actively listen to the woman's concerns and feelings. Scheduled weekly appointments with the woman can provide a sense of security and help ready her for the birth process.
- The midwife should show empathy by acknowledging the woman's emotions and experiences and thus strengthen the bond between them.
- Reassure women that all personal and medical information shared will be kept private and confidential.

### **4.3.3 Guideline 3: Promotion of psychological empowerment through antenatal classes for pregnant women**

#### *4.3.3.1 Rationale*

During prenatal exercises in the classes, identification is a psychological process in which a person identifies with the characteristics or properties of another person or group. It plays an important role in the development of personality structure and social identity. Identification can occur on various levels, such as personal, social, or cultural. It is a fundamental component of socialisation and contributes to the formation of norms, values, and behaviours (Awork, 2024).

Women are psychologically empowered by attending prenatal exercises as the classes enhance their self-confidence during pregnancy and offer them a means of Identification with a peer group. Promoting psychological wellbeing during pregnancy minimises the risk of psychological diseases and enhances cognitive processes, attitudes and behaviour (Winarni et al., 2023:93). By maintaining good psychological health, pregnant women support their overall health and wellbeing (Navon-Eyal & Taubman-Ben-Ari, 2023:3).



The World Health Organisation defines maternal mental health as a state of wellbeing in which a pregnant woman identifies her own capabilities, effectively manages stress, engages in productive activities, and positively contributes to her community (Sun et al., 2024:2). Antenatal education plays an important role in helping women with essential psychological adaptations during pregnancy (César-Santos et al., 2024:515).

The Maternal, Perinatal, and Neonatal Health Policy (South Africa. Maternal, 2021) states that promoting the psychological wellness of pregnant women is an essential component of healthcare. This policy emphasises Person-Centred Care (PCC), which ensures that the psychological needs of women are given equal importance alongside their physical health through the integration of mental health into antenatal care.

Antenatal classes should prepare the women for childbirth, breastfeeding and parenthood by encouraging them to adopt healthy behaviours that will increase self-confidence (Dagla et al., 2023).

#### *4.3.3.2 Implementation of actions for Guideline 3*

The following actions are indicated for the midwife in terms of Guideline 3:

- Provide women with information on how to love themselves
- Create a supportive non-judgemental environment that empowers them to talk freely about their concerns and experiences
- Encourage women to read magazines, books and articles about self-love and mental health during pregnancy to create a deeper understanding of and appreciation for their wellbeing
- Emphasise the importance of making time for yourself as this helps with relaxation and organising one's thoughts (women tend to be more emotional during pregnancy as a result of the increase in hormonal production)
- Encourage women to respect and value the opinions of others though these may differ from their own. Appreciating different perspectives will help them to connect with one another.

Emphasise that changes in the body and weight gain are normal within certain set boundaries:

- Give health education talks during routine antenatal care about nutrition and how to adapt to healthy eating habits during pregnancy
- Involve a dietician to address dietary issues and offer support to those who need it
- Emphasise that weight gain during pregnancy is normal and women who engage in physical activity will not gain more weight than they can lose afterwards.

Create an environment of emotional support:

- Set specific dates and times for regular weekly antenatal classes that enable women regularly to access routine antenatal care classes. These classes should focus on the physical and psychological empowerment of women to enhance their wellbeing during pregnancy
- Create a supportive environment during antenatal classes where pregnant women can connect, share their unique experiences and provide emotional support for each other
- Involve other members of the multi-disciplinary team such as psychologists, mental healthcare nurses, counsellors and community support groups that offer additional support and resources to promote the mental wellbeing of pregnant women
- Create a safe and non-judgmental space within antenatal classes for women to express their feelings, concerns and fears. By encouraging open communication women feel heard and supported by their fellow peers and healthcare workers.
- During the antenatal classes, provide health education that focuses on self-care practices, such as relaxation techniques, healthy coping mechanisms, and setting boundaries. Empowering mothers with self-care strategies assists them to prioritise their overall wellbeing during pregnancy.
- Encourage partners and family members to participate in antenatal classes as this will provide additional support and understanding for pregnant women.

Involving the women's loved ones in the pregnancy journey can strengthen the support system and promote a sense of community.

#### **4.3.4 Guideline 4: The midwife should maintain a socially healthy environment in which pregnant women feel comfortable and can identify with other pregnant women**

##### *4.2.4.1 Rationale*

The importance of Guideline 4 was confirmed in a recent study, where women engaging in prenatal exercises experienced a socially supportive environment. The guidance and supervision of the midwife during these exercise sessions, and interaction with other pregnant women, built the women's self-esteem and made them feel motivated and confident (Belachew et al., 2023:4).

Prenatal exercises should be integrated at all healthcare institutions that offer basic antenatal care to pregnant women (Talbot et al., 2024:303). The Maternal, Perinatal and Neonatal Health Policy (South Africa. Maternal, 2021) seeks to improve antenatal care and its outcomes by encouraging active participation in exercises during routine antenatal visits. This is an opportunity to enhance both the social and the psychological dimensions of the pregnant woman as a holistic being.

Midwives should therefore focus on their important role in motivating, informing and encouraging women to engage in prenatal exercises during routine antenatal care visits (Kilpatrick et al., 2024:4).

##### *4.2.4.2 Implementation of Guideline 4*

Midwives should implement the following to address Guideline 4:

###### *Support among pregnant women*

Encourage good interpersonal relationships among attendees at the antenatal classes, so that new friendships can be formed. This could be a unique and rewarding experience for pregnant women to identify with a "community" of support.

### *Involvement of the partner*

Partners should be invited to join the classes to respect and understand the psychological needs of pregnant women and feel included in the preparation for the birth. Have open discussions with women who are too timid to join the exercises offered in the classes, to overcome their reservations.

### *Competencies of the midwife*

- Midwives to constantly update their competencies (knowledge, skills, attitudes and values) – if necessary, in relation to the various cultural backgrounds of the prenatal exercise participants – to promote cultural inclusivity.
- Engage actively with other members of the multi-disciplinary team to develop a comprehensive antenatal care plan that includes prenatal exercises as a central component.

### *Creating and sharing positive outcomes of classes*

- Midwives should encourage enthusiasm among the pregnant women to exercise independently, by praising the achievement of women who have done so.
- The midwife should share positive stories about the psychological benefits derived by previous participants from prenatal exercises, perhaps stimulating a group discussion to identify the best possible activities to address individual needs and circumstances.
- Encourage women to attend the classes regularly, as then they can set specific positive goals and objectives for themselves. They can then look forward to a positive childbirth process while enjoying overall wellbeing. Selecting soothing and uplifting music to play in the background during the prenatal exercise sessions can have a calming effect on the women, relaxing the mind, reducing stress and increasing motivation.
- To prepare women who are apprehensive about the upcoming childbirth, an open day event for expectant women and their partners could be arranged. The open day can serve as an opportunity to provide valuable information about the psychosocial benefits of engaging in exercises. An invitation might be sent to other antenatal clinics offering exercises, and experienced parents can share positive stories about their experiences. It is possible also to create interactive question-and-answer opportunities to help the new parents make informed

decisions about their health and that of the unborn baby. The open day event would empower parents with the knowledge, confidence and resources necessary to cope with the pregnancy journey.

#### *Involvement of the community*

- Create awareness about prenatal exercises offered in antenatal classes within the local community by hosting health education sessions about prenatal exercises at the community centre, library or gym to educate women about the importance of engaging in physical activity during pregnancy.
- Use social media platforms such as Facebook, WhatsApp and Twitter to share information about the importance of staying physically active during pregnancy.

## **4.4 RECOMMENDATIONS**

Recommendations made below are for the healthcare environment, nursing and health education and research.

### **4.4.1 Healthcare environment**

Midwives should place clear motivational posters in antenatal clinics to raise awareness and highlight the benefits of engaging in prenatal exercises. The posters should provide the dates, time and venue where the exercises will be offered, making it easy for pregnant women to access such information.

The midwife should promote the overall wellbeing of the mother by advising her on both prenatal and post-natal classes. She must convey the message that engaging in regular physical activity is safe during pregnancy, promotes the physical health of both the woman and her developing fetus and minimises the risk of developing pregnancy-related complications such as hypertension and diabetes (Kwiatkowska et al., 2024:219). An essential exercise is the pelvic floor or Kegel exercise to strengthen the pelvic floor muscles and improve urinary continence.

Exercise areas should provide a comfortable environment, with good ventilation, a natural light source and enough space for women to move about freely. By creating

an exercise space that is welcoming and congenial, the midwife will motivate women to continue doing exercises weekly.

Various items of equipment may stimulate interest in the exercises, such as birthing balls, yoga mats and comfortable chairs. Soft music helps to create a calm and relaxed atmosphere.

The professional midwife should be knowledgeable about safe and appropriate exercise and have an open-door policy regarding consultations with women about their health and exercise. Women should be made to feel comfortable about discussing any concerns or questions regarding their exercise routine.

The midwife may include discussion in the exercise sessions, where mothers can talk about how they address their various discomforts. The discussion may be led towards ways of ensuring that the exercise experience is safe and enjoyable. By prioritising open communication during classes, the midwife can make sure that the exercises are being conducted safely for all.

Social engagement during prenatal exercises has numerous benefits for expecting mothers. Through sharing a similar experience, women can connect more easily with each other. The midwife should build in time after classes to provide further opportunities for such engagement. Social support boosts the motivation of women and provides a sense of togetherness. They will feel less isolated in their pregnancy, and connecting with other women will enhance their overall wellbeing.

The midwife should encourage the involvement of the partner. Prenatal exercises create an opportunity for the father to support the pregnant woman and strengthen the bond between them. Through actively participating in the exercises, partners gain a deeper understanding of the holistic changes that the expectant mother is experiencing. It can be a fun experience that creates fond memories and promotes a healthy relationship between them in anticipation of the new family environment.

To ensure the safety and effectiveness of prenatal exercises, it is recommended that an advanced midwife offers the correct exercises to women. The midwife should

monitor the progress of women participating in prenatal exercise programmes and evaluate their effectiveness. She should encourage the participants to provide feedback as this will enable healthcare workers to improve the quality of care being delivered to women.

#### **4.4.2 Nursing and health education**

Midwifery as a qualification offered in academic institutions should be of the highest standard as in each of her professional duties the midwife is responsible for two human lives, mother and baby. Midwifery plays a crucial role in maternal and newborn health. By integrating midwifery education into training programmes, healthcare workers can obtain a complete understanding of reproductive health and childbirth. Healthcare providers gain knowledge and skills in providing comprehensive antenatal care to pregnant women and their families by including midwifery principles, skills, and practices in training programmes. This approach has led to improved health outcomes for both pregnant women and their unborn babies, as well as a more patient-centred approach to maternity care. The midwifery training programme should ensure that nursing students and other healthcare workers are competent in providing quality and comprehensive antenatal care to pregnant women and their families.

Educators must ensure that prenatal exercise programmes for women are part of the classes they offer and emphasise that they should be safe and promote the overall wellbeing of pregnant women, based on their needs and fitness levels.

The orientation of students at an antenatal clinic prepares them for offering prenatal exercises in an antenatal clinic setting. Students should understand the different exercises offered and the benefits of each for the mother and unborn baby.

A physiotherapist can demonstrate and explain the exercises to students to enable them to gain a deeper understanding of the physiological principles of prenatal exercises. Physiotherapists bring a unique perspective and expertise that enriches the educational experience of nursing students, helping them develop a solid foundation that they can bring to bear when engaging in patient care.

Students can develop educational posters that demonstrate the importance of antenatal classes and use them in simulation laboratories, as educational tools and as a constant reminder to educate pregnant women and their families about prenatal exercises. Posters developed by students can be placed in clinics as visual aids for pregnant women.

During clinical sessions, the 3rd- and 4th-year students can conduct these exercises under the supervision of a physiotherapist, as part of their midwifery classes. This will help students to understand prenatal exercise techniques. They will also be able actively to engage in the process, raising questions and receiving feedback.

In-service training should regularly be offered to midwives to update them on the latest scientific findings on how exercises should be offered. Midwives can in this way improve their skills and knowledge in providing evidence-based antenatal care to pregnant women and their families. By staying up-to-date with the latest prenatal exercises the midwife can offer the most effective interventions to promote the overall wellbeing of pregnant women.

Professional development in the form of in-service training provides midwives with the opportunity to learn new exercise techniques, discuss and debate them and continually improve their practice. Ongoing in-service training on health education also empowers the midwife to deliver quality information on exercises to women.

In-service training regulatory in the latest scientific exercises that a midwife can offer is essential. Regular in-service training at clinical facilities ensure that midwives are up to date with the latest prenatal exercises that can be offered at the antenatal clinic. Midwives can improve their skills and knowledge in providing evidence-based antenatal care to pregnant women and their families. By staying up to date with the latest prenatal exercises the midwife can offer effective interventions that promote overall maternal health and well-being. In-service training offers midwives with the opportunity to learn new exercise techniques and continuously improve their practice. Continuous in-service training and health education empowers the midwife to deliver quality care that suits the exercise need of women.



In sum, in-service training supports the continuous professional development and competence of midwives, students and other members of the multidisciplinary team giving quality care to pregnant women and their families.

Midwives should provide comprehensive antenatal education and counselling sessions to pregnant women that empower them with knowledge about the benefits and safety of conducting prenatal exercises. They should raise awareness of women's health issues during routine antenatal visits and through health promotions, offering free cervical screening and breast examinations and encouraging women to participate.

In addition to her role in antenatal classes, the midwife plays a part after the baby's birth. Before discharging a woman after giving birth, the midwife should offer guidance appropriate to her needs regarding exercises such as pelvic floor and gentle stretching that will assist her with regaining strength, improve flexibility and promote physical and mental wellbeing. She should encourage new mothers to attend prenatal exercises offered and provide ongoing support, health education and social interaction during the postpartum period.

Antenatal classes should offer specialised exercises, dietary information and emotional support to help women deal with the physical and emotional changes that accompany childbirth. In antenatal classes, women receive individualised care, build relationships with other new parents, and access resources to support their overall wellbeing. The midwife should encourage new mothers to prioritise their wellbeing during the prenatal period as this will result in improved physical and emotional health outcomes for both mother and baby.

#### **4.4.3 Research**

Further research can be conducted in both qualitative and quantitative research paradigms. One possibility is a correlation study of the pain level of mothers who undertook exercises frequently during pregnancy and those who did not, to test the hypothesis that women who have done prenatal exercises experience less pain than those who have not.

A scoping review can explore new exercises that are globally offered to pregnant women and their outcomes for the wellbeing of the unborn baby.

A qualitative study can explore the lived experiences of mothers who gave birth and undertook antenatal classes regularly.

Various surveys can be conducted to measure the relationships between prenatal exercises and (i) the emotional and physical wellbeing of the mother during the puerperium phase; (ii) the period of breastfeeding the baby; and (iii) losing weight after labour.

#### **4.5 LIMITATIONS OF THE STUDY**

As important as prenatal exercises are, it was difficult to purposively sample private clinics that offered antenatal classes. It would have been beneficial to have conducted the study at a public hospital, but there, antenatal classes are not offered regularly, are not as comprehensive as one might wish, or are not offered at all. The scarcity of prenatal exercises in private clinics is due to the preference for using advanced midwives, who are not readily available in the private sector. During the sampling, it was difficult to select participants who regularly attended the classes. The experiences of participants were based on the exercises offered by more than one midwife, who offered the sessions on a rotational basis.

This qualitative study included seven participants, after which data and meaning saturation occurred, and although the results reflect subjective experience, their transferability to other similar available settings seems eminently plausible.

#### **4.6 CONCLUSION**

The findings revealed that the women who engaged in prenatal exercises were happy, confident and had a minimal chance of developing pregnancy-related complications such as hypertension, diabetes mellitus and mental health issues. Participating in prenatal exercises enhanced the women's physical and psychological wellbeing and

provided various benefits for both mom and unborn baby. A trusting relationship was established between the midwives and the women, as they felt supported and their needs were addressed holistically. Psychological equilibrium and security through prenatal exercise empowered the women and they felt confident about their pregnancies and upcoming childbirth. By integrating into their practice the guidelines proposed above, midwives can support women holistically during pregnancy and promote the overall wellbeing of both them and their unborn babies.

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## ANNEXURE A: INFORMATION SHEET



PPO BOX 1906, Bellville, 7535

Tel: +2721-9596804

[www.cput.ac.za](http://www.cput.ac.za)

Email: [205203930@mycput.ac.za](mailto:205203930@mycput.ac.za)

### PARTICIPANT'S INFORMATION SHEET

**Project Title:** Guidelines for midwives in offering holistic-focused antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town

Dear Participant

#### **Introduction**

My name is Anthea Jacobs, and I am a registered Master's degree student in Nursing Science at the Cape Peninsula University of Technology under the supervision of Prof K. Jooste and Dr.O.M.M. Sehume. I would like to ask you to offer me an opportunity to explain the research that I wish to undertake and to ask you to voluntarily participate in an individual one-to one interview. Please note that you can ask any question you may have at any time.

#### **Purpose of the research study**



The purpose of my study is to develop guidelines for midwives based on the best experiences of pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town.

The findings of this study can be beneficial for making recommendations for midwives in private nursing practices that offer prenatal exercises to pregnant women

### **Description of study procedures**

As a participant in this study conducted you will voluntarily sign an informed consent form and I will explain the research process. Subsequently, individual semi-structured interviews will be conducted in a private room at the private nursing practice as agreed with you as the participant, not during antenatal classes. The individual interview conducted will not be longer than 30-40 minutes. With your permission I would like to record the interview, for me to gain more insight and to accurately analyse the data with my supervisor. I will also be taking notes to identify any gaps and to look open minded to the information that was provided by you as the participant.

### **Risks or discomfort**

You will be free from discomfort and a quiet environment will be created to make you feel welcome and at ease. The researcher is a registered nurse and midwife should you feel unwell any given time. There are various hospitals and clinics around Durbanville if we need a medical practitioner to attend to you.

### **Privacy and confidentiality**

Your privacy and confidentiality will be protected. An individual interview will be held with you in a private place and at a time of your choice. No names will be used on the recordings or transcripts and only the researcher and supervisors will have access to the information provided. All your information will be as electronic data, password-protected on the computer, for five years after the study has been completed, thereafter the data files will be deleted from the computer. The computer will be password protected and data stored in the Cloud. This is in-line with the POPI Act (No 4 of 2013) to ensure that your interview digital recordings will be stored in the Cloud, to prevent the data being used by third parties. The researcher is obligated not to share any confidential information obtained from the participant without her/his

consent and only the researcher, independent coder and supervisors of the study will have access to this information.

### **Conditions of participation**

Taking part in this study will be voluntarily and the decision to participate is totally up to you the participant. However, I would appreciate it if you shared your lived experiences with me on the antenatal classes you have attended. Choosing not to participate will not lead to any form of punishment, and you will still be allowed to make use of the prenatal exercises or other services provided at the private nursing practice. Should you agree to participate and at a later stage during the study decide to withdraw, you may also do so.

### **Expenses**

No financial obligations will be put on you as the participant. Please note that you will also not be paid for participating in the study.

### **Contact details**

This research is being conducted by Anthea Jacobs; a Junior Lecturer employed at Cape Peninsula University of Technology (Department of Nursing Science).

If you have any questions about the research study itself, please contact:

Researcher: Anthea Jacobs

Telephone: 0710434995/0832405887

Email address: 205203930@mycput.ac.za

Should you have any questions regarding this study and your rights as a research participant, or if you wish to report any problems you have experienced related to the study, please contact:

Research Supervisor: Prof. Karien. Jooste

Cape Peninsula University of Technology

Email :JoosteKa@cput.ac.za /[kjooste1@gmail.com](mailto:kjooste1@gmail.com) or Telephone : 0828972228

Co-supervisor: Dr.O.M.M. Sehume

Head of the Department of nursing Science

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P O Box 1906, Bellville, 7535

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Chairperson of Faculty of Health and Wellness Sciences Research Ethics Committee

Dr Dirk Bester

Cape Peninsula University of Technology

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**ANNEXURE B: CONSENT FORM**



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Email: 205203930@mycput.ac.za

**WRITTEN INFORMED CONSENT**

**Letter of request to participate in the study**

Project title:

*Guidelines for midwives in offering holistic-focused antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town*

The study has been described to me in a language that I understand, and I freely and voluntarily agree to participate. My questions about the study have been answered after reading the information sheet. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way. My digitally recorded interview will be in the cloud, password protected (POPI Act, No 4 of 2013) to prevent the data being used by third parties. The researcher is also obligated not to share any confidential information obtained from me (the participant) without her/his consent and only the researcher, independent coder and supervisors of the study who will have access to this information

Participant's signature.....

I further agree that the interview is digitally recorded.

Participant's signature.....

I further agree that the researcher takes field notes.

Participant's signature.....

Witness .....

Date.....

## ANNEXURE C: INTERVIEW SCHEDULE



PO Box 1906, Bellville, 7535

Tel: +2721-9596804

[www.cput.ac.za](http://www.cput.ac.za)

Email: [205203930@mycput.ac.za](mailto:205203930@mycput.ac.za)

Introductory questions

Welcome and explain the purpose of the study.

What is your age at your last birthday?

What is your relationship status?

What is your highest level of education ?

Main questions

- What were your best lived experiences while undertaking prenatal exercises during pregnancy at the private nursing practice?
- How can the midwife support you holistically while undertaking prenatal exercises during pregnancy?

Examples of probing questions

- Tell me more .....
- What do you mean?

**ANNEXURE D: LETTER REQUESTING PERMISSION FROM PRIVATE CLINIC ANTENATAL CLASSES**



17 July 2023

Nulife Maternity and Baby  
Private maternity and baby clinic  
Durbanville

Dear Clinic manager

Re: Request to conduct a research study

I hereby request permission to undertake a qualitative study at your private clinic.

I am a Master's student at the Cape Peninsula University of Technology (Health and Wellness Sciences, Division of Nursing). My supervisor is Professor Karien Jooste. The study is entitled: *Guidelines for midwives in offering holistic-focused antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town.*

The study will explore the best lived experiences of pregnant women in undertaking prenatal exercises in a private nursing practice. The participants need to have had exposure or experience with the topic being investigated.

I am choosing your clinic as you the only

The participants will be interviewed by the researcher herself, using a prepared interview guide with questions. I also attach the proposal, information sheet, informed

consent form and questions for you to become acquainted with the purpose of the study and the process that will be followed.

Approval for the study was obtained from the Health and Wellness Sciences Research Ethics Committee (HWS-REC). The researcher will adhere to the rights of participants to privacy and confidentiality. In this study no names will be attached only numbers on the interview transcripts. Participants will be able to withdraw at any stage of the research process.

In this study, the researcher will make use of semi-structured individual interviews and field notes. The interviews will take about 30 – 40 minutes in a private room at the clinic, as arranged with you. If participants choose another private place, it will be arranged. The researcher will digitally record the experiences shared by the participants with their written consent.

The interviews will be analysed and double checked by another experienced researcher.

I am attaching the proposal, information sheet to participants and informed consent sheets for your information.

Looking forward to your favourable consideration.

My contact detail is:

Cell no: 0710434995/ 0832405887

Email address: 205203930@mycput.ac.za

I am attaching the proposal, information sheet to participants and informed consent sheets for your information.

Thank you for considering my request.

Yours faithfully

Signature: ..... Date: .....2023

Student: Mrs Anthea Arries



Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Research Supervisor/ Head of Department Nursing Science, Health and wellness science:

Prof. K. Jooste

Cape Peninsula University of Technology

P O Box 1906, Bellville, 7535

Telephone: (021) 959 2271

Email: kjooste1@gmail.com

Signature.....  .....

Date: July 2023

## ANNEXURE E: ETHICAL APPROVAL



**HEALTH AND WELLNESS SCIENCES RESEARCH ETHICS COMMITTEE (HW-REC)**  
Registration Number NHREC: REC- 230408-014

P.O. Box 1906 • Bellville 7535 South Africa  
Symphony Road Bellville 7535  
Tel: +27 21 959 6917  
Email: sethn@cput.ac.za

19 September 2023  
*HWS-REC Approval Reference*  
*No: CPUT/HWS-REC 2023/H5*

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Faculty of Health and Wellness Sciences

Dear Ms. Anthea Arries - 205203930

**Re: APPLICATION TO THE HWS-REC FOR ETHICS CLEARANCE**

Approval was granted by the Health and Wellness Sciences-REC to **Ms. A Arries** for ethical clearance. This approval is for research activities related to research for **Ms. A Arries** at Cape Peninsula University of Technology.

**TITLE: Guidelines for midwives in offering holistic-focused antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town**

**Supervisor: Prof. K Jooste and Dr. O Sehume**

**Comment:**

**Approval will not extend beyond 20 September 2024.** An extension should be applied for 6 weeks before this expiry date should data collection and use/analysis of data, information, and/or samples for this study continue beyond this date.

The investigator(s) should understand the ethical conditions under which they are authorized to carry out this study and they should be compliant to these conditions. It is required that the investigator(s) complete an **annual progress report** that should be submitted to the HWS-REC in December of that particular year, for the HWS-REC to be kept informed of the progress and of any problems you may have encountered.

Kind Regards

A handwritten signature in black ink, appearing to read "Carolynn".

Ms. Carolynn Lackay  
**Chairperson – Research Ethics Committee**  
Faculty of Health and Wellness Sciences

## ANNEXURE F: PERMISSION LETTER



**SR BERNADINE ESTERHUYSEN**

Practice Nr.: 0948071

SANC: 15450570

Specialist Midwife

SACLC (Wits)

ANTENATAL COURSES | BREASTFEEDING CONSULTATIONS | BABY & CHILD IMMUNISATIONS

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To whom it may concern

I hereby grant Anthea Jacobs permission to access clients that have participated in the antenatal exercises, with the clients' consent as well.

Kind regards

Bernadine



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# Epsilon Editing

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24 August 2024

## TO WHOM IT MAY CONCERN

This serves to confirm that the Master's thesis by Anthea Jacobs, "Guidelines for midwives in offering holistic-focused antenatal classes to pregnant women undertaking prenatal exercises in a private nursing practice in Cape Town," has been proofread and edited to my satisfaction for English idiom and correctness of expression. The References have been checked for accuracy against the CPUT Harvard standard.



Professor D G N Cornwell  
(PhD, Rhodes University)