

**The perceptions of female youth regarding menstrual hygiene
management (MHM) in Roodeplaat, Tshwane**

Mini-dissertation

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ABSTRACT

The Perceptions of Female Youth Regarding Menstrual Hygiene Management (MHM) In Roodeplaat, Tshwane

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Menstruation is an essential stage of any woman's life and is a natural process of womanhood. This process requires knowledge, education, and necessary material to ease the experience of menstruation; however, these aspects are not always available or easily accessible. Menstruation is a phenomenon that happens globally, however research on menstruation and the perception linked to it is an unknown sphere. Previous studies have focussed intensely on the phenomenon of menstruation. This phenomenon has not received the same attention in South Africa.

The primary purpose of this study was to explore and describe the perceptions of female youth regarding MHM in Roodeplaat, Tshwane. The first objective was to conceptualise and contextualise female reproductive health, the menstrual cycle, and MHM. The second objective was to explore and describe the source and experience of sexual reproductive health education among female youth in Roodeplaat. The third objective was to explore and describe the experiences of female youth regarding their menstruation in Roodeplaat. The fourth objective was to explore and describe the challenges of female youth regarding MHM in Roodeplaat. The fifth objective was to explore and describe resources and support available for female youth related to MHM in Roodeplaat. The last objective was to suggest social work intervention strategies for menstrual hygiene management for female youth. The approach used in this research study was the qualitative approach where five female youth persons were interviewed. The research was primarily interested in the perception of female youth

regarding menstruation and MHM, as well as the challenges and adversities the participants encountered; therefore, the qualitative research approach was suitable for the study.

The research results firstly indicated that female youth in the Roodeplaat community have mixed perceptions of menstruation and MHM and demonstrated a lack of knowledge. Secondly, close collaboration between relevant stakeholders such as government, NGOs, CBOs, private sector, healthcare workers, social workers, teachers and policymakers is required.

In conclusion, the study focuses on the perception of South African female youth in the City of Tshwane and how they experience menstruation and MHM.

It is, therefore recommended that further studies be done, focussing on menstruation and MHM in other provinces and secondly that other studies should be performed to focus on the perception of male youth regarding menstruation and MHM.

KEY CONCEPTS

Experience

Female Reproductive System

Menstruation Hygiene Management.

Menstrual hygiene materials

Menstruation

Roodeplaat

The City of Tshwane

Youth

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CHAPTER ONE: INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

The South African population is around 57.7 million and the majority of the population (51%) is female. People between the ages of 15 to 34 years can be summed up to 20.6 million people (Evans, 2018). Thus, 35.7% of the South African population have started or are menstruating in South Africa. School absenteeism (Van Biljon & Burger, 2019:7), lack of finances to buy sanitary products (Kuhlmann, Henry & Wall, 2017:385), and discrimination, have been reported as challenges that youth experience daily (Rheinländer, Gyapong, Akpakli, & Konradsen, 2019:14).

Menstruation is an essential stage of any woman's life and is a natural process of womanhood. This process requires knowledge, education, and necessary material to ease the experience of menstruation; however, these aspects are not always available or easily accessible. Each person's experience is unique, thus the researcher will embark on a journey to discover and gain insights into how the female youth of Roodeplaat perceive the menstruation process and how menstruation hygiene is managed in the Roodeplaat area. This will provide insight into a sensitive subject that has not received enough attention in South Africa.

To gain a better understanding of the focus of the study the following terms will be conceptualized:

City of Tshwane is defined as "the capital of South Africa and is the largest municipality, as measured by land mass" (Statistics South Africa, 2011).

Experience can be defined as "the result, the sign and the reward of that interaction between organism and environment which, when it is carried to the full, is a transformation of interaction into participation and communication" (Vyas & van der Veer, 2005:2).

Female reproductive system is defined as “a complex multi-organ system involving the hypothalamus, pituitary gland, ovaries, uterus (endometrium and cervix), and vagina” (Clarke & Khosla, 2010:118).

Menstruation Hygiene Management (hereafter MHM) is defined by Korir, Okwara, and Okumbe (2018) as the “use of clean material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of menstruation, using soap and water for washing the body as required and having facilities to dispose of used menstrual management materials”.

Menstrual Hygiene Materials can be classified as the “products used to catch the menstrual flow, such as pads, cloths, tampons or cups” (United Nations, 2019:8).

Menstruation is defined as “part of the female reproductive cycle that starts when girls become sexually mature at the time of puberty. It is a phenomenon unique to females. During a menstrual period, a woman bleeds from her uterus via the vagina” (Pandey, 2014:2168).

Roodeplaat “is located in the City of Tshwane, within the Province of Gauteng, Roodeplaat has a total population of 912, while the two most spoken languages are Afrikaans and Sepedi, the two largest population groups are African and White in which males make out most of the population” (Statistic South Africa, 2011).

Youth is defined by *the National Youth Policy 2015-2020* (National Youth Commission, 2015:10) “as those falling within the age group of 14 to 35 years”. For this study, Youth will be classified as those falling between the ages of 18 and 35.

This chapter includes a concise literature summary, the theoretical framework that underpins the study, the rationale and problem statement, the aims and objectives. A brief overview of the research methodology will be concluded with a summary of the chapters that will be deliberated in the report.

Subsequently, a contextualization of research topic will be discussed.

1.2 CONTEXTUALISATION OF TOPIC

This section will entail describing the female reproductive systems, menstruation, and MHM with a focus on adolescents and young adulthood. This section will then further expand on the gap in research, policies that govern MHM, and the role of social workers in this regard.

1.2.1 Female Reproductive System

The female reproductive system is a multifaceted, complex organ structure including the hypothalamus, pituitary gland, ovaries, uterus (endometrium and cervix), and vagina (Clarke & Khosla, 2010:118-128). A cycle of recurrent and meticulously controlled events consisting of the reproductive organs takes place regularly on a standard of every 28–32 days in healthy non-expectant females between menarche (the first occurrence of menstruation) and menopause (Clarke & Khosla, 2010:118-128). The female reproductive system is responsible for the menstruation process and affects more than half of the population of South Africa (Evans, 2018).

1.2.2 Youth

The age classification of adolescence has received a lot of debate, and the age group that falls in the category of adolescence is not universally set. The *National Youth Policy 2015-2020* (National Youth Commission, 2015) and *The Draft for National Youth Policy for 2030* (Department of Planning, Monitoring, and Evaluation, 2020:18) will be used to define adolescence as youth between the ages of 14 and 35. However, for this study, youth will be defined as between the ages of 18-35 years.

Youth in South Africa experience various types of challenges. *The Draft for National Youth Policy for 2030* (Department of Planning, Monitoring, and Evaluation, 2020:18-20) identified various challenges that youth experience, namely poverty and lack of job opportunities (this is a global trend), elevated drop-out rates and insufficient skills growth, well-being complications, high HIV/AIDS occurrences, violence and substance abuse, absence of access to sporting and cultural opportunities, lack of social unity and volunteerism and the prevalence of incapacity among youth. The awareness of the challenges indicated above will contribute to the forming of the challenges and experiences of female youth in Roodeplaat regarding MHM.

1.2.3 Menstruation

Menarche (the first instance of menstruation) is a notable spot in a woman's life as it commemorates the beginning of the female reproductive stage. A woman's period (start of menstruation) starts, generally, between the ages of 12 and 13 years. The menstrual cycle has three phases which include the follicular phase (proliferative), ovulation phase, and luteal phase (secretory). The average menstrual cycle lasts

usually 28 days, however, this varies from person to person (Clarke & Khosla, 2010: 28).

The menstruation process sets up the woman's reproductive capacity for conception and when conception does not take place, the ovary is not fertilised. This causes the hormone levels to decrease because the corpus luteum decreases (Patricio & Sergio, 2018:19-20). The decrease in estrogen and progesterone causes the circulation of oxygen to decrease, and the lining of the endometrium starts to build up. Endometrial prostaglandins lead the uterine muscle to contract and cause the tissue to separate or become tarnished (Patricio & Sergio, 2018:19-20). Then the endometrium starts to shred and menstrual flow begins, which is comprised of the separated endometrial tissue, red blood cells, inflammatory exudates, and proteolytic enzymes (Patricio & Sergio, 2018:19-20). The regular duration of menstruation is 4–6 days, but the standard range can be 2–8 days. Typically, a woman loses on average 30 ml of blood {liquids?}, more than 80 ml is considered uncharacteristic and cause for concern (Patricio & Sergio, 2018:19-20).

Menstruation can have emotional and physical implications (Budhathoki, Bhattachan, Castro-Sánchez, Sagtani, Rayamajhi, Rai & Sharma, 2018:2). Emotional implications include isolation and exclusion from social activities which can have negative effects on a female, as menstruation has been reported to cause fear and anxiety. Females have also reported being bullied by male counterparts due to situations females had experienced that include the leakage and dropping of sanitary materials, the prevalence of smells and stains on clothes (Budhathoki et al., 2018:2). Physical implications include pain and discomfort due to menstruation (Budhathoki et al., 2018:2). This emphasises the need for MHM, which is discussed next.

1.2.4 Menstrual Hygiene Management

MHM can be described as the access to clean menstrual management material and to do this in privacy, as well as the availability and access to ingredients like soap and water, which is needed for cleaning the body as required, and having access to amenities to dispose of used menstrual materials (Budhathoki, et al., 2018:2).

The forms of absorbents used during menstruation are reusable and washable cloth pads, commercial sanitary pads, tampons, recyclable tampons, menstrual cups, bamboo fiber pads, banana fiber pads, water hyacinth pads (Kaur, Kaur & Kaur, 2018:3). The types of absorbents used during menstruation by the female youth of Roodeplaat will also be explored.

MHM is an important practice that eases the menstruation process and contributes to the overall health of women. Sumpter and Torondel (2013:2) have identified a link between reproductive tract infections and the need for MHM and that MHM has various social and cultural implications which can affect a female's life and can cause exclusion from social activities (Sumpter & Torondel, 2013:2). MHM is guided by legislation to form a foundation to guide MHM practices, this will be discussed next.

1.2.5 Policies

Policies and legislation that focus on MHM in the global arena and national arena will be discussed in this section.

1.2.5.1 Global Policies

The prevalence of global policies that focus on menstrual hygiene management is not enormous. The only two policies that were identified were *the Commission on Status of Women* (United Nations, 2019:2), which highlights the necessity for water and sanitation to increase MHM, and the *Human Rights Council* (United Nations, 2018:5), which addresses the need to reduce the stigma associated with menstruation and increase awareness of MHM. The National Sustainable Development Goals (Agenda 2020) aim to address issues that are linked to MHM or the lack thereof, such as no access to water and sanitation, Goals 1- 6 address the needs of MHM (Tobin, 2019:123). Goal 6 emphasizes the need for Water, Sanitation, and Hygiene programs to be implemented to ensure that all people have access to clean water, proper sanitation, and disinfected facilities.

It is every human's right to have access to water, sanitation, and hygiene and this can be defined as an adequate standard of living. The National Water Act of 1997/1998 together with the Sanitation Policy (2016) and the National Development Plan (NDP) focuses on establishing WASH in schools and communities (Coetzee & Kotze,

2018:3), by addressing WASH, issues linked to poor menstrual hygiene can be prevented (Mclaren & Padhee, 2021:134).

1.2.5.2 National Policies

National policies that govern South Africa are the *Sanitary Dignity Policy Framework* (Department of Women, Youth, and People with Disability, 2019:7-9) and the *Integrated School Health Policy* (Department of Basic Education and Department of Health, 2012). There is not enough legislation in South Africa that focuses on the phenomenon of MHM. However, the policies that are available offer guidance and are elaborate when focusing on this problem.

Sanitary Dignity Policy Framework (Department of Women, 2012:7-9) aims to empower women and increase gender equality by focusing on the increased availability and accessibility women have to sanitary products, by providing sanitary products to vulnerable and marginalised individuals. The *Integrated School Health Policy* (Department of Basic Education and Department of Health, 2012) focuses on providing education about menstruation and MHM through subjects like Life Orientation to bridge the gap between stigmas and female youth not being prepared when their menarche occurs.

These policies guide the roles and duties of social workers; this will be addressed in the next section.

1.2.6 Role of social workers

The main goal of the social work profession is to develop and promote the well-being of people and to ensure their basic human needs are fulfilled as stated by the Code of Ethics (NASW, 2022). When conducting research, it is important to consider the above goal.

When considering the principles of social work, one of the principles is social justice, this implies that social workers should pursue change to encourage sensitivity to a certain situation (NASW, 2022). This can be used to guide the objective of the research

as the researcher has to advocate for the female youth in South Africa to encourage social change and awareness regarding menstruation and MHM.

Social Workers should also promote the dignity and worth of a person (NASW, 2022) by conducting a study that focuses on a sensitive topic that is not talked about enough. Social workers can bridge the gap in the system where female youth's dignity and worth are not taken into consideration. This forms part of a vital key in the role of social workers, not only in this study but in all studies. By conducting research with a focus on dignity and worth social workers can provide background by assessing the needs and resources of female youth regarding FMH.

Sutton and Austin (2015:234) indicate that the role of the researcher in qualitative research is to enter the thoughts and attitudes of study members. The researcher must be mindful of his/her own biases and should reflect on her/his personal bias before collecting data to eliminate researcher bias. The researcher must also make use of field notes when analysing data, to ensure that the recorded data has depth. The researcher must also be careful to not be judgmental, by engaging the participant with respect and dignity. This is also in line with the ethical considerations that will be discussed later in chapter 3.

The role of social workers is based on a theoretical framework that forms the essence of understanding human interaction. This will be discussed next.

1.3 THEORETICAL FRAMEWORK

The most appropriate theories that are relevant and forms the basis of understanding the result of the research process are the Systems Theory and the Ecological Systems Theory. The researcher will examine each theory and its relevance to the study.

1.3.1 Systems Theory

The systems theory is a theory that was developed in the 1940s. This theory was developed by Ludwig van Bertalanffy and furthered by Ross Ashby. The systems theory can be described as the examination of the intangible society of phenomena, autonomous of their substance, sort, or three-dimensional or chronological measure of reality (Heylighen & Joslyn. 1992). The systems theory further highlights those

physical systems that are open to, and co-operate with, their surroundings, and that these systems can obtain qualitatively new assets through development, resulting in frequent development (Heylighen, & Joslyn. 1992).

The systems theory looks at a situation from all parts and examines it as a whole, by making use of the systems theory to explore the experience of female youth. This will guide the researcher to examine the experience and how the systems from outside impact the individual's functioning, this will help the researcher to gain insight into how female youth experience MHM.

The ecological systems approach is derived from the systems theory and will be discussed in the next section.

1.3.2 Ecological Systems Approach

The ecological systems approach was founded by Uri Bronfenbrenner in 1958 and he went on to develop it further. The ecological systems approach is interested in how ecosystems influence the behaviour and interaction of individuals. These ecosystems are categorised into four systems, namely micro, meso-, exo- and macrosystems (Härkönen, 2007:4).

- **Microsystem**

This is the first level nearest to the person and comprises the surroundings with which the person has immediate interaction, which includes the settings in which individuals directly interact (Ettetal & Mahoney, 2017). Constructions in the microsystem involve the household, school, neighbourhood, or daycare environments. At this level, the interaction between individuals and other individuals takes place in two directions - both away from the person and towards the person (Härkönen, 2007:8). This can be explained as individuals who interact and influence each other. The individual is affected by a structure's actions and the structure is influenced by the individual's actions. This interaction is called "bi-directional influences". At this level, the influence on the individual from the structure has a bigger impact on the individual, more so than all the other interactions do (Härkönen, 2007:8).

Taking the microsystem into consideration during the research will guide the researcher to determine how the Microlevel (families and friends) react and form part of the participant's experience of MHM.

- **Mesosystem**

This is the second level of the ecological systems theory, which offers a link between the structures of the person's microsystem, which involves processes that arise between several microsystems in which individuals are fixed (Ettekal & Mahoney, 2017:3). One microsystem influence what happens in another microsystem, which makes up the mesosystem. The mesosystem can be summarised as a system of microsystems (Härkönen, 2007:9). This subsystem can be explained in the context of social work, as the way the individual perceives his relationship with the microsystem's influences. The overall interactions between the microsystems - for example, the individual's interaction with his/her family, determines her production and interaction in the workplace. This will help to guide the researcher to be aware of how the interaction between parents and siblings contributes to the participant's experience.

- **Exo-system**

This third level defines the larger community system in which the person does not function directly (Härkönen, 2007:9). The exo-system is the next furthest level and comprises the microsystems in which individuals are involved, but not directly entrenched (Ettekal & Mahoney, 2017:4). This sub-system can be further used to explain social work problems such as family violence. For example, a parent may have work problems at the workplace and then release their frustration on the family members. Here the family is not directly embedded, but they experience the negative effects of the interaction between microsystems. This can guide the researcher by examining how the school system sees MHM and how it affects the participants' experiences.

- **Macrosystem**

This is the fourth level (Härkönen, 2007:10). This level is comprised of cultural standards, customs, and rules. The effects of values defined by the macrosystem have a gushing effect throughout the communication of all other systemic layers. This can

be explained as the values and laws in society, which describe how individuals interact at Exo, meso, and micro levels. This sub-system can be further interpreted in the social work field as how individuals interact in a healthcare setting, which is determined by the values and laws that are implemented in their particular society. For example, the prevalence of HIV was previously much stigmatised, and the diagnosis of HIV was dreaded and frowned upon, as that was the culture in the past. However, today HIV is not stigmatised or dreaded as in the past, as the culture of society has changed. This can include the perception and culture in the community about MHM and what policies govern MHM in schools, communities, and the South African context.

- **Chronosystem**

This is the last level of the ecological systems theory, which is the level furthest from the individual. This level indicates the passing of time and contributes to the development process of individuals (Tomasetti, 2016:3).

The use of the ecological systems approach helps to provide a background in understanding possible challenges experienced by youth in Roodeplaat, such as poverty (Exo) and cultural view (Macro), which can influence how female youth experience MHM and how poverty and cultural views can harm their experience and management thereof. The use of these systems helps to gather information about the experiences of participants and how their perceptions are formed and contribute to their particular experience.

1.4 PROBLEM STATEMENT AND RATIONALE

The problem statement will be determined by identifying and formulating the research question for the study and linking the question to the rationale of the study.

The study of MHM is a field that has not received a lot of attention in South Africa. A study was conducted in 2016 on MHM in KwaZulu-Natal schools and aimed to determine what effects menstruation had on schoolgirls (Kgware, 2016:17). In 2019 a study was conducted on the effect of menstruation on absenteeism in Limpopo and the results indicated that menstruation causes absenteeism for young girls (12-13 years and 10-11 years), but that older girls do not have a higher probability of being

absent during their menses (Van Biljon & Burger, 2019:28). This has been the extent of research focusing on Menstruation and MHM in South Africa.

As the only studies that were conducted took place in Limpopo and KwaZulu-Natal (Van Biljon & Burger, 2019:3;Kgware, 2016:5) the scope needs to be broadened. The general absence of knowledge pertaining to menstruation has contributed to school absenteeism (Van Biljon & Burger, 2019:7), lack of finances to buy sanitary products (Kuhlmann et al., 2017:385) discrimination (Rheinländer et al., 2019:14), and physical and emotional harm to the well-being of females, and thus emphasises the need for information about the experience of menstruation among the youth in South Africa.

This study aimed to explore the experience of MHM on female youth in the Roodeplaat area in Gauteng, South Africa. This study addressed the lacuna in the research field and provide an insight into MHM amongst youth. This study aimed to use the information that was gathered for future research and the possibility to bring forth policies. Kamcare, the organisation that the researcher worked with, had introduced the use of reusable pads and this research can help determine how the female youth experience MHM, and make recommendations for the need for reusable pads in the Gauteng province.

The research question for this research was: *What* are the perceptions of female youth regarding Menstrual Hygiene Management (MHM) in Roodeplaat, Tshwane. The study addressed the lack of information and awareness about MHM amongst female youth in Gauteng, which helped to determine what the needs of the youth are and what can be done to address their need. This study helped to form a policy and legislation about MHM, the study aimed to gain a better understanding of their experiences. The problem statement and rationale, guide the aim and objectives of the study and this will be discussed in the next section.

1.5 AIM AND OBJECTIVES

Aim: To explore and describe the perceptions of female youth regarding MHM in Roodeplaat, Tshwane.

Objectives:

- To conceptualise and contextualise female reproductive health, the menstrual cycle, and MHM.
- To explore and describe the source and experience of sexual reproductive health education among female youth in Roodeplaat.
- To explore and describe the experiences of female youth regarding their menstruation in Roodeplaat.
- To explore and describe the challenges of female youth regarding MHM in Roodeplaat.
- To explore and describe resources and support available for female youth related to MHM in Roodeplaat.
- To suggest social work intervention strategies for menstrual hygiene management for female youth.

1.6 RESEARCH METHODOLOGY

The research paradigm that the study focuses on will be feminism. This paradigm focuses on the equality of men and women (Caprino, 2017). The research that is best appropriate for this study is qualitative.

The research approach that the study focuses on is exploratory and descriptive. Exploratory approaches ask 'what' questions and using this helps to gain insight into a phenomenon, while descriptive approaches ask "how" questions to try to gain detail into a social setting (Maree, 2016:11).

The type of research applicable to the study was applied research, as it is based on and designed to solve problems (Baimyrzaeva, 2018).

The most suitable research design for this study was the phenomenological study design. This design focuses on the essence that individuals subscribe to, an experience or a phenomenon. When using this research design the focus was on describing what all participants had in common (Niewenhuis, 2020:84), the research aimed to accurately describe the real-life experiences of female youth who were experiencing menstruation.

The study population was female youth from the ages of 18 to 35 that are menstruating and are situated in the Roodeplaats area. Non-probability sampling was used: non-probability sampling is used by randomly selecting a sample (Maree, 2016:197). The main type of non-probability that was used is purposive sampling, this is when a sample is selected for a precise purpose (Maree, 2016:198). Data was collected through face-to-face interviews with 5 female members of the Roodeplaats community, recruited by the volunteer process.

The data was analysed through thematic analysis, which is a method for analytically finding and presenting an understanding of models of themes across a data set (Braun, Clarke, Hayfield & Terry, 2019:57). The data was analysed by using the six steps of the thematic analysis.

The trustworthiness of the data is determined by the credibility, transferability, dependability, and confirmability of the data (Maree, 2016:123-125), which is discussed in detail in chapter 3.

The ethical considerations that were adhered to in this study will also be elaborated on in chapter three.

1.7 LAYOUT OF MINI-DISSERTATION

Chapter 1: Introduction and background to the study

This chapter will provide the basis and information on what the study will entail and what needs to be achieved.

Chapter 2: Literature review

This chapter will include discussing the theoretical basis of the study and the literature background that form the core elements of the research study.

Chapter 3: Research methodology and strategies

This chapter will outline the research methods used to implement this study as well as the ethical considerations that were adhered to. In addition, the key themes will be outlined, and the challenges and limitations of this study will be discussed.

Chapter 4: Research process, results, and interpretations

The research process will be discussed including the data collection process, the transcribing of interviews, and linking the research with themes identified. Thereafter the research findings of this study will be analysed, and an understanding thereof will be provided. The accomplishment of the goal and objectives of the research will be examined, as well as the key findings. Based on the key findings, conclusions will be drawn, and practical suggestions given.

Chapter 2 follows, which focuses on the literature review.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter will elaborate on the literature on Menstruation and Menstruation Hygiene Management, Menstruation Hygiene Management (hereafter MHM) in South Africa or the lack thereof, the Female reproductive system, sanitary products, intervention strategies focusing on youth, and previous research and interventions.

2.2 BACKGROUND

Thomson, Amery, Channon, and Puri (2019:12) mention that in 2015 the United States National Public Radio labelled it the “year of (the) period” due to the publicity and focus on the topic of Menstruation and tampon tax. Tampon tax is when tampons and female sanitary products are seen as a luxury in comparison to condoms that are exempted from tax (Crawford & Waldman, 2018:439). Menstruation Hygiene management became a topic of great debate in the United States. This controversy caused England to provide sanitary pads for free.

A study conducted in 2019 in South Asia (Nepal) about MHM, indicated that cultural views and stigma underpinned their experience, which included the following: Girls were not allowed to be close to boys, not permitted to enter the kitchen or cook, were kept under food restrictions, and some were not allowed to sleep in their beds (Thomson et al., 2019:13). Kuhlmann, Henry, and Wall (2017:357) stated that a handful of studies focus on Sub-Saharan Africa and the South Asia Region. A study conducted in Sub-Saharan Africa indicated that literature focusing on MHM is limited (Sewanyana & Bitanihirwe, 2015:15), with a study conducted in Uganda, identifying the challenges of MHM, the study indicated a lack of education about menstruation (Parker, Smith, Verdemato, Cooke, Webster & Carter, 2014:437).

A study was conducted in 2015 to discover MHM among rural high schools in the Northwest of South Africa, the findings were that there was a lack of knowledge about MHM in the Northwest (Chikulo, 2015:1983). A study was conducted in Limpopo about the knowledge of menstrual practices, and they found the need for awareness and knowledge regarding MHM (Ramanthuba, 2015:1). A study was conducted in Durban to gather information about MHM and evidence indicated the need for privacy and the

need for advocacy and awareness about MHM to increase the dignity of women (Scorgie, Foster, Stadler, Phiri, Hoppenjans, Rees & Muller, 2016:172).

Taking into consideration the above information, it is evident that there is a need for literature and research about MHM. This can promote awareness and increase knowledge of MHM, as well as address the challenges identified through research. The second element that is evident is that literature and research in South Africa are limited and that no studies have focused on MHM in the City of Tshwane, thus showing a crucial gap in research.

2.3 FEMALE REPRODUCTIVE HEALTH

Reproductive health is a notion of full physical, psychological, and societal health, and not only the lack of reproductive illness or indisposition (World Health Organisation, 2011:6). This can be simplified as the ability to have a rewarding and protected sex life and the choice to reproduce and how often to do so. This section will elaborate on the female reproductive system, including the physiology and the importance of a good reproductive health system.

2.3.1 Endocrine system

The endocrine system is responsible for controlling organs through the use of hormones. Hormones are biological indications that send messages to the organs (World Health Organisation, 2011:19). The vital glands that form part of the endocrine structure are the adrenal, thyroid, and pituitary glands. These glands produce hormones that send messages to the organs, the most vital hormones in the female reproductive system are luteinizing hormones (LH), Follicle Stimulating Hormones (FSH), testosterone, and lastly estrogen. LH and FSH form part of the peptide-derived hormones, while testosterone and estrogen form part of the steroid-derived hormones (World Health Organisation, 2011:32).

Estrogen is a reproductive hormone that contributes to the forming of breast tissue and promotes the regulation of Menstruation. LH sends a signal to the ovaries to produce the ovum (female egg) and is also in charge of releasing the female egg. (FSH) is a female reproductive hormone that controls the growth of hair on the female body. The menstrual cycle will be discussed in detail in section 2.4.

The above-mentioned hormones receive messages from the gonadotropin-releasing hormone (GnRH) which is released by the Hypothalamus in the brain. This hormone is accountable for the release of the luteinizing hormone (LH) and follicle-stimulating hormone (FSH). The above hormones then contribute to ovulation and stimulate excretion of the estrogen and progesterone from the ovaries. These hormones then stimulate the organs of the female reproductive system including the breasts, uterus, and vagina. How the structure works is dependent on the genetics of a given person. (World Health Organisation, 2011:32).

The endocrine system is vital to the menstrual cycle as it determines the pattern and pace of the menstrual cycle (Naz, Doyom & Tehrani, 2020:16). The menstrual cycle design indicates the state of health of the endocrine system, and abnormal menstrual cycles may be a sign of serious illnesses such as diabetes and polycystic ovary syndrome (PCOS) (Naz et al., 2020:16). The abnormal Menstrual cycle can damage a woman's sexual well-being and parts of their social life cycle (Naz et al., 2020:17).

2.3.2 Physiology

Four main organs are included in the female reproductive system, namely the ovaries, fallopian tubes, uterus, and vagina (Clarke & Khosla, 2010:118-128).

The ovaries are where the egg is formed, the fallopian tubes are the canals that transport the egg to the uterus, the uterus is where the egg that is fertilised develops and grows when fertilisation takes place, and lastly, the vagina is known as the birth canal (World Health Organisation, 2011:25; Clarke & Khosla, 2010:118-128).

Oogenesis can be explained or defined as the formation of the egg, or ovum. The egg is the female cell that can be prepared by a male cell to make an undeveloped organism that can then form into an embryo. The course of fertilisation starts when a female is still an incipient organism. The production of the ovum happens previously or marginally after the introduction of a female. Upon entering the world, a female can approximately have 1,000,000 essential eggs in her lifetime, however, just 200,000 are left by pubescence and in total only 450 eggs will complete oogenesis. The inactivity can cause the eggs to be vulnerable to environmental exposure (World

Health Organisation, 2011:41), the link between reproductive health and environmental exposure will be discussed in the next section.

2.3.3 Importance of reproductive health

Good reproductive well-being is a condition of comprehensive natural, emotional and societal well-being in all concerns involving the reproductive structure (United Nations Population Fund, 2016). It is suggested that menstrual health is directly linked to good reproductive health and that they are dependent on each other (Hekster & Punzi, 2019:2). Analysing the pattern/s of menstruation helps to determine a person's reproductive health, thus emphasizing the need for increased awareness about menstrual health to reach a consensus on a person's reproductive health.

Reproductive health in relation to the environment focuses on exposure to environmental contaminants during critical periods of human development. These periods are directly related to reproductive health throughout the course of life, including the period before conception, at conception, fertility, pregnancy, child and adolescent development, and adult health (World Health Organisation, 2011:41).

The environment can have an impact on the reproductive health status. This can be studied through Epigenetics, the study of how your environment affects your genes. Toxins in the environment can affect the processes of human reproduction, however, the validity and/or scope of this theory must be supported through greater levels of research (World Health Organisation, 2011:41).

The following recommendation was made by Hekster and Punzi (2019:6) on how to include menstrual health in reproductive health; including menstrual discussions in reproductive health counselling (HIV, Abortion, Reproductive health discussions) and encouraging women to promote their menstrual self-care as the most effective way of prevention of reproductive health issues (Hekster & Punzi, 2019:6-7). In conclusion, by placing reproductive health as the focal point of Menstrual health the topic can receive more attention and awareness.

2.4 MENSTRUATION

Menarche (Menstruation) is a notable mark in a woman's life as it commemorates the beginning of the fertile and reproductive phase of a woman's life. A woman's period (start of menstruation) generally starts between the ages of 12 and 13. The menstrual cycle is characterised by three phases, namely: follicular phase (proliferative), ovulation phase, and luteal phase (secretory). The average menstrual cycle usually lasts 28 days, however, this varies from person to person (Clarke & Khosla, 2010: 28).

2.4.1 Menstrual cycle

The female menstrual cycle is vital for procreation. This procedure is under command of the endocrine system. The ovarian cycles are described as a 21–35-day cycle and are mostly generalised to a 28-day cycle (Ramirez-gonzalez, Varghese, Filho & Swanson, 2016:40-41; Schmalenberg, Tauseef, Barone, Owens, Liberman, Jarczok, Girdler, Kiesner, Ditzen and Eisenlohr-Moul, 2021:2). During the ovarian cycle, an ovum (egg) is prepared for discharge. The ovum is delivered into the fallopian tube and is prepared for prospective fertilisation by a sperm cell, the uterus starts shaping a level of supplement-rich cells on its internal dividers. This coating will fill in as an implantation bed for a possible treated egg. Nonetheless, if the egg isn't treated when the egg arrives at the uterus, the uterus will get rid of the coating that was built. This is because there is no requirement for an implantation bed since preparation has not happened. Periods happen in month-to-month cycles, all through a female's regenerative life. Nevertheless, for most ladies, the monthly cycle doesn't happen while a lady is pregnant. The feminine cycle begins during pubescence and closure occurs during menopause (Ramirez-gonzalez et al., 2016:28; Schmalenberger et al., 2021:2).

The female cycle is managed by explicit chemicals. Luteinizing chemicals and follicle-animating chemicals advance ovulation and invigorate the ovaries to create estrogen progesterone. The above chemicals animate the uterus to get ready for expected preparation. The phase has three stages: follicular (before the arrival of the egg), ovulatory (egg discharge), and luteal (after egg discharge). The monthly cycle starts with the first day of menstruation, which is considered day 1. The cycle closes not long

before the following feminine period. Feminine cycles commonly range from around 25 to 36 days (Ramirez-gonzalez et al., 2016:29; Schmalenberger et al., 2021:3).

2.4.2 Impact of menstruation

This section will elaborate on the effect of menstruation by focusing on school attendance, what the physical impact of menstruation is, and lastly the psychological impact of menstruation. These three themes were identified and summarised by previous studies focusing on research in South Africa.

2.4.2.1 School Attendance

Maclead, Paphitis, and Kelland (2020:1) mention that there cannot be a universal link between menstruation and missing school, as many studies have different outcomes. The themes that have been identified for reasons why school attendance was affected include the following – physical infrastructure, access to menstrual products, and social issues. The study that was conducted in the Eastern Cape focused on the difference between resourced schools and less-resourced schools. The results of this study indicated that 10% of their research participants missed school due to menstruation, however, there was no connection between school attendance and less-resourced schools, there was, however, an indication that resourced schools identified the physical experience of menstruation as important, while less-resourced schools focused on the social aspects of menstruation.

Oster and Thornton (2011:93) state that menstruation impacts school attendance in a significant and negative manner, however, there exist several reasons why a learner may miss school while menstruating, including bodily indicators, embarrassment, secrecy and fear of leakage, no access to products and/or the inability to manage menstruation at school.

Burger and Van Biljon (2019:6) identified four major explanations for why menstruation can affect school attendance. The first reason is that there are social norms that restrict women's movement, this is related to the cultural belief and stigma that limits women from doing certain tasks while menstruating. The second reason is due to the increase in awareness of keeping menstruation a secret and that this might pose risks when going to school if the learner lacks the needed resources to prevent this exposure This

is mainly because they are afraid that someone may find out that they are menstruating, and that menstruating must be seen as a secret. The third reason is attributed to menstruation indicating the start of fertility and that it sometimes signals the parental arrangement of girls to get married, which then has an increased chance of school absence or drop-out. The last reason is the physical impact menstruation has on the body; this will be discussed in the next section.

Thus, it can be concluded that school attendance can be impacted by menstruation, however, most recent studies show that school attendance is impacted by the social implications of menstruating, rather than structural or resource restrictions.

2.4.2.2. Physical impact

Menstruation can cause menstrual cramps, headaches, back-ache, nausea, and diarrhea (Burger & Van Biljon, 2019:29). Secor-Turner, Schmitz, and Benson (2016:302) indicate that women experience abdominal pain and cramps. Hennegan, Shannon, Rubli, Schwab, and Melendez-Torres (2019:15) conducted a study in 2019 on the practice of menstruation in low and middle-income states. Their results indicated that genital soreness, inflammation, rashes, and bruising were found during menses, due to the ingredients of menstrual products or insufficient regularity of change and that these symptoms were linked to reproductive tract infections. Unhealthy practices that stemmed from fear or stigmatizing cultural beliefs had a negative physical impact in the majority of cases. These unhealthy practices will be discussed in section 2.5 Menstruation Hygiene Management. Menstruation has a negative physical impact on women or girls. {has or can have?}

Kolić, Sims, Hicks, Thomas, and Morse (2021:32) conducted a study on the correlation between bodily activity and the menstrual cycle. They concluded the study by stating that previous studies indicated that there is a correlation between participating in physical activity and menstruating, however, this is different for each person, as their perception of menstruation is different (Kolić et al., 2021:42-47). Thus, the perception was that women had to withhold from physical activity, they did not participate, but on the contrary, women did increase participation in physical activities during menstruation, however, the reason was impacted by physical discomfort or stereotypes.

2.4.2.3 *Psychological impact*

Secor-Turner et al. (2016:302) stated that women experience feelings of shamefulness, fearfulness, and being stressed that they might leak during their menstrual period. Hennegan et al. (2019:29) summarised that those women had negative menstrual experiences associated with low self-esteem, attributed to limited ways to manage bleeding, or shame which is linked to distress. Menstruation impacts the psychosocial well-being and mental well-being of women, like anxiety and depression linked to decreased social interaction. Another key factor that became known during a study by Crankshaw et al. (2020:9) and Lahme, Stern, and Cooper (2018:57) said that female learners were bullied by male learners about not only menstruation but also being sexually active.

2.4.3 Perception of menstruation

Studies conducted in 2013, 2016, and 2017 about the perceptions regarding menstruation among women, have indicated that menstruation can be seen as a risk factor for stress and has contributed to the process of education negatively, however other participants in these studies indicated that they see menstruation as a natural process. Socio-economic deprivation has also contributed to the factor that menstruation has an increased risk factor for stress and this may impact the negative perception among participants (Padmanadhanunni & Fennie: 2017:2).

Most of the participants in these studies also indicated cultural beliefs and taboos as themes. This can be summarised as the following beliefs: The prohibition of cooking when menstruating, not being allowed to go to church or any religious gatherings. This also has an impact on the perception of menstruation. Secor-Turner et al. (2016:302) also observed a certain type of secrecy that needed to be maintained by women in society to ensure no one is aware that a woman is menstruating.

2.4.4 Knowledge of menstruation

This section will discuss what level of knowledge was identified in prior studies regarding menstruation, where the majority of knowledge was obtained from, and if knowledge was obtained before the first of menstruation or on the day.

2.4.4.1 Level of Knowledge

Ramathuba, (2015:6) conducted a study regarding the knowledge of women in the Venda District of Limpopo, indicating that most participants had an understanding of what menstruation means and indicated that menstruation is monthly bleeding. Others saw it as a sign of adulthood and a means of cleansing the body. A large majority of women knew menstruation is a unique process exclusive to females. Crankshaw et al. (2020:9) conducted a study in Gauteng among females and determined that participants had sound knowledge about menstruation, meaning that they could now fall pregnant, however, there was a lack of knowledge in explaining how the menstruation process worked this is consistent with the previous studies as there is an understanding of menstruation, there however lack the correct terminology and description (Bulto, 2021:914; Chikulo, 2015:1997; Ramanthuba, 2015:3; Scorgie, et al., 2016:167).

2.4.4.2 Source of knowledge

In a study by Turner et al. (2016:302) it was indicated that most women received formal education at school and the rest of their knowledge came from experience, either through instruction, myths, beliefs, or attitude. In a large percentage, the knowledge was taught to them by their mothers (Crankshaw et al., 2015:9; Shanbhag, Shilpa, D'Souza, Josephine, Singh & Goud, 2012:5).

In 2000 South Africa's Department of Basic Education implemented the Comprehensive Sex Education curriculum (CSE), which would discuss sex education in schools during Life Orientation classes, however in 2020 the CSE curriculum was amended to be taught from Grade Four up to Grade 12 Learners (Department of Basic Education, 2021). The curriculum aimed to educate learners about sex and to enhance basic knowledge and awareness and not encourage sexual behaviour (Department of Basic Education, 2021).

It can be summarised that the majority of knowledge comes from school and the learner's mother. The study by Crankshaw et al. (2015:11) identified a key role that educators played in the experience of menstruation and that those resources need to be utilised to improve awareness and knowledge of educators regarding menstruation. Participants in the study indicated they would rather go to an educator than speak to a female family member.

2.4.4.3 *Prior knowledge*

Concerning information on the members before menarche, a study by Ramanthuba (2015:3) found that 27% of participants had knowledge on the actual changes that identify with menarche, 94% knew about the social and strict limitations, while 48% knew about sterile practices and 98% were educated with regards to the utilization of absorptive materials.

The majority of girl learners in the Western province of South Africa obtained prior knowledge before starting their first menses (Chikulo, 2015:1977). A large majority (99.6%) had learned of menstruation and part of them had acquired this knowledge before attaining menarche (Shanbhag et al., 2012:9)

2.5 MENSTRUATION HYGIENE MANAGEMENT

MHM can be described as the access to clean menstrual management material and to do this in privacy and the availability and access to cleansers and water for bathing and availability of amenities to disregard used menstrual materials (Budhathoki, Bhattachan, Castro-Sánchez, Sagtani, Rayamajhi, Rai & Sharma, 2018:2)

UNICEF (2013:3) cited in Chikulo (2015:1972) concluded that MHM has three essential dimensions that form part of the definition:

- “Enunciation, recognition, knowledge, and self-certainty to manage menstruation with safety and dignity using safe hygiene materials together with
- Adequate water and agents and spaces for washing and bathing and
- Disposal with privacy and dignity”

This section will elaborate on Menstruation Hygiene management and the significance of maintaining MHM, the overall knowledge of MHM, what can cause poor MHM, and the implications of poor MHM.

2.5.1 Significant of Menstruation Hygiene Management

MHM is an important aspect and necessity which eases the menstruation process and contributes to the overall health of a woman. Sumpter and Torondel (2013:2) have

identified a link between reproductive tract infections and the need for MHM and found that MHM has various social and cultural implications which can affect a female's life and can cause exclusion from social activities (Sumpter & Torondel, 2013:2).

Genital discomfort, irritation, rashes, and bruising during menses stemmed from the properties of menstrual materials or inadequate frequency of change (Hennegan et al., 2019:28). These negative symptoms emphasise the need for MHM and express that lack of MHM practices can lead to cancer or infections, other concerns emphasised that cultural beliefs regarding dietary limitations on the utilization of normal food varieties, connected to exhaustion, or retaining urine inspired by a paranoid fear of others noticing feminine blood in toilets (Hennegan et al., 2019:28).

MHM is a topic that before recent studies did not receive much attention, however recent studies have increased the lens more on MHM. Studies focusing on MHM in South Africa have started to attain rhythm, nevertheless, studies in South Africa still need to be increased.

2.5.2 Knowledge of Menstruation Hygiene Management

Menstruation has been a topic that is discussed widely in the school curriculum, especially in Life Orientation classes, however, MHM is a topic that has not been discussed at length and has been identified by prior studies as a topic that needs further investigation (Chikulo, 2015:1977).

Knowledge of MHM is largely impacted by the culturally expected norms in society and there is a lack of overall basic information about MHM practices. Lahme et al. (2017:60) recommended that to improve the impediments caused by cultural beliefs and taboos, a partnership between cultural leaders and health practitioners needs to be established for those cultural beliefs to be grounded by medical opinions, and that some cultural beliefs are grounded in sound medical knowledge. A partnership will help to eliminate incorrect beliefs and create opportunities to reach girls in poverty-stricken environments by working together to develop plans to break structural barriers in a given community.

2.5.3 Causes of Poor Menstruation Hygiene Management

Poor menstruation hygiene is attributed to several factors and can have devastating results, such as a reproductive tract infection, which has become a silent phenomenon that negatively impacts women's functioning (Santra, 2017:712).

This section will focus on the main factors that can lead to poor MHM, which can be categorised into four areas, namely - waste disposal, poverty, cultural beliefs, and structural beliefs.

2.5.3.1 *Waste disposal*

Good MHM is dependent on the correct disposal of sanitary pads (Chikulo, 2015:1980). Vaughn (2013:18) identified in the study of MHM in Sub-Saharan African schools, that sanitation should be increased and that schools should provide adequate means to dispose of sanitary products, privacy, clean water, and soap. Recent studies have identified two primary disposal methods used by females as either disposing in a bin in public places or placing the soiled sanitary products in a bag and storing it until they could discard them at home (Chikulo, 2015:1980; Crankshaw et al., 2020:13; Vaughn, 2013:18; Scorgie et al., 2015:17). Most of the studies indicated that disposal at home included throwing it into a pit or placing it in a plastic bag and throwing it in the dustbin, which can have negative effects on the infrastructure of schools or communities, by causing clogged toilets and pollution in the water supplies, which in turn can negatively impact on the environment.

2.5.3.2 *Poverty*

Financial circumstances have an impact on how MHM is managed and controlled, this can directly be linked to the cost of sanitary products and the means to obtain sanitary pads. When girls lack the financial resources to obtain sanitary products, they make use of tissues, socks, newspapers, or old clothes. Recent studies also indicated that some participants would not change their sanitary products as often as they should, to save money. This can harm their hygiene during menstruation (Chikulo, 2015:1978; Vaughn, 2013:15). Another crucial factor that needs to be considered from prior research, is that the area where participants lived also influenced the MHM, as participants in rural areas had difficulty in accessing sanitary pads in contradiction to people in urban areas. Out of the above need, the necessity grew for reusable pads, to cut the cost and financial burden sanitary pads had for girls and the household, this

need was also developed to eliminate poor MHM and to encourage constant MHM techniques in areas where resources were limited (Vaughn, 2013:16).

2.5.3.3 Cultural beliefs

Vaughn (2013:7-9) identified in their study of Sub-Saharan Africa, that traditional and cultural beliefs can influence MHM, as well as the emotional schoolgirls might experience while menstruating. The study examined the belief of schoolgirls, however, the beliefs came from all generations as they learned these cultural beliefs from their parents and community members, thus these results also reflect the view of women in various age groups in Sub-Saharan Africa.

In Ghana, it is believed that menstrual cloths are used for witchcraft and can lead to sterility or death, while in Tanzania menstruating is seen as the time for girls to get circumcisions (Vaughn 2013:10). In Malawi, some schoolgirls believe that placing Methylated spirits in their vaginas would stop the bleeding (Vaughn 2013:10). These factors and beliefs can cause negative MHM practices, however, most of these studies of other traditions had a pleasant outcome on MHM, as girls were told to bathe regularly and to withhold from some daily activities (Vaughn 2013:10).

Cultural taboos and beliefs can prevent the identification of the needs of women menstruating which can have both mental and physical implications. Physical health problems such as HIV and other sexually transmitted diseases, urinary tract infections, vaginal thrush, and pelvic inflammatory diseases are common (Lahme et al., 2018:55).

2.5.3.4 Structural barriers

Due to socio-economic factors and poverty, most studies in South Africa concluded that there were not adequate sanitation facilities or buildings that promoted privacy. This negatively impacted on the regular changing of sanitary products, with participants in studies waiting till they were at home to change the sanitary products, and this had an indirect negative effect on their MHM (Lahme et al., 2018:58; Chikulo, 2015:1982).

The American College of Obstetrics and Gynaecology (2018) suggests that sanitary pads be changed every 4-8 hours determined by your flow, which intends to prevent infections or diseases, and in the case of tampons to prevent toxic shock syndrome. Burnham and Kollef (2015:1) describe toxic shock syndrome as “a rare but severe

disease characterized by fever, hypotension, a skin rash with subsequent desquamation and multiple organ dysfunctions”. Toxic shock syndrome can take place in women that are menstruating and using tampons or menstrual cups. If tampons or menstrual cups are not removed regularly, staphylococcus aureus bacteria can be produced, and this causes toxic shock syndrome.

2.6 MENSTRUATION HYGIENE MATERIALS

This section will elaborate on the types of Menstruation Hygiene materials (sanitary products) and what products are mostly used and why. This segment will also touch on what manner sanitary products were disposed of, by looking at past research and clarifying why there has developed a need for reusable sanitary pads.

2.6.1 Types of Materials

The types of absorbents used during menstruation are environmentally friendly and washable cloth pads, commercial sanitary pads, tampons, recyclable tampons, menstrual cups, bamboo fiber pads, banana fiber pads, water hyacinth pads (Kaur, et al., 2018:3).

2.6.2 Most known materials

When examining previous studies from sub-Saharan Africa, it was found that the most popular products are reusable cloths and sanitary pads among girls (Vaughn, 2013:13). The reusable cloths were mainly made from old clothing or towels and the majority of girls who used reusable cloths had a lower socio-economic status than those using sanitary pads. Other products that were used were wool, socks, papers, and pieces of matress, and in rare cases where the area the girls lived in was very poor, they would use leaves and cow dung. A few girls reported using menstrual cups and tampons (Vaughn, 2013:13).

When looking at past research in South Africa, Chikulo (2015:1978) indicates that sanitary pads are most used among schoolgirls in the Northwest province and that menstrual cups and tampons were used by a minority of learners. This is consistent with research done in Limpopo by Ramathuba (2015:4), where it was also determined

that if participants did not have money, they resorted to clothes, newspapers, toilet paper, and towels, which is consistent with the findings of Vaughn (2013). The above findings are consistent with research done in Durban by Scorgie et al. (2015:15), however, their study indicated that women did not use tampons due to the cost alone, but also experienced tampons as uncomfortable. Reusable products like menstrual cups or reusable pads were unknown to most of these participants (Scorgie et al., 2015:15).

More recent studies in the Eastern Cape, and Gauteng indicated the same results, except for products like cloth, newspaper, and toilet paper, which were used by very few participants (Crankshaw et al., 2020:6; Maclead et al., 2020:5), Thus it seems as if the area where they reside and the socio-economic level of females, determine the products they use.

2.6.3 Disposal of sanitary product

The disposal of sanitary products posed many challenges for menstruating women. Previous research indicated that due to poverty, lack of proper infrastructure, shame, and cultural beliefs, disposal of sanitary products was generalised into the following manners: burning, throwing into a pit, burying used cloth or pads; flushing in toilets, disposing of by throwing in the field or a river; covering in newspaper and throwing into a dustbin (Sapkota, Sharma, Pokharel, Budhathoki, & Khanal, 2013:122-128; Lahme et al., 2018:59; Vaughn, 2013:18).

The disposal of sanitary pads brought anxiety and stress to most women in past research (Scorgie et al., 2015:16-17). Due to fear of exposure or the secrecy of menstruation, it is evident that the lack of adequate disposal of sanitary pads places great stress on women (Lahme et al., 2018:59). The Department of Women, Youth and Persons with disabilities (2019:17) intends to address the challenges linked to waste disposal to increase MHM practices in South Africa by increasing WASH (Water, Sanitation and Hygiene) facilities.

2.6.4 Need for reusable products

To address the financial barriers and waste disposal challenges that are identified in previous studies and seen as an ongoing problem not only in South Africa, but globally, the need arises for the development of reusable products that are cost-effective and eliminate the problems of how to dispose of sanitary products, by rather washing the pads or reusable products.

Some studies researched the possibility of reusable products, and it was determined that menstrual cups were the most beneficial, as the participant felt that they had more control over leakage than the reusable pads, as participants felt that they must bath more and that the pad did not provide much protection (Vaughn, 2013:21). Another study indicated that some concerns were voiced about the effect of menstrual cups on discharge and a girl's virginity, the prevalence of cancer, or increased infections (Scorgie et al., 2015:26).

In Uganda the Menstruation Hygiene Management project (2012-2016) provided 100 000 rural women access to sanitary pads and sanitation, and in partnership with Uganda social enterprise Afripads (reusable pads) were handed out. The same goal-directed project was implemented in Ethiopia (Plan International USA, 2016:4).

2.7 INTERVENTION STRATEGIES

Youth in South Africa experience various types of challenges. *The Draft for National Youth Policy for 2030* (Department of Planning, Monitoring, and Evaluation, 2020:18-20) identified challenges that youth experience, namely poverty and lack of job opportunities (this is a global trend), elevated drop-out rates and insufficient skills growth, well-being complications, high HIV/AIDS occurrences, violence and substance abuse, lack of access to sporting and cultural opportunities, lack of social unity and volunteerism and the prevalence of disability among youth. The awareness of the challenges indicated above will contribute to the forming of the challenges {meaning?} and experiences of female youth in Roodeplaats about MHM.

The following section will indicate the skill, knowledge, and value requirements that are needed and would be beneficial when doing an intervention.

2.7.1 Knowledge requirements

Knowledge about the developmental life stage of youth (young adults) is essential to understand what intervention would be beneficial, this section will discuss the characteristics youth experience in the female life stages, moving the focus to physical development, cognitive development, and social development.

2.7.1.1 Physical development

The physical development of a young female adult is defined by the start of puberty and more especially the start of menarche. This physical benchmark is very important in the start of womanhood and the formation of identity. In young adulthood, the body is physically fully developed in women (Sawyer, Afifi, Bearinger, Blackmore, Dick, Ezeh & Patton, 2012:1630-1640).

The period also marks the point at which the body reaches full maturation and full physical development. Sexuality is expressed in this time, in addition sexual orientation and cultural views influence the above components and need to be considered when conducting the study (Tyler, 2020:820).

2.7.1.2 Cognitive development

In this stage young adults have developed the ability to design thoughts from start to finish and have fully expanded the ability to defer delight. The ability to assess internal encounters expanded worries for the future and extended clear moral thinking (Sawyer et al., 2012:1630-1640). Being aware of the cognitive development encourages the researcher to ask a question that determine internal encounters relating to thoughts about Menstruation and MHM.

An important hallmark of this life stage is that they can think abstractly about an experience even though they were never directly impacted by this experience (Tyler, 2020:869), for example, the youth can think about menstruation in general terms as well as due to lived experience, this can provide a clear outlook on the perception of youth regarding MHM.

2.7.1.3 Social development

Social development is an important development milestone in young adulthood and includes the following: the development of firmer feelings of autonomy, forming of sexual personality, expanded enthusiastic security and confidence, more meaningful relationships and association with friends, the local area, and family. There is also a development of regrowth of interest in friendly and social traditions and lastly the development of genuine heartfelt connections (Sawyer et al., 2012:1630-1640), thus, considering the above, it is evident that social encounters are one of the key aspects that form the perception and knowledge of Menstruation and MHM and is a factor that needs to be examined when conducting this study.

Tyler (2020:906) suggests that your psychosocial aspect like personality is mostly stable, but however can be impacted by your environment, however, your personality and temperament, the type of person you are, impacts on how you perceive a certain situation and will determine how you interact with your environment (Tyler, 2020:906). This can be very important in considering the perception youth have about menstruation, as it widely affected by their environment as well as their personality (Tyler, 2020:906).

2.7.2 Values

Intervention strategies should be intended to focus on priority needs that will be financially sustainable, economical, and efficient, and all strategies should focus on developing the community by focusing on social, physical, and psycho-social needs. This links to the Values of the White Paper for social welfare by collecting the efforts on the community development approach by focusing on the methods, skills, and philosophy of the community at ground level (Republic of South Africa, Ministry for welfare and population development, 1997).

All intervention strategies should focus on the following by The White paper for Social Welfare (Republic of South Africa, Ministry for welfare and population development, 1997):

- The help of the local area improvement process.
- The advancement of family-focused and local area-based projects.
- To limit building and monetary strengthening programs.
- The advancement of formative social alleviation and disaster help programs.

The white paper also mentions the Value of Service and how important it is to help people in need and address the social problem and enhance the dignity and worth of people.

Social work research is governed by the same values that govern social work and focuses on the notion that is action orientated and the research should be conducted to gain knowledge about a topic so that further intervention can take place concerning the results obtained (Smith: 2012:443).

2.7.3 Previous Intervention Strategies

The World Health Organization in cooperation with UNICEF has adjusted its goals to make MHM a propriety and to address the problems that have been linked to poor MHM (UNICEF, 2019:13).

The Sustainable Development goals 3,4,5,6,8 and 12 focus on addressing overall health and wellbeing, supplying quality education, eliminating gender inequality, and improving WASH (Water, Sanitation and Hygiene) and poverty (United Nations, 2015). In alignment with this, UNICEF developed five priorities that need to be addressed in their Gender Action Plan 2018-2021. The Gender Action Plan aims at the promotion of gender equality on all levels of society (UNICEF, 2019:17). The five priorities focus on gender equality, improving knowledge and empowerment, increased health, and giving them autonomy over their own lives (UNICEF, 2019:15). To be able to meet the SDG goals and address gender inequality the focus must first be on providing hygienic, safe, and comfortable management of menstruation (Sommer, Torondel, Hennegan, Phillips-Howard, Mahon, Motivans, Zuleika, Gruer, Haver, Caruso and Monitoring Menstrual Health and Hygiene Group, 2021:2).

On a national level the Department of Women, Youth, and Person with Disabilities (2019) in South Africa aims to address problems linked to poor MHM by focusing on

sanitary dignity by ensuring that every girl can go through their menstruation process in a dignified manner. The Sanitary Dignity Framework focuses on knowledge empowerment, increased water, sanitation, and hygiene, and adequate access to menstruation materials irrespective of socio-economic background.

The above policies and legislation address the policy framework, however, intervention strategies should focus on the ground level and implementing programmes to address the need for increased awareness and education on menstruation. Three organisations in South Africa have been focused on Menstruation and Menstruation Health, Qrate ZA is a Non-Profit Organisation focusing on empowering youth to think critically, Qrate ZA aims to eliminate stigmas about mental health, menstruation, and masculinity (Mlaba, 2020), The Cora Project aims at eliminating period poverty by providing sanitary pads in Cape Town and The Western Cape (Mlaba, 2020). The Siyasizana Foundation's main goal is to address the need of vulnerable groups like women and children, with one of their duties including distributing sanitary pads through a Pad Drive (Mlaba, 2020). Studies in South Africa have done research by implementing intervention strategies to determine the effectiveness of some interventions. Haberer (2018:35) implemented a study by supplying menstrual cups to high school girls to address financial and structural barriers to MHM. The results indicated that even though menstrual cups are reusable, easier to change, and that disposal is not a barrier, the participants of the study still preferred disposable sanitary products. The study of Haberer (2018:40), painted a different picture of period poverty and eliminated the assumption that menstrual products are linked to financial implications. This empowers the idea that financial barriers are not a direct obstruction, but that women have a preference and that all women should have equal opportunity for their preferences, however a lack of WASH facilities should not be an impediment and intervention should focus on eliminating basic structural issues, Haberer (2018:40). This is however only one perception that needs to be considered when devising intervention strategies.

2.8 SUMMARY

Menstruation and Menstruation Hygiene management is a topic that has recently been receiving attention, however, more studies need to be implemented in South Africa. The understanding of the female reproductive system is a complex system that needs

increased awareness. MHM needs to be addressed and is dependent on various factors that can lead to poor MHM practices. The types of menstruation products are dependent on cultural, structural, and financial factors. Intervention strategies include policy and legislation and should be determined by the needs of the community; however, it is evident that more research and intervention are needed on the topic.

Chapter 3 follows, which focuses on the discussion of research methodology and the research findings.

CHAPTER THREE: RESEARCH METHODOLOGY AND RESEARCH FINDINGS

3.1 INTRODUCTION

This chapter will elaborate on the research methodology and methods applied in this study. This will firstly focus on the research approach, research type, research paradigm, research design, the study population and sampling method, data collection method, method of data analysis and quality of data, the pilot study, as well as ethical considerations

Secondly, the chapter will focus on the research finding through a thematic analysis of the data and will build on the research question and objectives.

3.2 RESEARCH QUESTION

The research question for this study was: *What are the perceptions of female youth regarding Menstrual Hygiene Management (MHM) in Roodeplaat, Tshwane*. The study plans to address the lack of information and awareness about MHM amongst female youth in Gauteng, which helped determine what the needs of the youth are and what can be done to address their need. This study helped to form a policy and legislation about MHM, the study will also aim to gain a better understanding of their experiences.

3.3 RESEARCH APPROACH

The research paradigm for this study was feminism. This paradigm focuses on the equality of men and women (Caprino, 2017). The goal that feminism aims to achieve, has changed throughout the years from past to present, however, the core of feminism has stayed the same (Mcdougall, 2013:1; Harrison & Boyd, 2018). By utilizing this paradigm to form part of the research approach, it aims to focus on the endeavours and insights of people that have experienced injustices and disempowerment like a woman and place them at the core of the research (Willsher, Campus & Goel, 2017:2).

The research approach selected for this study was qualitative research. Qualitative research aims at gathering information from people about an experience to gain a better understanding of people's lives (Polkinghorne, 2005:137 in Shokane, Makhubele & Blitz, 2018:30). The purpose of the research was to explain and describe the experience of female youth regarding MHM. Therefore, the study was qualitative while the research approach will be exploratory and descriptive. Exploratory approaches ask 'what' questions to gain insight into a phenomenon, such as the phenomenon of MHM, which is the only experience by a singular group such as females, while descriptive approaches ask "how" questions to gain detail into a social setting (Maree, 2016:11), such as how the female youth of Roodeplaat experience MHM. This research approach gathers information from the participant about their perception, enabling the researcher to get descriptive information about the phenomena of menstruation and MHM. A challenge of this approach is that it is very time-consuming, and the researcher can influence the credibility based on the researcher's personal bias, however, this can be prevented through trustworthiness, using member checking, and taking notes, which will be discussed in detail in section 3.6.4.

3.4 TYPE OF RESEARCH

The type of research applicable to the study was applied research, as it is based on and designed to solve problems (Baimyrzaeva, 2018). This research is applied because the researcher is not only seeking to acquire knowledge about the perception of MHM but further looking to apply the knowledge to solve problems being faced by female youth in Roodeplaat, to contribute to the development of policy and legislation that can provide guidance on MHM and the challenges experienced.

3.5 RESEARCH DESIGN

The most suitable research design for this study is the phenomenological study design. This design focuses on the essence that individuals subscribe to, an experience or a phenomenon. When using this research design the focus is on describing what all participants have in common (Niewenhuis, 2020:84), the research aimed to accurately describe the real-life experiences of female youth who are experiencing menstruation. This information was gathered from more than one participant for rich and in-depth information.

The reason why the phenomenological design applies to the study is, as it focuses on the phenomenon of MHM and how female youth experience this phenomenon, therefore focusing on the meaning that certain lived experiences hold for participants. Combining the individual experience can provide a comprehensive perception of MHM among female youth.

The sub-design will be transcendental/psychological phenomenology, as the focus is less on the interpretations of the researcher and more on a description of the experiences of participants. This was accomplished by combining the textural (what) and structural (how) descriptions of the phenomenon (Niewenhuis, 2020:85). The phenomenology design focussed on the phenomenon of MHM among female youth between the age of 18 and 35. This research design determines the meaning/essence a phenomenon has for people, such as the essence of MHM for the female youth of Roodeplaat and this provides a rich, thick description of data. It is important to take note that this sub-design can be subjective.

3.6 RESEARCH METHODS

This section will cover the following topics: study population and sampling, data collection, data analysis, data quality, and pilot study.

3.6.1. Study population and sampling method

The population and sampling group is detrimental to the quality of information that is obtained in research. This section will elaborate on the type of study population in the study and the sampling method.

3.6.1.1 Study population

The study population can be defined as the elements from which the sample is selected (Rubin & Babbie, 2010:344). The study population was female youth from the age of 18 to 35 that are menstruating and are situated in the Roodeplaat area of Tshwane.

3.6.1.2 Sampling method and sample

A sample includes elements, or a subset of the population reflected for actual inclusion in the study (De Vos, Strydom, Fouché & Delport, 2011:224). The sampling method was non-probability, with the use of purposive sampling or a non-random way of

choosing a sample (Maree, 2016:197). It is used when there is a specific study population that needs to be researched, as is the case in this study. It allowed the researcher to create criteria that ensured the participants for the study were well suited to gather detailed information.

The type of non-probability sampling method selected for this study was the purposive sampling method. A key aspect of purposive sampling lies with the measures used as a basis for sampling. Niewenhuis (2020:92) identified six criteria that need to be met for the use of purposive sampling. The strategy should be relevant to the research, the sample should produce rich data on the type of phenomena, the sample should increase transferability, the sample should produce credible findings, including ethical considerations, be feasible and lastly be accessible, this research meets the above criteria.

The researcher recruited 6-7 participants for the research study that meet the criteria. The participants were recruited through a voluntary process, Kamcare had started a new project to hand-out reusable sanitary pads in the community, the researcher was involved in this process and had to recruit participants that were willing to form part of this research. The researcher had utilised information from 5 participants to compile the findings, however, 2 participants from the 7 participants, information, and interview transcript was shared with another co-researcher, that is unable to collect data by himself due to gender differences and the sensitivity of the topic. The researcher thus included 5 participants in the research study.

Inclusion criteria included the following:

- Female.
- Must have started their menses.
- Between the ages of 18-and 35.
- Must have resided in Roodeplaat, Tshwane, Gauteng Province.
- Be able to converse in either English or Afrikaans.
- Be a recipient of reusable pads from Kamcare.
- Signed the letter of informed consent.

3.6.2. Method of data collection

The data collection process is important and affects the trustworthiness of the information that is obtained. In this section, the chosen data collecting instrument will be discussed in detail.

The data collection instrument that was used was face-to-face interviews, an interview that is a two-way conversation between the participant and the researcher and takes place in real-time (Niewenhuis, 2020:108), this allowed the researcher to gain insight into how the participant experienced MHM. The researcher conducted face-to-face interviews with 5 participants. A semi-structured interview was used, and an interview schedule was provided. The semi-structured interview provided a basis in terms of the topics that need to be discussed during the interview but gives the interviewer the choice of when to ask which question and how the questions are asked (Maree, 2016:93). The interview took place in Roodeplaat, a venue was made available, and the participants and researcher had to adhere to social distancing and ensure masks were worn as per Covid-19 regulations. A translator was used when language barriers were identified, who was part of Kamcare organisation to ensure the participants are comfortable and confidentiality is ensured.

Face-to-face interviews took place in real-time when the participant and researcher were together, as this allowed for the researcher to be aware of social cues and is synchronous communication. This also provides the opportunity where the participants can provide extra information that can be added to the non-verbal indication of the transcription (Opdenakker, 2006:3). Further, it also allows for the capturing of interviewees' emotions and behaviour as they describe their stories (Niewenhuis, 2020:108). Conducting face-to-face interviews was time-consuming, and costly and the researcher had to be careful as to how questions in the interview schedule were asked to prevent researcher bias. Despite this disadvantage, a face-to-face interview was the most optimal way of gathering information considering the availability of resources the participants had in the community and the sensitivity of the topic.

The interview schedule consists of seven sections, the first section included the personal background of the participant, the second section included the participant's

knowledge about reproductive health, the third section entailed the menstruation experience and challenges, the fourth section included the MHM and challenges, then MHM challenges, thereafter the section included the resources and limitation, subsequently the social work intervention and lastly the recommendations. Interviews was voice recorded with the permission of the participants.

Shokane et al. (2018:41) state that an interview can be handwritten or recorded to ensure that the information is accurately gathered and will ensure that the richness of the information is kept. For the purpose of this study, the interviews were voice recorded and the participants were asked to give their permission for the voice recording before the interviews.

3.6.3. Method of data analysis

Braun, Clark, Hayfield, and Terry (2019:57) describe thematic analysis as “a method for systematically identifying and offering insight into patterns of themes across a data set”. Analysing data, using thematic analysis, takes the following steps: Familiarizations, coding, searching for themes, reviewing themes, defining, and naming themes, and writing a report (Braun et al., 2019:61-69).

- **Phase one: Familiarisation**

The main aim is to become acquainted with the data set’s content and to regulate what might apply to the research. The writing of notes is used as this will help with the analysing of the data to determine the meaning of the data (Braun et al., 2019:60-61). The aim was to go through the interviews a couple of times and get a grasp of what the participants experienced around menstruation and MHM.

- **Phase Two: Generating Initial Codes**

This brings forth the systematic analysis process of the data. Codes summarised the data and provided more than just a detailed description, but also provided a meaning that is deeper than the description. Therefore, codes provide an interpretation of the data (Braun et al., 2019:61). The deductive approach to coding will be used to identify data for pre-determined themes (Braun et al., 2019:61). This includes going from specific to general for example. In this study the focus was on the experience of female youth in Roodeplaat, the themes and information gathered in this study can be used to form future research.

- **Phase three: Searching for themes**

In this phase, the analysis process changes from codes to themes. Themes are detected through the link between the data and the research question. This was done by assessing the coded data to identify any comparison between the codes and this then formed the themes. In terms of this research study, the researcher evaluates the codes and determines what the relation is and how it is linked to the study. Such themes included the experience of MHM by participants (Braun et al., 2019:63).

- **Phase four: Reviewing potential themes**

This phase includes the process of revising the relationship between the themes, coded data, and the entire data set. This was to ensure that the process, up to this point, provides quality data and ensures coding was done correctly. This was done by asking questions such as “is there enough data in the interview transcription to provide accurate codes?” (Braun et al., 2019:65). The themes identified during the pilot study guided the formation of the interview schedule and elaborated on the experience of the participants.

- **Phase five: Define and name the themes**

This phase aims to state what is exceptional and definite about each theme, including the shift from themes to detailed descriptions. Each theme provided a clear emphasis, scope, and purpose. Naming the themes were also an important aspect of this phase (Braun et al., 2019:66). Possible themes in the study was the available services, sanitary materials used, and stigma related to menstruation.

- **Phase six: Producing the report**

In qualitative research, the analysing of the data and the writing of the report is an interlinked process that happens right through. This report aimed to conclude the findings of the research, by describing the data that was developed, and by analysing the data (Braun et al., 2019:69). Thus, the report included a chapter that focuses on the literature review, data collection, findings, and recommendations.

3.6.4. Data quality

In qualitative research, the trustworthiness of the data is determined by the credibility, transferability, dependability, and confirmability of the data. To ensure data quality, the researcher will make use of these constructs as follows (Maree, 2016:123-125):

3.6.4.1 Credibility

Attempts to identify if the data that was collected corresponds with the findings (Maree, 2016:123). Several strategies can be used to ensure credibility, namely, using well-established research methods, choosing a design that links with the research question, using a well-described method of sampling - purposive sampling and thorough data collection (Maree, 2016:123). Making use of inclusion criteria increased the possibility that the information was credible.

With the implementation of a well-established research method that collects data in the most accurate manner, such as the use of interviews in this study, the research design should answer the research question. Thus, the phenomenological study answered the question about the phenomenon of menstruation and MHM (Niewenhuis, 2020:144).

Purposive sampling increased the credibility of the information and included deciding on a sample and sample size that best met the criteria of the research, such as female youth in the Roodeplaat area experiencing menstruation. Debriefing between the researcher and her supervisor increased the credibility of the information.

3.6.4.2 Transferability

Transferability eliminates the possibility of generalisation, by inviting the researcher to make connections between the basics of the study and their understanding (Maree, 2016:124). Transferability is accomplished when the results can be applied to another situation, to concepts, to practice, or to future research (Lietz & Zayas, 2010:195). Transferability can be increased through two strategies, namely thick descriptions, and purposive sampling (Maree, 2016:124). Thick descriptions included full and focused accounts of the setting, participants, and research design that was used to ensure transferability. This was done by making sure that the report gave accurate descriptions of how data was collected, as well as the purposive sampling that was used (Niewenhuis, 2020:144).

3.6.4.3 Dependability

Dependability is demonstrated through the research design and the implementation, the aspect of data gathering, and reflexive appraisal (Maree, 2016:124). Making notes of the research design process and implementation process during the research,

assisted in gaining an understanding of the reasoning process during the research, which made the measuring instrument reliable. This is used in preference to reliability. Strategies to increase dependability included keeping a journal of choices made during the research process, especially as far as the data collection and analysis process is troubled (Niewenhuis, 2020:144). In this study the researcher kept a reflective journal and notes of the choices made during the interview and the data analysis.

3.6.4.4 Confirmability

Lincoln and Guba (1985) as cited in Maree (2016:125), define confirmability as “the degree of neutrality or the extent to which the finding is shaped by the participants and not by the researcher bias, interest or motivation”. To achieve confirmability, a study establishes that the findings and data are connected (Lietz & Zayas, 2010:198). To increase the confirmability of the research, triangulation is used. Triangulation is the use of multiple data collection methods (Maree, 2016:121) and reducing researcher biases. The researchers’ biases are reduced by encouraging researchers to acknowledge their predispositions and using an audit trail which allows the observer to track the research process and using quotes in a manner that conveys what the participants are trying to say (Maree, 2016:125). In this study the direct verbatim quotes of the participants were used to ensure that the essence of the participants’ did not get lost.

3.6.5 Pilot study

A pilot study can be used to assess the viability of enrolment, randomization, retaining, assessment actions, new methods, and implementation of the novel intervention (Leon, Davis & Kraemer, 2011:626). A pilot test is described as a trial run or a mock interview. This implies that it provides a guide to the real data collection method and helps to decrease problems when conducting and collecting data. The researcher conducted the pilot study to determine the feasibility of the study and test the interview schedule.

A pilot study determines the type of interview schedule that is needed, what the participant identifies as needed questions, to prepare the researcher on the type of questions that need to be answered, how the questions need to be asked, to see if there will be participants willing to participate in the interview, how the data will be

coded and assessed and if the type of data collection method addresses the research question. A pilot test was conducted by having an interview with one participant in Roodeplaat rural community, to determine whether the interview schedule works well in exploring the topic.

3.7 ETHICAL CONSIDERATIONS

When conducting a phenomenological study in qualitative research, some ethical considerations need to be considered between the researcher and the participant. Permission was requested from the participants, the Research Ethics Committee, and the directors of the organisation (Kamcare). Thereafter, ethical clearance was applied for at the Research Ethics Committee of the Faculty of Humanities at the University of Pretoria. Ethics approval was granted by the Research Ethics Committee of the Faculty of Humanities on 11 August 2021.

The following ethical aspects will be considered (Babbie, 2017:63-67):

- **Informed consent, voluntary participation, and no deception**

Informed consent is the process where the participants are informed about all aspects of the proposed research study. The participants need to decide and after studying all aspects of the proposed research study, the participant voluntarily, confirms his or her willingness to participate in a particular study (Arifin, 2018:30). The researcher needs to obtain informed consent from participants who are 18 years and older (Babbie, 2017:65), which was done individually with each participant.

Voluntary participation is closely related to the notion of informed consent, and it is the obligation of informed consent. Fundamentally, this means that potential research participants must be fully knowledgeable about the measures and dangers involved in research and must give their informed consent to participate. They willingly participate in the study without promising any material gain as that might lead to biases (Arifin, 2018:30). In this study the participants were recruited through a voluntary process and were not promised any financial or material gain and could refuse participation at any time.

No deception refers to misleading or withholding information or presenting incorrect information to participants (Babbie, 2017:65). To adhere, the researcher should identify themselves as such and explain what they are researching about. Furthermore, the researcher ensured that all the information is provided in the letter of informed consent.

The recruitment process included gathering data from Kamcare, an NGO in the identified area, about the female youth who will possibly receive pads from the organisation, in order to improve their menstrual hygiene management experiences. Suitable community members that make use of this organisation to obtain reusable pads was identified and informed by Kamcare about the research project and was asked if they would be interested. Kamcare therefore served as a gatekeeper since they already have access to the community and can identify participants who meet the inclusion criteria, making the recruitment process easier.

- **Debriefing and no harm**

Researchers must ensure that the participant's physical, social, psychological, and emotional well-being is taken care of. This is the principle of no harm. During the study, the researcher tried to the best of her ability to promote the participant's well-being. This was done by debriefing or providing counselling facilities. Debriefing means interviewing participants about their experience in participating in the study, highlighting if there was any damage done throughout the study. Deceiving participants could produce inaccurate data which will contribute to the study not achieving its goal. (Babbie, 2017:69). If the debriefing is inadequate in instances where circumstances or situations of extreme emotional or physical challenge are being studied or explored (Babbie, 2017:64), the researcher referred any participants needing free counselling to the social worker Liezel Landman from Kamcare, with whom prior arrangements have been made to provide free counselling services. Due to Covid-19, the interviews were held in a venue in the community, where there was enough ventilation and to ensure social distancing as per government regulations, all participants and researchers wore masks.

- **Confidentiality and protection of identity**

Confidentiality between the participants and the researcher needs to be ensured (Arifin, 2018:30). This means that the researcher promises not to share the information publicly and that only the researcher can identify the participant and not the reader. This will be accomplished with the use of alias names or pseudonyms (Babbie, 2017:67). As interviews were conducted, the researcher knew who the participants were and could not provide anonymity. But by assigning alias names, their identity was protected.

- **Gatekeepers and ethics approval**

A term referring to the person who is of legal age that manages researcher's access to participants" (Mcfadyen & Rankin, 2016:83). Making use of gatekeepers is essential when conducting research with participants that are young or doing research that includes sensitive topics such as menstruation. Understanding the position, perspective, beliefs, and values of the gatekeeper is an important matter in research where the research is sensitive, or the participants are vulnerable. Kamcare was the gatekeeper between the researcher with the participants, as they have knowledge about the community and have established rapport with the participants, this will ease the data collection process and the quality of the information. By being involved in the project by Kamcare in Roodeplaat, Kamcare was the gatekeeper to assist the researcher to get involved in the community and recruiting participants. Ethics approval was granted by the Research Ethics Committee of the Faculty of Humanities on 11 August 2021.

3.8. RESEARCH FINDINGS AND INTERPRETATION

This section will deal with the interpretations of the information that was collected during the face-to-face interview with 5 female participants between the ages of 18-35. The section will provide a summary of the participant's demographic profile, firstly and secondly provide an outline of the themes that were identified in the interviews, and then a thematic analysis of the themes, using quotes from the interviews to support the themes and literature substantiation from the literature study.

The research findings will firstly discuss the demographic profile of participants, followed by the thematic analysis of themes and sub-themes.

3.8.1 Demographic profile of participants

Table 3.1: Demographic information of participants

Participant	Gender	Age	Home language	Racial group	Marital status	Children	Religious	Highest Qualification
01	Female	34	Tsonga	Black	Single	Four	Christian	Matric
02	Female	20	Sepedi	Black	Single	One	Christian	Matric
03	Female	22	Sepedi	Black	Single	One	Christian	Grade 10
04	Female	28	IsiZulu	Black	Single	Three	Christian	A Degree in Public Management
05	Female	19	Sesotho	Black	Single	Three	Christian	Grade 11

Table 3.1 indicates the demographic detail of the five participants and will further be discussed below, namely, the age, gender, home language, marital status, race, and highest qualifications.

3.8.1.1 Age

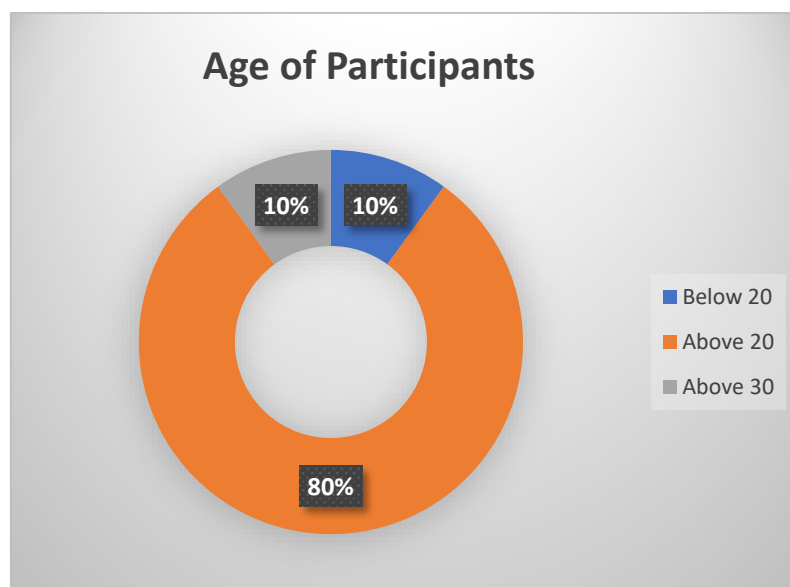


Figure 3.1 Age of participants (N=5)

As seen in figure 3.1 above, the research participants can be categorised as being between the ages of 18-34 (National Youth Commission, 2015:10). The majority of the participants were between the age of 19-34 years old.

3.8.1.2 Gender

The research participants were all females as indicated by the inclusion criteria. Menstruation is unique to women and forms part of their reproductive process (Pandey, 2014:2168), which explains why all the participants were women.

3.8.1.3 Home language

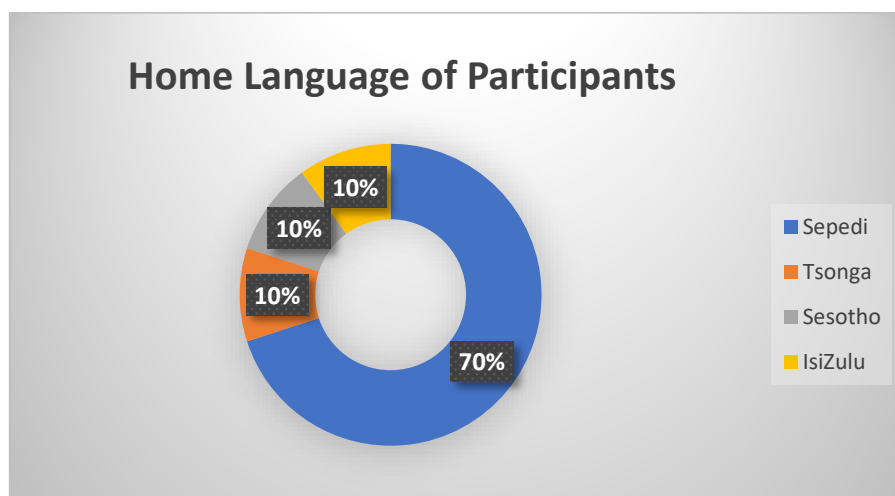


Figure 3.2: Home language (N=5)

As shown above in Figure 3.2, the languages spoken by the participants were: Sepedi, Tsonga, Sesotho, and IsiZulu. Among these Sepedi (Northern Sesotho) was the home language of the majority of participants. This is consistent of the demographic characteristics of Roodeplaat as the most spoken language in Roodeplaat is Northern Sesotho (Statistics South Africa, 2011).

3.8.1.4 Race of participants

All the participants in the study were African and this links with the population characteristics of Roodeplaat as one of the largest population groups is African (Statistics South Africa, 2011). This also explains the prevalence of the participants.

3.8.1.5 Marital status

All of the participants indicated that they were not married. Subsequently, with further discussion they disclosed they had a partner. However, they were not married. This is

consistent as 58.3% of the City of Tshwane population were not married (Statistics South Africa, 2011).

3.8.1.6 Highest qualification

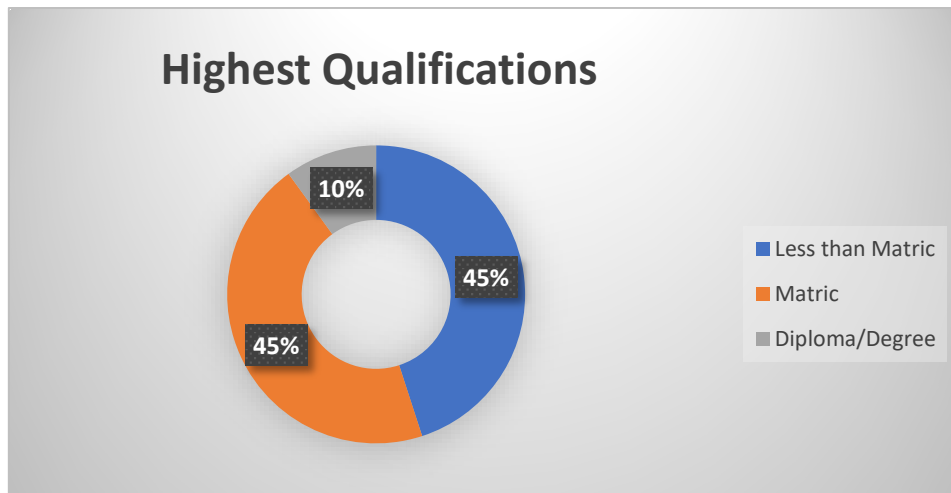


Figure 3.3 Highest Qualifications (N=5)

Figure 3.3 indicated the qualifications of the participants, and this can be summed up as 45% (2 Participants) had Matric and another 45% (2 participants) had less than Matric and only 10% (1 participant) had tertiary education (Degree/ Diploma). Statistics South Africa (2022) mentions that 53% of South African youth completed upper secondary education (Grade 11-12). The finding of the study is below the average compared to this rate in South Africa. Only 11.4% of youth complete tertiary education and this corresponds with the study as only one participant completed tertiary education.

3.8.2 Themes and sub-themes

A thematic analysis will follow after the Table 3.2, which shows the six themes that were identified during the face-to-face interviews and the sub-themes that are categorised under each theme.

Table 3.2: Themes and sub-themes

THEME	SUB THEME
1. Knowledge of reproductive health and menstruation	1.1 Sex/ reproductive health 1.2 Age of sex/reproductive education 1.3 Definition of menstruation
2. Menstruation experience and challenges	2.1 Onset of menstruation 2.2 Experience 2.3 Menstruation preparedness 2.4 Support structures 2.5 Cultural beliefs 2.6 Physical implications 2.7 Psychological implications
3. Menstruation Hygiene Management and challenges	3.1 MHM understanding and knowledge. 3.2 Lack of knowledge 3.3 Resources 3.4 Menstruation hygiene materials 3.5 Method of disposal
4. Resources and limitations	4.1 Reusable sanitary pads 4.2 Community programs
5. Intervention	5.1 Social Work interventions
6. Recommendations	6.1 Increased awareness 6.2 Increase education 6.2 Promoting reusable pads 6.3 Good MHM practice

A thematic analysis of each theme and sub-theme follows, using the interview quotes of the participants from the transcribed interviews to support the themes and sub-themes. The participants are referred to as participant 1 (P1) and when researcher is quoted it is referred to as (R). Literature from chapter 2 is used to substantiate the findings and the theoretical framework which underpins the study, is also be linked to the findings where possible.

3.8.2.1 Theme 1: Knowledge of reproductive health

This theme aimed at determining the baseline knowledge the participants had about menstruation, which is their level of knowledge regarding reproductive health. Sub-themes that emerged from the study, included sex/reproductive health education, age when sex/reproductive education was discussed and the participants understanding of the term menstruation.

- Sub-theme 1.1: Sex/ Reproductive health education

This sub-theme aimed at determining where the participants obtained sex education from, in order to determine who, the main source of their knowledge was.

Below interview extracts reflecting who contributed to the reproductive health education of the participants:

P1: "Ja, from school."

P2: "I learned about it from grade seven."

R: "Grade ten, was it from, from school?"

P3: "Ja."

P4: "Uhm most of the time it was friends".

P5: "Umh, school."

Four out of five participants mentioned that they obtained sex education knowledge from schools and only one participant received sex education from a friend. The demographic findings showed in 3.8.1.3 that the language spoken was Tsonga, Isizulu, Sesotho and Sepedi, which could have had an influence on the participants ability to understand the knowledge that was given regarding reproductive health due to the different terminology. The highest level of education in 3.8.1.6 indicated that 2 of the participants have matric, while two participants had less than matric and only one participant had a degree. This could have influenced how and when the participants were taught about sex/reproductive health education.

Cultural beliefs and the school play a vital role in the perception among the Youth regarding sex education and menstruation. Evidently female youth in South Africa's perceptions can be understood better by linking it with the ecological system and more specifically the macrosystem.

The participant's perception of sex/reproductive health education is determined by the cultural beliefs of society (Härkönen, 2007:8). A study by Modisa (2019:85) indicated that 90% of the 30 participants interviewed, felt that discussions about sex and sex education were a sensitive topic and parents referred to it as "a taboo topic". Evidently this can explain why the majority of the participants obtained information from the school rather than from parents. It is evident from the study, that sex education is discussed by the school.

The next sub-theme regarding sex education is the age when sex education was discussed with the participants.

- Sub-Theme 1.2: Age of reproductive health/sex education

This sub-theme focussed on at what age participants received sex/reproductive health education, in order to gain an understanding of menstruation. This was to determine if the age of participants in this study, could be linked to the standards set out by the Department of Education. This will help to determine how the participant's perception of menstruation is formed. The quotes below reflect at what age the participants learned about sex/reproductive health:

P1: "Uhm when I was in grade ten."

P2: "I learned about it from grade seven."

P3: "mmm grade ten."

P4: "It, I was eighteen."

P5:(Pause) "Grade, grade eleven."

Two of the participants received sex/reproductive health education at grade ten, while one participant received education earlier at grade seven, while the other two participants received education at the age of eighteen in grade eleven. The demographic findings showed in 3.8.1.1 that the majority of the participants were aged above 20, while one participant was below 20 years and the other one was above 30 years. This can be linked to the age the participants received sex/reproductive health education.

In 2000, South Africa's Department of Basic Education implemented the Comprehensive Sex Education curriculum (CSE), which would discuss sex education in schools during Life Orientation classes, however in 2020 the CSE curriculum was

amended to be taught from Grade Four up to Grade 12 (Department of Basic Education, 2021). The curriculum aimed to educate learners about sex and to enhance basic knowledge and awareness and not encourage sexual behaviour (Department of Basic Education, 2021). When examining the age of the participants when they were taught about sex/reproductive education. The results are conclusive with the CSE curriculum.

- Sub-theme 1.3: Definition of Menstruation

This sub-theme aimed at determining the participant's understanding of the term menstruation and what they understood by the term, in order to gain insight into the participants' perceptions regarding menstruation. The participants' quotes below, support this sub-theme:

P1: "Okey, what I understand about it is the cleaning of, is the cleaning of a women's system."

P2: "I understand like it's like it's what is happening each and every month on women."

P3: "Like how, oh like some other they go sick they some others they just feel (Researcher says pain and Keletso repeats) pains ja."

P4: "Uhm, I understood that it will come once in a month, ja and ja...Having my period, it uhm blood that has to be flushed away that sub my body and has to come out each and every month for those few days".

P5: (Translator translates what menstruation is.) (Everybody giggles)"She said it's just blood."

From the participants' description of menstruation, the following descriptions came up: cleaning of a women's system, the fact that it happens once a month, blood is flushed away, and the presence of pain. It is evident that the terms the participants used to describe menstruation were vague, however, there is merit in their description as some of the words are formed by their experience. The demographic findings showed in 3.8.1.1 that the majority of the participants were aged above 20 years and between the age of 18-34 years, which can be linked to the explanation the participants gave of the term menstruation. The language spoken as shown in 3.8.1.3 was mostly Sepedi, which could have had an influence on their ability to understand and define the term. The highest level of education in 3.8.1.6 indicated that only one participant had a degree and only two had matric and this could have impacted the ability of the participants to translate their understanding into English.

The participants indicated that menstruation is the cleaning of the female system, which relates to Vaughn (2013:10-11) who gathered information regarding menstruation in Sub-Saharan Africa and many countries like South Africa and Uganda, indicating menstruation is the cleansing of the system and this is a well-known understanding of menstruation.

Pandey (2014:2168) defines menstruation as “part of the female reproductive cycle that starts when girls become sexually mature at the time of puberty. It is a phenomenon unique to females. During a menstrual period, a woman bleeds from her uterus via the vagina” (Pandey, 2014:2168). Furthermore, Clarke and Khosla (2010:28) state that menstruation happens every 28 days (Once a month). Considering this information, adequate knowledge of menstruation is needed, however there is a baseline knowledge regarding menstruation, and the findings are coherent with previous studies (Bulto, 2021:914; Chikulo, 2015:1997; Ramanthuba, 2015:3; Scorgie et al.,2016:167).

Taking into consideration the ecological systems approach, the “bi-directional influence” of the microsystem this could have affected the participant’s perception of menstruation, and their experience is affected by their perception of menstruation (Härkönen, 2007:8). The sources the participants received education from took place in the micro-system and this interaction between the participants and the source took place in the meso-system. Menstruation is a daily occurrence that only happens to females and explains the definition of menstruation and clarifies why all the participants were female.

3.8.2.2 Theme 2: Menstruation experience and challenges

This theme aimed at helping the researcher to establish background information on participants’ experiences and challenges regarding menstruation, to develop insight. The sub-themes generated include the onset of menstruation, experience, menstruation preparedness, support structure, cultural beliefs, physical and psychological implications.

- Sub-theme 2.1: Onset of Menstruation

This theme reflected on the age of participants at menarche and provided the researcher with a baseline of menarche amongst participants to compare their menarche with other global studies.

The quotes below reflect the statements of the five participants:

P1: "I was fifteen...(pause) fifteen years old."

P2: "I was sixteen years."

P3: "Eighteen years."

P4: "I was thirteen."

P5: "By the age of sixteen"

One of the participants indicated that they started menstruating at the age of 15, another at 18 years, another at 13, while two started at the age of 16. The participants are aged between 19-34 years and menstruation occurs during youth, which is in line with their onset of menstruation. The demographic findings showed in 3.8.1.1 that the majority were aged 19-34 and menstruation happens during youth, and which explains the onset of menstruation.

A women's period (start of menstruation) starts, between the age of 12 and 13 years (Clarke & Khosla, 2010: 28; Ramathuba, 2015:1), however, Padmanabhanunni and Fennie (2017:54) stated that research concentrating on menstruation and their personal experience in developing countries is under-explored. The results contradict the research done in 2010, 2015 and 2017 by Padmanabhanunni and Fennie (2017:54), that menstruation is not fully explored in developing countries and especially South Africa. The demographic findings showed in 3.8.1.1 that the majority were aged between 19-34 years which can be linked to the onset of menstruation. With regards to the ecological systems approach the onset of menstruation could have impacted on the interaction in the meso-system, which then impacted on the participants' micro-system.

- Sub-theme 2.2: Experience

This sub-theme focussed on determining the participant's experience, to assist in understanding their perception. The researcher asked the participants how they

experienced their first menstruation compared with how they experience it now, below are comments that reflect the participant's first experience:

P1: "No, it was bad cause I didn't know much about periods... I just saw that I was bleeding, and I was confused as to why I was bleeding as I didn't hurt myself, I didn't understand."

P2: "It was very bad cause my mom wasn't around and I was staying with my grandmother she was like she didn't understand because like in my family everyone like they go on periods when they reach age seventeen or eighteen so like ja there was shock why it happened so fast ... It was difficult cause she wasn't open to me so my mom decided to come home and ja."

P3: "I was vomiting, having stomach-ache then (Stops speaking)."

P4: "Oh, it was so stressful, and so like uncomfortable and you ask yourself what happening, should I do now."

P5: "It was a surprise."

All the participants indicated that the day they had their first menstruation, they experienced it as unpleasant due to unpreparedness, lack of knowledge, stigma, discomfort, and pain., These findings are consistent with Vaughn's (2015:8) findings, which stated that the participants of their study had feelings of pain, shame, discomfort or anxiety and fear. Furthermore, Scorgie et al. (2012:6) stated menstruation is a distressing time, as participants were not prepared, which links to the experience of the participants of this study.

The interview quotes below reflect on how the participants' perceptions changed from the past to at the time of the interview:

P1: "It's fine but I'm not used to it really (Researcher and Elizabeth Laughs), it's been years but still, I still feel like Eish when it comes to that date, I feel bored you know."

P2: "Uhm I feel good cause like it, it's like if very normal to me mm."

P3: "Like now, uh I don't feel any pains anymore like they just go like for three days only. But then for the first time I was going for seven days."

P4: "Now I can say it's awesome, I actually start to worry when I don't see my period (Researcher and Participant 04 laugh together) I love my period and ja and I love each and every month."

P5: " She said she is free about it now she has accepted that it's life."

Four participants saw menstruation as a natural part of life at the time of the interview, while one participant indicated that she is still not used to menstruating. The demographic profile showed in 3.8.1.5 Marital status, indicated that even though the participants was not married they had partners, which could possibly be linked to how they experienced menstruation now, at the time of the interview with the support from partners might have an influence on the individual's experience.

Padmanabhanunni and Fennie (2017:6) similarly concluded in their research that menstruation is seen as a natural event that can be predicted and prepared for, however, they also said that the experience was bothersome and debilitating.

- Sub-theme 2.3: Menstruation preparedness

This sub-theme focussed on the level of preparedness of the participants, for their first menarche, which was an opportunity to determine what effect preparedness had on the perception of the participants. The response of participants on when they expected their menses to start and whether they were prepared, included the following responses:

P1: "No, it was bad cause I didn't know much about periods."

P2: "It was difficult cause she wasn't open to me so my mom decided to come home and ja."

P3: "No, I was not."

P4: "Actually no, I had no idea... Ah I can say I was all alone, cause I didn't tell anyone."

P5: "It was a surprise."

All of the participants indicated that they were not prepared for menstruation. The demographic findings showed in 3.8.1.1 that the majority were aged between 19-34, which can explain why four out of the five participants felt that menstruation was a part of life, as they are used to menstruation and in 3.8.1.5 it reflected the relationship status, indicating that the majority of the participants have partners, which could have influenced how they felt at the time of the interview.

Vaughn (2013:3) mentions that schoolgirls receive little to no information about menstruation beforehand and the information that is given is mostly incorrect and leads to a misleading understanding of menstruation, this is not a rare occurrence, as this was also reported in studies done in South Africa (Scorgia et al.,2015:12;

Ramathudu, 2015:5; Crankshaw et al., 2020:13). This is consistent with the findings of this study and a connection can be made between the level of preparedness and how the participants experience their menstruation as well as the demographic finding of age which was between the age of 19-34 years old and the highest level of education indicated that only one participant had a degree and only two had matric and the other had less than matric this could have impacted the ability of the participants to be influenced by misleading perceptions of menstruation.

Lack of prior knowledge could have had an effect on their experience of menstruation. The ecological systems approach can be used to gain an understanding, the lack of preparedness due to unknown factors from the parents not preparing the participants, could have had an indirect effect on the participants' experience and thus, perception of menstruation, thus linking to the Exo-system (Ettel & Mahoney, 2017:4).

Sub-theme 2.4: Support structures

This sub-theme determined if the participants have a support system with whom they could talk to regarding their menstruation and which they could receive support from. Determining if the participants have a support structure available helped the researcher determine if the presence of support systems have an effect on the perception of the participants. The researcher asked the participants if they talked to someone or if someone offers them support, below reflect the comments from the participants:

P1: "Nobody."

P2: "I receive a lot of support like when I'm on my periods like joh. I don't want to be disturbed by someone I just listen to music and sleep. So like my mom like always says no, no one should disturb me because I'm always, if you disturb me I fight joh."

P3: "My eh Aunt."

P4: "I usually I do talk to my partner. We do discuss periods. I remember the other month, it came twice. He left, he went home, I was on my period, when he came back, I think it came again in a week or two. I had my period again, he said, no, when I left you had your period, now I come back, you have your period again. I said, ahhh, I did not notice, cause I am not sick, I have no stress".

R: "Did, did your stepmother support you."

P5: "Ya"

Four out of five participants indicated that they discussed menstruation or received support from friends, partners, stepmothers, mother's or aunts. Only one participant did not have a support system and did not discuss or receive support from anybody. Sisters, parents, grandmothers, auntie and teachers were reported to be the support systems by Vaughn, 2013:4; Chikulo, 2015:1976; Scorgie et al., 2015:13; Ramathudu, 2015:4; Crawshaw et al., 2020:11). The results are consistent with the research done in other studies. The type of support that is received includes discussions and advice.

With reference to the ecological systems approach, the meso-system (interaction in the micro level) could have had a direct influence on the micro level (family and friends), which had the ability to influence the individual's experience of menstruation.

- Sub-theme 2.5: Cultural beliefs

This section reflected on the presence of cultural beliefs in South Africa concerning the menstruation experience among female youth and what outcomes this had on the participants' perception regarding menstruation and MHM. The researcher asked the participants what cultural belief they have or practice, the remarks of the participants as stated below:

P1: "No, it's just a normal a normal thing".

P2: (Shakes head)

P3: "Shaked head"

P4: "No, nothing."

P5:(Translate question)" She says none"

All the participants indicated that they do not practice nor were they aware of any cultural beliefs regarding menstruation or MHM. Previous studies have concluded that some cultural beliefs restrict menstruating women from participating in activities and a stigma that they are dirty or impure, these cultural beliefs are mostly found in Sub-Saharan Africa (Vaughn, 2013:9; Chikulo, 2015:1978; Ramathudu, 2015:5), this is not the case with this study. The demographic profile showed in 3.1.8.3 Home language, that the majority of the participants speak Sepedi and 3.1.8.4 Race, indicated that all the participants are African, thus ethnicity had impacted the presence of cultural beliefs among the youth in this study. With reference to the ecological systems approach, the

interaction of the Exso-system, had an impact on interaction and perceptions of the individuals in their micro-system.

- Sub-Theme 2.6: Physical implications

This sub-theme elaborates on whether any physical implications of menstruation were experienced by the participants. Their responses are reflected below:

P1: "Sometimes."

P2: "Mmm (Nodding Yes)... Cause I Joh I got sick when I'm on my periods I then feel sick and I can't go anywhere."

P3: "I was vomiting, having stomach ache then (Stops speaking) Like now, uh I don't feel any pains anymore like they just go like for three days only. But then for the first time I was going for seven days"

Four out of five participants indicated negative physical implications of menstruation, including pain, stomach ache, feeling sick and vomiting. Two of the participants indicated that they had pain at the start, however, they currently do not experience it anymore. Menstrual pain is one of the most common negative implications (Vaughn, 2013:18; Scorgie et al., 2015:14; Crankshaw et al., 2020:7). The findings are similar to those found in this current study. Structures in the microsystems have the ability to create negative or positive reactions and results and the interaction in the Meso-systems had a negative impact on the individual's micro-system, menstruation in the case of the participants had negative implications on how they as individuals functioned (Härkönen, 2007:8).

- Sub-theme 2.7: Psychological implications

This sub-theme elaborates on the psychological implications experienced by the participants through the reactions of others, such as being teased. The perception about menstruating is determined by the experience and the experience is linked to any physical or psychological implications menstruation had on the females' participants. The responses of participants regarding psychological implications and whether they were ever teased when menstruating is reflected below:

P1: "No." (did not get teased about menstruation)

P2: "No." (did not get teased about menstruation)

P3: (Shaked head) (did not get teased about menstruation)

P3: "No."(did not get teased about menstruation)

P4: "No, they didn't tease about me." (did not get teased about menstruation)

P5:(Translates question)" She did not tell them; they did not notice anything... She made sure that they cannot see her "

No participants were ever teased or bullied due to menstruation and thus they reflected having experienced no psychological implications. Negative self-image and lack of confidence and self-esteem, stress, and teasing were recorded as psychological implications of menstruation (Chikulo, 2015:1977; Lahme et al., 2018:55; Crankshaw et al., 2020:8). These findings from previous studies do not link with the findings of this study. This can possibly be due to the fact that participants are highly secretive about menstruation.

One participant indicated:

P5: "I did not tell them; they did not notice anything." and "I (she) made sure that they cannot see her."(Translation).

With regards to the ecological systems approach the fact that the participants were not bullied means that there was no conflict between individuals on a micro level and thus no conflict in the meso-system. The demographic profile showed in 3.1.8.3 Home language, that the majority of the participants speak Sepedi and 3.1.8.4 Race indicated that all the participants are African. These two factors played a role in this theme on the experiences and challenges of participants regarding menstruation. These were mainly experienced on the micro level and impacted the functioning of the Meso-system.

3.8.2.3 Theme 3: Menstruation hygiene management and challenges

This theme aimed to explore MHM and the challenges associated with MHM, to enable the researcher to determine the knowledge the participants had regarding MHM and what challenges they faced. Sub-themes included: The concept of MHM, the strategies used to maintain their MHM, the availability of safe clean facilities that promote MHM, the products that the participant used and the method of disposal of menstrual products.

- Sub-theme 3.1: Concept of MHM

This sub-theme focussed on the participants understanding of the concept MHM. Their responses to what they understood of the term MHM, they responded as follow:

P1: "Menstruation hygiene management. I Never heard." (Researcher and Elizabeth laughs)

P2: "It means... Like it means maybe like if you're on your period you should bath maybe three times a day. You should take care of yourself."

P3: "Hygieneean, sho I don't , I don't know currently" (P3: Laughs)

P4: "I think woman, when you are on your period, you must maintain your hygiene, must stay clean, if you wash, if you wash twice a day, it must be three or four times a day when on your period...I think it is something I maintain and do for myself, cause u know when I am on my period, I don't want anyone to know, so I like to just bath myself and be clean."

Only two of the participants understood the term MHM and could explain their understanding of the term, which they understood as follow: to bath regularly and maintain hygienic practices. Two of the participants did not understand the term and one participant had difficulty understanding the question, which had to be translated by one of the co-researchers who could speak the participant's language. MHM is a topic that has not been discussed in length and has been identified by prior studies as a topic that needs further investigation (Chikulo, 2015:1977). Chikulo (2015:1978) states that the majority of the participants do not understand the term, even though they perform MHM practices on a daily basis, which links with the current study. With regards to the ecological-systems approach, the macro-system (cultural and belief of how to maintain MHM), might have impacted the understanding the individuals had about the concept MHM.

- Sub-theme 3.2: MHM Strategies

This sub-theme aimed at understanding participants' MHM strategies. The participants' responses were as follows:

P1: "Cause I was taught not to be use eh toilet paper... Ja, I always have pads."

P2: "Ja, sometimes when I'm in school because when you're home you bath three times a day but when you're at school you can't bath obviously."

P4: "I think it is something I maintain and do for myself, cause u know when I am on my period, I don't want anyone to know, so I like to just bath myself and be clean."

P5: "She changed the diapers"(indicating the sanitary pads)

Two (P2 and P4) participants indicated that bathing regularly is an MHM strategy, another participant (P5) indicated changing sanitary pads regularly as a strategy, and lastly, one participant indicated that not using toilet paper as a pad was her strategy. Thus, bathing regularly, changing sanitary products regularly and ensuring they had a sanitary product with them to prevent the use of toilet paper, were the MHM strategies that the participants used. Menstrual Hygiene Management (MHM) can be described as the access to clean menstrual management material and to do this in privacy and to have access to cleansers, water for bathing and availability of amenities to discard used menstrual materials (Budhathoki, et al., 2018:2), the definition of MHM and the explanation from participants have common links.

Kaur et al. (2018:6) states that among MHM strategy, the management of menstrual waste is important and these strategies can be managed by including MHM and waste management into the curriculum, by ensuring have toilet facilities cater for women's needs, areas that allow women to change and clean themselves in a dignified manner, lid on all dustbins to ensure clean facilities and guidelines from government regarding waste and how to manage the waste. It is evident that some of the strategies that were identified by the participants are rooted in good management protocols, however there is still need for improvements.

MHM strategies are learned within the meso-systems and good relationships in the meso-system have the ability to create positive effects on the participants' MHM., which occurred due to the relationship they had with other individuals in their meso-system.

- Sub-theme 3.3: MHM Facilities

This sub-theme focussed on the how the participants experience MHM facilities in their community. This included whether they had access to running water for MHM washing and hygiene, one participant responded:

P2: "No" - No running water at her school"

Only this one participant indicated that they she did not have running water at school and this negatively affected her MHM.

Three of the participants indicated that they have running water and facilities to change sanitary materials:

P3: "Yes - we have."

P4: "Yes."

P5: "It's running."

The majority of the participants thus had access to running water and facilities to change sanitary materials. When determining the availability of MHM facilities resources, Vaughn (2013:17) indicates that previous studies showed that most schoolgirls do not have adequate sanitation facilities at school to manage their menses. Due to socio-economic factors and poverty, most studies in South Africa concluded that there were not adequate sanitation facilities or buildings that promoted privacy. This influenced the regular changing of sanitary products, with participants in studies waiting till they were at home to change the sanitary products, this had an indirect negative effect on their MHM (Lahme et al., 2018:58; Chikulo, 2015:1982). The Exo-system of the participants influenced their daily activity as the lack of resources in the community affected their ability to manage their menstruation hygiene effectively.

- Sub-theme 3.4: Menstruation Hygiene Materials

This sub-theme focussed on the menstruation products or materials used by the participants for MHM, providing the researcher with the opportunity to establish whether there is a need for reusable pads for the future and how the different sanitary products affect the participants' lives. The quotes below indicate their responses:

P1: "It was pads then after that, after maybe 6 months I've used tampons for some while now and then later after I have my second child it happened that I this was a smelling discharge that comes from my vagina, so I went to the doc the doctor tell me not to use tampons anymore".

P2: "Pad."

P3: "More pads."

P4: "I use pads."

P5:(Translate question)" She says she likes the ones you through in the dustbin "she says the one from Kamcare she's using as a form of panty liner because she

thinks that they what is the name. That they can be a leakage that is why she is using them as a form of panty liner.

Four participants indicated that they used sanitary pads from the beginning, while one participant indicated that she used tampons. This is consistent with studies indicating the most used menstruation hygiene material as sanitary pads (Chikulo, 2015:1978; Vaughn, 2013:13; Ramathuba, 2015:4; Scorgie et al., 2016:15). The most common MHM materials can be linked to the Individuals' micro-systems, as the individuals' socio-economic circumstances influenced the materials they used.

- Sub-Theme 3.5: Method of Disposal

This sub-theme aimed to determine the waste disposal practices participants engage in with their used sanitary products. Their responses on what they do with their used sanitary products, included the following:

P1: "I throw them inside the toilet."

P2: "obvious I roll with a tissue then, because we use this toilet like you are not flushing ja..."

P3: "like I put them on a plastic then after maybe two days then I take them to the big bin."

P4: "yes I burn it, I prefer it, cause our waste management system is not proper. so, I prefer to burn it... yes, I put it in a plastic and wait till I am finished, I then burn it."

P5: "I threw it in the dustbin."

From the above responses, the majority of the participants flushed their used sanitary pads away in the toilet or threw it in a dustbin, while one participant burnt the used pads. Recent studies have identified two primary disposal methods used by females, as either disposing in a bin in public places or placing the soiled sanitary products in a bag and storing it till, they can discard them at home (Chikulo, 2015:1980; Crankshaw et al., 2020:13; Vaughn, 2013:18; Scorgie et al., 2015:17). The method of discarding was directly linked to the availability of structure and facilities in the Micro-systems, that allowed the individual to dispose of used materials in a dignified manner.

The discarding of used menstrual products in a dustbin was thus consistent with previous studies. The burning of menstruation hygiene products was not a common

practice, due most probably to the lack of space to burn these products. This can mostly be attributed to the fact that all the participants reside in Roodeplaat, where 38% of refuse is removed by the municipality (Statistics South Africa, 2011). The method of disposal can thus be indirectly linked to the lack of facilities in the community, due to aspects that are influenced by the macro-system.

3.8.2.4 Theme 4: Resources and limitations

This theme aims to discuss the resources and limitations that were identified in the study, in order to provide an opportunity to formulate recommendations. The following sub-themes were generated, namely, the availability of reusable pads and the community programmes in the community.

- Sub-theme 4.1: Reusable pads

This sub-theme aimed to establish the participants' views regarding reusable pads, in order to establish if there is a need for reusable pads and provide suggestions for future research. When asked if the participants had used reusable pads before this study, their responses were as follows:

P1: "No."

P2: "No."

P3: "Ja."

P4: "Yes, yes, I do have it.."

Only two of the participants had used reusable pads before. Their perceptions regarding the reusable pads were as follows:

P1: "I think it will change cause I know that every time after using it I have to wash it then meaning that I won't have a problem off unexpected period."

P2: "No, it is very easy because like some girls can't afford to buy pads so this one at least you wash then you hang it then..."

P3: "Easier."

P4: "Yes, yes, I do have it, yo! those are so wonderful. I use them, cause when I start, I do not have a heavy flow, so I see it saves my pads, so I use the washable pads on my first day and on the last day."

P5 (translator): "She says back in the days she use to use grannies nappies to say if you don't have a pad you take a cloth you fold it and then you use it ...She says it

is much better cause when you just have to cutana ordinary cloth. You even be afraid to go put it on the washing line so that was better. Okay."

All of the participants indicated that they thought reusable pads would be a better product to use. One participant mentioned that the reusable pad would be cheaper. Scorgie et al. (2015:15) indicated in their study, that little to no participants were aware that reusable pads exist. All the participants in the current study had access to an NGO in their community namely, Kamcare. Kamcare distributed reusable pads to the community of Roodeplaat, at the Crèche and they provided training to the community members on how to use it. Thus the micro-system positively affected the individual through interaction with other micro-systems (Meso-system).

- Sub-theme 4.2: Community programs

This sub-theme aimed to identify community programs in the community, to determine the availability of support for female youth with regard to menstruation and MHM. The participants responses to whether they knew of any community programs offering support to female youth, were as follows:

P1:(Silence and looks unsure)

P2: "Kamcare."

P3:(Shaked head).

P4: "I can say none."

P5: (Translator) "She does not know any other organisation."

Only one participant knew of the NGO Kamcare, when asking the participants about programs in the community that focus on menstruation and female youth empowerment. Only one participant indicated that she knew of Kamcare and that there were no other programs that offered support for female youth in the community and the rest of the participants could not think of any other programmes or organisations. Taking the above into consideration, it emphasises the importance the Exo-system (policies), impacts the programs in the micro-system and then impacts the individual's perceptions and experiences.

The Department of Women, Youth, and Person with Disabilities (2019) in South Africa aim to address problems linked to poor MHM by focussing on sanitary dignity by ensuring that every girl can go through their menstruation process in a dignified manner this is obtained by focussing on gender equality (Sommer et al., 2021:2).

3.8.2.5 Theme 5: Intervention

This theme aimed to discover any intervention the participants had experienced with professionals regarding menstruation and MHM, such as social workers or any healthcare worker. One sub-theme emerged, namely social work.

- Sub-theme 5.1: Social work

This sub-theme focussed on social work as profession by whom the female youth had received intervention regarding MHM. Their responses on whether they had ever seen social workers to discuss menstruation or reproductive health, were as follows:

P1: "No."

P2: "Ja."

P3: "No."

P4 : "No."

P5: "Uh uh"

Two of the participants indicated that they had spoken to a social worker about their menstruation and MHM needs and challenges, while the rest of the participants indicated that they had not. One participant indicated that she had a need for it. Intervention strategies should be intended to focus on priority needs that will be financially sustainable, economical, and efficient and all strategies should focus on developing the community by focusing on social, physical, and psycho-social needs (Republic of South Africa, Ministry for welfare and population development, 1997). Social workers play a crucial aspect in menstruation and MHM and the education thereof (Anitha & Sinu, 2015:5). The intervention of professionals can influence the functioning of the exo-system and can affect the experience of the individual.

3.8.2.6 Theme 6: Recommendations

This theme aimed to identify the recommendations that were made by the participants. The sub-themes identified included increased awareness, increase education, promoting the use of reusable sanitary products and lastly the promotion of MHM practices in the community.

- Sub-theme 6.1: Increase awareness

This sub-theme focussed on recommendations to increase awareness of MHM. The participants responses included the following remarks:

P2: "It's like I can give them the advice of like if they start being on periods they should talk not to be afraid like to talk to other person and like they must not be shy about them because it's very normal it's what it's what it happens to every woman."

P1: "So, most of the time we are going to schools doing school talks then we include this one for menstruation like last we were at "infuty" there was a problem that it was giving away sanitary pads."

P4: "I can say, they must be more open about it, talk about it. Research and find more information about it."

Three of the participants recommended increasing awareness and that discussion of menstruation be promoted and encouraged. Thus, increasing the awareness about menstruation and MHM, could have an influence on women's perceptions and that of the community. This is in line with the Gender Action Plan 2018-2021, which aims to promote gender equality on all levels of society (UNICEF, 2019:17). This includes gender equality, improving knowledge and empowerment, increased health, and giving them autonomy over their own lives (UNICEF, 2019:15)

Increased awareness on a micro level can promote awareness in the meso system and how individuals in the meso-systems interact and react to menstruation and MHM.

- Sub-theme 6.2: Increase education

This sub-theme focussed on recommendations about increasing education, which were responded to as follows:

P2: "Like education should especially right now like most teenagers are going through a lot about this thing because they are ashamed so education should make programs so that they can teach them a lot about going on periods and about how they can manage themselves."

P1: "Uhm, I like it if the young boys, if they can teach them about the menstruation cause always, they laugh at girls and then the girls they become shy and then."

P4: "To discuss it more, not only with girls, but to also teach boys about it."

Three of the participants recommended that the focus should be on education and not only education for females, but also for males to eliminate stigma and shame. The Sustainable Development goals 3,4,5,6,8 and 12 focus on addressing overall health and wellbeing, supplying quality education, and eliminating gender inequality (United Nations, 2015). Lack of education about menstruation has a negative effect and previously studies also recommend promoting education (Chikulo, 2015:1973;1974;1983). With reference to the ecological systems approach, increased education on the micro-level can lead to increased awareness, which can lead to policy development in the Exo-systems.

- Sub-Theme 6.3: Promoting Reusable Pads

This sub-theme elaborated on the recommendation made by the participants which was that the use and promotion of reusable pads should be encouraged. The participants had the following remarks:

P4: "Ja, I can say, I think the washable pads, if they can continue with the training & issuing, because a lot of girls do not have the financial stability to buy pads or something to cover themselves with, so the washable pads can be available most of the time."

P5: (Translates and explains the question)" So she says please ah keep on coming to give us the pads which is was able. Cause sometimes people don't have money to buy the pads which are disposables so please keep on coming so that they can receive again the was able pads."

Two of the participants indicated that reusable pads should be explored and discussed more and training should be given in the community. Scorgie et al. (2015:26) confirm that reusable menstruation products have a positive effect on local sanitation and waste management. Scorgie et al. (2015:26) study indicated that participants had positive views about reusable products. This emphasises the recommendation for promoting reusable pads in the community. Reusable pads can have a positive financial implication for the community and for waste management and this will have a positive outcome in the Exo-system.

- Sub-Theme 6.4: Promote MHM Practice

This sub-theme elaborated on the recommendations made by the participants, which was that they recommend MHM Practises to be encouraged. The researcher asked the participants what recommendations they had:

P1: "I will advise them the way I was, you must wash yourself and regularly and your pads change it and your pants."

Only one of the five participants recommended that the emphasis should be on increasing and promoting menstruation hygiene management practices. Chikulo (2015:1973) indicated that 60% of South African women lack proper MHM and this can have social and cultural implications which can lead to prohibiting social activities (Sumpter & Torondel, 2013:2). This emphasises why the above recommendation is beneficial. Creating a proper cultural foundation and knowledge about MHM practices will lead to the development of appropriate cultural beliefs in the macro systems.

3.9. SUMMARY

This chapter focused on the research methodology and empirical findings of the research study. The first section elaborated on the research methodology and methods, quality of data and ethical considerations. The second section focussed on the research findings, dived into the biographic details of the research participants and the thematic analysis of the six themes and sub-themes. Some of the key findings included that the knowledge of menstruation and MHM was limited, the experience of menstruation was linked to the level of preparedness and that the infrastructure in the community limited the proper disposal of sanitary products and had a negative effect on the management of their menstruation.

Chapter four will address the summary, conclusions and recommendations.

CHAPTER FOUR: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

The previous chapter presented the empirical research findings as obtained by means of this qualitative study. In this chapter the manner in which each of the research objectives was met and the research question answered, will be discussed. The chapter also describes the shortcomings of the study, the key findings and conclusions, and recommendations.

4.2 SUMMARY

The aim of this study was to explore and describe the perceptions of female youth regarding Menstrual Hygiene Management (MHM) in Roodeplaat, Tshwane.

The objectives of this study were:

1. To conceptualise and contextualise female reproductive health, the menstrual cycle, and MHM.
2. To explore and describe the source and experience of sexual reproductive health education among female youth in Roodeplaat.
3. To explore and describe the experiences of female youth regarding their menstruation in Roodeplaat.
4. To explore and describe the challenges of female youth regarding MHM in Roodeplaat.
5. To explore and describe resources and support available for female youth related to MHM in Roodeplaat.
6. To suggest social work intervention strategies for menstrual hygiene management for female youth.

4.2.1 Objective 1

To conceptualise and contextualise female reproductive health, the menstrual cycle, and MHM.

The first objective was attained by means of conducting an in-depth literature review on Menstruation Hygiene Management, menstruation, and how the female reproductive system functions.

The theoretical framework, namely the systemic-ecological approach, provided the context in which the experience and perception of MHM and menstruation of female youth in Roodeplaat could be understood (section 1.4.1). The literature review provided a definition of the concept of menstruation (section 2.4), a definition of MHM (Section 2.5) and the research gap regarding MHM (Section 2.2), Knowledge of MHM Section (2.5.2), the importance of MHM (Section 2.5.1) and factors that cause poor MHM Section 2.5.3). The Systemic-ecological approach was used to gain an understanding of how female youth perceive and experience menstruation hygiene management and menstruation (Härkönen, 2007:4; Ettekal & Mahoney, 2017). To determine the perceptions female youth had of MHM, it was linked to the different levels of the systemic-ecological approach, namely, the Micro, Meso, Exo and Macro levels.

4.2.2 Objective 2

To explore and describe the source and experience of sexual reproductive health education among female youth in Roodeplaat.

This objective was reached through an in-depth literature review, previous research undertaken in section 2.4.4 and then the research study with in-depth interviews with female participants, to determine where the participants received information and knowledge of reproductive health in section 3.8.2.1.

4.2.3 Objective 3

To explore and describe the experiences of female youth regarding their menstruation in Roodeplaat.

To achieve this objective, it was important to determine the knowledge the participants had regarding menstruation and MHM, achieved in Chapter Three section 3.8.2.1. This objective was also achieved through examining the empirical findings, which provided the perspectives of the participants by exploring the following factors that contributed to the participants' experience and the challenges that they encountered

(section 3.8.2.2 and 3.8.2.3): with regards to onset of menstruation, experience, menstruation preparedness, support structure, culture belief, physical implications, and psychological implications.

4.2.4 Objective 4

To explore and describe the challenges of female youth regarding MHM in Roodeplaas.

This objective was met by examining the reflective statements in section 3.8.2.2 and section 3.8.2.3, which showed the challenges female youth experienced in respect to menstruation and MHM. In line with the Systemic-ecological approach, participants' narratives revealed that the participants encountered challenges at the individual, interpersonal and family, neighbourhood and community levels, as well as at the policy, systems and societal levels. The participants generally indicated there was inadequate or limited support at all levels.

4.2.5 Objective 5

To explore and describe resources and support available for female youth related to MHM in Roodeplaas.

This objective was met by examining the reflective statements of the female youth in Roodeplaas in this regard, in sections 3.8.2.2 and 3.8.2.3, by examining the support systems of the female youth and resources in their community.

4.2.6 Objective 6

To suggest social work intervention strategies for menstrual hygiene management for female youth.

Objective six was achieved by means of intervention strategies, as recommended in the sections to follow in this chapter, in section 4.5.5 under social work interventions and all other interventions strategies were mentioned under recommendations.

4.2.7 Research question

The research question in this study was: *What are the perceptions of female youth regarding Menstrual Hygiene Management (MHM) in Roodeplaat, Tshwane.*

The above question was answered through conducting the qualitative research study, which involved interviewing five female youths in Roodeplaat, Gauteng, regarding their menstruation and MHM experience, through one-on-one face-to-face interviews to collect data which the researcher then transcribed and analysed, generating themes and sub-themes as discoursed in detail in Chapter Three of this study. Six themes with their sub-themes emerged to answer the research question.

4.3 LIMITATIONS OF THE STUDY

The limitations of this study included the following:

- The research was conducted with five participants in the rural community of Roodeplaat, Tshwane, Gauteng. Thus, the study was conducted in only one district of one province in South Africa, which means that the results cannot be generalised. The results can, however, be applied to similar populations.
- Qualitative research can be highly subjective, but the researcher needed to remain objective. In this regard, the trustworthiness of the data was important, and the researcher used various strategies to ensure trustworthiness and avoid researcher bias, which cannot be avoided, but can be limited.
- There was a language barrier between researcher and participants, which made transcribing and data interpretation a challenge and limited the essence of raw data.
- One of the features of non-probability purposive sampling, used in this research, is that participants were selected using inclusion criteria and not randomly. To mitigate this, the participants were recruited through a voluntary process by Kamcare, who started a new project to hand out reusable sanitary pads to female youth in the Roodeplaat community and functioned as gatekeepers, to identify potential female participants aged 18-35 years who were willing to form part of this research. Those interested would receive reusable sanitary pads from Kamcare and would provide their contact details to Kamcare

- The qualitative data was collected by means of open-ended questions and voice recordings, so the participants had control over the content of the data they provided. As a result, the researcher verified the contents of the data through the recordings and transcribed interviews. The interviews, however, took place at a Crèche, which made the audio quality of the interview recordings a challenge to transcribe, due to the background noise levels.

4.4 CONCLUSIONS

This section will present some conclusions drawn from the literature study.

4.4.1 Conclusions from the literature study

To gain understanding of how female youth perceived menstruation and how their experience influenced their perceptions, the Systemic-ecological approach was identified to be relevant in strengthening this study. The Systemic-ecological approach examined the levels in which the individuals interacted, including the individual's relationship with other individuals, the community and society levels. These factors influenced how individuals experienced menstruation and MHM and how this, contributed to the forming of their perceptions. By using the Systemic-ecological approach, the different levels of these systems within this community where participants resided, informed the conclusions of the study. The above approach aided to determine the perceptions of female youth and in which level they experienced interaction. It can therefore be concluded that the Systemic-ecological approach was appropriate in underpinning the study and was successfully used to understand the perceptions of female youth regarding menstruation and Menstruation Hygiene Management (MHM).

The literature revealed that menstruations and MHM are topics that are under-researched in South Africa and especially in Gauteng. The literature discovered that there is lack of knowledge and awareness regarding reproductive health and menstruation. This gap in research and knowledge, could be contributed to the cultural beliefs and secrecy related to menstruation. The literature also emphasised the importance of MHM and what impact this has on the individual and community. The factors that lead to poor MHM include, poverty, lack of proper waste disposal, structural barriers and inaccurate cultural beliefs. The literature highlighted the need

for social work interventions to play a critical role in supporting and empowering female youth in the community. This also alluded to the need for implementation of national plans and policies that are aimed at improving general knowledge of menstruation and MHM, to eliminate myths and stereotypes. It can consequently be concluded that the literature study conducted was appropriate and applicable to this study.

In the following section the key findings, conclusions and recommendations regarding the empirical findings will be presented, in relation to each of the themes.

4.5 KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS FROM THE EMPIRICAL STUDY

In this section the key findings, conclusions and recommendations for each theme will be provided.

4.5.1 Theme 1: Knowledge of reproductive health

This theme focused on identifying the knowledge of participants regarding reproductive health. Three sub-themes were identified: reproductive health, age when sex/reproductive education was obtained, and their definition of menstruation.

4.5.1.1 Key findings

The research findings indicated that sex education and reproductive health education mostly happened in school settings and that cultural beliefs were detrimental in the perception of sex/reproductive health, as it was seen as a “Taboo topic”.

Participants received sex/reproductive health education in grades 7, 10 and 12 and the menstrual education was taught, linked to the Department of Basic Education’s Comprehensive Sex Education (CSE) curriculum guidelines.

The understanding of the participants about menstruation varied and was mostly vague, however, the following common links were present; cleaning of a woman’s system, menstruation happening once a month and the presence of pain.

4.5.1.2 Conclusions

It can be concluded that female youth in Roodeplaat received limited education about sex and reproductive health and that the foundation of sex education in schools is not

the same for all female youth and that education that was received did not empower female youth in Roodeplaats with knowledge, so that they could define menstruation in a comfortable manner.

4.5.1.3 Recommendations

- Since sex education was mostly provided at Schools, the standard of education that was shared needs to be improved and bench-marked with other schools nationally and possibly globally. This will provide female youth with basic information and prevent confusion and misconceptions regarding reproductive health and sex education.
- Education should be broadened to families in the community to prevent the perception that sex/reproductive health education is a taboo topic and to educate families about preparing female youth on menstruation at home.

The following recommendations in italics are those of the participants:

- *There was a need to not only educate community and families but also to educate male youth in the community.*
- *Increased education of menstruation in the community was indicated as detrimental.*

4.5.2 Theme 2: Menstruation experience and challenges

This theme focused on how the female youth experienced menstruation and the challenges they encountered. The sub-themes identified were Onset of menstruation, experience, menstruation preparedness, support structure, cultural beliefs, physical implications and psychological implications.

4.5.2.1 Key Findings

- The onset of menstruation was one of the key factors that contributed to the participants' experience and participants started menstruating between the ages of 13-18 years.
- Participants had negative experiences linked to menstruation, which could be related to their lack of support systems at onset.
- The lack of preparedness led to an overall negative experience of menstruation.

- The level of education had a direct influence on the presence of misconceptions regarding menstruation.
- Female youth in Roodeplaat were not aware of cultural beliefs in the community.
- Pain, stomach-ache, vomiting and feeling sick were reported as physical implications of menstruation that were experienced by female youth.
- Bullying was not reported among the psychological implications of menstruation.

4.5.2.2 Conclusions

The experience of menstruation was impacted by the level of knowledge and level of preparedness of the individual. Increased knowledge and preparedness of menstruation prior to the onset, had a positive effect on how menstruation was experienced, with retrospect to the Systematic-ecological approach the meso systems (family, friends and partners) had an impact on how female youth experienced menstruation.

4.5.2.3 Recommendations

- To increase the education on menstruation in the community, by providing education to family members through community education programmes.
- To increase accurate beliefs regarding menstruation through Curriculum Sex Education (CSE) and community empowerment.
- Collaboration between healthcare workers and teachers should focus on the physical implication of menstruation and what strategies can be used to address the challenges, and advice should be grounded in medical observations and diagnoses and not on myths and beliefs.

4.5.3 Theme 3: Menstruation Hygiene Management and challenges

This theme focused on Menstruation Hygiene Management and the challenges associated with MHM. The sub-themes under this theme were: The concept of MHM, MHM strategies, available MHM facilities in the community, Menstruation Hygiene materials and disposal method of menstruation materials.

4.5.3.1 Key Findings

- Female youth in Roodeplaat did not understand MHM and could not explain the term.
- Even though the participants could not explain the term they partook in strategies that could be categorised as MHM strategies.
- Bathing regularly, changing sanitary products regularly and ensuring the participants had sanitary products with them to prevent the use of toilet paper, were the MHM strategies identified.
- Most of the participants had access to running water at home and facilities to change sanitary materials, however access to running water at school was a challenge, which was reported by one participant. The same participant washed three times a day when she was menstruating and the lack of running water at school was a challenge for this participant.
- The MHM strategies were learnt through the participants' meso-system (families and friends).
- The most used product was sanitary pads and was because sanitary pads were the most inexpensive of all the available sanitary products.
- Disposing of used sanitary products in the dustbins was the most common method of disposal.
- Burning of used sanitary products was reported by one participant and is not a common method of disposal in South Africa. This method can be linked to a manner of managing and maintaining the secrecy associated with menstruation.

4.5.3.2 Conclusions

Menstruation Hygiene Management was not a known term in Roodeplaat, although the participants practiced MHM daily. MHM was limited by a lack of access to running water at schools in the community. The use of pads can be linked to the socio-economic circumstance of the participants. Disposing of sanitary pads is linked to the secrecy assigned to menstruation.

4.5.3.3 Recommendations

- There is a need to make MHM a topic in reproductive health education and for the Department of Basic Education to include this topic in their CSE.

- The Department of Water and Sanitation should make it a priority to ensure there is access to running water at schools to ensure MHM.
- There is a need to develop and implement strategies that ensure waste disposal of sanitary products is safe for the individual and the environment.

The following recommendations in italics are those of the participants:

- *There is a need to increase the awareness of MHM and strategies related to MHM in the community.*
- *Washing yourself frequently and changing pads is recommended by the participants to other female youth.*

4.5.4 Theme 4: Resources and limitations

This theme focussed on identifying the resources and limitations in the community that might have impacted the perception of menstruation and MHM in the Roodeplaas community. The sub-themes were reusable pads and community programs.

4.5.4.1 Key Findings

- Kamcare provided the participants with reusable pads, during their community programs. Even though the participants had access to reusable pads, only two participants had used the reusable pads.
- Reusable pads were a resource that the participants had access to through Kamcare organisation.
- Reusable pads were seen as a cost effective, convenient and an easy method. Despite this some of the participants still used sanitary pads.
- Kamcare was identified as the only organisation which focused on menstruation and female youth empowerment. No other organisations or programmes were identified in the community by the participants.

4.5.4.2 Conclusions

It is evident that there is a lack of resources in the community that concentrate on female youth and their needs. Despite this, the participants received reusable pads from Kamcare and the participants had positive feedback regarding reusable pads, which can be a possible factor that can receive more attention in the future.

4.5.4.3 Recommendations

- The community of Roodeplaat needs to have more programs that promote dignity and prevent gender inequality.
- The Department of Women, Youth, and Person with Disabilities should aim to address problems linked to poor MHM, by focusing on sanitary dignity, by ensuring that every girl can go through their menstruation process in a dignified manner, by focusing on gender equality (Sommer et al., 2021:2).

The following recommendations in italics are those of the participants:

- *Reusable pads should be promoted, and information and training should be provided regarding reusable pads.*
- *Kamcare should continue with their reusable pads programs in the community.*

4.5.5 Theme 5: Intervention

This theme aimed to address the types of interventions the participants received. The sub-theme was social work interventions.

4.5.5.1 Key Findings

- Discussion with social workers regarding menstruation and reproductive health was one of the interventions the participants received.
- There is a need for discussions with social workers regarding menstruation and MHM. Interventions from professionals have the ability to positively alter negative perceptions and experience of menstruation and MHM.

4.5.5.2 Conclusions

Social workers play a crucial role in promoting sanitary dignity and enhancing the quality of life of female youth and more intervention with professionals is needed.

4.5.5.3 Recommendations

- Create or strengthen the knowledge on menstrual health and MHM in the curriculums of professionals like social workers, teachers and healthcare workers.
- Provide female youth the opportunity to discuss MHM and menstrual health with a professional via social platforms to breach the current gap.

4.5.6 Theme 6: Recommendations

This section focussed on the recommendations made by the five participants for future research and for services in the community

4.5.6.1 Key findings

- Reusable pads should be promoted, and information and training should be provided regarding reusable pads.
- Kamcare should continue with their reusable pad's programs in the community.
- There is a need to increase the awareness of MHM and strategies related to MHM in the community.
- Washing yourself frequently and changing pads is recommended by the participants to other female youth.
- There is a need to not only educate community and families, but also to educate male youth in the community.
- Increased education of menstruation in the community was indicated as detrimental.

4.5.6.2. Conclusions

It is evident that education and awareness is a key recommendation and important for future research on menstruation and MHM. This education should also be extended to male counterparts in society.

4.5.6.3 Recommendations

- The recommendation made in this research should not only be generalised to Gauteng, but nationally to similar populations.
- Curriculum for Sex Education should include a section that aims at educating men in society about menstruation and MHM and not only females.

4.6 RECOMMENDATIONS FOR FUTURE RESEARCH

- One of the limitations of this research was that the study was conducted in only one of the provinces in South Africa, which means that the results cannot be generalised. Studies should be conducted on a bigger scale and in other provinces, so that the results obtained can be widespread and findings generalised.

- Male youth should also be included in programs and research to get an overview of how male youth perceive menstruation and what their beliefs are regarding MHM. This would be beneficial to determine if male perceptions have an impact on the perceptions of menstruation of female youth.

4.7 FINAL CONCLUDING REMARKS

Despite the limitations identified, this research has succeeded in achieving its key objectives. Female youth in the Roodeplaat community have mixed perceptions of menstruation and MHM and demonstrated a lack of knowledge. Close collaboration between relevant stakeholders such as government, NGOs, CBOs, private sector, healthcare workers, social workers, teachers and policy makers is required. This will assist in the development of more knowledgeable female youth, who practice good MHM strategies. Hopefully this will also help in educating male youth with regards to menstruation of females and MHM, to help mitigate their stigmatisation towards females with regards to menstruation.

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6.APPENDICES

6.1 Appendix 1: Ethics approval



Faculty of Humanities

Fakulteit Geesteswetenskappe
Lefapha la Bomotheo



11 August 2021

Dear Mrs A Pretorius

Project Title: The perceptions of female youth regarding menstrual hygiene management (MHM) in Roodeplaat, Tshwane
Researcher: Mrs A Pretorius
Supervisor(s): Dr CL Carbonatto
Department: Social Work and Criminology
Reference number: 15079806 (HUM038/0521)
Degree: Masters

I have pleasure in informing you that the above application was **approved** by the Research Ethics Committee on 11 August 2021. Data collection may therefore commence.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should the actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

We wish you success with the project.

Sincerely,

Prof Karen Harris
Chair: Research Ethics Committee
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: tracey.andrew@up.ac.za

Fakulteit Geesteswetenskappe
Lefapha la Bomotheo

Research Ethics Committee Members: Prof I Pikitrayi (Deputy Dean); Prof KL Harris; Mr A. Biko; Dr A. M de Beer; Dr A. de Santos; Ms KT Govender; Andrew; Dr P. Gubisa; Dr T. Johnson; Prof D. Mamee; Mr A. Mohamed; Dr I. Ncube; Dr G. Buttergill; Prof D. Reubon; Prof M. Sene; Prof E. Tshau; Prof V. Tshabe; Ms B. Tshabe; Ms D. Mkalape

6.2 Appendix 2: Letter requesting permission at Kamcare



14 July 2021

Ref.: Amonique Pretorius (15079806)
Email: u15079806@tuks.co.za
Cell phone No: 084 447 6654

ATT: Mrs L Landman
C/O Kameeldrift and Sinagoge Roads
Kameeldrift East
0035

Dear Mrs Landman

REQUEST FOR A PERMISSION TO CONDUCT RESEARCH IN YOUR FACILITY

I, Amonique Pretorius, am a registered student for MSW (Healthcare) programme at the Department of Social Work and Criminology, University of Pretoria. A requirement besides the coursework modules in the first year is to conduct research and write a mini-dissertation, resulting from a research project, under the supervision of an appointed supervisor, namely Dr C.L. Carbonatto.

I hereby request permission to conduct my research project at your facility. The envisaged title of the study is: "The perceptions of female youth on menstruation hygiene management in Roodeplaat rural community, Tshwane". The goal of the study is to explore and describe the perceptions of female youth on menstruation hygiene management in Roodeplaat rural community, Tshwane.

Room 10-10, Humanities Building
University of Pretoria, Private Bag X20
Hatfield 0020, South Africa
Tel +27 (0)12 420 2410
Email: Charlene.carbonatto@up.ac.za
Web: www.up.ac.za

Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha le Bomotho

The objectives of the study are:

- To describe female reproductive health, the menstruation cycle, sexual reproductive health education and menstruation hygiene management
- To explore and describe female youth in Roodeplaat rural community, their source of education on sexual reproductive health, preparation and support regarding the onset of menstruation and menstruation hygiene management
- To explore and describe the experiences of female youth in Roodeplaat rural community regarding menstruation, factors creating challenges, their coping mechanisms, resources and support
- To explore the experiences of female youth in Roodeplaat rural community of projects providing support with free sanitary materials
- To make recommendations for social work intervention with female youth with regards to education, preparation and support on the menstrual cycle and menstruation hygiene management

The envisaged target group of the study is: Female Youth who benefited from your reusable sanitary towel project. Kamcare will act as a gate keeper between the researcher and the participants by informing the potential participants in Roodeplaat rural community about the research project and getting the contact details of those female youth who are interested to partake in the study. These contact will be given to the researcher to contact these potential participants regarding voluntary participation in the study.

If they meet the selection criteria, they will be included in the study and sent a letter of informed consent via email. The empirical part will entail conducting individual face-to-face interviews

using an Individual Interview schedule with the participants. I fully understand Covid-19 situation, but unfortunately it is unrealistic to plan for online Individual Interviews. This is not possible in Roodeplaat rural community, due to the fact that the potential participants reside in informal settlements where the people do not have electricity, data nor smart phones and cell phone reception is very poor. The researcher planned to conduct face-to-face Individual Interviews with participants at the venues made available, adhering strictly to social distancing, wearing of face masks and hand sanitizing, as well as other Covid-19 protocols. This will be done to observe the COVID-19 conditions as well as to protect the health and safety of the researcher and the participants.

A copy of the final report results will be made available to your organisation after completion. It would be appreciated if you will please consider the above request favourably and grant permission at your earliest convenience.

Yours sincerely,



Name: Amónique Pretorius

Researcher



Dr CL Carbonatto - Supervisor

Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha la Bomotheo

6.3 Appendix 3: Kamcare permission letter



13 July 2021

For attention: Dr C.L. Carbonatto
Department of Social Work and Criminology
University of Pretoria

Dear Dr Carbonatto

RESEARCH CONDUCTED IN KAMCARE: MSW (HEALTHCARE) POSTGRADUATE STUDENTS 2021

With this letter, I am giving permission for the MSW (Healthcare) postgraduate students from the University of Pretoria to conduct their research in our organization. As I understand these postgraduate students want to explore the experiences of female youth who are beneficiaries of our re-usable sanitary pad project, regarding the managing of their menstrual hygiene. I think it is a wonderful research project and will give my support in any way possible.

We are commencing with a new project in mid-August 2021, distributing hand-made re-usable sanitary pads to female youth between the ages 18 to 25 years, living in informal settlements in the Roodeplaat rural area, Tshwane. Kamcare is willing to act as gate keeper between the researchers and the participants, by informing the potential participants in the Roodeplaat rural community about the research project and getting the contact details of those female youth who are interested to participate in the study. These contact details will be given to the group of postgraduate students to contact these potential participants regarding voluntary participation in the study. A venue in the community will also be made available by our organisation to the students, whether the Roodeplaat Community Hall or Vhathu Phanda Crèche in New Town, Roodeplaat, where they can conduct the interviews.

I understand the Covid-19 situation fully, but unfortunately it is unrealistic to plan for online focus group or online individual interviews. This is not possible in this community, due to the fact that the beneficiaries/potential participants reside in informal settlements, where the people do not have electricity, data nor smart phones and cell phone reception is very poor. Our organisation does not have internet nor computer facilities for the students to use in this community. My suggestion is thus for the students to rather conduct face-to-face individual interviews with participants at the venues made available, adhering strictly to social distancing, wearing of face masks and hand sanitizing, as well as other Covid-19 protocols.

If you need any more information, please contact me on 072 150 3994.

Kind regards



MRS LIEZEL LANDMAN
MANAGER: COMMUNITY DEVELOPMENT

Office: +27 12 756 4223 * C/o Kameeldrift- and Sinagoge Roads, Kameeldrift East, 0035 * email: info@kamcare.org * Website: <http://kamcare.org>

6.4 Appendix 4: Letter for counselling services



15 July 2021

The University of Pretoria
Faculty of Humanities
Research Ethics Committee

To whom it may concern:

RE: Counseling for research participants

Title of the study: the perceptions of female youth of menstruation hygiene management in Roodeplaas, Tshwane.

I, Liezel Landman, hereby confirm that I will provide counselling free of charge for the participants of the above-mentioned study conducted by the MSW (Healthcare) students should there be a need after the interview.

My details are as follows:

Name: Liezel Landman
Organization: Kamcare Social and Training Services
Contact details: 072 150 3994
Qualification: Masters degree in Social Development and Policy
SACSSP Registration No.: 10-20096

Kind Regards,



MRS LIEZEL LANDMAN
MANAGER

Office: +27 12 756 4223 * C/o Kameeldrift- and Sinagoge Roads, Kameeldrift East, 0035 * email:
info@kamcare.org * Website: <http://kamcare.org>

6.5 Appendix 5: Letter of informed consent



Date: 2021/07/27

Name: Amónique Pretorius
Email: u15079806@tuks.co.za
Cellphone No: 084 447 6654

LETTER OF INFORMED CONSENT

SECTION A: RESEARCH INFORMATION

Research Information

This letter serves to invite you to participate in a study on the perceptions of female youth of menstruation hygiene management in Roodeplaas, Tshwane. The informed consent gives a brief explanation of the purpose and procedure of the research and the rights of participation. Please go through the form before you make an informed decision regarding your voluntary participation. Feel free to ask questions about the proposed study before signing the consent form.

Title of the study

The perceptions of female youth on menstruation hygiene management in Roodeplaas, Tshwane

Purpose of the study

The purpose of the study is to explore and describe the perceptions of female youth on menstruation hygiene management in Roodeplaas, Tshwane.

Procedures

You have been informed of the study and provided your contact details for researcher to contact you to partake in the study. The researcher will be responsible for conducting a face-to-face interview in order to collect data on your perceptions on menstruation hygiene management as a female youth. Once you sign this letter, you agree to take part in the study. The researcher will arrange to conduct an individual interview with you when it suits you best. The interview will be recorded, with your permission, to ensure that all the information you are sharing is captured for research purposes. The duration of the interview will be approximately 45 minutes to an hour. A semi-structured interview schedule will be used to guide the interviewing process. Please note that the recording will only be used for the purpose of data analysis of the research and will be kept confidential. You have a right to access your data at anytime you wish to do so.

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Lefapha la Bomotho

Risks and discomforts

The researcher does not intend to put you under any risk or discomfort with the information you will share. There is a possibility of emotional discomfort related to the sharing and exploration of your perceptions on menstruation hygiene management. The researcher will debrief you after the interview is concluded and should you experience a need for counselling, you will be referred to a professional counsellor for free intervention. You do not have to answer any question that will make you feel uncomfortable during the focus group .

Benefits

You will not receive any form of remuneration/ compensation/ incentives for participating in the study. The study is however about improving menstrual hygiene management for female youth. The findings of this study can also help professionals to better understand the experiences of female youth regarding menstrual management.

Participants' rights

Your participation in the study is entirely voluntary and you may withdraw from participation at any time and without negative consequences to you or your family members. There will be no penalty or loss of benefit if you decide not to take part in the research. You have a right to withdraw from the research at any time without having to explain why. Should you wish to withdraw from the study, all data gathered in respect of your interview will be destroyed.

Confidentiality

The information shared during the interview will be kept confidential and will be used for the purpose of the study only. The researcher will also not identify you by name during the report, using only pseudonyms or a false name to protect your identity. The only people who will have access to the data, will be the researcher and the supervisor.

Data usage and storage

Please note that the data collected might be used in the future for further research purposes, a journal publication or conference paper. The data collected will be stored in the Department of Social Work and Criminology, University of Pretoria for the period of 15 years as required.

Access to the researcher

You may contact the researcher using the contact details provided above for the duration of the study, should there be any questions or uncertainties regarding the study and your participation.

Should you need counselling after the interview you can contact the counsellor Liezel Landman at Kamcare. Kindly note the services are free of charge.

Please sign Section B on the next page if you agree to participate voluntarily in the study.

Yours sincerely,



Amonique Pretorius

Researcher

SECTION B: INFORMED CONSENT OF PARTICIPANT

I(*Full Name of participant*) hereby declare that I have read and understood the above information. I was given adequate time to consider my participation in the study. I was also given the opportunity to ask questions and all of them were answered to my satisfaction. I hereby give consent to participate voluntarily in this study.

Participant: _____
Date: _____
Signature: _____

I(*Full Name of researcher*) hereby declare that I have explained the information in Section A: Research Information to the participant and he/she indicated understanding the contents and was satisfied with the answers to questions asked.

Researcher: _____
Date: _____
Signature: _____

6.6 Appendix 6: Interview schedule

MSW (HEALTH CARE) 2020 GROUP INTERVIEW SCHEDULE

Meeting data

Date: To be confirmed

Start time: To be confirmed

Meeting location: Roodeplaat Community hall or Vhathu Phanda Crèche in New Town

Elapsed time:

Participant data

Number of voluntary participants that attended:

Introduction

- Good day my name is Amónique Pretorius, I am a researcher from the University of Pretoria. I. Will be conducting the face-to-face interview with you today.
- Discuss purpose of the study.
- Tell the participants that the interview session will be recorded.
- Discuss the importance of confidentiality and give the participants time to choose their own pseudo names if the wanted too.
- Begin interview.

Theme	Question
1. Biographical information	Age Gender Marital status Number of children Religion Home language Highest qualification
2. Knowledge about reproductive health	•When did you learn about sex education or reproductive health and where did you access this information?

	<ul style="list-style-type: none"> •What do you understand by menstruation or menstrual cycle?
<p>3. Menstruation experience and challenges</p>	<ul style="list-style-type: none"> •How old were you when you started menstruating? •Can you remember this experience and how it made you feel? •Were you prepared and supported for your onset of menstruation and by whom? •Who was the first person you told about it and what was their reaction? •What advice did they give you and was it useful? •Were you ever teased about menstruating? How did you react to the teasing? •Tell me about your current menstruation experiences? •How does menstruation affect your social life? •Do you talk to anyone about your menstrual experiences? •Who offers you support during menstruation? •What are cultural beliefs or practices regarding menstruation you know of?
<p>4. Menstruation hygiene management and challenges</p>	<ul style="list-style-type: none"> •What is your understanding of menstrual hygiene management (MHM)?

	<ul style="list-style-type: none"> •Who told you about MHM? •What type of support do you receive or do you want? •What challenges do you experience regarding MHM? •What do you do to cope with MHM challenges? •What strategies do you implement to address these challenges? •What do you need to manage your period properly? •What MHM products have you used from your first period onwards? •What type of MHM product are you currently using? •What do you do to stay hygienic during your period? •Explain what do you do with your used menstruation products? •What do you think could improve your MHM?
<p>5. Resources and limitations</p>	<ul style="list-style-type: none"> •What resources are there in community for female youth regarding menstruation hygiene management? •What challenges in your environment did you experience in MHM before accessing Kamcare? •What impact has accessing Kamcare had on your MHM?

	<ul style="list-style-type: none"> •Do you use the reusable sanitary pads from Kamcare? If so, has it made a difference in your life? •What valuable lessons have you learnt since accessing Kamcare?
6. Social work intervention	<ul style="list-style-type: none"> •Any interaction with/referral to a social worker regarding sex education or reproductive health? •What kind of assistance did they give? •Your experience of their intervention?
7. Recommendations	<ul style="list-style-type: none"> •What do you think could improve your MHM experiences? •Given your experience and knowledge of MHM what advice would you give to younger girls starting their period? •What change would like to see in terms of education about menstrual hygiene management? •Do you have any recommendations for programs for female youth in your community?

End the interview with asking about how the participants experienced the interview and basic debriefing.

Giving them the contact details of Liezel Landman, social worker at Kamcare, if there is a need for counselling.

6.7 Appendix 7: Letter from editor

I, Mick Raubenheimer, declare that I edited the work of Amonique Pretorius in this mini dissertation.



Mick Raubenheimer
BA Linguistics (2001)
PGCE (2010)
Editor (3 years)
Intermediate Phase educator (8 years)