The perceptions of female youth regarding menstrual hygiene management (MHM) in Ikageng, Potchefstroom

Mini-dissertation

by

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ABSTRACT

Title: The perceptions of female youth regarding menstrual hygiene management (MHM) in Ikageng, Potchefstroom
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Menstruation is an important part of the female reproductive system. These experiences are unique to every individual. This is influenced by environmental factors on a micro, meso and macro level and ultimately affects individuals on various levels. In an attempt to alleviate this issue, several empowerment interventions have been launched in order to enable females to manage their menstrual hygiene more efficiently. These are however hardly represented within existing literature. The focus of this study is on the perceptions of female youth regarding MHM, specifically in Ikageng, Potchefstroom, North West Province.

The research approach followed was qualitative in nature with a philosophical foundation that was embedded in feminism. With this a phenomenological research design was implemented. The research type applicable to the study was applied research. The study population was selected through non-probability, purposive sampling. NG Welfare, Potchefstroom was used as a gatekeeper during the recruitment process. Five participants were purposively selected and interviewed, using face-to-face individual, semi-structured interviews. The steps of data analysis were used for the thematic analysis. Seven themes were generated, namely: experiences during the onset of menstruation, current menstrual experiences, concept of reproductive health and menstruation, menstrual hygiene management, challenges being experienced with regards to MHM, the reusable pad initiative and recommendations.

Conclusions made from the study confirmed that environmental factors did indeed influence the perceptions of female youth of MHM. Therefore, investments in environmental improvement could lead to improved experiences of MHM and overall

individual functioning that could in turn benefit the functioning of the community as a whole in many ways.

LIST OF KEY TERMS

Female
Ikageng
Menstrual Hygiene Management (MHM)
North West Province
Perception
Potchefstroom
Youth

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CHAPTER 1: GENERAL INTRODUCTION

1.1 INTRODUCTION

Menstruation is an important part of the female anatomy and is a natural phenomenon that most healthy females experience (Punzi & Hekster, 2019:2). The onset of menstruation usually occurs during a vulnerable life phase known as adolescence, during which girls become sexually mature and reach puberty. Menstrual Hygiene Management (MHM) is an essential aspect for females to maintain a healthy lifestyle and negligence in this regard can lead to severe health issues. Worldwide, there are several factors that are influencing the overall menstrual hygiene management perceptions of females (United Nations International Children's Emergency Fund, 2019:13). Environmental factors that are especially evident in developing countries, can for instance constrain individuals from obtaining the necessary menstrual hygiene materials and supplies and make the overall MHM experience challenging. Ultimately, this can have major implications for the overall functioning of the individual and can affect them not only on biological and physical levels, but also on psychological and social levels (Lahme & Stern, 2017:2). In order to address this social issue, several empowerment projects have been launched all over the world. Through these projects females are enabled to manage their menstrual hygiene more sufficiently and have self-worth and confidence as women (Tellier & Hytell, 2017:10). It is however not clearly evident if these interventions are indeed improving the MHM experiences of females. In order to obtain a comprehensive understanding of the perceptions of MHM amongst females, all of these aspects need to be considered.

In the following chapter several aspects of a proposed study on the above mentioned is discussed. To understand the context of the study, a description of the following key concepts is provided:

- ***Perception:*** "The way in which something is regarded, understood, or interpreted" (Oxford English and Spanish Dictionary, 2021:1). In the context of this study, it specifically referred to how participants perceive MHM and how this affected them.
- ***Female:*** "a person with two X-chromosomes in the cell nucleus that produce egg cells when they become sexually mature and has a vagina, uterus and ovaries for reproductive organs" (Dictionary.com, 2021:1). For this study, a female specifically referred to

someone that experiences menstruation, as this phenomenon is mostly associated with the female gender.

- ***Ikageng, Potchefstroom:*** The study was conducted in "a township bordering Potchefstroom, which is located within the North West Province of South Africa" (South African Venues.com, 2020:1).
- ***Menstrual hygiene management (MHM)*:** The researcher utilised the most comprehensive and common definition of this term that refers to MHM as "the management of hygiene associated with the entire menstrual process. This includes when women and adolescent girls are using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They also understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear" (UNICEF, 2019:3). In this study MHM referred to how the female youth of Ikageng, Potchefstroom, North West province perceive MHM.
- ***Youth:*** "young people between the ages of 14 and 35 years old" (Republic of South Africa, 2015:10). In this study female youth aged 18 – 30 years formed the sample of the study.

1.2. CONTEXTUALISATION OF TOPIC

Most of the studies conducted on this topic, describe the practices, knowledge, and attitudes regarding MHM, including cultural beliefs and taboos as well as the education about menstruation. There is also literature available based on observations made that determines the connection between MHM practices and various socio-demographic and contextual factors such as lack of privacy, water, and/or proper sanitary disposal facilities (Kuhlman, Henry & Wall, 2017). Studies mostly focus on schoolgirls and conclude that MHM is more challenging for girls attending public schools than for those who attend private schools (Kuhlman et al., 2017). Most studies focus on developing countries, including sub-Saharan African countries and the South Asia region. Although the topic of MHM has recently gained more attention in African countries, it is under-studied specifically in South Africa (Geismar, 2018:15). A lot of studies also focus on the challenges being experienced, but very few include the attempts being implemented to

address these challenges, such as empowerment projects and the effectiveness thereof (Sida, 2016:3). In order to obtain a comprehensive understanding of the perceptions regarding MHM, this study therefore not only focused on the challenges being experienced, but also the attempts that have been made to enhance MHM perceptions of female youth in South Africa, as well as the effectiveness thereof.

1.3 THEORETICAL FRAMEWORK

The ecological systems approach was utilised as a framework to analyse and interpret the study's findings on the perceptions and the influencing factors on the different levels of the female's environment, in order for them to maintain MHM, as well as the effect it has on their development as a woman. The ecological perspective focuses on the person-in-environment and the interactions between persons, families, groups or communities and their environment (Teater, 2014:23). The theory was developed by Urie Bronfrenbrenner and he believed that everything in a person's surrounding environment affects their development. Understanding this development, requires that the entire context of the ecological systems and their relationship that form the person's environment and in which growth occurs, must be considered (Bronfrenbrenner, 1994:4). The theory divides the person's environment into five complex levels, each having an effect on a person's development:

- **Microsystem**

This is the closest system to the female and includes structures which they have direct contact with within their immediate surroundings for example home, school or work and mostly includes family, teachers, peers, community members or caregivers (Ryan, 2001:2). "The interactions within microsystems are often very personal and are crucial for fostering and supporting development" (Guy-Evans, 2020:4). Studying this system allowed the researcher to identify environmental structures that are directly influencing the MHM perceptions of the females. This was either in a positive way with sufficient support or in a negative way with a lack of support, ultimately affecting them in different ways.

- **Mesosystem**

"The mesosystem is where a person's individual microsystems do not function independently, but are interconnected and assert influence upon one another. Essentially, a mesosystem is a system of microsystems" (Guy-Evans, 2020:4). This

system basically refers to the interaction between the different structures of a person's microsystem, for example the interaction between the female's parents, teachers, peers and/or work (Ryan, 2001:2). This was crucial to consider in order to understand how structures are influenced by each other and how this interaction, in turn, once again influences the female's MHM perceptions.

- **Exosystem**

The exosystem refers to a larger social setting in which the person does not function directly but still indirectly impacts their development by interacting with a structure in their microsystem (Ryan, 2001:2). "Examples of exosystems include the neighbourhood, parent's workplaces, parent's friends and the mass media. These are environments in which the individual is not involved, and are external to their experience, but nonetheless affects them anyway" (Guy-Evans, 2020:4). In order to obtain a comprehensive understanding, factors that affect the MHM perceptions not only directly, but also indirectly, had to be studied.

- **Macrosystem**

The macrosystem is considered the outermost level in the person's environment and consists of the actual cultural values, customs and laws of the person (Ryan, 2001:2). "The macrosystem differs from the previous ecosystems as it does not refer to the specific environments of one developing individual, but the already established society and culture which they are developing in" (Guy-Evans, 2020:4). This context involves the socioeconomic status of the person and family, their ethnicity or race and living in a developing or third world country (Ryan, 2001:2). The MHM perceptions of a female living in a third world country differed from one living in a wealthier country. It also differed according to the cultural beliefs of the individual, and therefore had to be considered within the study. The effects of the larger principals in the macrosystem also have a rippling effect on the interactions of all the other levels.

- **Chronosystem**

The final system involves the time dimension as it relates to the environments of a person. "Elements within this system can be external, such as the timing of death, or internal, such as the psychological changes that occur with the aging of a person" (Ryan, 2001:2). Internal and external influencing factors also had to be considered in order to gain a comprehensive understanding, as they differed from female to female and played a role in how MHM was ultimately perceived.

In conclusion, one could not only consider the immediate environment of an individual when studying such a complex phenomenon that can clearly be influenced by multiple aspects. The ecological theory enables one to take a holistic approach to see diverse points of entry into difficult situations. The theory is also flexible, as it can provide a way of assessing and can be combined with other approaches to fulfil the need (Teater, 2014:23). The theory was therefore suitable to use as an abstract framework, as it related well with the other methodological components of the study, as well as the phenomenon being researched, which included the perceptions of female youth regarding MHM and helped to explain and make sense of it. In order to do this, environmental factors that can influence these perceptions on different levels needed to be considered, as suggested by the theory.

1.4 PROBLEM STATEMENT AND RATIONALE

Female youth in South Africa are often challenged by factors in the environment that influence their perceptions of sufficient MHM. Such factors vary between the different environmental levels, for example, from being bullied by peers, being influenced by culture, to living in a developing country where poverty is evident and influences the ability to obtain the necessary menstrual hygiene materials and supplies. This can affect them on different levels and can have an impact on their overall MHM experiences as a woman (Lahme & Stern, 2017:2). In order to address this social problem among female youth, several interventions have been launched to empower such females to manage their menstrual hygiene effectively, that allows them to have self-worth and confidence as a woman (UNICEF, 2019:13). However, the challenges being experienced and the actual contribution of such interventions to the experience of MHM among female youth, specifically in South Africa was unknown.

In order to understand the MHM perceptions among the female youth in South Africa better, the relationship between the individual and environmental factors that can influence these perceptions as well as the effect it has, needed to be examined. The contribution of empowerment projects, such as the one that was implemented by Kamcare in Kameeldrift, Gauteng, and the surrounding provinces that aims to improve MHM of female youth in South Africa, also had to be included when studying these perceptions. This was beneficial, as it contributed to the overall understanding of positive

and negative environmental factors that exist in developing countries like South Africa, that influence MHM. This is considered a challenge for female youth who are also in a vulnerable stage of their lives. Through this, the importance of female empowerment in a country like South Africa was also highlighted.

The research question for this study was therefore: **What are the perceptions of female youth regarding Menstrual Hygiene Management (MHM) in Ikageng, Potchefstroom?**

1.5 AIM AND OBJECTIVES

The study's aim was to explore and describe the perceptions of female youth regarding Menstruation Hygiene Management (MHM) in **Ikageng, Potchefstroom?**

The research objectives of the study were:

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

1.6 RESEARCH METHODOLOGY

The purpose of the study was to explore and describe the perceptions of female youth regarding MHM in Ikageng, Potchefstroom. The study was conducted on the philosophical foundation of feminism in order to obtain a true reflection of the perceptions of female youth regarding menstrual hygiene management that is an experience that is

unique to the female gender and causes them to experience the world differently. Several projects in South Africa strive towards empowering women with regards to MHM and following this approach allowed the researcher to better understand this. The study was applied research since it aimed to not only gather information on the topic, but also for the findings to be used to address the challenges that have been faced within MHM and make recommendations in this regard. The study itself was therefore also empowering in nature and connected well with the feministic approach. Since the researcher aimed to obtain a true reflection of the participant's lived experiences regarding MHM and their perceptions therefore, a phenomenological research design, with a transcendental phenomenology sub-design, was implemented. This design ensured that a detailed understanding was obtained with rich and thick description of data, which was ideal for this study since that was what the researcher aimed to achieve.

In order to reach this, in-depth data had to be gathered and the study was therefore qualitative in nature. This was done through conducting face-to-face individual interviews while using an interview guide as a data collection instrument. The interviews were recorded and then transcribed. For analytical purposes, the thematic data analysis genre as described by Clarke, Braun and Hayfield (2015) was utilised. Thematic analysis is a method that is used to analyse qualitative data and the goal is to develop themes and data codes from a unique point of view. The study targeted female youth in Ikageng, Potchefstroom and five participants were included within the study sample. The recruitment process included working through a gatekeeping organisation that provided access to community members and informed them about the study. With their informed consent, the researcher contacted them and scheduled the individual interviews. Purposive sampling was followed, since the researcher aimed to reach a specific sample based on a specific inclusion criterion.

In order to ensure that the study is feasible, a pilot study was also conducted by the researcher that served as a guide for the actual research procedure. To obtain quality and trustworthy data, credibility, transferability, dependability and confirmability was ensured through a number of techniques including prolonged engagement, supervision, member checking, negative case analysis, persistent observation, thick descriptions, purpose sampling, journaling, code-recode strategy, audit trail and peer examination. To ensure that the study was ethically suitable, aspects such as making use of gatekeepers,

gaining informed consent, voluntarily participation, confidentiality, no harm and debriefing, no deception, positionality and analysing and reporting were applied throughout the study. A detailed exposition of the research methodology will be provided within chapter 3.

1.7 LAYOUT OF MINI-DISSERTATION

The mini-dissertation will be structured as followed:

Chapter 1: General introduction - Offers a general introduction to the study, indicates the theoretical framework, the problem statement and rationale for the study, the research question as well as the aim and objectives. A brief overview of the research methods will be included.

Chapter 2: Literature review on MHM – The literature review of the study will focus on female youth, the reproductive health cycle and menstruation of the female, general MHM.

Chapter 3: The first section of the chapter focuses on research methodology, research methods, pilot study and ethical considerations. The second section focuses on the research findings and interpretation, using a thematic analysis.

Chapter 4: In the final chapter, the achievement of the aim and objectives and research question of the study will be discussed, as well as the key findings. Based on this, conclusions will be drawn and feasible recommendations will be offered.

The literature review chapter follows.

CHAPTER 2: LITERATURE REVIEW ON MENSTRUAL HYGIENE MANAGEMENT

2.1 INTRODUCTION

Reproductive health is a crucial component of overall well-being. As part of this, it is crucial for females to manage hygiene during menstruation in order to maintain their health. Not being able to do this, can cause various physical as well as social implications for females and influence their quality of life (Lahme & Stern, 2017:2). It is therefore a matter that should not only be considered within the health industry but also within the social work field. Although this is an experience that is mostly unique to the female gender, it is a public issue that affects all people and the functioning of countries all over the world (Majola, 2019:2). Managing hygiene during menstruation can however be challenging due to several barriers that exist within the environment, especially for those that are vulnerable (United Nations International Children's Emergency Fund, 2019:13). This influences the way in which females perceive and experience MHM. Despite this, the environment also poses several resources that has been developed to enhance MHM with the aim to empower woman and has recently started to receive more attention (Tellier & Hytell, 2017:10). It however remains to be a common challenge that is being experienced.

In this chapter, an overview of existing literature with regards to MHM is brought together with the aim to determine what gap still needs to be addressed. To give context, an overview of the reproductive system of females is firstly provided. The menstrual cycle as part of the reproductive system of females is then discussed in depth. Based on this, the review also includes literature on the concepts of menstrual health and hygiene and the different components thereof, as this is the main focus point of the study. As part of this, not only the common challenges and the implications that are experienced in this regard are included, but also the existing interventions that have been developed to address the issue. Based on this, the remaining gaps that still exist despite these interventions is determined. This is utilised to compile a conclusion.

2.2 THE FEMALE REPRODUCTIVE SYSTEM

Reproduction can be defined as the process by which organisms make more of themselves (Hirsch, 2019:2). The female anatomy is a very complex but important part of reproduction. It is made up of internal as well as external organs, also known as genitals (Stoppler, 2019:1). The main function of the reproductive system is to ensure that reproduction of the human species does take place (Stoppler, 2019:1). As part of this, the system is firstly responsible for producing egg cells that is crucial for the process (Seladi-Schulman, 2020:1). These cells are also known as the oocytes or ova. Additional functions of this system include transporting the egg cell to the fallopian tubes for it to be fertilised by sperm. This process is known as conception**.** Next, the fertilised egg has to be implanted into the uterus wall for the pregnancy process to start. The reproductive system is responsible for providing a suitable environment for an embryo to grow as well as to facilitate childbirth (Seladi-Schulman, 2020:1). The reproductive system is developed to menstruate, if either fertilisation and/or implantation do not occur (Johnson, 2020:1). During menstruation, also known as menses, the endometrium (lining of the uterus) is shed via the vagina as the body's way of releasing tissue that it no longer needs. This is accompanied by bleeding (Knudtson & McLaughlin, 2019:1). Menstruation contains blood, blood by-products, endometrial cells and mucus (Christiano, 2019:1). Another crucial function of the system is to produce hormones for the reproductive system to be maintained (Johnson, 2020:1).

Menstruation is a natural biological process that most healthy females in a reproductive age experience (Punzi & Hekster, 2019:2). The time of menstruation onset varies with race and family, but the average for most females is during adolescence between 10 to 14 years when they reach puberty and lasts until 45 to 55 years of age when menopause occurs (Sumpter & Torondel, 2013:1). According to Louw and Louw (2014:320), adolescence is the life phase in which an individual transition from being a child to being an adult and is considered to be extremely vulnerable. Puberty is a common indicator of when an individual has become sexually mature and fertile (Stoppler, 2020:1), whereas menopause usually indicates the end of reproductivity (Pichardo, 2020:1).

The first occurrence of menstruation usually indicates when a female has reached the climax of puberty. This is known as menarche (Zastrow & Kirst-Ashman, 2013:270).

Menarche usually occurs relatively late within the sexual maturation process, about two years after breast development, growth of the uterus and after growth acceleration has decreased (Louw & Louw, 2014:324). It has been found that environmental factors including nutrition, stress and physical exercise can influences the onset of puberty. Girls who, for example, participate in strenuous physical exercise have shown to only start menstruation at a later stage, in some cases only at the age of 18 years old. A strong connection between stressful life events such as family conflict during childhood years and menstrual problems has been reported. Early exposure to negative parenting behaviour, followed by family disruption and residential separation from the father can, for example, lead to significant earlier menarche occurrence (Tither & Ellis, 2008:324). Furthermore, it has been found that girls from higher socio-economic groups start to menstruate approximately eleven months earlier than girls from lower socio-economic groups. For example, the average onset of menstruation in Europe and the USA is between 11 and 13 years of age, whereas in South Africa it is between 12 and 14 years old (Louw & Louw, 2014:324).

In most cases, females only begin to ovulate after menarche, suggesting that they might not be able to conceive for two or more years after menstruation has started (Hyde & DeLamater, 2011:271). Despite this, many cultures still consider the appearance of menarche as an indication of when the girl has “become a woman” suggesting that she can now reproduce, but individual differences do however occur. In most parts of South Africa, the start of puberty is not considered to be something special. The transitioning to adulthood is however often indicated by menstruation and celebrated by festivals, rituals and initiation ceremonies including circumcision, despite possible harmful consequences (Louw & Louw, 2014:325). This practice is known as female genital mutilation (FGM) and refers to the practice where external genitalia of females are partially or totally removed. It also includes other injuries that are made to the genital organs of a female with no medical purpose. These practices have proven to have no health-related benefits (World Health Organisation, 2020:1).

Significant differences in the age of menarche have been reported worldwide. In a study done with 2500 Americans, African Americans and Hispanic girls between the ages of 8 and 20, it was found that African Americans began menstruation much earlier than the other two groups. The Hispanic group also experienced menarche earlier than the white

girls in the study, but not as early as the African American group. Ninety percent of the participants in all three groups had begun menarche between the ages of 13 and 14 (Chumlea, Schubert, Roche, Kulin, Lee, Himes & Sun, 2003:110-113).

The structure of the female reproductive system consists of the following:

2.2.1 External organs

There are two main functions of the outside organs including enabling sperm to enter the body as well as to provide protection for the other organs (Johnson, 2020:2). The external structure is known as the vulva and includes the: mons pubis (tissue on top of the pubic bones) (Seladi-Schulman, 2020:2), labia majora (large and fleshy lips that contain glands for sweat and oil secretion and protects the other external organs), labia minora (the lips that are located just inside of the labia majora and surround the openings to the vagina and the urethra that is the tube responsible for transferring urine to the outside body) (Johnson, 2020:2), vestibule (area between the labia minora that contains the vaginal and urethral opening), Skene's glands (glands that are located inside the vagina near the urethra and plays a major role in sexual pleasure) (Seladi-Schulman, 2020:2), Bartholin's glands (glands that lie beside the opening of the vagina and produce fluid) and the clitoris (a small and sensitive protrusion that is found where the two labia minora come together and is vital for sexual pleasure). A fold of skin, known as the prepuce, covers the clitoris (Johnson, 2020:2).

2.2.2 Internal organs

The internal organs include the: vagina or birth canal (canal that joins the lower part of the uterus known as the cervix to the outside of the body and allows for sperm to enter and menstrual blood to exit) (Johnson, 2020:2), hymen (a thin piece of tissue that covers the opening of the vagina) (Seladi-Schulman, 2020:3), uterus or womb (organ that is shaped similar to a pear and the top part, known as the corpus, is hollow for a foetus to develop in), ovaries (glands that are small and oval-shaped that are responsible for producing egg cells and hormones and found on either side of the uterus) and the fallopian tubes (tubes that are attached to the top part of the uterus and serve as the channels for the egg cells to move from the ovaries to the uterus) (Jonson, 2020:2). In the following illustration the various structures that form a part of the female reproductive system can be seen:

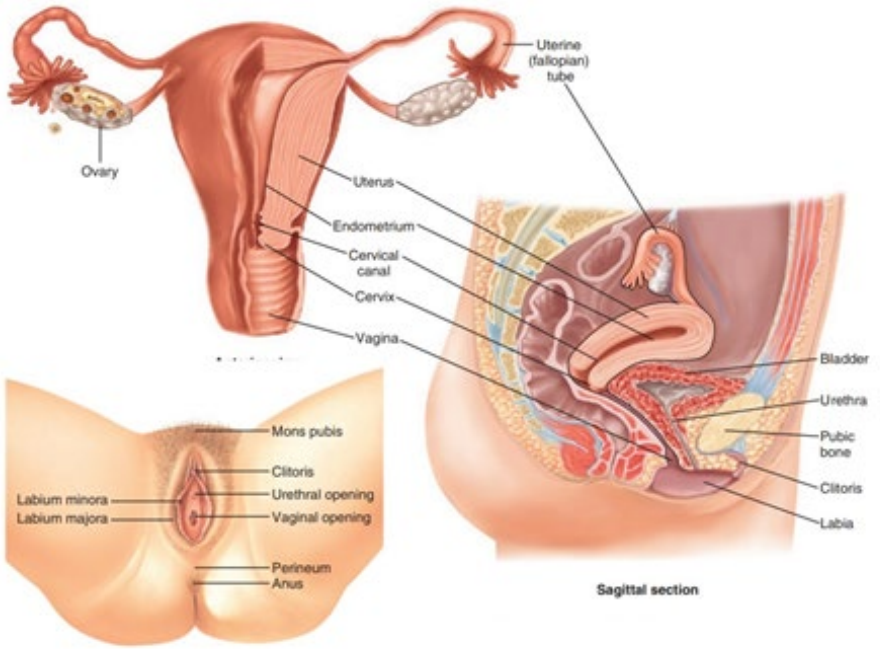

Figure 2.1: The anatomy of the female reproductive system (Pharmacy180.com, 2021)

2.3 THE MENSTRUAL CYCLE

The menstrual cycle can be defined as a monthly occurrence during which eggs mature, get released and the uterine lining is prepared for possible pregnancy. It occurs due to a complex process that take place between the ovaries and hormones that is produced by the brain. It is a biofeedback process, meaning the functions of the structures involved are interrelated and affected by each other (Stoppler, 2019:3).

Due to its biological value, menstruation is considered to be a healthy and beneficial experience and females are encouraged to embrace these unique gender experiences. Menstruation is firstly considered as the female body's natural cleanser, as many toxic substances are flushed out of the body through the system, including excess iron that can, in turn, reduce the risk of stroke or cardiovascular disease. This on its own, slows down the aging process and enhances life expectancy. Menstruation colour, length and smell can also indicate if something is wrong in the body. Experiencing heavy menstrual flow or no menstruation at all, can for instance indicate heart disease, diabetes or other reproductive health problems. It therefore helps females to be aware of their health (Janelle, 2017:1).

Menstruation is a natural biological occurrence that most healthy females in a reproductive age experience (Punzi & Hekster, 2019:2). The time of menstruation onset

varies between family and race, but the average for most females is during adolescence between 10 to 14 years when they reach puberty (at menarche) and last until 45 to 55 years of age when menopause occurs (Sumpter & Torondel, 2013:1). According to Louw and Louw (2014:320), adolescence is the life phase in which an individual transition from being a child to being an adult.

There are three phases within the menstrual cycle: the phase before the egg is released (follicular), the egg release phase (ovulatory) and the phase after this (luteal). In order to promote ovulation, the pituitary gland produces the Luteinizing and follicle-stimulating hormone. Through this the ovaries are stimulated to produce hormones including oestrogen and progesterone that, in turn, prepares the body for fertilization that might take place. During menstruation, the endometrium (lining of the uterus) is shed via the vagina as the body's way of releasing tissue that it no longer needs. This is accompanied by bleeding (Knudtson & McLaughlin, 2019:1). Each menstruation period commences approximately every twenty-eight days if not impregnated during the cycle (Sumpter & Torondel, 2013:1). The first day of the cycle starts with the bleeding and it ends just before the next menstrual period. Menstruation usually lasts from three to seven days. Twenty percent of females experience irregular cycles that vary from being longer or shorter (Knudtson & McLaughlin, 2019:1). Between 50 ml and 200 ml of blood is discharged with every menstruation and females have approximately 450 - 500 cycles over an average of 38 years of their lives (Punzi & Hekster, 2019:2). Geographical influences, racial aspects, nutritional standards, environmental factors and participation in physical activity can all affect the nature of the menstruation cycle (Sumpter & Torondel, 2013:1).

During the first day of menstruation, most females feel depressed, sad and emotional due to the oestrogen levels that are low. After a few days, the oestrogen levels increase, causing endorphins to be released. This makes them feel energised and happy. Since stress hormones are suppressed, it also makes a person feel beautiful and feminine. Many females report that they experience softer and smoother skin, having their pimples disappear and having a "glow". Additionally, menstruation has been considered to enhance sexual pleasure, since the genital area is much more sensitive during this time, causing females to achieve orgasms much quicker. The libido of a female is also more enhanced during this time. Medical practitioners state that sexual intercourse during

menstruation is medically safe. Despite this, many males avoid having sexual intercourse with partners that are on their period (Janelle, 2017:1).

Despite its beneficial value, many women still prefer to end or prevent menstruation from occurring. According to Guster, a medical doctor, women don't need to have their period every month. The belief that it is necessary, goes along with the association of fertilisation. It is reported that many women make use of short-term contraceptives such as birth control pills to not experience menstruation, especially during times where a wedding or vacation is planned. Since it is short-term, it is considered to be reasonable for those who live a healthy life. Due to some medical conditions including endometriosis, ovarian cysts, uterine fibroid symptoms, or anaemia, menstruation is also often supressed by medication. Although some contraceptives can delay the return of menstruation, it is not considered to have an impact on fertility, as long as it is not used as a form of permanent sterilization. It is explained that with the contraceptive pill, the cycle is usually one month long, so once not taken it wears off and allows for pregnancy to occur (Piedmont, 2021:1). In South Africa, around 64.6 present of all women of reproductive age make use of contraceptives (Harries, Constant, Wright, Morroni, Müller & Colvin, 2019:2). Yasmin, Levora, Camila and Jolivette are the common brands of contraceptive pills that are available in South Africa (Green, 2016:4).

The World Health Organisation (2021:1), states that reproductive health can be defined as a state of overall physical, psychological and social well-being in all aspects related the reproductive system and not merely the absence of disease or infirmity in this regard. It suggests that all individuals are capable of having safe and satisficing sexual intercourse and that they are able to reproduce when and how they decide to do so. It is clear that menstruation is a vital part of the reproductive system and without it, reproduction will not be able to take place. It is therefore crucial to consider menstrual health when studying reproductive health in order to understand the health and related social factors amongst females.

There are three phases within the menstrual cycle: the phase before the egg is released (follicular), the egg release phase (ovulatory) and the phase after this (luteal) (Knudtson & McLaughlin, 2019:1).

2.3.1 Follicular phase

The follicular phase starts with the menstrual bleeding. During this oestrogen and progesterone levels are low so that the endometrium can be shed. After this, the level of the follicle-stimulating hormone (FSH) increases so that several follicles in the ovaries can be developed (Knudtson & McLaughlin, 2019:3). This together with luteinizing hormone (LH) is developed by the pituitary gland in the brain and travels through the blood to reach the ovaries (Johnson, 2020:3). In every follicle an egg can be found. Later in this process, the level of the FSH decreases so that only a single follicle continues to grow in order to produce oestrogen (Knudtson & McLaughlin, 2019:3). The other follicles stop growing and die (Johnson, 2020:3).

2.3.2 Ovulatory phase

After this, the ovulatory phase begins (Knudtson & McLaughlin, 2019:3). This usually occurs about 14 days after the first phase and lasts about two weeks. During this stage, the LH and FSH levels increase so that the egg can be released, also known as ovulation. The egg is captured by finger-like tentacles at the end of the fallopian tubes, also known as fimbriae, and is then transported through the tubes (Johnson, 2020:3). The oestrogen levels decrease, whereas the progesterone levels increase (Knudtson & McLaughlin, 2019:3). During this stage, the mucus produced by the cervix also increased in order for sperm to be captured, nourished and transported to the egg for fertilisation to take place (Johnson, 2020:3).

2.3.3 Luteal phase

During the final phase, called the luteal phase, the LH and FSH levels decrease. After the egg is released, the raptured follicle closes and develops into a Corpus Luteum that produces progesterone (Knudtson & McLaughlin, 2019:3). The oestrogen level remains to be high during this stage and together with the progesterone, the lining of the uterus is thickened in order to prepare for possible implantation. If fertilisation took place, the fertilised egg (embryo) will travel through the fallopian tube to be implanted into the uterus and the female is then considered to be pregnant (Johnson, 2020:3). If this happens, the Corpus Luteum continues to develop during early stages of pregnancy (Knudtson & McLaughlin, 2019:3). If the egg is not fertilised, the Corpus Luteum degenerates as it passes through to the uterus and progesterone is no longer produced. Oestrogen levels also start to decrease causing the lining to break down and be shed, as it no longer has to support a pregnancy. This is when menstrual bleeding occurs, indicating the beginning of a new repeated cycle (Knudtson & McLaughlin, 2019:3). The following image provides us with a visual illustration of the menstrual cycle:

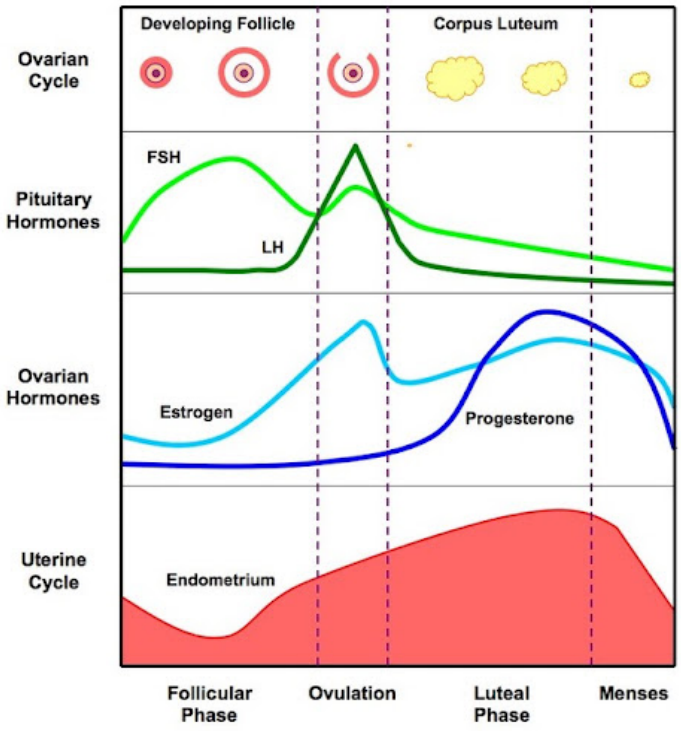

Figure 2.2: The menstrual cycle (BioNinja, 2021)

Menstruation symptoms are mostly experienced in the days before the bleeding occurs and is known as premenstrual symptoms (PMS). It includes a combination of emotional, physical and behavioural symptoms that occurs due to an increase in the brain chemical known as serotonin and the reproductive hormones, such as oestrogen and progesterone. Symptoms vary from person to person and also between each menstrual cycle. It is mostly experienced on a mild to manageable level. Common symptoms include irritability and mood changes, finding it difficult to concentrate, changes in sleeping patterns, feeling tired, feeling bloated, retention of fluids, appetite changes such as overeating or experiencing cravings for certain foods, constipation or diarrhoea, vaginal odour, gaining of weight, changes in skin, swelling and tenderness of breast, headaches, pain during ovulation and spotting (Begum, Sharma & Das, 2016:309).

It is not uncommon for females to experience abdomen, lower back and thigh discomfort during menstruation. Cramps are caused due to the muscles of the womb contracting and then relaxing to enhance the shedding of the uterus lining. Factors that also influence the pain that is being experienced includes: the menstrual flow being heavy, if the person has children, age, the prostaglandins (a compound in the body that influence the uterus)

being over-productive or sensitive, growths in the uterus or the use of contraceptives (Nwadike, 2021;1).

Other common menstrual disorders vary from experiencing heavy, painful or no menstruation at all. Dysmenorrhea refers to menstrual cramping that is severe and frequent. Pain in the lower abdomen and back as well as thighs is usually experienced. There are two types of dysmenorrhea. Primary dysmenorrhea refers to menstrual cramping that cause pain to occur due to the uterus contracting and is mostly worse during heavy menstruation. This is known as menorrhagia and refers to menstrual bleeding that is heavier than usual and that last longer. Secondary dysmenorrhea refers to when such pain is experienced together with another medical related condition, such as endometriosis or uterine fibroids (Begum et al., 2016:309).

There are various factors and other health related conditions that can cause painful menstrual cramps. One of the most common causes of menstrual cramps is an imbalance in hormonal levels. Hormonal substances, such as prostaglandins**,** can trigger the uterus to contract and cause pain. The higher the levels of these hormones, the more sever the menstrual cramps will be. Pelvic Inflammatory Disease (PID) is another common cause of experiencing painful cramps during menstruation. This refers to a type of infection that damages the reproductive organs of females including the uterus, ovaries, fallopian tubes and other parts of the reproductive system. Apart from the cramps that are caused, it can also lead to infertility (Begum et al., 2016:310).

Another medical condition that can cause pain during menstruation is Uterine fibroids. This includes the development of benign growths in the uterus wall. They vary in size, but often cause the uterus to expand to the size of a cantaloupe and larger. Fibroids do not always cause symptoms, but their location and size can cause problems, including heavy bleeding and pain. More than one fibroid is often found in the uterus. Additionally, the menstrual flow can be impeded due to the opening of the cervix being too small. This causes pressure along with pain which increases (Begum et al., 2016:311).

Adenomyosis is another condition that can cause cramps during menstruation, pressure in the lower abdomen and a bloated feeling before menstruation. This is due to the inner lining of the uterus breaking through the muscle wall. Endometriosis is another common

health condition that causes menstrual problems. It is very painful, since the tissue in the line of the uterus wall gets implanted in other parts of the reproductive system, such as the fallopian tubes, pelvic tissue and the ovaries. Finally, certain pregnancy related conditions can also cause unusual bleeding between the ages of twenty and forty years of age. This might be accompanied by pain. A painful and/or late heavy menstruation occurrence might be a miscarriage or a “blighted ovum” where the foetus does not develop normally (Begum et al., 2016:312).

When an absence of menstruation occurs, it is referred to as amenorrhea**.** Once again it is divided into two types. When a female has not started to menstruate by the age of sixteen it refers to primary amenorrhea, whereas secondary amenorrhea refers to when menstruation that was usually regularly experienced, has stopped for at least three months. Females who have not experienced menstruation by the age of fifteen are recommended to be medically evaluated and thirteen years old if no other sexual development has taken place. Oligomenorrhea is experienced when the menstrual cycle becomes light or infrequent (greater than 35 days apart). It is usually experienced by adolescents and medically harmful in most cases (Begum et al., 2016:309).

Several medical complications can also be associated with menstrual problems. Anaemia in premenopausal females is often caused by heavy bleeding (menorrhagia). Most cases of anaemia are mild, but can still cause oxygen transport in the blood to be reduced. This in turn, causes fatigue and the physical capacity to become diminished. More severe cases of anaemia cause breathlessness, high heart rates, dizziness, headaches, tinnitus (ringing in the ears), feeling irritated, pale skin, restless legs syndrome as well as confusion on a mental level. Osteopenia (loss of bone density) is also linked to amenorrhea, caused by reduced oestrogen levels. Other conditions linked to reduced oestrogen levels include eating disorders, pituitary tumours and premature ovarian failure. In more severe cases, disease, dietary or hormonal deficiency can cause progressive loss of bone density, thinning of bone tissue and increased vulnerability to factures. This is known as osteoporosis**.** Finally, infertility can also be caused by menstrual problems related with heavy bleeding, including abnormal ovulation, fibroids or endometriosis. Infertility can also be caused by conditions that cause amenorrhea. This includes abnormal ovulation as well as polycystic ovary syndrome (Begum et al., 2016:312).

Common signs of menstrual disorders include tiredness, mood changes, finding it difficult to concentrate, nausea and vomiting, excess perspiration, runny stomach, frequent urination, dizziness, loss of appetite and experiencing uneasiness of the days before or initial onset of menstruation (Begum et al., 2016:312).

The Majority of females experience menstrual clots throughout their reproductive years and it is considered to be normal. This refers to gel-like blobs of coagulated blood or tissue that are discharged from uterus during menses. To allow the uterine lining to be break down so that it can pass more easily, anticoagulants are released by the body to thin the content. This happens while the lining pools at the bottom of the uterus, while waiting for the cervix to contract and discharge the content. However, when the blood flow is stronger than the ability of the body to produce the anticoagulants, menstrual clots are discharged. They vary in size and colour from light to dark red. If clots pass regularly and are large in size, it could indicate a medical condition such as endometriosis and should be further investigated. This is mostly experienced during heavy blood flow, which is usually at the beginning of menstruation and is temporary. Excessive bleeding and clot formulation can be prolonged for females with heavier flows. One-third of females have heavy flows that soak through a menstrual product every hour for a long period. The menstrual cycle can be impacted by physical and hormonal factors and create a heavy flow, which in turn increases formulation of menstrual clots. For the exact cause of menstrual blood abnormalities, medical practitioners mostly examine the uterus and explore on the background of the patient to determine what has impacted their menstruation, such as if they had previous pelvic surgeries, use of birth control or if they have been pregnant before. Some also utilise blood tests to check for hormonal imbalances. Imaging testing, such as an MRI or ultrasound, can also be used to look for fibroids, endometriosis or other abnormalities. To treat menstrual clots hormonal contraceptives and other medications can be used. At times, surgery is also necessary such as a Dilation and Curettage (D & C), Laparoscopy and Hysterectomy. Medical conditions that are often found after these tests include uterine obstructions, cancer, hormonal imbalance, miscarriage, Von Willebrand disease, as well as iron deficiency anaemia (Christiano, 2019:1-5).

Each person experiences menstruation differently (Family Planning Victoria, 2021:1). Twenty percent of females experience irregular cycles that vary from being longer or shorter (Knudtson & McLaughlin, 2019:1). Despite this, it is clear that menstruation is a complex but crucial component of the menstrual cycle, as part of female reproductive health. As indicated, a wide spectrum of menstrual related complications can be experienced if menstruation is not maintained in a healthy manner and it is therefore crucial for it to be prioritised. This includes various components, as will subsequently be discussed.

2.4 MENSTRUAL HEALTH AND HYGIENE

The concept Menstrual Health and Hygiene (MHH) includes both Menstrual Hygiene Management (MHM) and other influencing factors that connect menstruation with overall well-being, health, education, equality, equity, empowerment and human rights. Menstrual health was built on the concept and considers the wider implications of the physical, socio-political and environmental factors that influence menstruation on mental, physical and emotional levels. Factors such as: accurate and appropriate knowledge; availability, safety, affordability, support, health care accessibility, sanitation facilities, positive social norms, appropriate disposal, and advocacy and policy have been identified as crucial parts of the menstrual management process and has therefore been included. Taking this into consideration, the World Health Organisation and UNICEF Joint Monitoring Programme (JMP) for drinking water, sanitation and hygiene, now defines MHM as: “Women and adolescent girls that are using clean menstrual management materials to absorb or collect menstrual blood, that can be changed in privacy, as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear” (UNICEFF, 2019:13).

2.4.1 Menstrual Hygiene Management (MHM)

Not only menstruation in general, but more specifically menstrual hygiene is a vital component of menstrual health and overall reproductive health. It is also a crucial aspect of consideration to the overall well-being and empowerment of females all over the world

(World Vison, 2018:1). The origin of the concept “menstrual hygiene management” can be related back to the exploration of why school attendance and education levels amongst girls were so low and the WASH initiate that was implemented to address this social issue (Sommer, Hirsch, Nathanson & Parker, 2015:2). After many years, there is now worldwide acknowledgement and mutual understanding of this concept and its importance, since it is being realised that it is far broader than just the need for physical supplies.

Having access to water sanitation and hygiene facilities (WASH) is a crucial component of maintaining adequate menstrual hygiene. Without this, females are not able to ensure MHM in a safe, hygienic and dignified manner and without proper privacy girls are unlikely to make use of such facilities. Many girls choose to not go to school during menstruation due to social and WASH-related challenges. In other instances, girls do attend school but then faces issues such as leakage, odours, discomfort or not being able to concentrate (Kandel, Teague & Walter, 2015:2). Education (Goal 4) as well as economic opportunities (Goal 8) of the Sustainable Development Goals is affected when girls are absent or less attentive in school due to a lack of WASH facilities during menstruation (UNICEF, 2019:15). Access to WASH facilities is also important at home and even health clinics in order to ensure that females have safe means to manage their menstruation at any given time. MHM is therefore a multi-dimensional issue that is being addressed by sectors between WASH, education, gender equality and reproductive health sectors that contribute to improving overall MHM (Kandel et al., 2015).

Poor water, sanitation, and hygiene conditions exist in environments all over the world, from temporary informal settlements to permanent residences in cities. Together with other US government agencies, Ministries of Health, non-governmental agencies and various international agencies, the global WASH initiatives of The Centres for Disease Control and Prevention (CDC) focus on six main areas. WASH is an acronym that groups together three important health components including healthy and safe water accessibility, adequate sanitation as well as improved hygiene. WASH programs aim to save lives and to reduce illness by addressing these three components. The programs focus on control measures as well as prevention on a long-term basis in order to ultimately “improve health, reduce poverty and to improve socio-economic development

as well as to respond to global emergencies and outbreaks of life-threating illnesses" (U.S. Department of Health and Human Services, 2021:1).

MHM has been a crucial point of consideration in the context of empowerment and human rights and it requires a holistic understanding. It has been established that females worldwide experience difficulties in managing menstrual hygiene due to a lack of the environment enabling them to do so, clearly indicating that menstruation hygiene management is linked with female's human rights and gender equality. This suggests that when females experience challenges in exercising their rights to water, sanitation and education, they will most probably experience challenges in managing their menstruation. This in turn, can negatively affect other human rights, including the right to education, work and health, causing a vicious cycle (UNICEF, 2019:14). According to Sida (2016:1), females in vulnerable situations are especially in need of attention in this regard.

MHM is a need not only for menstruating females, but also for other individuals who menstruates. The term "menstruators" refer to people who menstruate and also has menstrual related needs including females, transgender and non-binary people, making it much more inclusive (Anureet, 2020:2).

For the purposes of this study, this holistic concept of MHM will be utilised as a basis and explored further, specifically in the Ikageng, Potchefstroom.

2.4.2 The causes and implications of poor MHM

Despite its importance, menstruation is often undervalued. As a result, females are often left uneducated about the menstrual cycle that can eventually affect their self-confidence, as well as the way in which they take care of their own bodies and make choices throughout their entire reproductive lifespan (Punzi & Hekster, 2019:1). Some sources argue that menstruation creates limitations for females to engage in education, the work environment and the enjoyment of guaranteed rights such as reproductive health rights, sanitation, equality and dignity. It is therefore considered to be a contributing factor to disempowerment and gender inequality (Majola, 2019:2). Worldwide, females are not able to maintain menstrual hygiene in dignified and healthy manners. Health and hygiene needs are often not met because of common influencing aspects such as gender

inequality, discrimination, norms and standards, cultural taboos, poverty and limited access to basic services. During menstruation, adolescent females often get challenged with stigma, harassment and social exclusion. Discrimination is also often experienced by transgender men and non-binary individuals who menstruate and because of their identity are limited from gaining access to the necessary menstrual hygiene materials and supplies. All of this has negative effects on these individuals, including restricted mobility and freedom to make choices; poor attendance and participation in daily activities such as school and community activities; compromising their safety and being stressed and anxious. Females in humanitarian crises experience these challenges on an acute level (UNICEF, 2019:13). According to Majola (2019:2), limited access to the necessary MHM materials and supplies, does not only affect attendance in daily activities, but also has a rippling effect on the development of the economy on a communal level and the country as a whole. Menstrual hygiene materials include products such as pads, cloths, tampons and cups used to absorb menstrual discharge, whereas menstrual hygiene supplies refer to items such as body soap and washing powder, underwear and pain relievers that are used to support
MHM (UNICEF, 2019:13)

Globally females have developed strategies to handle challenges during menstruation. These differ between countries, depending on the person's preferences, resources available, socio-economic status, traditional beliefs, cultural values and educational level. However, due to existing limitations, females often manage menstruation with strategies that are not hygienic or are uncomfortable, especially in poorer areas (Kaur, Kaur & Kaur, 2018:1). Studies in Africa, South East Asia and the Middle East reports widespread usage of unsanitary products, and insufficient washing and drying of reusable products. In Africa studies have found that only 18% of Tanzanian females use sanitary pads and the rest use cloths or toilet paper. Between 31% and 56% of Nigerian schoolgirls use toilet paper or cloths to catch their menstrual discharge rather than sanitary pads. A study of females in Gambia found that approximately only a third regularly utilised menstrual pads. Studies in India have found between 43% and 88% of females wash and reuse cotton cloths instead of making use of sanitary pads. It has been found that cloths are often being cleaned without any soap or with water that is not clean. Drying is also often done inside rather than in direct sunlight or open air due to it being socially unacceptable. The result is that products and materials are used that have not been properly sanitised

(Sumpter & Torondel, 2013:2). These challenges are found to be particularly more experienced amongst females in lower socio-economic groups or living in rural areas (Hennegan, Shannon, Rubli, Schwab & Melendez-Torres, 2019:1).

Not being able to manage menstrual hygiene can cause various health and social problems. Several studies indicate that poor menstrual hygiene, based on personal hygiene or products used, can cause an increase in urogenital infection levels (Tellier & Hytell, 2017:9). However, there seems to be no consensus on a standard for adequate personal hygiene (Tellier & Hytell, 2017:9). Furthermore, in some traditions females are not allowed to touch their genitals or bath during menstruation, making MHM challenging. A study in Uganda, found that using materials that were dried outside caused higher levels of infection (Hennegan, Dolan, Wu, Scott & Montgomery, 2016 in Tellier & Hytell, 2017:10). The information on the relationship between different MHM practices and the well-being of individuals in African countries is unfortunately very limited.

It is clear that the influential factors of poor MHM differ between countries and the different cultures. Nevertheless, individuals are severely affected by this on physical, emotional and psychological levels.

2.4.3 Menstrual hygiene materials, supplies and facilities

Menstrual products and supplies are considered to be to most crucial factor in MHM. Despite many arguing that the broader concept must be taking into consideration, it remains crucial. It is important to differentiate between menstrual hygiene materials or products, menstrual hygiene supplies and menstrual facilities. Menstrual hygiene materials include products such as pads, cloths, tampons and cups used to absorb menstrual discharge. In the 1930's menstrual products and materials such as disposable pads, tampons or reusable cups, were first introduced. More recently the range, quality, safety and availability for example reusable or biodegradable products have improved significantly (Tellier & Hytell, 2017:10). Along with basic menstrual absorbents one should also have menstrual supplies (Kaur et al., 2018:3). Menstrual hygiene supplies refer to items such as body and laundry soap, underwear and pain relievers that are used to support MHM and are essential in managing menstrual hygiene. Supplies are not frequently considered in studies and studies that compare the prevalence of use among the above-mentioned products on a national or international level are limited (Tellier &

Hyttel, 2017:19). Menstrual facilities refer to the facilities that are necessary to ensure safe and dignified MHM, including sanitation (UNICEF, 2019:13). Sanitation generally includes access to toilets and water supply. It is also important to consider menstrual waste disposal facilities in this regard.

Menstrual waste refers to the waste that females generate during menses. Worldwide, countries have developed faecal and urinary waste disposal systems, but are still lacking suitable disposal systems of used menstrual products, due to menstrual management practices also lacking. It has been found that most females dispose of their sanitary products into domestic solid wastes or garbage bins that also becomes a part of solid wastes. In India, females struggle to manage menstrual hygiene, due to toilet facilities lacking bins for proper disposal of sanitary products, as well as proper hand washing facilities. In areas where modern disposable products are used during menstruation, it is being disposed of by being flushed in toilets and thrown into dustbins or through solid waste management. In more rural areas where reusable and non-commercial sanitary products such as reusable pads or cloths are used, menstrual waste is either buried, burned or thrown into garbage or pit latrines. The conclusion is thus made that they generate less menstrual waste, compared to females in urban areas that utilise commercial disposable products. Menstrual disposal practices are usually influenced by the type of products that are used, cultural beliefs as well as the location. Due to burning and burial being difficult because of limited privacy space, females in slum or informal settlement areas, mostly dispose of their menstrual waste into pit latrines. It is also due to the belief that it was used for witchcraft purposes and seen by men, which is not considered as appropriate (Kaur, et al., 2018:4).

Due to lack of sanitary facilities, girls in schools throw their sanitary pads in toilets. Some of them also throw away used menstrual cloths without them being washed. Due to a lack of proper disposal systems, broken toilet doors/locks, lack of water taps and poor water supply, many girls also report not going to school. In some schools, “feminine hygiene bins” or incinerators are available for menstrual waste disposal. Despite this, girls still refrain from utilising it, due to shyness or a fear of it being visible for others to see. As stated above, menstrual disposing habits and behaviour among females, vary between places. When at home, products are disposed of by being wrapped and thrown into the dustbin together with other domestic waste. In public places, prior to being

informed about the consequences of pads being flushed, they are flushed in toilets or wrapped and thrown into dustbins. If dustbins are not available, soiled pads are left wrapped or unwrapped in the corners of the toilets. This makes the toilets dirty and unhygienic and creates a breeding place for pesticides. Individuals that are responsible for managing public toilets, usually complain of systems being blocked due to sanitary pads or rags being flushed in the toilets (Kaur, et al., 2018:4).

Various products have been used over the years to absorb and manage menstruation and range from traditional approaches (staying home or being confined to huts), commonly available materials (newspapers, old leaves, corn cobs, cotton gauze or cloth strips), homemade materials (disposable or reusable products), commercially produced products (menstrual pads and tampons, reusable pads, menstrual cups, and menstrual panties), as well as biodegradable products (certain menstrual pads) (Tellier & Hyttel, 2017:19). The shapes and sizes of the different products vary, but the changing time for most is between four and six hours in order to prevent leakages and infections (Family Planning Victoria, 2021:2). Choices between products depend on personal preference, cultural acceptability, economic status and availability (Mohammed & Larsen-Reindorf, 2020:1). Factors such as environmental suitability also play a major role in preference (Tellier & Hytell, 2017:18).

The most preferred products among females in rural areas are reusable cloth pads, whereas commercial sanitary pads are preferred by females in urban areas. Most disposable sanitary products have been made up of chlorine-bleach or sulphate pulp to produce the fluff pulp. Recently, synthetic fibre rayon has been used to make deodorised and non-deodorised sanitary products. Chemicals such as organochlorines which have antibacterial substance can be found in deodorised products. These chemicals have been found to be harmful to soil's microflora when they are buried and the process of decomposition is therefore delayed (Kaur et al., 2018:3). The human rights standards, also known as AAAQ – availability, accessibility, acceptability and quality, are mostly used to assess the adequacy of products (Tellier & Hytell, 2017:19). Some of the most common absorbents that are used include the following:

2.4.3.1 Types of absorbent materials used

- **Commercial sanitary pads**

Sanitary pads can be found in chemists, general grocery stores, health and beauty stores or online. In comparison to cloth pads, they are costly and not suitable for the environment. They are also not able to be reused. It has also been found that the materials that are used to make these products are not completely natural and pesticides can be found in their making (Kaur et al., 2018:3). In South Africa a wide range of different sanitary pads are available. These vary between manufacturers, suppliers, sizes and shapes. Night- and day pads are also available. The figure below shows a commercial sanitary pad.

Figure 2.3: The commercial sanitary pad (Kaur et al., 2018)

- **Disposable Tampons**

This absorbent is inserted into the vagina and serves like a sort of a plug. It is made up of soft cotton. Internal protection is therefore provided. Tampons are also considered to be costly and not environmentally suitable. Recently, a more natural alternative to synthetic tampons have become available, known as sea sponge tampons (Kaur et al., 2018:3). Various size tampons are available in South Africa, as well as ones with an applicator. Common sanitary pads and tampon manufacturers include Kotex, Lil-lets, Always and Libresse. The figure below shows a disposable tampon.

Figure 2.5: Disposable tampons (Kaur et al., 2018)

- **Reusable products**

Reusable pads have been found to be a more sustainable alternative. Natural tampons that are washable have also been made out of materials such as bamboo or hemp.

Cotton and wool are also often used to knit tampons and is inserted in a similar manner to disposable tampons. It is however crucial for reusable products to be regularly washed and dried in a hygienic matter. To avoid contamination, they also have to be stored in a clean dry place. Reusable products are preferred by many, as it is easily accessible, less expensive and good for the environment (Kaur et al., 2018:3). The reusable pads that will be researched in this study, are made of cloth and materials such as old pillow cases, sheets and other waste cloth. The figure below shows examples of reusable sanitary products.

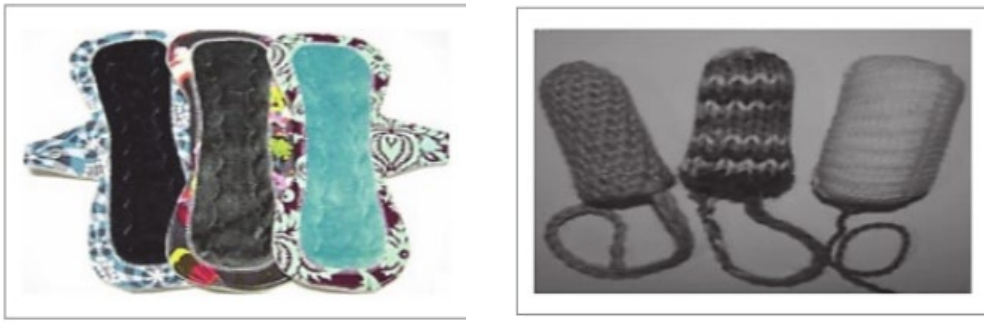

Figure 2.6: Reusable products (Kaur et al., 2018)

- **Menstrual cups**

This product is a rather new development, especially for less-privileged females. It is considered to be an alternative to sanitary products as it offers more sustainability, practicality and cost-effectiveness. Medical grade silicone rubber is used to make the cups so that it can be easily folded and inserted into the vagina. Depending on the nature of the menstrual flow, it can be worn for between six and twelve hours, reducing the changing time. Menstrual cups can be reused and is considered to be more environment-friendly (Kaur et al., 2018:3), but also need to be washed, cleaned and dried on a regular basis in order to maintain proper menstrual hygiene. The figure below shows a menstrual cup.

Figure 2.7: The menstrual cup (Kaur et al., 2018)

- **Menstrual panties**

These are underwear that has absorptive material built into the fabric. Examples include BeGirl and ThinX (Tellier & Hyttel, 2017:19). Although these products are available on

online platforms, it is expensive and not yet easily accessible in South Africa. The figure below shows menstrual panties.

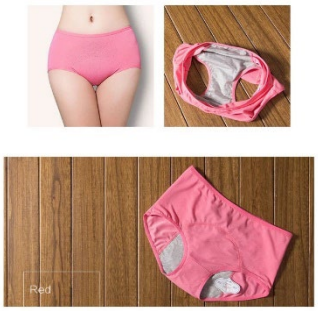

Figure 2.8: The menstrual panty (Your moon time, 2021)

- **Bamboo and banana fibre pads**

In some countries apart from South Africa, bamboo pulp is used instead of wood pulp to make sanitary products. It has found to be less dangerous and has an increased absorbing capacity. They are also cheaper and easy to decompose, making it friendlier for the environment. It also encompasses anti-bacterial substances contributing to comfortability and reduced infection rates. Charcoal bamboo pads have also become available. With these products, bloodstains are less visible and they can also be reused (Kaur et al., 2018:3).

In India, cost-effective pads for females in rural areas have been developed. They are made from waste banana tree fibre and are known as “Saathi”. They are also easily decomposable and eco-friendly. Apart from these, females in these areas also make use of natural materials such as cow dung, leaves or mud (Kaur et al., 2018:3).

Figure 2.9: The banana tree fibre pad (Kaur et al., 2018)

- **Water Hyacinth Pads**

Water hyacinth has also been used to manufacture menstrual pads. This is known as "Jani". They are also less expensive, easily decomposable and environment-friendly (Kaur et al., 2018:3). These are not available in South Africa yet.

Figure 2.10: The water hyacinth pad (Kaur et al., 2018)

It is clear that there is a wide range of products available that can be utilised to manage menstruation. Despite this, various factors influence the effectiveness thereof and should be considered.

2.4.4 Challenges being experienced in MHM

Various environmental, social, cultural and religious factors create barriers to menstrual practices and are ultimately constraining management of proper hygiene during menstruation (Kaur et al., 2018:1). World Vision (2018:1), emphasize that multiple factors contribute to the challenging menstruation experiences of females including a lack of adequate materials and facilities, physical pain related to menstruation, fear of disclosure and a lack of knowledge about the menstrual cycle. These factors are subsequently discussed:

2.4.4.1 Lack of reproductive health education

Despite its importance, menstruation is often undervalued. As a result, females are often left uneducated about the menstrual cycle that can eventually affect their self-confidence, as well as the way in which they take care of their own bodies and make choices throughout their entire reproductive lifespan (Punzi & Hekster, 2019:1). Several studies indicate that schoolgirls in low and middle-income countries, experience menarche for the first time in school environments and do not have any materials or support such as a teacher, mentor or role model to help them understand what they are experiencing. This causes 'menarche shock' and brings along feelings of shame and fear, especially to seek help when they need it the most (Chandra-Mouli & Patel, 2017 in Tellier & Hytell, 2017:16).

In a study that was done in Ghana on menstrual knowledge it was found that more than half of the girls in the community had poor menstrual knowledge. A large amount of the boys heard about it and had an idea about what it is. It was established that terms such as "Vodafone," "Red card," and "Palm oil" were used to describe it, especially in school or communal areas. In general, males have poor knowledge on menstruation, causing them to bully and tease girls (UNICEF, 2015 in Tellier & Hytell, 2017:16). It was also found that early adolescents were more likely to have poor menstrual knowledge compared to older adolescents. Older female community members were also found to be protective against the issue of poor menstrual knowledge. Girls of illiterate mothers were also more likely to have poor menstrual knowledge. The study furthermore found that girls with no technological communication mediums in their homes such as televisions and radios were more likely to have less knowledge about menstruation (Mohammed & Larsen-Reindorf, 2020:1). Other studies also indicate that females have very little knowledge about health risks that can be experienced due to ignorance about necessary hygiene management during menstruation, including tract infections that are usually contracted. Knowledge about the different products, how to properly use and dispose of them and the accessibility thereof also creates additional barriers (Kaur et al., 2018:1).

Furthermore, it has been found that discussions about menstruation management are not openly encouraged in most countries (Mohammed & Larsen-Reindorf, 2020:1) and communication and styles of teaching are also considered by some as a barrier to education regarding MHM. A study in Malawi, Kenya, Uganda and Ethiopia found that mothers and teachers felt uncomfortable to discuss menstruation with younger females and unintentionally instilled misconceptions (Chandra-Mouli & Patel, 2017 in Tellier & Hytell, 2017:16). Most teachers are of the opinion that it is not their place to teach girls about menstruation and report to not have adequate skills to do so. It has also been reported that it becomes difficult when a male teacher has to take on this role (MEDSAR IMCC, 2015 in Tellier & Hytell, 2017:16).

Ignorance is considered to be one the largest limitations to sufficient MHM. Literature indicates that little knowledge or inadequate knowledge serves to be a significant barrier to proper MHM. In most developing countries and especially in rural areas it has been

found that females are not educated on reproductive health, more specifically menstrual health, causing them to be physically and psychologically unprepared and unaware of menstruation occurrence and the different important aspects of managing the process adequately. This causes them to experience many challenges at home, school and the working environment (Kaur et al., 2018:1).

Studies in Africa and Asia emphasise the importance of early and appropriate education on reproductive health, more specifically menstruation, in order to eliminate misconceptions, to build self-esteem and to prepare girls to ultimately reduce stress and shame (Lahme & Stern, 2017:2). It is recommended that this should form part of the curriculums in schools (Mohammed & Larsen- Reindorf, 2020:1).

2.4.4.2 Cultural beliefs, norms and taboos

This brings the discussion to the point of cultural beliefs and taboos as a common barrier in MHM. Misconceptions and attitudes towards menstruation related to a specific culture or religion is known as menstrual beliefs**.** This forms the foundation of each individual's perception towards MHM. Several studies indicate that certain cultural beliefs and norms create limitations within proper MHM practices (Kaur et al., 2018:1).

In countries such as Tanzania, menstruation is strongly related to the indication of the ability to reproduce. Due to this social belief, girls are forced to engage in early arranged marriages and as a result have to drop out of school, are at risk for contracting HIV and other sexually transmitted infections, teenage pregnancies and illegal dangerous abortions, creating additional health risks. These are apart from the many other psychologic implications. In India, similar occurrence was found, where ritual celebrations of menarche including social restrictions such as the girl being confined to a hut or room, not allowed to leave without someone else or touch certain foods. In Malawi, specifically among certain cultures, these rituals also include being separated from others. They, for example, were no longer allowed to share bath shelters with parents, other family members or friends who have not yet menstruated (Lahme & Stern, 2017:2). In South Sudan, only widows are allowed to wear underwear since certain tribes believe that if a woman wears underwear, their husband will die (SNV, 2014 in Tellier & Hytell, 2017:16), making MHM challenging. Most females are afraid to disclose menarche to others since

it is associated with sexual activity that is considered to be unacceptable (House, Mahon & Cavill, 2012 in Tellier & Hytell, 2017:16).

According to some beliefs, many females are for example, restricted to cook, work, have sexual intercourse, bath, worship and participate in ritual activities or eat certain food during menstruation. This is specifically related to the misperception that menstrual blood is dirty or polluted. In certain areas of developing countries females are also restricted to bath or wash their hair during menstruation as it is considered to influence the blood flow. It is also believed that menstrual cloths should first be washed and then buried. Burial of bloodied menstrual cloths is considered to be a taboo. The washing and drying practices of these cloths have to be done in secrecy, like in a hidden place so that it is not visualised by others. Menstrual discharge was also misused for black magic purposes and cloths therefor had to be washed during the night when others were asleep. Females live in constant fear of being cursed and therefore hide bloodied cloths as it is seen as dirty, polluted and shameful. Similar sources indicate that menstrual waste was used for witchcraft and connected to danger. Once again it has to be buried since witches are believed to go after the human blood. If not, the menstrual cloths will be found and the females will then be cursed with infertility. Touching of females who menstruate is also considered to be a taboo. These restrictions are more common in rural areas that in urban ones (Kaur et al., 2018:2).

Some of the most common misconceptions that arise in South Africa regarding menstruation and MHM include the following: menstrual blood is dirty, menstruation should not be talked about, menarche is an indicator of sexual activity, menstruation is a sign of disease and the use of tampons can cause the hymen to tear. Most of these myths are rooted in superstition and beliefs that are transferred from older generations. Misconceptions can create challenges for female individuals especially in reaching out for support and once again the importance of adequate education in this regard is emphasised (Chirwa, 2014:1).

Implications on a political level due to cultural restrictions have also been reported. It has been highlighted that due to cultural prejudices, a major lack of political interest and intervention regarding MHM exists in developing continents such as Africa and Asia. Better advocacy, education and facilities have been recommended in order to improve

the abilities of females to manage their menstruation efficiently. Many others support these findings and recommendations (Lahme & Stern, 2017:2).

Due to cultural beliefs, many females are unprepared and not adequately informed about menstruation realities. This causes them to feel abnormal and creates fear, confusion and embarrassment especially about menarche and they are most probably due to develop negativity towards menstruation. From this, it is once again clear that education play a crucial part in effective MHM. Educating males and females on menstruation can help to eliminate false beliefs (Kaur et al., 2018:1).

According to Steenkamp (2003:97-98), making use of traditional or natural remedies are also a part of the culture and religion of Africans. A considerable number of females in South Africa prefers using alternatives to medical treatment and seek treatment from traditional healers for several problems related to the female reproductive system and organs with up to 92 plant species that are being used to treat specifically menstrual disorders (Steenkamp, 2003:97-98). Herbal remedies such as chamomile tea, fennel seeds, cinnamon, ginger, French maritime pine bark extract (Pycnogenol) and dill contains anti-inflammatory and antispasmodic ingredients that can reduce the swelling and muscle contraction associated with menstrual discomfort. To help with symptoms of PMS, a natural chemical in turmeric (Curcumin) can also be taken. Applying heat to the abdomen and lower back is also recommended as an alternative to relieving pain. Massage therapy has also proven to help and involves specific areas around the abdomen, side, and back areas to be pressed by the therapist. Essential oils such as lavender, peppermint, rose and fennel can also be added for an aromatherapy massage and may have additional benefits. It is further recommended to avoid foods that may cause bloating or water retention such as fatty foods, alcohol, caffeine and salty foods. A diet that could instead help with decreasing menstrual discomfort should contain minimally processed foods, fibre and plants and should consist of things like papaya that is rich in vitamins, and brown rice that contains vitamin B6 - which may reduce bloating. Walnuts, almonds and pumpkin seeds that is rich in manganese – which eases cramps. Olive oil and broccoli that contains vitamin E, chicken, fish and leafy green vegetables that contains iron – which is lost during menstruation, and flaxseed that consists of omega-3 with antioxidant properties - which reduce swelling and inflammation. Biron is another herb that helps the body to absorb calcium and phosphorus in order to reduce

menstrual cramps. This can be found in foods such as avocados, peanut butter, prunes, chickpeas and bananas. Drinking water also keeps the body from retaining water and helps to lessen the bloated feeling during menstruation. Hot liquids are usually better for cramps as bloodflow to you skin is increased and may help to relax muscles. Water-based foods such as watermelon, cucumber, lettuce, celery and berries can also be consumed to increase hydration. Another mineral that can help to reduce muscle cramping during menstruation includes calcium that can be found in foods such as dairy products, sesame seeds, almonds and leafy green vegetables. Exercise is another alternative way of reducing menstrual pain as it releases endorphins. Moderate exercise such as walking is preferred to strenuous activity. Making use of alternative treatment is however viewed as risky as they are not regulated and may cause unintended side-effects. They are also not always obtained from reliable sources (Nwadike, 2021).

2.4.4.3 Poverty and a lack of access

Accessibility to menstrual hygiene materials and supplies is considered to be another major barrier in maintaining MHM. Worldwide, about 500 million females experience accessibility problems to MHM facilities (World Vision, 2018:1). In most schools, sanitary products are not provided to girls, even if an emergency is experienced (Mohammed & Larsen-Reindorf, 2020:1). Stellenbosch University conducted studies in South Africa and found that approximately 30 percent of girls in the country to not attend school during menstruation, due to inability to buy sanitary products (Mlaba, 2020:1). People with impairments also struggle to manage their menstrual hygiene due to immobility difficulties, inaccessible facilities and/or limited ability to manage their menstruation on their own (Wibur, Kayastha, Mahon, Torondel, Hameed, Sigdel, Gyawali & Kuper, 2021:2).

Majola (2019:2) found that a lack of access to the necessary menstrual hygiene materials and supplies, does not only affect attendance in daily activities, but also has a rippling effect on the development of the economy on a communal level and the country as a whole. Accessibility not only to basic menstrual hygiene materials, but also to supporting supplies and facilities is a major concern. Many schools report to have sanitation problems and to not having a supply to water for WASH facilities. This also includes not having mirrors for uniforms to be checked for bloodstains (Mohammed & Larsen-Reindorf, 2020:1).

Accessibility limitations are particularly experienced in rural areas, since most of these females cannot afford to buy sanitary products due to the high cost involved. Globally females have developed strategies to handle accessibility challenges during menstruation. These differ from country to country, depending on the person's preferences, resources available, socio-economic status, traditional beliefs, cultural values and educational level. However, due to existing limitations, females often manage menstruation with strategies that are not hygienic or are uncomfortable, especially in poorer areas (Kaur et al., 2018:1). Studies in Africa, South East Asia and the Middle East report widespread usage of unsanitary products, and inadequate washing and drying of reused products. In Africa studies have found that only 18% of Tanzanian females use sanitary pads and the rest use cloths or toilet paper. Between 31% and 56% of Nigerian schoolgirls use toilet tissue or cloths rather than menstrual pads to catch their menstrual blood. A study of females in Gambia found that only around a third regularly used sanitary pads. Studies in India have found between 43% and 88% of females wash and reuse cotton cloths instead of using sanitary pads. It has been found that cloths are often being cleaned without any soap or with water that is not clean. Drying is also often done indoors rather than in direct sunlight or open air due to social restrictions and taboos. The result is that products and materials are used that have not been properly sanitised (Sumpter & Torondel, 2013:2).

These accessibility challenges are found to be particularly more experienced amongst females in lower socio-economic groups or living in rural areas (Hennegan et al. 2019:1). Accessibility and poverty as barriers are therefore closely connected. It has been reported that the socio-economic status of a female and her family plays a major role in the quality of MHM and a wide range of literature is available on the matter (Lahme & Stern, 2017:3).

This social phenomenon is described by the common term: period poverty. The term refers to when menstruaters are not able to afford or access adequate menstrual products due to limited financial means (Diamond, 2020:1). The term also includes a lack of access to toilets, hand washing facilities and appropriate waste management. Families are often left to choose between buying menstrual products and providing other essentials (Rapp & Kilpatrick, 2020:1). It has been established that, on average, buying

of menstrual products can cost up to R131.12 (€8) per month and the reality is that some females are not able to afford this. Studies have found that in the UK about 10% of girls are unable to afford menstrual products, 15% struggle to afford it and 19% use alternatives that are less suitable including rags, paper towels, toilet paper, or cardboard (Diamond, 2020:1). Others revert to using products for an extended amount of time. When females revert to unhygienic management, they are at a greater risk for physical harm, including urogenital infections such as urinary tract infections and bacterial vaginosis. Health issues such as skin irritation, vaginal itching and unusual discharge are also often experienced. A lack of access also brings about mental and emotional harm including experiencing anxiety, depression and distress (Rapp & Kilpatrick, 2020:1).

Poor socio-economic status and the impact of this on accessibility and MHM in general, can cause mental and emotional implications. Studies indicate that inadequate sanitation and a lack of facilities in schools violated the right of privacy for girls and caused them to experience stress and depression, which consequentially lead to poor performance on an academic level. It has also been documented that poor sanitation and MHM in schools, which did not meet the World Health Organisation's minimum standards, contributed to increased absenteeism among girls. A lack of gender-friendly bathrooms and bloodstains on school uniforms have also been reported as a concern and causes mental stress. As a result, girls prefer to rather stay at home than to attend school (Lahme & Stern, 2017:3). Statistics indicate that in Africa, one in every ten girls miss school during menstruation (Majola, 2019:1).

Despite water being a basic human right, it is agreed that access to clean running water is still a challenge in many African countries. Sanitation and hygiene are heavily compromised with limited or no accessibility to water. Adequate hygiene infrastructure, including safe, private and accessible toilets that is equipped with soap and water, where females can change and clean or dispose of menstrual products remains to be a major area of need, despite over 300 million individuals menstruating on a daily basis. Kajumba (2020:1) further emphasises that equal distribution of resources is necessary to ensure that global and equitable access to WASH facilities for all is ensured in both informal and formal settlements. Without healthy and safe water, proper sanitation and good hygiene management, menstruation can become a burden to many. It also makes the

management and the spreading of prevention of reproductive tract infections more challenging (Kajumba, 2020:1).

In order to obtain clean water, individuals often boil water as a strategy in managing the challenges that goes along with poor water supply. According to the WHO Guidelines for Drinking-water Quality, the process of boiling water to a rolling boil, is effective for pathogenic bacteria, protozoa and viruses to be inactivated. It is suggested that after the water has been boiled, it has to be removed from the heat and to be cooled down in a natural manner. Ice can be added. It is important to protect it from recontamination after being boiled, especially during storage. This is however a concern at times as this is not known or taken into consideration. (WHO, 2011:1).

Further elaborating on the above, females are considered to be in a more vulnerable position to sexual gender-based violence and increased menstrual stigma when they experience limited accessibility to WASH facilities. In the process of inability to manage menstruation in a hygienic way, gender inequality is also perpetuated. Females are limited in their daily activities and they are often scared to go to work or school or to engage in social activities. In addition, it is also important for females to have access to a variety of menstrual products and supplies and that they are educated on their usage (Kajumba, 2020:1). The fact that females are not a homogenous group and differ in their needs and preferences, they are being neglected by programs that promote only one type of products. In certain communities within Uganda, tampons and menstrual cups are for instance not accepted culturally and females then face an increased risk of infection when they do not know how to utilise, change these products or how to manage hygiene when doing so. During the time leading up to menopause (perimenopause) hormonal changes is experienced that often causes heavier bleeding which in turn requires more frequent changing and washing. This can be challenging without the necessary facilities. A lot of females do not have control over the products that they use and is also unable to dispose of or clean these products appropriately. This is in line with personal, environmental, cultural and other considerations (Kajumba, 2020:1).

Scotland is currently the only country in which menstrual products are provided freely (Diamond, 2020:1). Many argue that since menstrual products are a necessity and not a luxury, it should be as easily accessible as condoms and other contraceptives. Susan

Shabangu, the Minster in the Presidency responsible for Women in SA, states that free access to contraceptives and medical treatment for STIs is provided for by the current health system. She emphasises that what still needs to be provided are sanitary products, especially to indigent females, as most of them are unable to afford these essentials (Department of Woman, Youth and Persons with Disabilities, 2017:3). Period poverty is considered to be one of the main contributors to inability to manage menstruation with dignity and brings the discussion to the point of stigma and discrimination as a barrier.

2.4.4.4 Stigma and discrimination as a human rights issue

Worldwide, females are unable to maintain menstrual hygiene in dignified and healthy manners (UNCEFF, 2019:13). Some sources argue that menstruation creates limitations for females to engage in education, the work environment and the enjoyment of guaranteed rights, such as reproductive health rights, sanitation, equality and dignity. A lack of menstrual products raises various human right issues, including a violation of several socioeconomic rights, as well as a right to human dignity, equality, bodily integrity, reproductive health care and education, because these rights are implicated by poor MHM. A lack of menstrual products causes millions of females to experience indignity, as they continue to manage their menstruation without clean materials. There is no dignity in that and this creates a culture of silence that causes isolation in coping with these challenges. It is therefore considered to be a contributing factor to disempowerment and gender inequality (Majola, 2019:2).

Health and hygiene needs are often not met because of common influencing aspects such as gender inequality, discrimination, norms and standards and cultural taboos. During menstruation, adolescent females often get challenged with stigma, harassment and social exclusion. Discrimination is also often experienced by transgender men and non-binary individuals who menstruate and because of their identity; they are limited from gaining access to the necessary menstrual hygiene materials and supplies. All of this has negative effects on these individuals, including restricted mobility and freedom to make choices; poor attendance and participation in daily activities such as school and community life; compromising their safety and being stressed and anxious. Females in humanitarian crises experience these challenges on an acute level (UNICEF, 2019:13). Gender discrimination that exists due to sociocultural beliefs and gender-unfriendly policies in school environments creates additional barriers for girl's school attendance.

Ignorance on menstrual needs often also results in bullying by male students and teachers (Lahme & Stern, 2017:4). The barriers to adopting menstrual hygiene practices are therefore considered to be three-fold: a lack of awareness, a lack of acceptance and a lack of access. A lack of awareness and acceptance evolves around the fact that menstruation is kept a secret and that menstrual products are prioritised as a luxury rather than an essential health need (World Economic Forum, 2021:1).

Research furthermore shows that stigma also poses barriers in addressing the issue of poor MHM. Instead of acknowledging that menstruation is biologically normal and healthy, it is rather associated with impurity and disgust. The embarrassment that comes along with menstruation experiences prevents individuals from discussing it and issues such as limited access to products are left unexpressed. Shame is particularly also experienced by transgender individuals, as it is assumed that all menstruators are woman. It is believed that menstrual equity can be achieved once menstrual products become accessible, safe, and destigmatized (Rapp & Kilpatrick, 2020:2). Majola (2019:1), argues that it is not just females who will benefit from adequate MHM, but also the broader society and economies. Female reproductive health is therefore not only a woman's issue but also a societal issue. MHM with dignity and non-discrimination is an important consideration factor to change as it will enable females to participate fully in society (Majola, 2019:1).

2.4.4.5 Covid-19 challenges

Across the world, millions of females and other individuals continue to menstruate during the Covid-19 pandemic. Under normal circumstances, reproductive health and hygiene needs are not met, but during emergencies, these challenges can be exacerbated. The Covid-19 pandemic has found to have secondary implications for females and their ability to manage their menstruation and reproductive health in a safe and dignified way (UN Water, 2020:1). Research indicates that strategies used to combat the spread of the virus have instead limited access to menstrual hygiene materials and supplies (Ingraham, Sharma & Joe, 2021:2). Countries, for instance, had to implement lockdowns and resource points, such as schools and health clinics, had to be closed. As a result, a larger lack of access to support and menstrual hygiene supplies was created. During this time, many were unable to access adequate menstrual products due to mandatory quarantining and restricted freedom of movement. It has been reported that some had to

revert to the utilisation of household materials such as blankets. This, however, led to increased domestic violence and increased infections. Existing inequalities for females and individuals who menstruate, were therefore also intensified. Inability to meet menstrual hygiene needs therefore had an impact on the physical and mental health of females and compromised their social and economic opportunities (Ingraham et al., 2021:2).

Additionally, the availability of WASH resources has become more limited, especially in areas where water is scarce and has caused further difficulties in managing menstrual hygiene. This limitation forced individuals to choose between using water to combat the spread of Covid-19 or using it to manage menstruation. Menstrual hygiene needs are often chosen to be neglected. WASH resources such as clean water, soap and private, hygienic spaces for drying of reusable MHM materials, is also a necessity that became less accessible. This once again increased the risk of infection and shame to be experienced (Ingraham et al., 2021:2).

Due to border closures, panic buying and stock outs, Covid-19 has compounded menstrual hygiene inequities. This has severely impacted the supply of sanitary products. Studies that were done during the initial outbreak of the virus, found that most participants were anxious about their MHM needs not being met during the pandemic. As markets and the economy have been affected, the costs of menstrual products have increased, which is also disturbing. The financial strain that has been experienced by so many families during this time also plays a major role. With food and other utilities that are prioritised, menstrual materials and supplies are often not purchased, causing difficulties for disposable product users (Ingraham et al., 2021:2).

During the Covid-19 pandemic, maintenance of sufficient menstrual waste disposal has also become a public health issue. When sanitary products cannot be managed by a communities' waste management system, both groundwater and the surrounding area will become contaminated. Unsafe water from a hampered infrastructure, together with a poor sanitation system, can influence the health of females and other individuals who menstruate as other diseases can spread. Despite this, it remains to be an ongoing problem (Ingraham et al., 2021:2).

An increase of misconceptions was also caused due to a false belief that menstruation increased the spread of Covid-19. This in turn, enhances discrimination towards menstruators. It is argued that individuals who have already been oppressed due to race, religion, gender, social class or disability status experienced this on an increased level (Ingraham et al., 2021:2).

2.4.5 The physical implications of poor MHM

Inability to manage menstrual hygiene can also cause various health related problems. Several studies indicate that poor menstrual hygiene, based on personal hygiene or products used, can cause an increase in urogenital infection levels (Tellier & Hytell, 2017:9). If MHM is neglected and adequate sanitary measures are not taken, great health risks including toxic shock syndrome, reproductive tract infections (RTI), and other vaginal diseases can be experienced (Kaur et al., 2018:2). Research indicates that approximately 70 percent of reproductive infections among women in India are a result of poor MHM. Common symptoms of RTI include itching of the genital area, pain in the back and abdomen, genital pustules and unusual discharge from the genitalia (Sorma, 2018:4).

Unhealthy menstrual practices can firstly cause a medical condition known as dermatitis, where the skin becomes irritated, red, swollen and at times develop blisters. This causes discomfort and pain. Bacteria such as Salmonella, Staphylococcus and E. coli may also develop and spread to the urethra, resulting in urinary tract infections (UTIs) (The Economic Times, 2021:2). This is the most common infection experienced when MHM is compromised and is caused by inadequate washing of genitalia, using only water during washing practises, washing genitalia from back to front and using unhygienic absorbents during menstruation (Sorma, 2018:4). If left untreated, this on its own can severely damage the functioning of the kidneys. Genital infections can also be obtained as a result of growth of harmful bacteria and could damage the vagina. The pH balance of vaginal secretions can also change, creating a perfect environment for harmful bacteria to grow. If the balance between healthy and unhealthy bacteria in the vagina is disrupted, bacterial vaginosis (BV) can develop. Infections can increase the risk of becoming susceptible to cervical cancer (The Economic Times. 2021:2). About 132 000 females in India are diagnosed with cervical cancer per year with poor MHM as a major contributing factor (Sorma, 2018:4). Sources also indicate that unhygienic menstrual management practices

can increase the risk of infertility (The Economic Times, 2021:2). Poor MHM can also cause yeast infections, known as candidiasis. Infection in the reproductive and urinary tract can cause candida albicans infection, an opportunistic microbe and 75 percent of females in reproductive age experience asymptomatic vulvovaginal candidiasis.

Sorma (2018:4), further suggests that bodily fluids, including menstrual blood, can transmit sexually transmitted diseases such as Hepatitis B and HIV. It is therefore crucial for hands to be washed regularly and thoroughly with soap and water during changing practices (Sorma, 2018:4). It is explained that during menstruation, the cervix opens for blood to pass through from the uterus, allowing bacteria and viruses to travel into the top part of the cervix and uterine wall. The vagina has a protective acidic pH that protects it from certain STIs. During menstruation, the levels of this however decrease and the vagina becomes more alkaline, making it easier for microbes to grow in the reproductive tract. Menstrual blood is considered to be the perfect breeding opportunity for bloodborne sexually transmitted infections like HIV and hepatitis to grow. Contracting STIs and bacterial infections such as chlamydia and gonorrhoea during menstruation poses a somewhat larger risk. Once they travel beyond the cervix, a more dangerous infection of the reproductive tract, known as pelvic inflammatory disease, can affect fertility. Implementing preventative measures while having sexual intercourse during menstruation, such as using condoms, is therefore also still encouraged (Franklin, 2018:2). In contrast to this, many sources argue that STIs, more specifically HIV, cannot be transmitted through menstrual blood. It is stated that contact with menstrual blood does not pose any risk for HIV transmission. However, once in contact with harmed skin or once swallowed, it is possible but still considered as unlikely. It is also stated that due to HIV treatment that is effective, the virus is mostly undetectable therefore untransmutable, if the person adheres to the medication (Webb, 2019:5).

However, there seems to be no consensus on a standard for adequate personal hygiene. Some authors believe that certain products (such as disposable pads) or hygienic practices (such as, perineal washing before and after intercourse) are essential, whereas others believe differently (Tellier & Hytell, 2017:9). Furthermore, in some traditions females are not allowed to touch their genitals or bath during menstruation, that can cause other hygiene and health problems. A study in Uganda, found that using materials that were dried outside caused higher levels of infection (Hennegan, Dolan, Wu, Scott &

Montgomery, 2016 in Tellier & Hytell, 2017:10). This is contradictory to Sumpter and Torondel (2013:2), which previously stated that drying should rather be done in direct sunlight and open air. The information on the relationship between different MHM practices and the well-being of individuals in African countries is unfortunately very limited. Studies in Kenya did however find that young girls engage in transactional sex in order for them to afford menstrual products and hypothesize that this increases their risk of HIV, unintended pregnancy and school dropout (Phillips-Howard, Otieno, Burmen, Otieno, Ondongo, Odour, Nyothach, Amek, Zielinski-Gutrerrez, Odhiambo & Zeh, 2015 in Tellier & Hytell, 2017:10). Results from a study by Zana in Africa found that girls who experienced female genital mutilation had longer and more painful menstrual periods (House, Mohon, Cavill, 2012 in Tellier & Hytell, 2017:10).

It is clear that the influential factors of poor MHM differ between countries and the different cultures. Nevertheless, individuals are severely affected by this on physical, emotional and psychological levels. It is clear that MHM is a health and social issue, and is therefore crucial to consider in the field of social health care.

2.4.6 Programmes and policies enhancing MHM

Menstruation itself, as well as MHM, has always been challenging for females and it is therefore impressive how attention on the matters have already increased. Many different role players, including social workers, have contributed to this transformation. In 2014, a “Girls in Control” program in South Sudan, for example, provided education on menstrual hygiene and using reusable pads in order to manage menstruation more effectively, to approximately 4,500 girls (WASH, SNV, 2014). On international, national and regional levels, organisations and governments implemented goals and standards to address the matter. It has also been a research topic of interest at key universities in order to gain evidence. Knowledge technologies such as menstrual calendar apps have also been developed.

Existing interventions are mainly divided into two categories. Hardware interventions refer to interventions that provide physical resources such as menstrual absorbents and WASH facilities, whereas software interventions mainly address the psychosocial components of MHM including education with the aim to address discrimination and stigmatisation. Some interventions include a combination of both (Hennegan, 2020:639).

In a systematic review done by Hennegan (2020:639) it was found that to date, software interventions mostly provided education on menstruation via various mediums, such as written materials including pamphlets and posters, educational sessions in schools presented by social workers and other peer or health related educational approaches. It was also found that overall; studies indicate that software interventions such as education improve menstrual knowledge. It is however not clear what the exact impact on psychosocial well-being is, as most qualitative studies fail to assess these outcomes. Two identified improvements have however been reported, as well as one that brought about no difference due to experiencing dropouts amongst participants. On the other side of the spectrum, the review established that only menstrual material provision has received attention within studies, despite hardware interventions conceptualising provision of several physical resources including menstrual materials, infrastructure as well as disposal facilities. Of five studies identified through the systematic review of Hennegan (2020:639), two focussed on reusable products, two on the effectiveness of menstrual cup provision and one on disposable products. To summarise, existing studies hypothesize that school attendance among girls may improve if menstrual products are provided. Compared to software interventions, more focus was placed on school absenteeism within hardware intervention studies. Menstrual experiences and associated distress are however neglected. Studies also focus on assessing outcomes, duration, provision of products and weakness in design, making it challenging for conclusions to be made. It is suggested that this could be achieved through qualitative research complementary to other methods. Measuring techniques can also improve assessment outcomes in future studies (Hennegan, 2020:639).

UNICEF (2019:13) states that menstruation onset comes with several challenges that arise during adolescence, but also with opportunities. Menstruation programs focusing on health and hygiene can be used as an entry point for other projects, like sexual and reproductive health education and life skills development. Through self-efficacy improvement, MHM programmes can help females to gain skills to bridge health, freedom and developmental challenges, such as gender-based violence, early marriage and absence from school. Investments in adolescent females' well-being, has proven to cause triple dividends: for girls, for the women they will be when they are older, and for their children. MHM is therefore a key objective of the Sustainable Development Goals (UNICEF, 2019:13). SDG 6.2 highlights female's right to menstrual health and hygiene,

with the goal: “to by 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations” (United Nations, 2015:22). Education of menstrual health and access to menstrual products are also key factors in the promotion of gender equality and fight against poverty, as part of the UN’s Global Goal 1 and 5 (Mlaba, 2020:1).

Significant attention by the Government of South Africa has developed with regards to the accessibility problem to sanitary products and the influence it has on school attendance. Efforts on national level have also been made. In 2017, a Policy Framework on Sanitary Dignity, as the custodian of the promotion and advancement of gender equality and empowerment of women, was developed by the Department of Women, Youth and Persons with Disabilities (Department of Women, Youth and Persons with Disabilities, 2017:3). The Sanitary Dignity Program, as part of this, is guided by the National Sanitary Dignity Implementation Framework (SDIF). This was drafted with the aim to further enhance the framework and the implementation thereof. Furthermore, it aims for sanitary dignity to be promoted as well as for norms and standards with regards to sanitary products provision to be provided to indigent females. Social justice and basic human rights are also promoted and emphasised within this (Department of Women, Youth and Persons with Disabilities, 2017:15). It can however be argued that as with all legislations and policies, the actual implementation thereof remains to be challenging. Despite this, in 2018 some of the individual provinces in the country took initiative in establishing programs for distribution and provision of disposable sanitary products to female scholars. Most of the provinces had to budget for their campaigns or partnered with private organisations, social workers and civil societies. KwaZulu–Natal province, for instance, set aside 109 million rand for this project (Macupe, 2018:1). It is however claimed that the financial means of the project was affected through corruption, that the products were over-distributed and did not meet the national standards of quality assurance (Magubana, 2018:1).

The laws, policies and guidelines of South Africa also provides a framework for sexual and reproductive health service delivery that is supportive and rights-based with high priority on accessibility to health care. The Constitution of the country guarantees the right to such accessibility for all. The National Developmental Plan highlights “providing

affordable access to quality health care while promoting health and wellbeing" as key in achieving the domestic development goals. Additionally, The National Health Act (61 of 2003) recognises that vulnerable groups such as women, has specific health needs and even accommodates free health care for women who are pregnant as well as for women who wish to terminate pregnancy. Adolescent's and women's rights, as well as access to healthcare services are also widely supported by the National Adolescent Sexual and Reproductive Health and Rights Framework Strategy (2014–2019) and the Strategic Plan for Maternal, Newborn, Child, and Women's Health and Nutrition in South Africa (2012–2016) and also focuses on the challenges that are being experienced by young women in accessing sexual and reproductive health services. The environment of healthcare provision within South Africa is evolving rapidly. The National Health Insurance (NHI) is being piloted and includes a phased approach for the public sector and private sector to be brought together under a single-payer system (SAHR, 2016:96-103). Despite the progress that has been made within some areas of the South African health system and it being considered as a resource in addressing sexual and reproductive health issues, some sources report that the country is still falling behind with regards to certain health outcomes such as prevention and care for reproductive health issues as well as in accessing treatment. Other on-going challenges that effect the effectiveness and quality of the health sector includes "a quadruple burden of disease, inequitable distribution of health resources, emphasis on curative healthcare, dependence on the public healthcare system by the majority of the population and weaknesses in the areas of health resources and leadership". The social-demographic differences among the various racial groups within South Africa also affect the implementation of population policies (Susuman, 2018: 1-2).

Although the onset of menstruation manifests during adolescence and is considered as a vulnerable life stage, many studies argue that the youth should be targeted in interventions that improves MHM and that addresses challenges that are experienced in this regard. According to Chandra-Mouli (2015:3), the global health community has recognised the participation from youth in policy development regarding reproductive health as a crucial strategy for the unique reproductive health needs of young people to be met. Apart from commitments and scholarship on international level on how important the right of young people to participate is, there is limited information on the role of youth voices and priorities that have influenced sexual and reproductive health (SRH) policy

development and the implementation thereof (Villa-Torres & Svanemyr, 2015:4). In South Africa, 20.6 million people of the country's total population of around 57.7 million people consists of youth, which represents about 35.7% of the entire population (Ndondo, 2022:1).

Additionally, National Menstrual Hygiene Day is celebrated on 28 May within South Africa and is dedicated to creating awareness regarding the matter. The aim is to also create cohesion amongst government, non-governmental organisations, the private sector, communities and individuals as well as the media in the attempt for menstrual health and hygiene management to be promoted. It was also established with the goal to eliminate stigmas that exist around females that menstruate. In 2018 the Minister of Finance, declared the free provision of sanitary products to scholars, particularly in schools where fees are not paid. Together with this, it was also declared within the medium-term budget policy statement (MTBPS) that sanitary products would become zero-vat rated from 2019.The National Treasury also made R157 million rand available to quintile 1-3 schools across the country for the provision of free sanitary products. The National Financial Aid Scheme (NSFAS) also decided in 2019 to allocate R275 per month for personal care, including MHM, to students in tertiary education. This was a major contributor to the enhancement of Women's Rights in South Africa (Department of Women, Youth and Persons with Disabilities, 2019:1).

Available literature on the role of NGO's, more specifically social workers, in helping the government to reach the goals set out by legislation and policies with regards to MHM is very limited and outdated. Fisher (1997:442) however acknowledges the ability of these organisations to strengthen local and social initiatives in order to provide services. He also recognises the fact that NGOs are based on the fundamentals of "empowerment" and "participation" (Fisher, 1997:442). This study will follow a similar approach.

In South Africa, a new movement of non-profit organisations including Qrate ZA, the Cora project and the Siyasizana Foundation, that are operated by young females with influential digital platforms also had a significant impact in the attempt to combat period poverty. These organisations aim to supply pads and tampons to females that cannot afford them, empower females and educate them on menstruation with the goal of normalising the topic (Mlaba, 2020:1). Large companies, such as SPAR, Checkers, Pick

‘n Pay and Shoprite have also been collecting and distributing sanitary pads all over the country as part of their involvement in community projects that aim to empower women in South Africa. Recently, NPO’s including O Graceland and the MENstruation foundation of South Africa, has collaborated to launch the first ever sanitary pad vending machine at the School of Hope in Observatory within Cape Town. The aim is to develop sustainable and free access for young females to sanitary pads with the hope to distribute more machines to others schools and community centres. The organisations recognise that menstruation is not only a women’s issue, but rather a humanitarian issue (Solomons, 2021:1). Kamcare is another NPO in South Africa that promotes and distributes reusable menstrual products as part of community development in the Kameeldrift rural area and surrounding provinces. They provide social and training services by professionals to all people (Kamcare, 2021:1). For the purpose of this study, the effectiveness of initiatives provided through this organisation with regards to MHM , will receive attention. Hennegan (2020:638) emphasises that initiatives that aim to address menstrual needs might be valuable, but it is important to consider that not all good motives can guarantee positive results. Community developments often seem to fail in reaching the desired outcomes and can cause unintended harm.

Although research on the role of social workers specifically with regards to MHM is limited, some information is however available regarding the importance of social workers in the reproductive health industry. According to Alzate (2009:1), it is important for social workers to understand and promote sexual and reproductive rights in order to enhance the health status of affected individuals and to advocate for social justice in this regard as well as to react to worldwide reproductive health challenges. Reproductive rights and justice are unfortunately not often focused on in social work research, despite focus on incorporating and applying social justice theories to practice and research. The social work profession provides unique mandates for the requirement to promote social justice (Liddell, 2020:2). Challenges that are experienced with regards to access to reproductive care, emphasises the importance of social work policy, advocacy, and education (Wright, Bird & Frost, 2015:1).

According to Kajumba (2020:1), the connection between WASH and MHM is a crucial aspect that needs to be considered in the development of Sexual and Reproductive Health Rights (SRHR) programming. Despite efforts in addressing WASH and SRHR

together, direct approaches that integrate WASH and MHM are limited and often less prioritised on global and national levels. It is being argued that WASH and MHM actors can leverage one another's efforts for a greater impact on improved menstrual health in Africa, as a way of increasing the focus of menstrual health as a critical pathway to improved sexual and reproductive health rights. Community leaders that work on grass root levels should engage with and be equipped with skills and knowledge on how to mobilise and improve WASH facilities in the communities. Collaboration between WASH and MHM actors is being recommended as it can help to overcome challenges and improve the overall quality of existing Sexual and Reproductive Health programming. It is further argued that the promotion of WASH can be an entry point in securing Menstrual Health Rights (Kajumba, 2020:1).

Although so many efforts and recommendations have already been made to address poor MHM and improve the quality thereof, it remains to be a widespread problem.

2.5 SUMMARY

Menstrual hygiene management (MHM) is very broad and there are multiple aspects that should be considered when studying a related matter in order to obtain a comprehensive understanding and true reflection. Through the review, it was determined that MHM perceptions are influenced by various environmental factors, both positive and negative. Positive interventions that have been developed and the effectiveness thereof however require more attention as it is hardly represented in existing literature.

The next chapter focusses on the research methodology and findings.

CHAPTER 3: RESEARCH METHODS AND FINDINGS

3.1 INTRODUCTION

The purpose of the study was to explore and describe the perceptions of female youth regarding MHM in Ikageng, Potchefstroom and the way in which the study was conducted and the methods that were chosen to obtain this, was in support of this.

Since the researcher aimed to obtain a true reflection of the perceptions of female youth regarding MHM, the study was conducted on the foundation of feminism. Menstruation is an experience that is unique to the female gender. It is a topic that is often left unspoken about and through this study the researcher provided an opportunity for females to share their true and unique experiences regarding the matter and for it to be reflected within the study. This helped the researcher to understand empowerment projects that have focused on uplifting women and improving their MHM experiences. This also connected well with the empowerment approach that was perused throughout the study with the aim for the gathered information to be applied within problem solving regarding challenges that is faced by female youth regarding MHM and informing and making recommendations to the necessary stake holders in this regard. Since the study not merely aimed to gather knowledge but rather to also address the pressing social issue, it was applied in nature. The research also aimed to make the study as exploratory and descriptive as possible and therefore aimed to collect in-depth qualitative data on the research topic.

In die following section, a detailed description of the research methodology, research methods, pilot study as well as the ethical considerations is provided. The research approach is firstly discussed. Secondly, a description of the type of research is provided. The research design is then also discussed. Fourthly, the research methods are explained in detail. This will include the study population and sampling, data collection process, data analysis process, data quality as well as the pilot study. Finally, the ethical consideration that was implemented within the study is also discussed.

3.2 RESEARCH APPROACH

Since the study focused on MHM, that is a unique experience to women, the philosophical foundation in which the study was embedded, was feminism. Feminism

places emphasis on the challenges and experiences that are unique to females, but is rarely represented in social research. Feminism believes that women are different from men and therefore experience the world differently, express themselves differently and react differently to various influences (Teater, 2014:91). Since the study was interested in exploring and describing these unique experiences, this paradigm was most suitable. Feminism acknowledges the importance of gender in society, however, criticises gender and cultural practices that discriminate against women and give males an upper hand in society (Teater, 2014: 94). In most African countries, menstruation is perceived as a taboo and rarely discussed in schools, in homes as well as in the community. This disadvantages females in ways that force them to hide their experiences of developing as a young woman. By utilising a feminist paradigm in this study, it gave a chance for female youth members to let their voice be heard regarding this matter. With that said, working from a feminist paradigm allowed the researcher to explore and gain an understanding on the disadvantages that are experienced by females that can possibly influence their MHM perceptions. It also allowed the researcher to study and better understand empowerment projects in South Africa that strive towards uplifting women, when it comes to MHM.

In order to get an in-depth understanding of the above-mentioned, the researcher followed a qualitative research approach, which is directly linked to feminism as a research paradigm. Following a qualitative research approach meant the study was holistic in nature. It allowed the researcher to find answers to questions about a complex phenomenon such as the MHM perceptions of female youth, through exploring and describing the researched point of view. It utilises inductive reasoning, meaning the researcher will start at a particular point and then work towards a general understanding (Leedy & Omrod, 2005 in De Vos, Strydom, Fouché, & Delport, 2011:64). It is flexible in the sense that problem formulation and data collection is shaped as the investigation proceeds (Kumar, 2005 in De Vos et al., 2011:65). Unfortunately, qualitative studies do have lower credibility and can be influenced by the researcher's personal biases. Following this approach can also be time consuming and the information may not be generalised, but it is based on participants' own perceptions which ensured that the study was a true reflection of the participants' experiences and was therefore most suitable for this particular study (Johnson & Onwuegbuzie, 2004:20).

In order to gain this understanding, the researcher firstly explored and identified the factors that are influencing the MHM perceptions of female youth in Ikageng, Potchefstroom in order to get familiar with the topic. The aim of exploratory studies is to gain a better understanding of the phenomenon and the key variables (Stebbins, 2001 in Nieuwenhuis, 2020:61). Secondly, the researcher gathered thick data in order to obtain a deeper meaning of what the perceptions are. Within descriptive studies, the aim is to gather data to obtain a more comprehensive description (Tashakkori & Teddlie, 1998 in Nieuwenhuis, 2020:61). The purpose of the proposed study was therefore explorative and descriptive in nature.

3.3 TYPE OF RESEARCH

The research type applicable to the study was applied research. Applied research emphasises application and problem solving (Kreuger & Neuman, 2006 in De Vos et al., 2011:95). This study was applied in nature because the researcher not only wanted to acquire knowledge about the perceptions of menstruation hygiene management among female youth in Ikageng, Potchefstroom; but specifically to also further endeavour to apply the knowledge to solve problems being faced by female youth in Ikageng, Potchefstroom and to inform and make recommendations to governmental policy and legislation and community-based projects about these challenges in order for them to address this pressing social issue.

3.4 RESEARCH DESIGN

The research design appropriate for this study was phenomenology, which is a design unique to qualitative studies. Since the goal of the study was to explore and describe the perceptions of MHM among female youth, the phenomenological research design was most suitable, as it focuses on describing the personal meaning that certain living experiences hold for participants, so that a comprehensive description of the phenomenon can be provided. Phenomenology focuses on describing and exploring the experiences of participants, without any influence of the researchers own experiences (Van Manen, 2007 in Nieuwenhuis, 2020:85). By using phenomenology, the researcher was therefore able to accurately describe the real-life perceptions of females who experience menstruation from more than one participant, in order to gain rich and in-

depth data that reflected the personal nature of females. Data in this design is considered more natural rather than artificial (Easterby-Smith, Thrope & Jackson, 2008:97).

Transcendental phenomenology was utilised as a sub-design. It focuses more on describing the essence of lived-experiences by combining the textural (what) and structural (how) description of the phenomenon (Moustakas, 1994 in Nieuwenhuis, 2020:85). Through textural description, the research question - What are the perceptions of female youth on menstruation questions? – was explored. Structural descriptions focused on the researcher's second research question of how these perceptions affect them as female youth. Although data collected through this design can be time-consuming and subjective, it ensures that a detailed understanding is obtained with rich and thick description of data, which was ideal for this study since that was what the researcher aimed to achieve. To follow this design the researcher identified the phenomenon, bracketed out her own perceptions (especially since the researcher is also female and has her own experiences of MHM), and collected data from several individuals who have experienced the phenomenon (Moustakas, 1994 in Nieuwenhuis, 2020:85). This brings us to the next section of explaining how the study was conducted.

3.5 RESEARCH METHODS

This section will cover the study population and sampling, data collection, data analysis, data quality, and the pilot study in order to describe the methodology of the study.

3.5.1 Study population and sampling

The research was conducted in Ikageng, an informal settlement within Potchefstroom, North West province through a non-profit organisation (NGO), NG Welfare, Ikageng. NG Welfare renders welfare services within Potchefstroom and other areas. The research population of the study was therefore female youth in Ikageng, Potchefstroom, North West province. The locality of Ikageng is in the district of Dr Kenneth Kaunda in the province of North West, South Africa. It is a township with a total population of 87 701 people. The racial make-up of the town consists of Black Africans (98.0%), coloured (1.2%), Indian/Asian (0.2%), White (0.2%) and other (0.3%). Tswana, Sotho and Xhosa are the dominant languages that are spoken within the community with a small percentage of English-speaking individuals (Census Community Profile Databases, 2011:2).

The sampling approach that was used for this study was non-probability sampling. Non-probability sampling does not make use of a random selection of population elements. It allows the researcher to create an inclusion criterion that ensures that the participants for the study are well suited to gather thick information. It is less complicated than random sampling, as the researcher already knows what type of participant needs to be recruited. Non-probability sampling can be beneficial, as it is appropriate for studies where time is limited and results are urgently needed (Maree & Pietersen, 2020:218). Since the sample for this study was not randomly selected, but selected according to a specific inclusion criterion, this approach was most appropriate, as there is a specific study population that had to be reached. The type of non-probability sampling that was selected for this study was purposive sampling. This method of sampling is used in studies where the sampling is done with a specific purpose in mind, in this case to explore and describe the perceptions of MHM , specifically among female youth (Maree & Pietersen, 2020:218).

The researcher recruited five participants for the research study, who met the inclusion criteria, however, if the information gathered was not adequate, participants would have continued to be recruited until data saturation was reached, meaning reaching a point of exhausting all avenues of information gathering (Nieuwenhuis, 2020:91). The recruitment process included gathering data from the female youth in Ikageng, an informal settlement in the North West province, who received reusable pads, in order to improve their MHM experiences. The reusable pads were provided by Kamcare, an organisation in Kameeldrift, Tshwane that make these products as part of their community involvement projects. In order to make the recruitment process easier and since the organisation is already familiar with the community; NG Welfare served as a gatekeeper in order for the researcher to get access to the community members of Ikageng, Potchefstroom. A gatekeeper refers to the individuals controlling the researcher's access to participants (McFadyen & Rankin, 2016:82). NG Welfare was merely responsible for identifying suitable community members and informing them about the research project and was asked by the organisation if they would be interested in participating. Those who came forward voluntarily and showed interest, was asked to provide their contact details to NG Welfare. The researcher then contacted those who provided their contact details, and the first five participants who met the inclusion criteria and were willing to sign an informed consent form was included in the study and provided with the reusable pads. Possible

dates for a face-to-face interview were scheduled. Informed consent was obtained from participants prior to the interview.

The study specifically targeted female youth, which refers to individuals between the ages of 18 and 30 in line with the Notional Youth Policy, in Ikageng, Potchefstroom, since this is considered to be a vulnerable life phase (Louw & Louw, 2014:320). Five participants were included. In order for participants to be included in the sample of the study, they had to meet the following inclusion criteria:

- Had to be female
- Must have started with their menses
- Be in the youth life phase (between the ages of 18 and 30)
- Reside in Ikageng, an informal settlement within Potchefstroom, North West Province
- Had to provide informed consent
- Must have received and used a reusable sanitary pad received from Kamcare.

The exclusion criteria were as follows:

- Did not experience menstruation
- Were younger than 18 or older than 30
- Did not provide informed consent
- Did not want to participate voluntary
- Did not receive or use a reusable sanitary pad from Kamcare.

3.5.2 Data collection

Since the aim of the study was to explore and describe the MHM perceptions among female youth in Ikageng, an informal settlement within Potchefstroom, qualitative data collection methods were most appropriate for this study. It helped the researcher to gather rich data that was descriptive in nature and helped to better understand how the female youth construct their realities.

The method that was used to collect data was semi-structured individual face-to-face interviews, meaning the researcher used predetermined open-ended questions that were set up in an interview schedule to obtain information needed to describe the menstruation hygiene management perceptions among female youth (Nieuwenhuis, 2020:110).

Examples of questions included: “What is your understanding of menstruation?”, “How do you experience menstruation at home, in the community, at school?” What education did you receive on sexual reproductive health and MHM? Did you receive any support regarding the onset of your menstruation? Did you experience challenges during your menstruation period? The open-ended questions were then followed by further probing and clarification for example: “What type of support did you receive?”, “What type of challenges did you experience?” The researcher therefore made use of an interview guide as an instrument to collect data. Conducting individual face-to-face interviews can be time-consuming in terms of setting up an interview schedule and the interviewing process itself, which also limits the sample size. The quality of the data depends on the ability of the interviewer to conduct an interview and gather data well. Some interviewers may have their biases that could influence the way they interpret the data. Despite these risks, face-to-face interviews were considered the most appropriate data collection method, as it allowed the researcher to gather rich data (Nieuwenhuis, 2020:110).

Recording of each interview conducted, with the permission of the participants, was done digitally in a meticulous manner. Notes were also made after the individual interviews, as it helped to review the answers and ask additional questions where necessary. After the interviews, the researcher listened to the recordings, reviewed notes, and reflected on the interviews in order to identify gaps that needed to be addressed in possible follow-up interviews. Fortunately, this was not necessary. A verbatim written record (transcript) of what has been said was also drawn up for the purposes of data analysis.

3.5.3 Data analysis

The researcher used the thematic data analysis genre as described by Clarke et al., 2015:233). Thematic analysis is a method that is used to analyse qualitative data. The goal is to allow the researcher to develop themes and data codes from a unique point of view. “It provides a highly flexible approach that can be modified for the needs of many studies, providing rich and detailed data” (Clarke et al., 2015:223). Thematic analysis takes the following steps defined by Clarke et al., (2015:230):

- ***Familiarisation*:**

“Data analysis is facilitated by an in-depth knowledge of, and engagement with, the data set” (Clarke et al., 2015:230). The researcher actively engaged with the raw data and re-

listened to the recordings and transcribed each interview, read the transcripts, listened to audio recordings and made notes of any initial analytic observations to get familiar with the data and note items of interest. “This helps the researcher to move the analysis beyond a focus on the most obvious meanings” (Clarke et al., 2015:230).

- ***Generating codes*:**

“Coding is a systematic process of identifying and labelling relevant features of data in relation to the research question” (Clarke et al., 2015:230). Here the researcher started to identify patterns in the data and created labels, by grouping similar segments of the data together. For this study, colour coding was used through Microsoft Word software. An example of a code was: “Challenges experienced during MHM”. Coding took place on a semantic level meaning it focused on the obvious meaning of data.

- ***Generating of themes:***

The researcher then clustered together codes to create a map of key patterns in the data. Themes and sub-themes were organized in a table. A deductive approach was followed to generate codes and themes, meaning the data was viewed through the ecological systems theory to develop codes and themes (Clarke et al., 2015:230). An example of themes was then: “Challenges experienced on a micro level” and so forth.

- ***Reviewing themes:***

The researcher determined if identified themes were a good fit and if each theme had a clear central concept. Changes might take place in this step and the researcher must therefore be flexible (Clarke et al., 2015:230).

- ***Defining and naming themes:***

“Once the researcher is reasonably confident that they have generated a robust thematic mapping of their data, understanding both the scope of each theme and how the themes relate together, they begin the process of elaborating each theme and moving towards the write-up of their results” (Clarke et al., 2015:230). This included writing theme definitions. “These are fairly short descriptions explaining the essence, scope and coverage, and boundaries of each theme” (Clarke et al., 2015:230). The researcher gained conceptual clarity of each theme by naming it and creating an abstract of it. This served as a road-map for the final write-up.

- ***Writing a report:***

“With this step, the researcher weaves together their analytic narrative and vivid, compelling data extracts” (Clarke et al., 2015:230). Here, the findings were interpreted

and pulled together in order to tell a story and was supported with extracts from the data, to ensure that participant's personal experiences and perceptions were reflected and supported. "Themes provide a framework for the analysis, but analytic conclusions are drawn across themes" (Clarke et al., 2015:230). The analysis was descriptive in nature, meaning it aimed to summarise and describe patterned meaning in data. The findings were synthesised and arranged in an orderly and logical structure to reveal the essence of what was being studied. In order to answer the why question, the data was synchronised with existing literature to indicate how it agrees or disagrees and also expand existing data. All conclusions were based on the findings from the data of the study.

Transcribing and analysing the data in order to generate themes and sub-themes was time consuming, as it was difficult to organise and word the themes appropriately, in order to be a true reflection of the study's findings. In order to approach this, the researcher used the ecological systems approach underpinning this study to interpret the findings and answer the research question. A deductive approach was followed to generate codes and themes, meaning the data was viewed through the ecological systems approach to develop codes and themes (Clarke et al., 2015:230). This greatly reduced the number of possibilities and a context to create categories for codes, themes and sub-themes.

3.5.4 Data quality

A study is trustworthy when it represents the perspectives of the research participants as closely as possible (Lincoln & Guba, 1985 in Nieuwenhuis, 2020:144). In qualitative research, trustworthiness of the data is determined by four constructs namely credibility, transferability, dependability and confirmability of the data (Nieuwenhuis, 2020:123-125). ***Credibility*** refers to "the confidence that can be placed in the truth of the research findings" (Holloway & Wheeler, 2002; Macnee & McCabe, 2008 in Anney, 2014:276). The credibility of the study was ensured by prolonged engagement meaning the researcher committed towards spending extended time in Ikageng, an informal settlement within Potchefstroom, North West Province, to gain a greater understanding of the context. Supervision was used to allow debriefing between the researcher and the supervisor to provide an external view on the research process, as well as to compare the findings and interpretations against the raw data. Participants were given access to transcripts or field notes to correct errors or facts (member checking). Negative case

analysis was done where the researcher reported and accounted for any contradictions that emerged from the data which could have led to an alternative explanation. Persistent observation was implemented to get an understanding of participants' perspective and to minimize the effects of the researcher's involvement in the research procedure (Anney, 2014:277).

Transferability refers to "the degree to which the results of qualitative research can be transferred to other contexts with other respondents, in other words it is the interpretive equivalent of generalisability" (Bitsch, 2005; Tobin & Begley, 2004 in Anney, 2014:278). Transferability was ensured by establishing how typical the participants are to the context being studied and how the context to which the phenomenon being studied provided complete understanding of the context being studied. This was done through thick description and purposive sampling which was implemented in this study, as indicated above. Careful thought was given to the selection of the participants, since they represented the population in terms of the phenomenon (Nieuwenhuis, 2020:124).

Dependability refers to "the stability of findings over time" (Bitsch, 2005 in Anney, 2014:278). "To achieve dependability, researchers can ensure that the research process is logical, traceable, and clearly documented" (Tobin & Begley, 2004 in Nowell, Norris, Deborah & Nancy, 2017:3). To increase dependability, decisions made during the research process was documented in a journal, especially with regards to the data collection and analysis. The code-recode strategy was also implemented, meaning the researcher coded the same data twice, with one- or two-weeks space period between each coding. The results were then compared. An audit trail was kept by the researcher to document decisions and activities. "An audit trail provides readers with evidence of the decisions and choices made by the researcher regarding theoretical and methodological issues throughout the study, which requires a clear rationale for such decisions" (Koch, 1994 in Nowell et al., 2017:3). Peer examination was also done by the supervisor meaning the research process and findings was discussed with a neutral third party who has experience of qualitative research.

Confirmability is concerned with establishing that the researcher's interpretations and findings are clearly derived from the data, requiring the researcher to demonstrate how conclusions and interpretations have been reached (Tobin & Begley, 2004 in Nowell et al., 2017:3). Guba and Lincoln (1989) stated that to establish confirmability, credibility, transferability and dependability have to be achieved (Nowell et al., 2017:3). Confirmability was also achieved by keeping an audit trail so that others can understand

how and why interpretations were made, as well as by keeping a reflective journal to reflect on data collection and findings.

3.5.5 Pilot study

A pilot test is like a trial run or a mock interview, meaning it serves as a guide to the real data collection method and helps to eliminate problems when conducting and collecting data. A pilot study is needed in qualitative interviews to determine the type of interview schedule that is needed, as well as to identify questions needed to be asked and to prepare the researcher on how the questions need to be asked, as well as to see if there will be participants that will be willing to take part in the research. It also helps to determine if the type of data collection method enables the researcher to address the research question (Kim, 2010 in Makofane & Shirindi, 2018:41).

The researcher conducted a pilot study with one participant from the same community to determine the feasibility of the study in terms of the data collection method that was utilised, the recruitment process and to test the individual face-to-face interview schedule. The pilot study was conducted by having an interview with the participant with a similar inclusion criterion to the main study to establish whether the individual face-to-face interview schedule and the recording device were suitable for this study. This simply provided guidance for the study.

3.5.6 Ethical considerations

When conducting a study in qualitative research there are some ethical considerations that need to be considered (Babbie, 2017:63). In order to obtain permission and ethical clearance from the Research Ethics Committee of the Faculty of Humanities, University of Pretoria, the following ethical considerations were ensured during the study:

- Making use of ***gatekeepers*** was essential when conducting the research since they controlled access to participants. The researcher obtained permission from NG Welfare to inform female youth in the community of the study and distribute free reusable sanitary pads. Those interested provided the organisation with their contact details, which was given to the researcher. The position, perspective, beliefs and values of the gatekeeper was respected at all times. This was done to ensure that the research was conducted in

a sensitive manner as the participants are viewed as vulnerable (McFadyen & Rankin, 2016:83).

- ***Informed consent*** is the process where the participants are informed about all aspects of the proposed research study or any changes to be made. This allowed participants to make an informed decision to participate in the study. Informed consent was obtained by participants themselves prior to conducting the interview, as well as from the director of NG Welfare (the gatekeeper organisation) to proceed with the study. The consent letter included the following information: the topic and aim of the study, the research procedure to be followed, that partaking in the study will be voluntary and they may withdraw from the study if they wish to do so, that the interviews will be recorded with their permission, that the data will be stored for 15 years and that they will be given a pseudonym to protect their identity. Furthermore, it contained their name, surname and signature, as well as the ethical clearance number (Maree, 2020:48).
- ***Voluntary participation*** was connected to the fact that prospective research participants were fully informed about the procedures and risks involved in research and had to give their consent to participate as well as to be recorded during the individual face-to-face interview. They participated willingly in the study without being promised any material gain as that might have led to biases (Rubin & Babbie, 2017: 76). At any given time, participants could withdraw from the study without receiving any consequences (Maree, 2020:48). Only once the participants have signed the informed consent letter, the interview commenced.
- ***Confidentiality*** between the participant and the researcher was ensured, meaning the researcher promised to not share the information obtained from participants publicly. Participant's identities were protected by making use of pseudonyms (Babbie, 2017:67), as anonymity could not be provided due to the face-to-face contact in the individual interviews.
- ***No harm and debriefing*** - the first consideration that "governs ethics in research is the best interests of participants" (Maree, 2020:48). The researcher ensured that the participant's physical, social, psychological and emotional well-being was taken care of. This is the principle of *"to do no harm*" (Rubin & Babbie, 2017:78). During the study the researcher promoted the participant's wellbeing to the best of her ability and debriefing or counselling facilities was available for cases where circumstances or situations of extreme emotional or psychological challenge were being studied or explored (Maree,

2020:48). Furthermore, the researcher debriefed participants about their experience in participating in the study, to determine if there was any damage done throughout the study. Arrangements were made with Ms J Kgomongwe, a social auxiliary worker at NG Welfare for free counselling of participants who experience a need after the individual face-to-face interview. In order to promote physical well-being, certain Covid-19 regulations was implemented throughout the data collection process. Participants were required to wear face masks during the interviewing process and sanitise before they entered the hall where the interviews were conducted. Additionally, it was ensured that a safe distance was kept between participants and the researcher. This was in accordance with the mandatory protocols when in a public place (Disaster Management Act 57 of 2002: Regulations: Alert level 1 during Coronavirus Covid-19 lockdown, 2020:5).

- ***No deception*** refers to not misleading or withholding information and to not present incorrect information to participants. To adhere the researcher identified herself and explained why and what she was doing research about. Participants were informed that data will be archived at the University of Pretoria for fifteen years and may be utilised for follow-up research (Babbie, 2017:72).
- ***Positionality*** refers to the researcher's role or position while conducting the study (Maree, 2020:48). The code of ethics for social workers 4.4 was ensured, as it states: "Social work seeks to promote integrity in the science, teaching and practice of the profession. In these activities social workers are honest, fair, and respectful of others. Social workers strive to be aware of their own belief systems, values, needs and limitations, as well as the effect they have on their own work. Wherever feasible they clarify their roles to those involved and function appropriately in accordance with those roles" (SACSSP, 2019:7).
- ***Analysing and reporting*** means to be honest and clear about the research procedure. The researcher explained to participants how the findings that were gathered will be used. The researcher was familiar with limitations and failures of the study, reported negative findings related to analysis and told the truth about pitfalls and challenges experienced (Babbie, 2017:72).

Taking the above discussed into consideration, it is clear that the methodology, feasibility and ethical consideration of the study were carefully considered and planned. The researcher was of the opinion that a qualitative study with a feminism approach and transcendental phenomenology sub-design was most suitable to reach the purpose of

the study. The recruitment and data collection process were carefully considered and contributed towards gaining in-depth data with a true reflection of participant's perceptions with regards to MHM in Ikageng, an informal settlement within Potchefstroom, North West Province. The researcher also considered thematic analysis as suitable as it directly linked with the qualitative approach. The pilot study, data quality components and ethical considerations guided the researcher on how the research had to be conducted and was perused at all times.

3.6 EMPIRICAL FINDINGS

This section focusses on presenting, analysing and interpreting the collected qualitative data. Participant's biographic profile and the analysis thereof is firstly presented. Secondly, the findings are presented through a thematic analysis, consisting of the themes and sub-themes that were generated in order to analyse and structure the rich data. The findings will be substantiated with existing literature and quotes from the individual interviews that were conducted in order to illustrate the true reflections of participants.

3.6.1 Biographic findings

The biographic information of participants is summarised in the table below:

Table 3.2: Biographic summary of participants

Number of partici-pant	Gender	Age	Residence	Race	Cultural denomination	Socio-economic status	Scholar/ Employed/ Unemploye
1.	Female	30	Ikageng	African	Zulu	High	Employed
2.	Female	18	Ikageng	African	Xhosa	Low	Scholar
3.	Female	28	Imaging	African	Shona	Middle	Employed
4.	Female	23	Ikageng	Coloured	Tswana	Low	Unemployed
5.	Female	26	Ikageng	African	Tswana	Middle	Unemployed

Subsequently figures are used as visual illustrations for the analysis and interpretation of the biographic characteristic of participants:

3.6.1.1 Gender

In order for participants to participate in the study they had to be female. Although menstruation can be experienced by other menstruating individuals, this study specifically targeted females, since menstruation is usually associated with the female gender (Anureet, 2020:2). All participants were therefore female (100%) which represents a homogenic characteristic of the study population.

3.6.1.2 Age

The study specifically targeted the youth since they are considered to be vulnerable and hardly represented within studies (Tellier & Hytell, 2017:33). Participants therefore had to be between the ages of 18 and 30 in order to be included into the study. Menstruation is experienced by most healthy females of a reproductive age (Punzi & Hekster, 2019:2). The following ages were represented within the study:

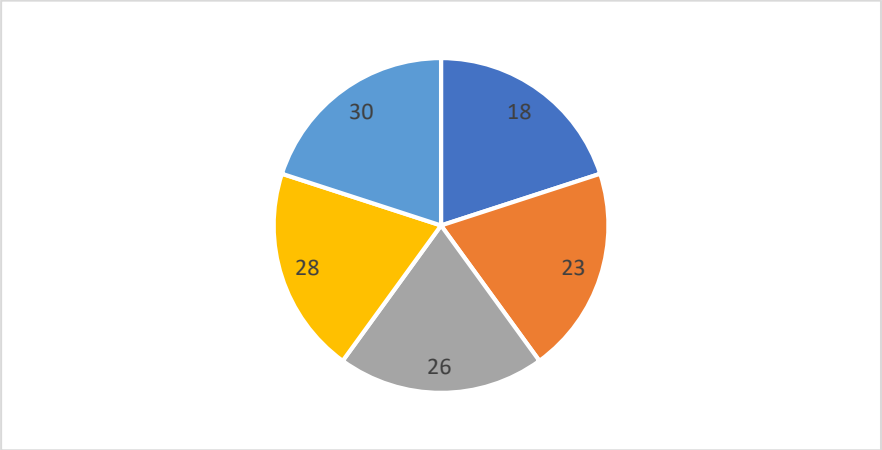

Figure 3.1: Age of participants

Thus, it is clear from the figure above that the participants were aged between 18 and 30 years, in line with the selection criteria and reproductive age of females.

3.6.1.3 Residence

Ikageng is “a township in Potchefstroom, North West Province, South Africa” (South African Venues.com, 2020:1), which is where the study was conducted and all the participants (100%) therefore resided there. This represents another homogenic characteristic of the study population.

3.6.1.4 Race

One biographic characteristic that allowed for some diversity within the study population was the race of the participants.

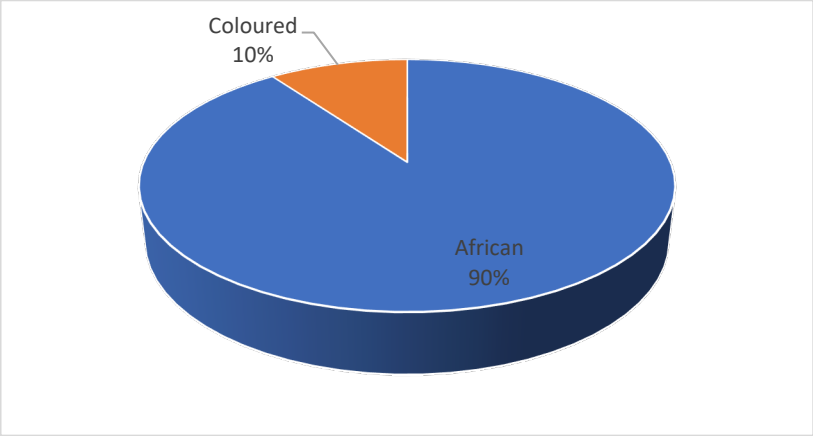

Figure 3.2: Race of participants

It can be seen in Figure 3.2 that the majority of participants (90%) were African and only one (10%) was a coloured.

3.6.1.5 Cultural denomination

Cultural beliefs are often considered to be an influential factor within MHM and therefore had to be considered within the study (Kaur et al., 2018:3).

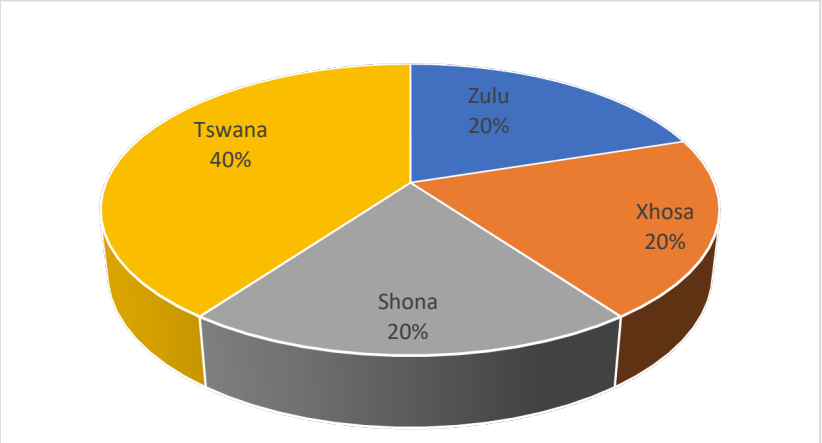

Figure 3.3: Cultural denomination of participants

Figure 3.3 reflects the heterogeneity within this aspect of the biographical findings, with the largest group of participants representing the Tswana (40%) culture, while the other participants fell into the Zulu (20%), Xhosa (20%) or Shona (20%) culture. Since most

participants were Tswana, it can be considered as a predominantly African community. Diversity is recognised in terms of the cultural make-up of the community.

3.6.1.6 Socio-economic status

The socio-economic status of the participants was another characteristic that ensured heterogeneity within the study population and had a large role to play within further findings that were contracted. It can be divided into high-, middle- and low-class.

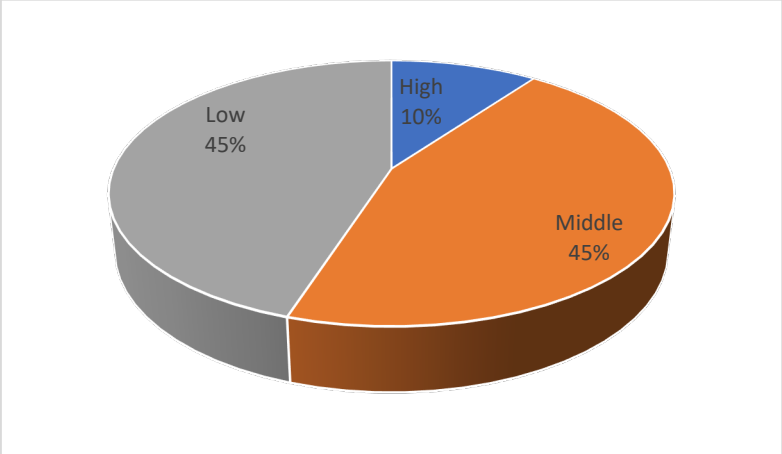

Figure 3.4: Socio-economic status of participants

One participant fell into the high socio-economic class, while the rest of the participants were divided between the middle- and low class. Thus, the majority of participants were in either low- or middle class.

3.6.1.7 Scholar/Employed/Unemployed status of participants

Poor socio-economic statuses have proven to influence accessibility and MHM in general (Lahme & Stern, 2017:3).

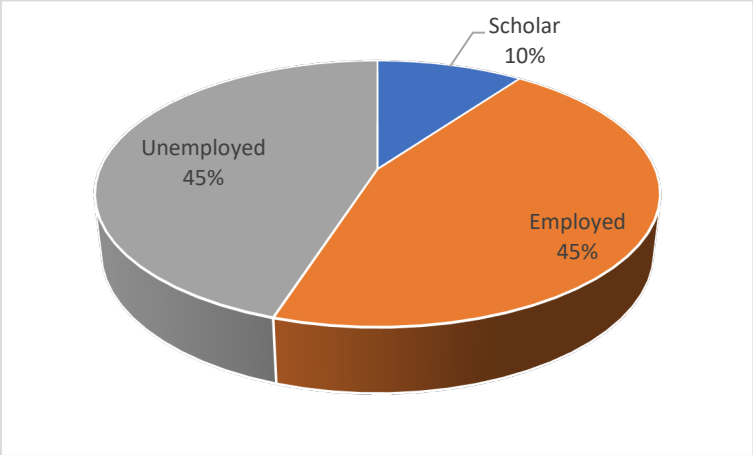

Figure 3.5: Employment status of participants

Differences in Figure 3.5 were evident within the employment statuses of participants that also has a direct connection to the socio-economic statuses of participants. Only one participant was still a scholar and the rest of the participants were divided between being employed or unemployed.

Subsequently, the thematic analysis follows.

3.6.2 Thematic analysis

The research findings are discussed according to the themes and sub-themes that were generated during data analysis that was done as described by Clarke, Braun and Hayfield (2015). This included the steps of familiarisation, generating codes, generating themes, reviewing themes, defining and naming themes and writing a report. The five individual face-to-face interviews were manually transcribed and will be used as a source for verbatim quotations in order to support the findings.

The following table provides an overview of the themes and sub-themes generated from the data that was collected**:**

Table 3.3: Themes and sub-themes

Themes	Sub-Themes
1. Experiences during the onset of menstruation	• Readiness for menarche • Source of support and education during menarche
2. Current menstrual experiences	• The normality of experiences • The psychological implications • The social implications • The physical implications • Current sources of support • Being able to talk about menstruation
3. Concept of reproductive health and menstruation	• Poor or only basic understanding • Connotation of maturity and being able to reproduce • Sources of knowledge

4. Menstrual Hygiene Management	• Concept of hygiene management • Understanding of hygiene practices • Understanding of disposing of menstrual waste correctly • Understanding of MHM needs • Preferred materials, other supplies and the effectiveness thereof •
5. Challenges being experienced with regards to MHM	• Accessibility and cost • A poor waste disposal system • Poor WASH facilities • Cultural beliefs • Strategies and ways of coping with challenges • Participation in daily activities • Environmental challenges
6. The reusable pad initiative	• Fear of making use of something new and different • Effectiveness and experiences of using the re-usable pad • Recommendations with regards to using the re-usable pad
7. Recommendations	• An all-inclusive approach • Better accessibility to re-usable products and proper facilities

Each theme generated from this study is presented with the sub-themes and is supported by quotes from the transcribed interviews and further substantiated with literature from the literature review.

3.6.2.1 Theme 1: Experiences during the onset of menstruation

The first occurrence of menstruation usually indicates when a female has reached the climax of puberty. This is known as menarche (Zastrow & Kirst-Ashman, 2013:270) and can be associated with the chronosystem, when taking the ecological systems approach into consideration, as this system describes the time dimension and includes bodily changes that might occur with the aging process (Ryan, 2001:2). Puberty and menstruation as a part of this, is a part of development and growing up and is inevitable. Despite this, each person experiences it differently and are affected by it in different ways.

During data analysis it became evident that each participant had a unique experience during their first period, but some common themes were identified. This influenced their

perception and future experiences towards menstruation. This theme focusses on the experiences of participants during the onset of menstruation and consists of two sub-themes, namely readiness for menarche and the source of support and education during menarche.

Sub-theme 1.1: Readiness for menarche

While some participants reported to being prepared for menarche, others stated that they were not, which led to additional implications. Participants that had a positive experience and felt prepared provided the following responses:

> *"Okay I had my period when, I think I was older than my peers because I was 16 but I think most of my peers started at 12, so I knew what menstruation is, so I was not surprise and all that, plus my parents told me that, actually they did not tell me, they were so amused that at my age I have not had my period, so when I got my period at age 16, it was something like it was normal." (Participant 1)*

> *"I had a really advantage, I was advantaged because of I stayed with my aunt and her three daughters so they are all ladies in the house so growing up seeing how, okay, this is how they do it, they shower and you know all those kinds of things, when I started having my periods, I didn't even bother myself to know the things about using the pads and you know all those kinds of things, so I was just copying what I saw. I was excited, like wow, actually this makes me feel like I'm now matured, I am a girl. I am a woman you know." (Participant 3)*

From the above-mentioned quotes, it is evident that those who had support, either from their parents or other female family members, felt prepared and ready for menarche, eventually resulting in a more positive experience. This shows the importance of having support structures within the microsystem of individuals. According to UNICEFF (2019:13), support is one of the factors that is crucial within the menstrual management process. It has been found that environmental factors including nutrition, stress and physical exercise can influences the onset of puberty (Louw & Louw, 2014:324). Other participants had fewer positive experiences and felt less prepared as seen in the following statements:

> *"My body started changing, I was not feeling well and my stomach was so painful and I was not feeling myself, like I was feeling something was changing in my body, I was not understanding what was happening, I was just thinking that maybe I cut myself and why is this blood coming out? I was not understanding where it was coming from. I just knew that my body was changing. I was scared." (Participant 4)*
> *"I was in grade 6 or 5, it was horrible, it was horrible because I didn't know what was happening, I taught I was going to die, it was just horrible, I mean I was young, I didn't know who to talk to, stuff like that. I was not prepared at*

> *all. When I got my first period, I felt so insecure because I was not comfortable and I didn't know it happened to everyone and all women, so I thought I am the only one, also I thought it is forever, like non-stop, so I started panicking as I thought that I was going to live like this for the rest of my life, so jah it was stressful and I was so young. I didn't know what was happening and I didn't know what pads and tampons were and it's funny because I have always been seeing them at shops, you know, so I never actually knew what those things are. I felt like it is never going to stop. You can hear that I went through the most. Then the pad made me feel more comfortable and during the day I could face the day even though I was still a bit shy about it." (Participant 5)*
>
> *"I was very scared; I was shocked, I was afraid because I had heard so many stories about menstruation and I did not know whether they are true or not but I was scared that was what is happening to me because I have never had shared that in my life. I was scared, I didn't know what to do, I did not know who to ask." (Participant 2)*

In contrast to the first two participants who had support and felt prepared for menarche, three of the five participants had less support and education in preparation for menarche, which left them without understanding of what was happening to them and feeling shocked. This phenomenon is known as menarche shock and is supported by several other studies that indicate that schoolgirls in low and middle-income countries, for instance, experience menarche for the first time in school environments and do not have any materials or support such as a teacher, mentor or role model to help them understand what they are experiencing. This causes 'menarche shock' and brings along feelings of shame and fear, especially to seek help when they need it the most (Chandra-Mouli & Patel, 2017 in Tellier & Hytell, 2017:16).

During the study some participants expressed similar experiences due to not being prepared. This can be due to not receiving support or being educated on what is happening to them and once again the importance of having reliable and trusting sources of support and education within the immediate environment of the individual (micro system) is emphasised. Having adequate knowledge in order for individuals to be prepared for menarche is important. This brings the discussion to the next sub-theme of sources of support and education during menarche.

Sub-Theme 1.2: Sources of support and education during menarche

Education and support are especially important during menarche and different results were obtained within the study with regards to this aspect. A lack of this could explain why some individuals felt unprepared, as those who did receive support and education,

had opposite experiences of feeling more prepared. This sub-theme is supported by the following quotes from participants:

> *"Definitely my mother. My sister jah but not that much." (Participant 1)*

When asked how it made her feel to have that support, she stated the following:

> *"At the time I didn't make much of it but now I think it was a good thing like it was nice, it was okay, nice actually." (Participant 1)*

> *"It was, am, my teacher, am, oh, the teacher, ah, that I spoke to. She confirmed everything for me that every girl goes through what I was going through. Where I am growing up it was always known that if a girl, am, sleeps with the boys, gets menstruation, so that was why I was actually scared to share it with my older sister. I did not want them at home to think that I am sleeping with boys but my teacher made it clear for me that no, it was not a matter of that, every woman in their lives they go through such a period that they would go through menstruation once a month. She tried to guide me. The teacher at school would buy me the pads. it's only the teacher and the friend of mine and later on, am, when I turned, I think about 17, there is a cousin of ours that stays close to where we stay that spoke openly about that because I had an embarrassing moment where I stood up and I had messed my dress and she quickly put me aside and told me what was going on and now it has been easier for me to speak to her when it comes to things like menstrual cycles and pains and things like that. Some girls at school are supportive, especially those that have been through the same as me." (Participant 2)*

> *"At home, it just made me feel that I had support, because if I experience something, I just asked them, just hearing how they are doing it, so I didn't really have to ask but the support was there, I knew that they knew I am on my periods and they'd share, okay, this is how we use to do things and I just follow what they do, so it was easy for me. Mainly, I can say that it was my aunt because I told her, you know this is what is happening." (Participant 3)*

Similar to participant 2, she also explained that the girls in her class supported each other by saying:

> *"We all supported each other." (Participant 3)*

> *"My grandmother just bought me a pad and showed me how to use it, she was not explaining, my grandmother was the one who was helping me there, because I didn't know my mom and my mother died." (Participant 4)*

> *"My mom and the lady that works at home and my aunt, because I have a lot of aunts since there is a lot of women in the family and school but at school, they gave me the info and only after I already knew about it from the family, so I was already comfortable with the knowledge but not physically. They taught me how to dispose of the pad and stuff like that." (Participant 5)*

Once again it became clear that not all the participants had proper support or education before or during menarche which created misconceptions and several other

psychological implications such as experiencing fear and confusion. The support that others received was very limited for example when participant 4 explains that her grandmother did help her but did not explain to her what is happening to her and why. Those that did receive support and education such as participant one and three stated that they were prepared for menarche. A direct link can thus be made: if individuals are educated and supported whether by family or teachers, they will be prepared for menarche. The unavailability of support and education will cause individuals to be unprepared and experience several challenges. Although initial support and education was not necessarily available for all participants, after some time some source of support or education did became available and proved to be beneficial to most of the participants. Taking the ecological systems approach into consideration, these sources were mostly within the individual's immediate environment (the microsystem), not necessarily only within the family but also at schools such as teachers or peers.

Literature indicates that little or inadequate knowledge serves as a significant barrier to proper MHM. In most developing countries and especially in rural areas it has been found that females are not educated on reproductive health, more specifically menstrual health, causing them to be physically and psychologically unprepared and unaware of menstruation occurrence and the different important aspects of managing the process adequately. This causes them to experience many challenges at home, school and the working environment (Kaur et al., 2018:1).

Due to cultural beliefs, many females are unprepared and not adequately informed about menstruation realities. This causes them to feel abnormal and creates fear, confusion and embarrassment especially about menarche and they are most probably due to develop negativity towards menstruation. From this, it is once again clear that education plays a crucial part in effective MHM. Educating males and females on menstruation can help to eliminate false beliefs (Kaur et al., 2018:1). Most teachers are of the opinion that it is not their place to teach girls about menstruation and report to have inadequate skills to do so. It has also been reported that it becomes difficult when a male teacher has to take on this role (MEDSAR IMCC, 2015 in Tellier & Hytell, 2017:16).

Although most of the education originated from within the microsystem of the individuals, differences between the original experiences of participants and their current menstrual experiences were recognised and therefore also have to be discussed.

3.6.2.2 Theme 2: Current menstrual experiences

This theme focusses on the current menstrual experiences of participants since it has proven to differ from initial experiences. This can be due to a number of reasons and can also be related to physical and psychological changes that might occur with development as described by the chronosystem when taking the ecological systems approach into consideration (Ryan, 2001:2). This theme will include six sub-themes namely the normality of experiences, psychological implications, social implications, physical implications, current sources of support, as well as being able to talk about menstruation.

Sub-theme 2.1: The normality of experiences

During the study it was found that most participants considered their current menstruation experiences to be normal and manageable, while others were concerned about abnormalities and irregularities. Due to them not being educated, they knew something was wrong, but they did not know why and that it was a part of reproductive health. Participants described their current menstrual experiences in the following manners:

> *"I am not sure should I say a lot has changed or something but since I am older now, I am experiencing irregular periods like often. I am even starting to think that something is wrong, like, I will get my periods, it's been, it's only this past three months that I've got my regular periods but ever since I, above 25, I will get my periods late sometimes, sometimes I will not get them at all, like, I will skip a month and sometimes it is not okay but, jah, irregular periods, I am experiencing irregular periods often" (Participant 1).*

She mentioned again later on that:

> *"Hence, I told you I am not sure, yes I mentioned that earlier that sometimes I even think that something is wrong with me, because I am 30 years old, I am not having baby so, I am not sure about my health but I think I am not okay, I don't know. Ah, it's stressful that one." (Participant 1)*

> *"I feel pain sometimes a day or two before my period. Sometimes it lasts for till, the first day, the day before the period and the first day and the second day just the morning, am, and a bit of nausea but, am, other than that, am, it's now as I mentioned earlier it's four to five days instead of the normal three days that I usually got. The fourth day would be a day where I could use a lighter pad or a lighter cloth but now recently, now that I am getting older it's been heavier and it's been more days." (Participant 2).*

In contrast to the above two participants, she further stated that:

> *"Now it is very manageable and I am very comfortable knowing my months, okay, this is my months, I know that it can give me a sign that maybe I have pimples or my breasts becomes so big and heavy and I know that okay I am close to my menstrual cycle time, so I am managing. I don't feel like eating, I lose my appetite." (Participant 2)*

This relates to premenstrual symptoms (PMS) that is commonly experienced by menstruators. The symptoms are mostly experienced in the days before the bleeding occurs and includes a combination of emotional, physical and behavioural symptoms that occurs due to an increase in the brain chemical known as serotonin and the reproductive hormones, such as oestrogen and progesterone. Symptoms vary from person to person and also between each menstrual cycle. It is mostly experienced on a mild to manageable level. Common symptoms include irritability and mood changes, finding it difficult to concentrate, changes in sleeping patterns, feeling tired, feeling bloated, retention of fluids, appetite changes such as overeating or experiencing cravings for certain foods, constipation or diarrhoea, vaginal odour, gaining of weight, changes in skin, swelling and tenderness of breast, headaches, pain during ovulation and spotting (Begum et al., 2016:309). Participants continued to explain their menstrual experiences as:

> *"Now it is just taking 3 days with my period, I am not taking 5 or 7 days, it is just 3 days and it is normal, I don't have a pain, I don't have a stomach cramp, its normal. My menstruation is not giving my problems anymore like last year, it can come twice in two weeks but now I can see that it is normal, it's normal menstruation." (Participant 4)*

> *"My current experiences are changes in cycles, I do not like that, they change unexpectedly or the period would go for too long, then I would be worried and I also get cramps, the cramps are horrible but know they are better because I use to take some kind of medication and it took something out and now, I don't get them anymore, the period pains, but I remember the pain, it was horrible, it was so horrible." (Participant 5)*

Thus, it can be seen that each person experiences menstruation differently (Family Planning Victoria, 2021:1). Each menstruation period commences approximately every twenty-eight days if not impregnated during the cycle (Sumpter & Torondel, 2013:1). It usually lasts from three to seven days. Between 50 ml and 200 ml of blood is discharged with every menstruation and females have approximately 450 - 500 cycles over an average of 38 years of their lives (Punzi & Hekster, 2019:2). Twenty percent of females experience irregular cycles that vary from being longer or shorter (Knudtson & McLaughlin, 2019:1). Geographical conditions, racial factors, nutritional standards,

environmental influences and indulgence in physical activity can all affect the nature of the menstruation cycle (Sumpter & Torondel, 2013:1).

It is not uncommon for females to experience abdomen, lower back and thigh discomfort during menstruation. Cramps are caused due to the muscles of the womb contracting and then relaxing to enhance the shedding of the uterus lining (Nwadike, 2021:1). Other common menstrual disorders vary from experiencing heavy, painful or no menstruation at all. Several medical complications can also be associated with menstrual problems (Begum et al., 2016:309).

It is clear that while some experienced their menstruation as normal, others experienced abnormalities. Once again considering being uneducated by structures within the microsystem on menstruation or being informed in this regard, could explain why participants were unaware or ignorant of why they are experiencing abnormalities. The concern and uncertainty that came with this can be associated with psychological implications that were experienced. This brings the discussion to the point of psychological implications as another important sub-theme.

Sub-theme 2.2: The psychological implications

During the study it became evident that menstruation and the different aspects thereof can cause psychological implications for individuals. This sub-theme focusses specifically on the psychological implications that were experienced due to a number of different reasons related to menstruation and the managing thereof. When individuals were asked about how menstruation affected them on a psychological level, the following response was provided:

> *"It has affected me emotionally since I was always worried what is going on, what I am going to do, where I would ask and who I was going to talk to. I was lonely because my grandmother was too old and I could not have that conversation with her." (Participant 4).*

This relates to the psychological impacts as a result of poor support and education. Some participants also expressed that they were psychologically affected when other people within their microsystem experienced menstrual management difficulties:

> *"It's heart-breaking because, I once saw one of friends with a stain and it's not nice, like amongst so many people, I am not sure was it because of a lack of sanitary towels or because she was not aware that it is that time of the*

> *month or something but seeing someone on her periods without a sanitary towel or pad, it's heart-breaking because it's not nice." (Participant 1)*
>
> *"It is confusing and depressing at the same time. The reason why I am saying these two things, the confusion comes from, I never know why it's at the beginning of the month sometimes, I never know why it's at the end of the month sometimes, so that's the confusing part, the depressing part is it affects my social, I think we spoke about that, the social things, that I cannot play with other kids, I cannot mix with other kids because I feel a little bit, am, withdrawn, so it's depressing, it's also confusing" (Participant 2)*
>
> *"I feel like I am more sensitive but I don't have to get like moody because I know it's only for two days, the first day and the second day and after that it's fine." (Participant 3)*
>
> *"Different times, different moments, different feelings, sometimes I feel like why do we have to bleed it makes me angry sometimes but then at times when I am sexually active and I get my period it's like a relief, so it's mixed emotions, psychologically, I just feel that it's not fair sometimes for girls because we go through so much and we still have to bleed for a couple of days of the month, every month, so it becomes stressful. The day before I start with my period, I become really productive, I will clean and cook, do housework and be in a good mood and then the next day I started and I am just like "Godzilla."*

She also states that:

> *"I need to smell good because the thought of it makes me so insecure to a point where I think I smell bad even though I don't." (Participant 5)*
>
> *"I can say is during my periods I am moody, so I tend to be just close in my space, like I don't want to interact with too many people, because I am moody, I am afraid that I am going to say something that is going to not sit well with you, so I choose to hold it back, so I can say maybe that's how it affects me socially sometimes." (Participant 1)*

The psychological implications of menstruation that were experienced included feeling worried, sad, lonely, angry, experiencing mixed-emotions, being stressed and moody, experiencing feelings of unfairness, confusion, sensitivity and wanting to withdraw. More positive psychological related experiences included feelings of relief and being more productive.

Psychological implications can also be linked to PMS, as mentioned earlier. As seen here, menstruation can ultimately have major implications for the overall functioning of the individual and can affect them not only on biological and physical levels, but also on psychological and social levels within the different levels that are identified within the ecological systems approach (Lahme & Stern, 2017:2).

Sub-theme 2.3: The social implications

During data analysis, it was found that individuals did not only experience psychological implications, but also socially related difficulties during menstruation management and it included implications such as isolation and withdrawal as well as bullying. The following answers were provided when participants were asked about the social implications of menstruation:

> *"As I said earlier that there was a time when I messed up my dress and some of the girls laughed at me and made fun of me, ah, the boys always make a joke, it's not just me, I am just talking about any other girls that I've seen and I always feel for them. The embarrassment also comes to me even if it's not me because I know exactly what that girl is going through. So, some people make us feel bad and some make us, ah, acknowledge the fact that we are going through the same thing." Further on, she states that: "Every time I'm on my period, I love being probably at home than playing around because you never know what might happen, so I prefer being around home so that I don't mess myself up." (Participant 2)*

She continued to explain later in the interview that:

> *"It's not nice to be teased, am, also I feel that with periods, with having periods you are no longer free as I used to be, I need to watch myself, I need to watch my actions, I need to watch what I do and when I do it and how I do it, I feel without freedom, on that week the freedom just goes away." (Participant 2).*

> *"It makes not want to interact with people a lot because I get irritated, I just don't want to talk, I don't feel like eating and I don't want to be asked why I am not eating, why this, why that." (Participant 3)*

When asked if she ever experienced being bullied or teased, she answered that:

> *"The guys would laugh or be like she has blood on her and then they'd know that you are on your period but it was not really a big challenge but it did make you feel a little uncomfortable." (Participant 3)*

> *"Like my boyfriend is too annoyed when I have my period, he always tells me: "Why is this always coming?" Maybe my period can come twice in a month and then he asks me again and I just tell him that it is normal, it is normal for women to get menstruation. The men don't always understand. I was scared to meet with the boys because my grandmother told me that if you have your menstruation and you sleep with a boy then you will get a baby, I was scared, I went over to my friend and told her to not do that and to not date guys because you will get the baby." (Participant 4)*

When asked if she ever experienced being teased or bullied, she stated that:

> *"I never experienced something like that but I saw my friend at school experiencing that, I was scared, the boys were laughing and the other girls were laughing, it was embarrassing, to see another girl, something like that happening to her. It was painful, I felt like I wanted to cry, I was trying to talk to them and say: "Guys stop it and that we have to help her." (Participant 4)*

> *"It doesn't really affect it that much, unless I'm around people that I don't know, then that's when I become worried that, you know, I might mess on myself or that's when I feel like "is my pad sitting right", if it's not sitting right you become uncomfortable and now I am around people I'm not use to, so I can't just ask, usually I'll ask my friend to please check my back because I'm that comfortable with the people that I know, so it basically depends who I am around of. And not socialise, that's with the first day, so now I have to settle in it. I just want to isolate myself; I just want to be in my own space because I'm not trying to have people's mood affect mine because mine are all over the place." (Participant 5)*

When asked if she was ever bullied or teased, she answered that:

> *"The only person that use to tease me was my little sister because she has not started her period and she did not know what it was so she always said that I was wearing diapers." (Participant 5)*

Social implications that were experienced by participants as a result of menstruation included feeling bad and experiencing feelings of embarrassment, irritation, uncomfortableness, fear, emotional pain and worry when in interaction with others. Feelings of other's not understanding was also mentioned. A lack of freedom, withdrawal and being bullied or teased is other social related implications that were experienced by participants. This refers to the interaction that takes place between peers and other structures within the microsystem and can therefore be identified as the mesosystem according to the ecological systems approach. A positive social experience that was mentioned is the acknowledgement that sometimes exists between peers regarding menstruation.

During menstruation, females are limited in their daily activities and they are often scared to go to work, school or engage in social activities within their micro- and meso systems (Kajumba, 2020:1) Adolescent females often get challenged with stigma, harassment and social exclusion (UNICEF, 2019:13). In general, males have poor knowledge on menstruation, causing them to bully and tease girls (UNICEF, 2015 in Tellier & Hytell, 2017:16). Ignorance on menstrual needs often also result in bullying by male students and teachers (Lahme & Stern, 2017:4). Not being able to manage menstrual hygiene, can cause various physical as well as social implications for females and influence their quality of life (Lahme & Stern, 2017:2). This mostly occurs within the more immediate environment of individuals and interactions with structures within this system. It is therefore a matter that should not only be considered within the health industry but also within the social work field.

Lastly, menstruation also impacts the individual on a physical level and will now be discussed in the following sub-theme.

Sub-theme 2.4: Physical implications

Menstruation also affected participants on a physical and biological level and also relates to the concept of reproductive health care. The following health related implications were reported by participants:

> *"I am 30 years old; I am not having baby so, I am not sure about my health but I think I am not okay, I don't know." (Participant 1)*

When asked if she receives health care for these concerns she answered:

> *"No." (Participant 1).*

> *"They do give us injections for us to not fall pregnant and I don't know how will that affect my health but I hope this is helpful because I did have sexual intercourse with my boyfriend, I understand that, he told me that we were supposed to use a condom but he told me that it broke, but I don't know." (Participant 2).*

Another participant also mentioned that when she had to use re-useable cloths, she:

> *"had some wounds in between my legs because you'd use a lap and then the blood would just take over and I don't remove it when I am supposed to remove it and then I get something, like in between the legs, like sores because it is soft skin there so jah, I think I did experience it once and now I'm realised that okay look I need to have more so that I won't experience the same thing that I'd experience." (Participant 3).*

> *"It's not like last year that was painful, my stomach was painful and always when I got my period I had period pain, I didn't know why but now I don't have the period pain, I just get normal period. My body has always changed, my breast, when I am on my period my breast is painful, it is only my breast that is sore, I can't even touch it." (Participant 4)*

Participant 4 also stated that:

> *"I was having a rash in my vagina and it was so painful. I am being treated because they say if you wait too long to treat a STI can become HIV/AIDS but when I found out that I have an STI I just went for treatment. Every time me and my partner are not using protection, after three weeks I am going to the clinic and checking myself and checking that I don't have an STI, HIV & AIDS, all these sicknesses, I am checking to know what is my status." (Participant 4).*

Not being able to manage menstrual hygiene can cause various health related problems. STI's has proven to have major reproductive health implications if not treated appropriately. Sorma (2018:4) suggests that bodily fluids, including menstrual blood, can

transmit sexually transmitted diseases such as Hepatitis B and HIV. It is therefore crucial for hands to be washed regularly and thoroughly with soap and water during changing practices (Sorma, 2018:4). It is explained that during menstruation, the cervix opens for blood to pass through from the uterus, allowing bacteria and viruses to travel into the top part of the cervix and uterine wall. The vagina has a protective acidic pH that protects it from certain STIs. During menstruation, the levels of this however decreases and the vagina becomes more alkaline, making it easier for microbes to grow in the reproductive tract. Menstrual blood is considered to be the perfect breeding opportunity for bloodborne sexually transmitted infections like HIV and hepatitis to grow. Contracting STIs and bacterial infections such as chlamydia and gonorrhoea during menstruation poses a somewhat larger risk. Once they travel beyond the cervix, a more dangerous infection of the reproductive tract, known as pelvic inflammatory disease, can affect fertility. Implementing preventative measures while having sexual intercourse during menstruation, such as using condoms, is therefore also still encouraged (Franklin, 2018:2). In contrast to this, many sources argue that STIs, more specifically HIV, cannot be transmitted through menstrual blood. It is stated that contact with menstrual blood does not pose any risk for HIV transmission. However, once in contact with harmed skin or once swallowed, it is possible but still considered as unlikely. It is also stated that due to HIV treatment that is effective, the virus is mostly undetectable therefore untransmutable, if the person adheres to the medication (Webb, 2019:5).

Several studies indicate that poor menstrual hygiene, based on personal hygiene or products used can cause an increase in urogenital infection levels (Tellier & Hytell, 2017:9). If MHM is neglected and adequate sanitary measures are not taken, great health risks including toxic shock syndrome, reproductive tract infections (RTI), and other vaginal diseases can be experienced (Kaur et al., 2018:2). Common symptoms of RTI include itching of the genital area, pain in the back and abdomen, genital pustules and unusual discharge from the genitalia (Sorma, 2018:4). Sources also indicate that unhygienic menstrual management practices can increase the risk of infertility (The Economic Times, 2021:2). However, there seems to be no consensus on a standard for adequate personal hygiene. Some authors believe that certain products (such as disposable pads) or hygienic practices (such as, perineal washing before and after intercourse) are essential, whereas others believe differently (Tellier & Hytell, 2017:9).

From the study, it seemed as if some participants were more aware of their reproductive health, while others were not. This can be as a result of having poor knowledge and being ignorant, due to not being educated or supported during initial stages of menstruation occurrence from structures within the microsystem of the participants. This appears to result into neglect or unawareness and affected the physical well-being of participants and the way in which they take care of themselves. Physical difficulties that were being experienced included: unawareness of reproductive health and having limited knowledge in this regard, experiencing rashes or sores due to poor MHM, physical body changes due to PMS and having STI's and managing this during menstruation.

Nevertheless, it is clear that the influential factors of current menstrual experiences differed between individuals. Despite this, individuals were severely affected by this on physical, emotional, social and psychological levels. It is therefore clear that menstrual management is a health and social issue, and is crucial to consider in the field of social health care. Having support during menstruation is once again emphasised and it also influenced the current experiences of participant. The current sources of support will therefore now be discussed.

Sub-theme 2.5: Current sources of support

As mentioned earlier, participants did not necessarily have proper support and education during menarche but at later stages some support became available. It therefore differed from initial sources of support. However, it remained to be within the immediate environment of the participant, so therefore within the microsystem according to the ecological systems approach. Participants reported to having the following current sources of support:

> *"It is a normal support from my boyfriend, because I, that is someone that is close to me. If I need some sanitary towels and I run out of it, I will just ask him, but he just pick one from the shops for me and that's it." (Participant 1)*

> *"I still speak to my teacher and my cousin, am, and they are really open about the topic and they are the ones because I don't have any money, I am still at school, they buy me the pads, yes, but I am not really full aware, I would love, in as much as at school there is a topic now about, am, your body, there is that class about your body, but you'd find that it's not taken very well by all of us, it's sort of an embarrassment, some people don't want to talk about it, some do want to talk about it because they've been through it, some don't want to talk about it because they haven't been through it, so it comes with a mixed of emotions, so it's never really a topic that everybody understands, I want to know more about what menstruation is all about." (Participant 2).*

A need for education is once again expressed. She further stated that:

> *"My teacher has girl children, so she's been someone that has been very supportive, so she always says that whenever she is buying pads or things that are needed by girls; she also buys me some stuff." (Participant 2)*

> *"Nothing, it's just normal. I know it's my responsibility." (Participant 5)*

From the research it became evident that as participants grew older, some of them become less reliant on the support of others and mostly relied on themselves as it became more manageable. According to the ecological systems approach, this associate with the chronosystem that explains that changes in the way things are experienced might occur as individuals grow older. For example, when participant 5 expressed that she does not currently rely on any support and that she is individually responsible for her menstrual management.

Being able to talk and express oneself in terms of menstrual experiences, is an important part of feeling supported, which brings the discussion to the following sub-theme of being able to talk about menstruation.

Sub-theme 2.6: Being able to talk about menstruation

During the study, it becomes clear that being able to talk and express oneself in terms of menstruation experiences and needs is also important but unfortunately this was not always available. When participants were asked if they talk to anyone about their menstrual experience the following findings were obtained:

> *"Yes, my boyfriend." (Participant 1)*

> *"Yes, I have someone that I can speak to. I still speak to my teacher and my cousin, am, and they are really open about the topic. But you must understand that a whole lot of time we, in as much as we are at school, we are mostly at home and I felt that the sister that I stayed with is not really open about the topic, in as much as it took me some time to speak to her about it. When I told my sister about my problem with regards to menstruation, she buys me pads but she's not open about, ah, being on periods and discussing the pads and how to use them Whenever we speak about things like that or whenever I am having problems at home I also go and speak to my teacher. It is necessary for any young girl to have someone to speak to with regards to menstruation and periods." (Participant 2)*

She continued to explain later on in the interview that:

> *"I guess this topic really is difficult to share, especially in the rural area. So, for our culture I must say, black people, we are not as open as it is probably with the coloured girls and the white girls that I've seen and, in my school, there are some coloured girls that stay in the area, they talk about, they've*

> *shared, but with us culturally, it's not, something that is not shared, it's just there, jah, so I wouldn't say there is a certain belief or I don't know, it's just not being shared." (Participant 2)*

This relates to the influence of cultural beliefs and will be explained in further detail later on. She also stated that with regards to not being able to participate in sports while being on her menstruation that:

> *"Having being able to open up and speak to my teacher, I go to her or to the leader of that certain sport and let them know my situation at that moment, why is it that I am not willing to participate. Having been able to speak up for myself and say this day or this week I will not be able to do A, B, C, D, then they would understand. I've managed to explain to those that are in charge, it has been easier for me." (Participant 2)*

When asked what advice she would give a friend on how to improve her menstrual experiences she stated the following:

> *"I would advise her to go to someone older as well; I would also want her to open up at her home as well for someone to help her. Now they are staying with the father, so it's difficult for her to speak to the father about menstrual information, so she came to me and then I took her to my cousin to speak to my cousin and now she's finding it difficult to speak to her father regarding buying, him buying her pads, she doesn't know how to start the topic, am, because she just started, she went to my cousin and spoke to my cousin and luckily my cousin, we all stay in the same township, she had said that she will find a way of speaking to her father in terms of providing for her." (Participant 2)*

> *"I just feel I don't want to talk and people just being people, then I'll be like you know guys I am feeling this because I am on my periods, just to make them aware. I want them to know it's because of my periods, so that they will understand better. I don't feel like eating because when they ask me, I'll be like okay it's because I am on my periods and I feel very bad because I am on my periods." (Participant 3)*

When asked what advice she would give a friend in order to improve menstruation she said that:

> *"If they don't have money to go to their parents or someone in the location that can help them or at school that assist people that can't buy it." (Participant 3)*

> *"My aunty that you know of, it's the one that I am open with, that I talk to and tell everything. Jah, she guides me, last time I was having my period 3 weeks longer and I did not understand what was happening and while I am getting me period, she just told me to take a grandpa and warm water and drink it and when I do it, my period stopped, I was scared that something was wrong with me, but that one just told me to take a grandpa and warm water and drink then you will see that your period will stop. I started talking with my aunty, that one is too friendly, she is the one who can explain everything, if I don't understand, I go to her and ask her what is this and this and she tries to explain this is that and this is what you do. I feel better because it is safe to*

> *share your problems with someone you can trust. My grandmother was too old and I could not have that conversation with her." (Participant 4)*

She also said later on that:

> *"I just try to explain boyfriend that this thing is a normal thing, all women get this period." (Participant 4)*

> *"My doctor, the safest person to go to. I didn't know who to talk to. For black people it's very weird, we don't have such conversations, it's like the sex talk, we don't have such conversations until it is like there. Black people have a thing of saying periods. It's weird." (Participant 5)*

Although challenging due to a number of reasons such as cultural beliefs, all participants were able to talk to at least to one person within the microsystem of the ecological systems approach, which refers to the closest system of individuals (Ryan, 2001:2). They seemed to realise the importance of having support and being able to express and talk about menstruation, the challenges that are experienced as well as the management thereof.

As part of managing and coping with menstruation, it is important for individuals to be able to express themselves in terms of experiences and needs and they should have a reliable support system that they can talk to when necessary. One of the most common misconceptions within South Africa regarding menstruation is that it should be kept hidden and that one should not talk about it (Chirwa, 2014:1).

As mentioned before, having a poor support system that is unable to educate individuals and provide knowledge about menstruation and managing it, can also affect menstrual experiences. The researcher was therefore interested in finding out what participants' knowledge of some important terms were and will now be discussed within the following theme.

3.6.2.3 Theme 3: Concept of reproductive health and menstruation

This theme focuses on the concept and knowledge of participants on reproductive health and menstruation that forms a part of this, as well as the different aspects thereof. This is a direct reflection of how participants perceive menstruation and the management thereof. This theme has been divided into three sub-themes and includes: poor or only

basic understandings as well as a connotation to maturity or being able to reproduce. The sources of knowledge will also be discussed as a sub-theme.

Despite its importance, menstruation is often undervalued. As a result, females are often left uneducated about the menstrual cycle that can eventually affect their self-confidence, as well as the way in which they take care of their own bodies and make choices throughout their entire reproductive lifespan (Punzi & Hekster, 2019:1). Studies also indicate that females have very little knowledge about health risks that can be experienced due to ignorance about necessary hygiene management during menstruation, including tract infections that are usually contracted. Knowledge about the different products, how to properly use and dispose of them and the accessibility thereof also creates additional barriers (Kaur et al., 2018:1). Furthermore, it has been found that discussions about menstruation management are not openly encouraged in most countries (Mohammed & Larsen-Reindorf, 2020:1). A study in Malawi, Kenya, Uganda and Ethiopia found that mothers and teachers felt uncomfortable to discuss menstruation with younger females and unintentionally instilled misconceptions (Chandra-Mouli & Patel, 2017 in Tellier & Hytell, 2017:16).

Sub-theme 3.1: Poor or only basic understandings

Understanding not only menstruation, but also reproductive health as a broader spectrum and the different aspects thereof is important in order to know how to manage it properly and what practices to implement when doing so. When participants were asked what their understanding of reproductive health was, the following answers were provided:

> *"I have no idea. It has something to do with my menstrual cycle, definitely. But I am not sure exactly what it involves. I don't know." (Participant 1)*

> *"I don't know Ma'am, ah, all I know is that menstruation is when you are on your periods, but I am not sure of what the reproduction means." (Participant 2)*

> *"The way I understand about my reproductive health is everything that is inside of me, so I understand that I am healthy." (Participant 3)*

Participant 5 portrayed a somewhat better understanding by saying:

> *"It is the maintenance of your reproductive organs and your body as a woman generally, so my understanding is that it has to be in a good condition and you have to maintain it so that your whole-body works perfectly and properly in order for it to be reproductive like it's supposed to be."*

From these quotes one can see that most of the participants were not able to provide a detailed description on what reproductive health and menstruation as part of this entails. Most of the descriptions were superficial.

The World Health Organisation (2021:1), states that reproductive health can be defined as a state of overall physical, psychological and social well-being in all aspects related to the reproductive system and not merely the absence of disease or infirmity in this regard. It suggests that all individuals are capable of having safe and satisfying sexual intercourse and that they are able to reproduce when and how they decide to do so. It encompasses various aspects that were not recognised within participants' descriptions of reproductive health.

Menstruation is a part of the reproductive health system and knowledge regarding the concept of menstruation was also specifically explored. The following explanations were provided:

> *"It is a cycle that women go through every month. It has something to do with the reproductive system. Sorry I almost said fertility." (Participant 1)*

> *"I know that when people get menstruation, they get pregnant." (Participant 2)*

Participant 3 provided a little more detail with the explanation of:

> *"Menstruation is whereby I start to get my periods where the blood has to flow and then it takes like certain, every month or monthly thing that it takes certain days that you get your menstruation. As a woman or as girl you have your menstruation. When you get pregnant your menstruation cycle stops." (Participant 3)*

> *"I think menstruation is when your eggs are exiting and going down and then the blood is coming out and you have a pain." (Participant 4)*

> *"Okay menstruation for me is the shedding of the egg that is not fertilised." (Participant 5)*

Explanations of the concept of menstruation that were provided were also very basic. This influences the way in which menstrual experiences are perceived. Participant 5 for example further expressed that:

> *"I just feel that it's not fair sometimes for girls because we go through so much and we still have to bleed for a couple of days of the month, every month, so it becomes stressful"*

It is clear from the above that the understandings of participants regarding the two most important concepts as a part of reproductive health were very basic and participants did not include information as to why these processes occur as well as the importance thereof. It did not seem as if the participants realised what the actual value and importance of menstruation is.

During menstruation, also known as menses, the endometrium (lining of the uterus) is shed via the vagina as the body's way of releasing tissue that it no longer needs. This is accompanied by bleeding (Knudtson & McLaughlin, 2019:1). The menstrual cycle can be defined as a monthly occurrence during which eggs mature, get released and the uterine lining is prepared for possible pregnancy. It occurs due to a complex process that takes place between the ovaries and hormones that is produced by the brain. It is a biofeedback process, meaning the functions of the structures involved are interrelated and affected by each other (Stoppler, 2019:3).

Due to its biological value, menstruation is considered to be a healthy and beneficial experience and females are encouraged to embrace these unique gender experiences. Menstruation is firstly considered as the female body's natural cleanser; as many toxic substances are flushed out of the body through the system, including excess iron that can, in turn, reduce the risk of stroke or cardiovascular disease. This on its own slows down the aging process and enhances life expectancy. Menstruation colour, length and smell can also indicate if something is wrong in the body. Experiencing heavy menstrual flow or no menstruation at all, can for instance indicate heart disease, diabetes or other reproductive health problems. It therefore helps females to be aware of their health (Janelle, 2017:1).

During the first day of menstruation, most females feel depressed, sad and emotional due to the oestrogen levels that are low. After a few days, the oestrogen levels increase, causing endorphins to be released. This makes them feel energised and happy. Since stress hormones are suppressed, it also makes a person feel beautiful and feminine. Many females report that they experience softer and smoother skin, having their pimples disappear and having a "glow". Additionally, menstruation has been considered to enhance sexual pleasure, since the genital area is much more sensitive during this time, causing females to achieve orgasms much quicker. The libido of a female is also more

enhanced during this time. Medical practitioners state that sexual intercourse during menstruation is medically safe. Despite this, many males avoid having sexual intercourse with partners that are on their period (Janelle, 2017:1). According to the ecological systems approach, this affects interaction that takes place with structures within the microsystem.

Some participants did however attach a deeper meaning to these concepts that brings us to the discussion of the next sub-theme.

Sub-theme 3.2: A connotation of maturity or being able to reproduce

Past studies have indicated that some individuals perceive menstruation as a sign of maturity and readiness to reproduce and forms their basis of reproductive health and menstruation understanding and the way in which it is further perceived. Similar findings were recognised within this study as some of the female participants made a direct connotation to maturity and the ability to reproduce when asked about their concepts of reproductive health and menstruation. This is supported by the following statements made by participants:

> *"I am no longer a young girl and now, am, that's what I've been told, that I am now a woman. I might when I am pregnant, sorry, when I am going through menstruation; there is higher possibility that I can be pregnant." (Participant 2)*

> *"It also shows me that I am now matured you know, so I was excited, like wow, actually this makes me feel like I'm now matured, I am a girl, I am a woman you know" (Participant 3)*

> *"My grandmother told me that if you have your menstruation and you sleep with a boy then you will get a baby, I was scared, I went over to my friend and told her to not do that and to not date guys because you will get the baby" (Participant 4)*

Some participants perceived this connotation as positive, while other's experience it to be more negative and perceived it as something bad. In most cases, females only begin to ovulate after menarche, suggesting that they might not be able to conceive for two or more years after menstruation has started (Hyde & DeLamater, 2011:271). Despite this, many cultures still consider the appearance of menarche as an indication of when the girl has "become a woman" suggesting that she can now reproduce, but individual differences do however occur. In most parts of South Africa, the start of puberty is not considered to be something special. The transition to adulthood is however often

indicated by menstruation and celebrated by festivals, rituals and initiation ceremonies including circumcision, despite possible harmful consequences (Louw & Louw, 2014:325). In countries such as Tanzania, menstruation is also strongly related to the indication of the ability to reproduce. Due to this social belief, girls are forced to engage in early arranged marriages and as a result have to drop out of school, are at risk for contracting HIV and other sexually transmitted infections, teenage pregnancies and illegal dangerous abortions, creating additional health risks. These are apart from the many other psychologic implications. In India, similar occurrence was found, where ritual celebrations of menarche including social restrictions such as the girl being confined to a hut or room, not allowed to leave without someone else or touch certain foods. In Malawi, specifically among certain cultures, these rituals also include being separated from others. They, for example, were no longer allowed to share bath shelters with parents, other family members or friends who have not yet menstruated (Lahme & Stern, 2017:2). In South Sudan, only widows are allowed to wear underwear since certain tribes believe that if a woman wears underwear, their husband will die (SNV, 2014 in Tellier & Hytell, 2017:16), making MHM challenging. Most females are afraid to disclose menarche to others since it is associated with sexual activity that is considered to be unacceptable (House, Mahon & Cavill, 2012 in Tellier & Hytell, 2017:16).

Some of the most common misconceptions that arise in South Africa regarding menstruation and MHM includes the following: menstrual blood is dirty, menstruation should not be talked about, menarche is an indicator of sexual activity, menstruation is a sign of disease and the use of tampons can cause the hymen to tear. Most of these myths are rooted in superstition and beliefs that are transferred from older generations. Misconceptions can create challenges for female individuals especially in reaching out for support and the importance of adequate education in this regard is emphasised (Chirwa, 2014:1). Since the macro system is much broader and consist of various different role-players, opinions and understandings, misconceptions can often arise within this environmental level of the ecological systems approach.

The sources of this knowledge and understandings will now be discussed.

Sub-theme 3.3: Sources of knowledge

From the study, so many different understandings regarding menstruation and reproductive health were shared and the researcher was interested in knowing why this

is the case and therefore explored the sources of knowledge and education in order to understand where these understandings and differences come from. When asked where the abovementioned understandings came from, participants answered the following:

> *"I am not sure but I think that knowledge comes from maybe school. I think school jah because I cannot say at home because home, you go there and you tell them what you learnt at school and ten they just emphasise what you have been told." (Participant 1)*

> *"At first it came from my friend because I could not share with, ah, my family members as I stayed with my sister and, am, when I spoke to her because she had already had periods before, so, I had to, am, share with her and then she took me to a teacher in our school that also helped her in terms of knowing fully what menstruation was all about and the teacher said to me I should share with the sister that I stayed with which is my sister, my older sister, if I was afraid I could also share, go to the clinic and share with the nurses at the clinic" (Participant 2)*

> *"It's personally got from my personal experience and then also at home, experience living with my aunt and just ladies in the house, like you know being young, even before I started getting my period, seeing how they do things and how they will get their periods and also going school. I've also learned from High School, that's where you get to know that, okay; this is whereby as a woman or as girl you have your menstruation." (Participant 3)*

> *"School and I got it at home, the ladies that works at home use to talk to me about this because when I was younger it was very weird to me so they just explained to me that as long as you are clean, make sure that you change every day and bath, you know, so that you just maintain the good hygiene." (Participant 5)*

Apart from family members, health care clinics and schools also appeared to be a major source of knowledge which emphasises the importance of the health and educational systems of South Africa and the role that teachers play in this. Once again most of the sources of knowledge was within the immediate environment of participants that represents the microsystem of the ecological systems approach. This is the closest system to the female and it includes structures where they have direct contact within their immediate surroundings for example at home, school or work and it mostly includes family, teachers, peers, community members or caregivers (Ryan, 2001:2). As some of the participant's sources of knowledge were elders and other home role-players within the microsystem, it can only be assumed that this is related to traditional beliefs. Conceptions and attitudes towards menstruation related to a specific culture or religion is known as menstrual beliefs. This forms the foundation of each individual's perception

towards MHM (Kaur et al., 2018:1). More discussions on cultural beliefs will follow later as this is a strong theme that emanated from the data.

Receiving knowledge on MHM is also important and since the study specifically focused on MHM, the researcher was also interested in knowing what participants knew about this and how they practice this important principle as a part of general menstrual management. Participants were therefore also asked about their understanding of this concept and the different aspects thereof.

3.6.2.4 Theme 4: Menstrual Hygiene Management (MHM)

Hygiene management is an important aspect of overall menstrual management and can affect the individual in many different ways if not practised properly. This is however influenced by various environmental factors. This theme focuses on MHM in general as well as the various different aspects thereof and includes sub-themes of: concept of hygiene management, understanding of hygiene practices, understanding of correct disposal of menstrual waste, understanding of MHM needs as well as preferred materials, other additional supplies and the effectiveness thereof.

The concept of hygiene management during menstruation was firstly explored:

Sub-theme 4.1: Concept of hygiene management

Maintaining hygiene is an important part of menstruation management and when not managed adequately and without the necessary education, the individual can be affected in various manners. It was therefore important to explore what individuals understand regarding this concept and if it is applied correctly and with the appropriate knowledge. When participants were asked what their understanding of MHM was, they answered as follows:

> *"Menstrual hygiene simply says that you need to be as clean as you can, like make sure that down there you are clean, you are neat, everything that you do down there is clean" (Participant 1).*

When she was later on asked on what advice she would give to a friend in order to improve MHM she stated that she would say to:

> *"bath, bath, bath as many times as you can during your menstrual cycle, I think hygiene is all about taking care of yourself down there and you need water and soap." (Participant 1)*

> *"It's cleanness during that time of the month, that's my understanding about it; it's knowing how to maintain yourself during that time of the month". (Participant 5)*

When she was asked the same question of what advice she would give a friend in order to improve MHM, she provided a similar response:

> *"Change your pad regularly and bath, don't matter how tired you are, please just take a shower, that's it, you know and just keep yourself clean as a woman, you know you need to feel good and to feel good, you have to look good." (Participant 5)*

One participant did however indicate that she does not know much about hygiene by saying:

> *"Hygiene I don't know much" (Participant 4)*

It is interesting to note that despite participants' limited understanding of reproductive health and menstruation; they presented with a better and relatively good understanding of how to maintain proper hygiene during menstruation and mentioned various valid practices in doing so. It is not clear why this difference was present, as the sources of knowledge remained the same.

Not only menstruation in general, but more specifically menstrual hygiene is a vital component of menstrual health and overall reproductive health. It is also a crucial aspect of consideration to the overall well-being and empowerment of females all over the world (World Vison, 2018:1). The origin of the concept "menstrual hygiene management" can be related back to the exploration of why school attendance and education levels amongst girls were so low and the WASH initiative that was implemented to address this social issue (Sommer et al., 2015:2). After many years, there is now worldwide acknowledgement and mutual understanding of this concept and its importance, since it is being realised that it is far broader than just the need for physical supplies.

The World Health Organisation and UNICEF Joint Monitoring Programme (JMP) for drinking water, sanitation and hygiene, defines MHM as: "Women and adolescent girls that are using clean menstrual management materials to absorb or collect menstrual blood, that can be changed in privacy, as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management

materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear" (UNICEF, 2019:13).

When we look at the definition of MHM most of the aspects were covered within their explanations, except for "having water for washing the body as required and having access to safe and convenient facilities to dispose of used menstrual management materials", which is some of the challenges that will be addressed later on in more detail.

With this, participants also showed a good understanding of hygiene practices that has to be implemented in order to maintain proper hygiene. This forms the next sub-theme

Sub-theme 4.2: Understanding of hygiene practices

Together with a good concept on what MHM is, it was also evident that participants had knowledge of good hygiene practices and how to maintain proper hygiene. This is portrayed by the following quotations:

> *"I, ah, understand that I need to cover up, am, my bleeding either with a pad or a cloth and wear tight panties or underwear and change my pads every time its full and make sure that I get a shower or a bath twice or three times a day if I can. When I am on my period, I try to take a bath twice a day which is in the mornings before I go to school and in the evenings before, ah, we go to bed – that is if there is enough water in the house. I make sure that I take a bath, make sure that I stay clean." (Participant 2)*

She explains that when she changed her pads:

> *"I always go with a cloth and I rinse it a little bit, once I'm done with wiping, I use that cloth and wipe myself and get rid of the disposable pad and put in a new one." (Participant 2)*

> *"You have to make sure that you stay clean, you don't have to take many hours wearing a pad that you are using because of the smell that comes, it's very uncomfortable, it's very strong, whereby even when you get inside the room people would be like something is smelling bad and especially when it is hot, so it's very important that you need to actually, am, make sure that, okay, if you wear it, you can feel it when it's too much blood on the cotton or the cloths, maybe when you are even using cloths or the pad, so you it means that you have to go and shower or you have to go and change it and wear another one that is clean so that it mustn't smell. I always make sure that I must always have pads, it's a must, and when I am buying my toiletries, I must plan ahead so that I don't get my period and then I don't have pads and I don't know what to do. I buy them for myself in advance every month, I must have more than I usually use, because sometimes you can't predict the dates. You need a lot of toilet paper to also clean yourself. Be neat and make sure that you shower in the morning and wash underneath and change so that it doesn't go through your pants." (Participant 3)*

With regards to changing her pads she stated that:

> *"I make sure that I change my pads, I don't let it get too full. I make sure that in the morning around 10:00 or around 13:00 I have to go change it, around 15:00 I have to go change it again, before I sleep, I have to change it, in the morning when I wake up, I have to change it so that I will stay clean." (Participant 3)*
>
> *"Drink a lot of water, clean water, maybe in the morning you have to drink two glasses of water and after maybe one hour you drink another class of water and then at night you drink water, midnight when you go to the toilet, you wash your hands, drink water and go back to sleep." (Participant 4)*
>
> *"I wash my hands a lot, especially when I go to the bathroom and I put on spray, I put it on a lot, I bath more than I usually do or shower more than I usually do and I always carry with me extra pads or tampons, you know just in case and I wear black, black pants, anything dark because I just don't want any incidents that are not necessary." (Participant 5)*

It seemed as if changing pads regularly and bathing/washing frequently were two main topics that were really strongly presented with regards to hygiene practices and how to maintain good hygiene, as most participants shared this when asked about how they manage hygiene during menstruation. This showed that they were aware of the importance of hygiene management during menstruation and know how to maintain it. This indicated that they might have been better educated on MHM by the sources within the microsystem rather than other aspects of the menstrual management, when taking the ecological systems approach into consideration.

The shapes and sizes of the different products vary, but the appropriate changing time for most is between four and six hours in order to prevent leakages and infections (Family Planning Victoria, 2021:2).

When discussing MHM, it is also important to consider menstrual waste disposal as it also influences hygiene on a broader spectrum.

Sub-theme 4.3: Understanding of disposing of menstrual waste correctly

Due to several environmental limitations that were identified within the data, it become evident menstrual waste disposal has proven to be challenging within Ikageng, Potchefstroom, North West province. This will be discussed in further detail later in the

findings. Despite this, participants had adequate knowledge with regards to how to dispose of menstrual waste correctly, supported by the following statements:

> *"I normally wrap them with a tissue, neh, and then I put it in a plastic bag, and then I throw it in the bin." (Participant 1)*

> *"When I am at school, I feel that my disposable pad is pretty full I go to the bathroom, am, when I go to school knowing that I am on my period I usually have either toilet paper or newspaper with me, so I will take it out, fold it and also fold it with the newspaper. I've got a plastic bag that I put them in, so that I can go when I get home then I drop them in the pit, the pit toilet but when I am home, I still fold it and then, ah, same thing and I throw it in the toilet. The used ones we throw them in the toilet, it's a pit toilet, so we throw them in the toilet, so I'm not sure who goes and picks up the buckets, so for instance I know my neighbours, there are people that come and pick up the buckets, I'm not sure, probably it is the same with our home as well." (Participant 2)*
> *"I usually use it in the morning, like when I realise that I am on my period and then in the afternoon, maybe around 16:00 I have to use another one, actually when I get the feeling that there is a lot and that my pad is getting heavy then it is a sign that I need to change and then jah, that's what I do but even when I am finishing my periods I must change it because of it smells, you see, especially when it is hot you must always make sure that you change. After I use them, I throw them in a plastic and then I tie them up and I'll throw them away in the, am, dustbin not the normal one but the one specially for sanitary pads." (Participant 3)*

> *"You change it after, like, 4 hours you change it. I just wrap it in toilet paper safely and put it in a plastic bag and throw it away in the dustbin. Inside the house, the dustbin is inside the house. Those people who work in the municipality, they come to collect it." (Participant 4)*

> *"Am you take it off when you go to the toilet and you roll it up in a tissue and put it in a sanitary bags and put it in the she-bins, that's what I do, as well as with the tampons, but then before I use to flush the tampons or smaller ones, so I learned that at some places the toilets they don't work well, so it's always better to dispose of them as well and I know some people they burn it, they go burn it instead of throwing it into a bin with everything else. It depends on my flow, it depends if I'm having a heavy flow or just a light flow but if I have a heavy flow, I think about five times because I'm very insecure." (Participant 5)*

With regards to the topic of sufficient menstrual waste disposal, one of the participants also recommended that:

> *"To those who got the privilege of using the pad, they must make sure that they doesn't just throw it away wherever they feel like because it has to be hygienic, maybe if you are traveling or don't have a place where you can put the pads, advise them to put it in a plastic and tie it so that the smell doesn't come out and throw them in a bin that is covered and not open so that the dogs don't eat it and to think of other people because it can also bring germs in the house or whatever, so don't just throw it away when you are done and to shower when you feel dirty." (Participant 3)*

Within this study, participants reflected adequate understandings of how to dispose of menstrual waste in a hygienic, safe and dignifying manner. This was despite the fact that several environmental challenges were experienced within the macrosystem of individuals when considering the ecological systems approach. Menstrual waste refers to the waste that females generate during menses. Menstrual disposal practices are usually influenced by the type of products that are used, cultural beliefs as well as the location (Kaur, et al., 2018:4).

Most of the participants did not seem to realise that MHM needs are far broader than just the need for physical absorbents which brings the discussion to the next sub-theme.

Sub-theme 4.4: Understanding of MHM needs

According to the literature as discussed in chapter two, MHM is a very broad concept and consists of many different aspects. Participants did not appear to share this understanding and provided very basic answers when asked about their MHM needs:

> *"The pads, maybe for hygiene, soap, jah, and a cloth." (Participant 1)*

> *"Pads, comfortable underwear, I would say pills for the pains that I usually have before the period and probably a secretly bag that I would hide in my backpack for school like something like a pencil case of a sort that I will put my pads that I will always have on my backpack with me whenever I am going to school because that would help on some days probably if I have forgotten pads at home or overflowing, ah, a bag, a little bag where I can put like my change of, am, pads and probably a cloth that would be damp for me to be able to wipe because not all the schools, especially my school that I go to, does not always have toilet paper in the toilets. As I said not much as I would like to have, it's not much. I'll really love to get lessons on menstruation as a whole. In as much as I've been through it the past two years but I still want to understand more about menstruation." (Participant 2)*

This is also another reflection of the very limited education that participants received on reproductive health and menstruation. Only when she was asked if she doesn't think she will need water and sanitation as well she answered that:

> *"Water or a tank or something would really help. The water, the toilets, the bathrooms, the enough necessities" (Participant 2)*

> *"I just need to make sure that I have my pads with me, I just need to have the pads. I actually need a lot of toilet paper, I forgot, because when you are going to the toilet there is a lot of blood coming. I have to be comfortable. I think I need to be healthy and drink a lot of water since it is healthy. I feel like it is very important to educate, especially young people, to educate them on what menstruation is and then those that are also sexually active, they need to be educated that when you are close to your periods you mustn't have*

> *intercourse and all those kinds of things because they don't know how it damages them. I can say that I wish that especially people with a poorer background that doesn't have access to pads that they can be educated regarding how to use the cloths, how to change it to avoid smells, how to throw it away, how to wash it, that you have to tie it in a plastic and put in a bin outside of the house because it smells." (Participant 3)*
>
> *"I just need to drink water, not take pills or grandpa, just warm water, I need pads and I don't use the toilet paper, I am just using wool when I am going to the toilet and after 3 hours I am taking off that pad and I always drink water to clean my kidneys." (Participant 4)*
>
> *"I need a timetable, a calendar to know when it stops so that I am aware of the approximate time that it would last, I need sanitary pads and tampons, I hardly use tampons, I used to, and I need to bath a lot, like I need to smell good because the thought of it makes me so insecure to a point where I think I smell bad even though I don't, so that's what I need basically, the pills is a must. Sanitizers, I think everyone deserves sanitizers in life, especially with the whole corona situation, yes, that's the only thing and free pads, that would make it some much easier because it's a priority, it's a natural thing for women, so jah, that's the only thing." (Participant 5)*

Participants from the study did not seem to realise that menstruation management is far broader than just a need for absorbents and refrained from taking into consideration that other supplies and facilities that are usually provided by officials within the exosystem such as the government, are also necessary. This portrays a very limited understanding of MHM needs, despite them having a good understanding of MHM in general and how to practise it.

Across the world, millions of females and other individuals continue to menstruate during the Covid-19 pandemic. Under normal circumstances, reproductive health and hygiene needs are not met, but during emergencies, these challenges can be exacerbated (UN Water, 2020:1).

Menstrual products and supplies are considered to be to most crucial factor in MHM. Despite many arguing that the broader concept must be taken into consideration, it remains crucial. It is important to differentiate between menstrual hygiene materials or products, menstrual hygiene supplies and menstrual facilities. Menstrual hygiene materials include products such as pads, cloths, tampons and cups used to absorb menstrual discharge. In the 1930's menstrual products and materials such as disposable pads, tampons or reusable cups, were first introduced. More recently the range, quality, safety and availability for example reusable or biodegradable products have improved

significantly (Tellier & Hytell, 2017:10). Along with basic menstrual absorbents one should also have menstrual supplies (Kaur et al., 2018:3). Menstrual hygiene supplies refer to items such as body and laundry soap, underwear and pain relievers that are used to support MHM and are essential in managing menstrual hygiene. Supplies are not frequently considered in studies and studies that compare the prevalence of use among the above-mentioned products on a national or international level, are limited (Tellier & Hyttel, 2017:19). Menstrual facilities refer to the facilities that are necessary to ensure safe and dignified MHM, including sanitation (UNICEF, 2019:13). Sanitation generally include access to toilets and water supply. It is also important to consider menstrual waste disposal facilities in this regard.

From the above-mentioned data, it is clear that most of the participants preferred to make use of disposable sanitary pads to manage their menstruation.

Sub-theme 4.5: Preferred sanitary products, other additional supplies and the effectiveness thereof

The main menstrual hygiene materials that were mentioned within this study as absorbents that were used during MHM included the disposable sanitary pad, the tampon and re-usable materials such as cloths. When participants were asked what materials, they used to manage their first period and the effectiveness thereof, the following was shared:

> *"I used her sanity towels, I think, for my first period. It was a pad. It did its job like, yes, definitely." (Participant 1)*

> *"Earlier on I was just using cloths; I would cut out old vests and use those. Those cloths I would wash them when I was washing but later on as the months went by I would realise that in some days because I would just use one cloth and turn it over and turn it over and turn it over as I bled more but I realise that some days the periods are stronger so my cloth would get a bit damp too quickly than the usual type so I realise that I needed to have more cloths to keep with me and I'll wash those whenever I am taking a bath." (Participant 2)*

She further explained about her experience with using the cloths:

> *"Because I did not know any better for me it was a difficult experience yes because I had to wash the cloths and sometimes the stain wouldn't come out as much as it would have been and then at the same time it showed me neatness, it taught me about cleanness even at times when I look back now I feel that, okay, I did not carry my pads with me in my bag, if I've got a period I know what to do. Hadn't I gone through what I went through then I would know, I would know an extra way of doing about things because I had known that first encounter of using cloths and not the pads because the pads now*

> *that we use, you just take a pad use it and fold it when it's done, put it in a bin or put it in the toilet but then you had to wash your own blood and hang it up, make sure you hang it up in a place where no one can see because now everyone see that you are on your period" (Participant 2)*

It seemed as if although it was challenging for her, it was turned into a positive experience which is evidence of a form of resilience that was created. This also speaks to the fact that when re-usable materials are used, additional hygiene practices such as adequate washing and drying are of utmost importance, as mentioned earlier-on. She did however later on state again that:

> *"I remember the first time I used, as I said to you, the cloths, I could not walk properly because I wasn't use to something being under me and my panty so for me, I had to watch the way I walk that I would be scared that it is going to fall of my panties. I experience it being uncomfortable and to the extent that you can smell that you are smelling, you know which was very, very difficult, it was very challenging but not being exposed to using pads, you feel like it's a normal thing but it was very difficult because sometimes it smells, sometimes your cloths can easily get wet with the blood and then by that time you feel uncomfortable, and it's very uncomfortable." (Participant 2)*

> *"When I started having my periods I didn't even bother myself to know the things about using the pads and you know all those kinds of things, so I was just coping what I saw, okay, they use cloths, I am on my periods, okay so I just take a 'lappie' that is not strong and then I just cut it and then I just wear it and then I put it in my bag, the other one and cut maybe three and then I have to go to school with the other one and then I would like just one is too wet now and then I change and I just throw away the other one where people would throw pads and stuff like that and even at school, that time, I usually seen that people does use the same system because of periods, I mean pads were quite expensive in that time, so it was not something that I can be ashamed of but it was something, like you know you grow up, you see them doing it, so you never bother about pads, it's normal for you." (Participant 3)*

She went on explaining that:

> *"My first period I used, it was one of my cloths, I can't remember, but it was one of my cloths that I used, it was a little bit soft, not too hard and then that's what I used, I cut it and I realise that something I didn't know first time is that it flows a lot and then it is wet and it is school, so it was a disadvantage for me that I had to actually spend so many hours with the one cloth with me and I didn't know if I remove it and then my panty was actually wet, and not having something, I had to wait until I go back home and shower and take the other clean one, the first day I thought just like, you know one would be enough but then when I go it's like, yoh, its wet, it's coming off the panty, you're feeling uncomfortable and I had to take my jersey and wear it around myself and I just wanted to go home and that's the only thing I wanted, it was very, very uncomfortable. I can't say that it was really embarrassing because at High School, in my class there was a few ladies who experienced and we would know there was days, the first day when you are on your period and you just sit and then when you walk people would be like no there is blood, obviously you feel ashamed but seeing this and then immediately if someone*

says, jah you feel ashamed, like maybe in front of a guy that see there is blood, then I just take your jersey and cover it until I go home. So, I realised that okay, next time that I am on my period I must cut as many cloths as I can, so that I can throw them away or wash the one while I am showering so that I can wear the others to school or when I am busy with something like work. I remember my aunt use to take socks and then put the normal cottons and then put them inside the sock and tied it and then she'll wash it after she tied it." (Participant 3)

"Jah it was the one that you throw away. That cloth they gave me later at school but using the pad was easier than a cloth. It depends, maybe if you use Always but I use Stayfree, the soft one and I don't get a rash on my vagina and it is a safe one." (Participant 4)

"I used tissue and then when they found out at home they told me no, you have to use a pad. I used the tissue and then the pads became comfortable, it was actually better, I felt better, my only stress was when I was sleeping because it use to like drip or mess the bed, so I'd sleep with like, I had these charts, map charts, I don't know the material but when you stain it you can just wipe it, so I use to put it under me when I sleep so that when I mess it I can just wipe it instead of it being on the sheet. The pad made me feel more comfortable and during the day I could face the day. It is effective, but my challenge with it is that sometimes I feel like it is not on the right way because it shifts and it becomes uncomfortable. So, what I do now I just buy the long ones, the ones for at night just to make sure I am secure from each area or when I use a tampon, I would put the tampon in and also still use a thin pad, just to be extra careful but otherwise it is effective. It is very expensive, especially the ones that work properly, the ones that work properly are the ones that are more expensive and those are the ones we need, it's sad." (Participant 5)

Poverty and not being able to buy sanitary materials is one of the main challenges that affect accessibility and the effectiveness of MHM and will be addressed in more detail within the following sub-theme. Other materials and supplies that were currently used by participants included the following:

"I am still using the pads." (Participant 1)

"I am using pads at the moment. "Now that I've been using pads, am, at least they stick on the panty." (Participant 2)

"I use pads. I am quite happy with it, it makes me feel like I am in control, I know exactly that this is what I need to do to manage my hygiene and to not feel uncomfortable with the smell." (Participant 3)

Additional supplies that she used included:

"Maybe some water." (Participant 3)

"Pads and tampons sometimes. Mybulen, I use to take those because the pain was horrible, so those were the only pills I needed, sometimes I would take three because the pain was that bad and then I'd sleep. Other extra supplies that I would need would be like specific underwear, I don't just wear

any kind of underwear when I put on a pad, I need the tight ones that can hold if firm." (Participant 5)

Various products have been used over the years to absorb and manage menstruation and range from traditional approaches (staying home or being confined to huts), commonly available materials (newspapers, old leaves, corn cobs, cotton gauze or cloth strips), homemade materials (disposable or reusable products), commercially produced products (menstrual pads and tampons, reusable pads, menstrual cups, and menstrual panties), as well as biodegradable products (certain menstrual pads) (Tellier & Hyttel, 2017:19). Choices between products depend on personal preference, cultural acceptability, economic status and availability (Mohammed & Larsen-Reindorf, 2020:1). Factors such as environmental suitability also plays a major role in preference (Tellier & Hytell, 2017:18).

The most preferred products among females in rural areas are reusable cloth pads, whereas commercial sanitary pads are preferred by females in urban areas. The human rights standards, also known as AAAQ – availability, accessibility, acceptability and quality, is mostly used to assess the adequacy of products (Tellier & Hytell, 2017:19).

Considering the human rights standard, it seemed as if only three characteristics were met with regards to using re-usable materials such as a cloth which includes accessibility, availability and acceptability. However, quality is compromised. In contrast to this, availability, acceptability and quality were met with regards to the sanitary pad and tampon, but accessibility appeared to be somewhat problematic. Such challenges that were experienced within the different environmental levels when considering the ecological systems approach with regards to MHM will now be addressed within the following sub-theme.

3.6.2.5 Theme 5: Challenges being experienced with regards to MHM

Various challenges were identified within the study that were experienced by participants regarding MHM. These can be considered as environmental constrains and while some can be identified within the macrosystem of individuals, others are specifically related to the exosystem of the ecological systems approach as participants were not necessarily directly involved with these factors but was still affected by them. This theme focused on

MHM challenges and includes sub-themes of accessibility and cost, a poor waste disposal system, poor WASH facilities, cultural beliefs, strategies and ways of coping with challenges, participation in daily activities and environmental resources.

It has been established that females worldwide experience difficulties in managing menstrual hygiene due to a lack of the environment enabling them to do so, clearly indicating that menstruation hygiene management is linked with females' human rights and gender equality. This suggests that when females experience challenges in exercising their rights to water, sanitation and education, they will most probably experience challenges in managing their menstruation. This in turn, can negatively affect other human rights, including the right to education, work and health, causing a vicious cycle (UNICEF, 2019:14). According to Sida (2016:1), females in vulnerable situations are especially in need of attention in this regard.

Various environmental, social, cultural and religious factors create barriers to menstrual practices and is ultimately constraining management of proper hygiene during menstruation (Kaur et al., 2018:1). World Vision (2018:1), emphasize that multiple factors contribute to the challenging menstruation experiences of females including a lack of adequate materials and facilities, physical pain related to menstruation, fear of disclosure and a lack of knowledge about the menstrual cycle.

The challenges will now be discussed:

Sub-theme 5.1: Accessibility and cost

When asked about how participants get access to their preferred materials and supplies, they provided the following answers:

> *"I buy them at the shops that is the only way. People are not working; people are poor out there, so if ever you don't have money, you cannot buy unless you make use of the undisposable." (Participant 1)*

> *"Access, am, my sister buys them and I get some donations. Ah, my teacher has girl children so whenever she is buying pads or things that are needed by girls; she also buys me some stuff. Not being able to have all the necessary supplies, just the soap as I have mentioned, your water, your cloths, your toilet paper, it makes me feel helpless, am, as with my age I am not the one that's makes decisions in the community and being helpless is not like there is something that is happening that we can do. It's not being able to*

> *sometimes not having access to the resources that I had mentioned earlier." (Participant 2)*
>
> *"I have to make sure that when I buy my toiletries, I have to buy my pads. I buy them for myself in advance every month." (Participant 3)*
>
> *"I get them from my school. That one that I am buying that I am throwing away, it is more than R20, it's expensive. One packet in a day is not enough; you have to get maybe three packets, because there are people whose menstruation is always heavy. I buy it for myself." (Participant 4)*
>
> *"The chemist, basically in the shops but mainly chemists where I can get everything. I buy it for myself. Jah but it is a distance, so you have to buy for the next two months to really make sure and it is expensive so you have to decide what you really need, do I want pads or just tampons." (Participant 5)*

Although the preferred materials were available, participants seemed to be experiencing some challenges with regards to accessing them and buying them due to the cost involved. As mentioned before, most of the participants fell into low- and middle- socio-economic classes, which indicate that it could be difficult for them to afford the cost of sanitary materials. The socio-economic statuses of participants and the influence it has on accessibility can be associated with the macrosystem when considering the ecological systems approach, as it does not refer to a specific environment of one person, but the already established circumstances in which the individual is developing (Guy-Evans, 2020:4). The accessibility challenge therefore specifically relates to environmental limitations. Such challenges can ultimately affect the quality of MHM and the way in which menstruation is perceived.

Worldwide, about 500 million females experience accessibility problems to MHM facilities (World Vision, 2018:1). In most schools, sanitary products are not provided to girls, even if an emergency is experienced (Mohammed & Larsen-Reindorf, 2020:1).

Accessibility limitations is particularly experienced in rural areas, since most of these females cannot afford to buy sanitary products due to the high cost involved (Kaur et al., 2018:1). In support of this, another study found that these accessibility challenges are found to be particularly more experienced amongst females in lower socio-economic groups or living in rural areas (Hennegan et al., 2019:1). Accessibility and poverty as barriers are therefore closely connected. It has been reported that the socioeconomic

status of a female and her family plays a major role in the quality of MHM and a wide range of literature is available on the matter (Lahme & Stern, 2017:3).

This social phenomenon is described by the common term: period poverty. The term refers to when menstruaters are not able to afford or access adequate menstrual products due to limited finical means (Diamond, 2020:1). The term also includes a lack of access to toilets, hand washing facilities and appropriate waste management. Families are often left to choose between buying menstrual products and providing other essentials (Rapp & Kilpatrick, 2020:1). It has been established that, on average, buying of menstrual products can cost up to R131.12 (€8) per month and the reality is that some females are not able to afford this. Others revert to using products for an extended amount of time. When females revert to unhygienic management, they are at a greater risk for physical harm, including urogenital infections such as urinary tract infections and bacterial vaginosis. Health issues such as skin irritation, vaginal itching and unusual discharge are also often experienced. A lack of access also brings about mental and emotional harm including experiencing anxiety, depression and distress (Rapp & Kilpatrick, 2020:1).

Poor socio-economic status and the impact of this on accessibility and MHM in general, can cause mental and emotional implications. Studies indicate that inadequate sanitation and a lack of facilities in schools violated the right of privacy for girls and caused them to experience stress and depression, which consequentially lead to poor performance on an academic level. A lack of gender-friendly bathrooms and bloodstains on school uniforms have also been reported as a concern and causes mental stress. As a result, girls prefer to rather stay at home than to attend school (Lahme & Stern, 2017:3). Interaction with structures within the microsystem is therefore once again affected, when associating this with the ecological systems approach. The interactions within microsystems are often very personal and are crucial for fostering and supporting development" (Guy-Evans, 2020:4).

Another challenge that has been identified to compromise MHM involves a poor waste disposal system within the Ikageng, Potchefstroom, North West province.

Sub-theme 5.2: A poor waste disposal system

A proper waste disposal system appeared to be unavailable within Ikageng, Potchefstroom and created challenges with regards to MHM. According to the ecological systems approach, this relates to the exosystem of participants as they do not have control over this but are affected by it. The following challenges were reported by participants with regards to menstrual waste disposal:

> *"We don't have dustbins in the toilets at school or a pit toilet. The buckets can be very messy and not be able to keep up with them when they fall and things like that. If the buckets get full, they are all over the place because, am, then the buckets are not being picked up." (Participant 2)*

> *"Like maybe staying on a visit, like some people when I visit them and I am on my periods and I don't know where they throw away their pads and I have to keep them with myself, like maybe in a plastic bag, where the ones that I change I must keep it, so I don't have to ask them for them to also not know that I am on my periods, so I just like put it in a plastic bag so when I get home I'll just throw them away or something like that. Because others, it you put them in the bin, and then they'll take the bin outside and the dogs will get it and you'll see the periods lying around outside and it's very unhealthy. It makes me feel uncomfortable because now I have to keep the pads in my bag and if I forget to tie the plastic it smells and I need to get rid of it immediately and remove it. It is an open bin the dogs can get it if there is no fence and they start to eat from there and it's very bad to see your pads laying outside because it is sensitive. Especially in the location, it's very challenging." (Participant 3)*

> *"Anyone can see your blood because you just take water and you flush it and then anyone can see it in the street because after you use that pad that you throw away, you throw it into the dustbin and it is thrown into the street where anyone can see your blood." (Participant 4).*

Worldwide, countries have developed faecal and urinary waste disposal systems, but are still lacking suitable disposal systems of used menstrual products, due to menstrual management practices also lacking. It has been found that most females dispose of their sanitary products into domestic solid wastes or garbage bins that also becomes a part of solid wastes. In India, females struggle to manage menstrual hygiene, due to toilet facilities lacking bins for proper disposal of sanitary products, as well as proper hand washing facilities (Kaur et al., 2018:4). In areas where modern disposable products are used during menstruation, it is being disposed of by being flushed in toilets and thrown into dustbins or through solid waste management. In more rural areas where reusable and non-commercial sanitary products such as reusable pads or cloths are used, menstrual waste is either buried, burned or thrown into garbage or pit latrines. The conclusion is thus made that they generate less menstrual waste, compared to females

in urban areas that utilise commercial disposable products. Due to burning and burial being difficult because of limited privacy space, females in slum or informal settlement areas, mostly dispose of their menstrual waste into pit latrines. It is also due to the belief that it was used for witchcraft purposes and seen by men, which is not considered as appropriate (Kaur et al., 2018:4).

Due to lack of sanitary facilities, girls in schools throw their sanitary pads in toilets. Some of them also throw away used menstrual cloths without them being washed. In some schools, “feminine hygiene bins” or incinerators are available for menstrual waste disposal. Despite this, girls still refrain from utilising it, due to shyness or a fear of it being visible for others to see. As stated above, menstrual disposing habits and behaviour among females vary between places. When at home, products are disposed of by being wrapped and thrown into the dustbin together with other domestic waste. In public places, prior to being informed about the consequences of pads being flushed, they are flushed in toilets or wrapped and thrown into dustbins. If dustbins are not available, soiled pads are left wrapped or unwrapped in the corners of the toilets. This makes the toilets dirty and unhygienic and creates a breeding place for pesticides. Individuals that are responsible for managing public toilets, usually complain of systems being blocked due to sanitary pads or rags being flushed in the toilets (Kaur, et al., 2018:4).

From the above mentioned, it is clear that this challenge affected participants physically, socially and psychologically. The above mentioned is evidence of an unsafe micro- and meso system that exists due to poor menstrual waste disposal systems as well as poor sanitation within the environment, which bring the discussion to the following challenge of poor WASH facilities.

Sub-theme 5.3: Poor WASH facilities

Challenges with regards to WASH facilities was an extremely profound theme that were identified within the study. This sub-theme includes the following:

> *“My school that I go to, does not always have toilet paper in the toilets, if it does, they get stolen, so you need to bring your own. I stay in an area where water is not available every time and things like toilet paper and stuff also, and even our toilet is a pit toilet. You need to understand that in our area we find that about 30 or more households are sharing the same tap and there is no water sometimes.” (Participant 2)*

> *"There is no water and I have to shower in the morning during that time, I have to wake up and shower and sometimes in the afternoon when I feel like it's too much I have to shower and then there is no water and then, you know, I just have to take the new pad and when you get to the bathroom to flush and there is no water, and then when you get there the blood is obviously inside the toilet, so you know it's very challenging if there is no water, sometimes there will be no water in the location and then you don't know what to do. I feel like it is very challenging." (Participant 3)*

> *"There is no water supply and sanitation. Every house has a tap but only one, we are using one tap and at the house if you are maybe more than five that are using that tap. And now this water we are using is not clean. If you drink that water, you have a running stomach and now, I'm still having a running stomach. It irritates me because I'm having a running stomach, I don't even want to eat since the morning I didn't eat, I was scared of what if I eat this food because I cook with this water so I'll be having a running stomach again. Now it affects me because I don't have the money to buy clean water and I don't work. We don't have enough since I am not working. I am using a little bath and doing a full bath but we don't have a bath, we just use a bucket." (Participant 4)*

> *"The water supply, there tend to be times where they would close the water in the whole township, so it becomes very difficult because it goes for a very long time, let's say a week, am, and then they open the water maybe at night but then it is not enough because you need water to drink, water to bath, water to wash your hands and imagine when you are on your period and there is also more than one person in the house, so those are the challenges, one of the main challenges actually, so it is really painful. I imagine the people that don't have that, so it becomes more stressful than what it is supposed to be." (Participant 5).*

Once again this can be associated with the exosystem of the ecological systems approach. Not only did participants not have access to water, but they did not have access to clean water. When water is indeed available, it appeared to be contaminated and caused physical implications. Similar to a waste disposal system, participants did not have control over the availability and conditions of sanitation systems and other WASH facilities as it is supposed to be maintained by the relevant role-plays of the country such as the municipality etc.

Having access to water, sanitation and hygiene facilities (WASH) is a crucial component of maintaining adequate menstrual hygiene. Without this, females are not able to ensure MHM in a safe, hygienic and dignified manner and without proper privacy girls are unlikely to make use of such facilities. Many schools report to have sanitation problems and to not have a supply to water for WASH facilities (Mohammed & Larsen-Reindorf, 2020:1). Education (Goal 4) as well as economic opportunities (Goal 8) of the Sustainable

Development Goals are affected when girls are absent or less attentive in school due to a lack of WASH facilities during menstruation (UNICEF, 2019:15). Access to WASH facilities is also important at home and even health clinics in order to ensure that females have safe means to manage their menstruation at any given time (Kandel et al., 2015).

Poor water, sanitation, and hygiene conditions exist in environments all over the world, from temporary informal settlements to permanent residences in cities (U.S. Department of Health and Human Services, 2021:1). Kajumba (2020:1), emphasise that equal distribution of resources is necessary to ensure that global and equitable access to WASH facilities for all is ensured in both informal and formal settlements. Without healthy and safe water, proper sanitation and good hygiene management, menstruation can become a burden to many. It also makes the management and spread prevention of reproductive tract infections more challenging. Further elaborating, females are considered to be in a more vulnerable position to sexual gender-based violence and increased menstrual stigma when they experience limited accessibility to WASH facilities. In the process of inability to manage menstruation in a hygienic way, gender inequality is also perpetuated (Kajumba, 2020:1).

According to Kajumba (2020:1), the connection between WASH and MHM is a crucial aspect that needs to be considered in the development of Sexual and Reproductive Health Rights programming. Despite efforts in addressing WASH and SRHR together, direct approaches that integrate WASH and MHM are limited and often less prioritised on global and national levels. It is being argued that WASH and MHM actors can leverage one another's efforts for a greater impact on improved menstrual health in Africa, as a way of increasing the focus of menstrual health as a critical pathway to improved sexual and reproductive health rights. Community leaders that work on grass root levels should engage with and be equipped with skills and knowledge on how to mobilise and improve WASH facilities in the communities. Collaboration between WASH and MHM actors is being recommended as it can help to overcome challenges and improve the overall quality of existing Sexual and Reproductive Health programming. It is further argued that the promotion of WASH can be an entry point in securing Menstrual Health Rights (Kajumba, 2020:1).

Another challenge that was identified to influence MHM included cultural beliefs and will now be discussed.

Sub-theme 5.4: Cultural beliefs

The affect that culture had on MHM was another strong theme that were recognised within the study and correlates with the macrosystem as part of the ecological systems approach since it is within the outermost level of the participant's environment (Ryan, 2001:2) and an already established system in which they live and perceive experiences within (Guy-Evans, 2020:4). When asked about cultural beliefs that influence MHM, the following were said by participants:

> *"Joh, okay, in my culture they belief that when you are on your periods, you don't have to cook, like, I remember my grandmother passed away two years back, and she died believing that, that it's more like, I am not sure, I don't want to say cursed or something, it's more like you've got some, you are unclean. In my culture it's more like you are unclean so you cannot, especially cause my grandfather was a believer, I am not sure should I say Christian, but at their church that's what they were taught and they taught us that a woman on her periods doesn't touch food, doesn't touch, we've got church cloths, doesn't touch her church cloths. Basically, in our culture they believe that, I am not sure even to say culture or something, but at my home they believe that when you are on your periods, you are unclean. Because those were my elders, I had to obey the rules. Because I will usually, especially with my mother, not my grandmother, I will argue with them that it's so funny that you believe that when I am not my periods I am unclean and I cannot cook for so and so but you can go and buy takeaways at those restaurants and you are not even sure who made them, how was she on her periods and you won't know, like I had so many questions but I had to go with the flow, but I don't believe, I don't agree with that because I think it is just a normal part of the reproductive system, those that you asked me what do you know about the cycle and menstruation, I think it is just nature and that we are created that way, there is nothing unclean about you. I don't think it affect my hygiene because I practiced that, but I still took baths, I did what I was supposed to do hygienically, so I don't think it affected me." (Participant 1)*

Later on, she continued to explain that:

> *"I know about them but currently they don't affect me, it's something that I know from a distance but I don't know it personally from me because I know that there are certain people that, they are not going to a funeral, they are not going to a church. It takes us back to that point of the cultural thing that they believe you are unclean; so, you cannot go to church because you are unclean. If ever you went to church, I was allowed to go, but if ever you are not going to participate in certain activities in church because you are on your periods." (Participant 1)*

> *"So, for our culture I must say, black people, we are not as open, with us culturally, it is something that is not shared, it's just there, jah, so I wouldn't say there is a certain belief or I don't know, it's just not being shared. I think I did, am, say earlier on that you never know what to do as a child, if you are*

not told about it on what to do and how to do it, what to try and who to go to." (Participant 2)

"I can say that there was a time that may other aunt's daughter experienced a lot of pain during her menstruation, like she was very lightheaded and she'd shout at everyone, she'll be very sensitive and she can't even go to school and she has to lay down in the bed and experienced having like the blocks when on her period, like I think of the other time that we were showering together and I saw like blocks of blood, you know, and it was very confusing to me, and they had to find medicine, like a natural medicine, a root of some tree so that it can stop, because it was like an abnormal thing that the blocks of blood coming out and it changes her, she doesn't eat, she wouldn't do anything, to the extent that her brothers started to know that she is on her periods and it is very painful to see, so they had to find a natural medicine to stop it. It was something from the tree, that they take out of the tree and then she put it in the water and then drink. I think people that grow up very old; they know that this tree can help. It's the older generations because they had no hospitals or the clinics were very far, so they had to find things that can help you, like jah, something like that, you don't really have to go to Sangomas, it was like a grandmother from your father's side that knows about it and would share and just tell you that you'd use that. It didn't really affect me because I never experiencing it, I just feel bad, so sad for her that she's going through that but luckily I never had problems with my menstruations or have blocks or have pain and cry or change my skin colour." (Participant 3)

"At my home, when you start getting your period, they just take a polish and they say "Bacho leretha" maybe to limit your menstruation days, they take polish and put it in my stomach. When I started getting my menstruation my grandma did it. In the shop, they mix it for you. Like polish you can get it in a shop but this one that they mix, I don't know where they get it. I think it has helped because since that my period only takes 3 days until now." (Participant 4)

"My grandmother use to tell me that when I was little, they us to tell me that when I am on my period or on that time of the month, because black people have a thing of saying periods, it's weird, so they'll tell me I mustn't be around boys at that time of the month and I'd wonder why, like why? So, it made me angry, that was one of them – not to be around boys and not to drink milk or to not put my feet in the water like swim, I was not allowed to swim or bath, take a bath, I had to like take a bath in a basin, so it got to me, it irritated me because I felt unclean, it didn't make sense, so those are the cultural beliefs that I am aware of but I am not following them now." (Participant 5)

This is a great example of how culture can influence MHM. When asked if she agrees with this, she answered that:

"I honestly don't because I feel like it's the body, it's inside the body, I don't think it has something to do with egg or milk or if you are swimming or not, I don't know, some of things that we are taught are quite questionable, yes, they are debatable actually. It was horrible because it got me cornered, now what do I do to be clean and it is not okay and not eating food that you want to eat and moods are everywhere because you are on your period and I would get angry and it is just a big thing, so you can just imagine the chaos in a person's mind at that time." (Participant 5)

In summary, it is clear that cultural beliefs associated with menstruation did influence individuals and served to be a barrier in participating in daily activities such as going to church, making food and not eating certain foods and therefor affected them socially and psychologically. Some beliefs did also somewhat affect MHM which relates to the physical well-being that is affected. As mentioned before, this can influence the way in which menstruation is perceived and cause certain attitudes. It however seemed that as individuals got older and they obtained more independence and freedom, they outgrew these beliefs (chronosystem – the influence of the ageing process) and others remained to find them helpful.

Several studies indicate that certain cultural beliefs and norms create limitations within proper MHM practices (Kaur et al., 2018:1). According to some beliefs, many females are for example, restricted to cook, work, have sexual intercourse, bath, worship and participate in ritual activities or eat certain food during menstruation. This is specifically related to the misperception that menstrual blood is dirty or polluted. In certain areas of developing countries females are also restricted to bath or wash their hair during menstruation as it is considered to influence the blood flow. It is also believed that menstrual cloths should first be washed and then buried. Burial of bloodied menstrual cloths is considered to be a taboo. The washing and drying practices of these cloths have to be done in secrecy, like in a hidden place so that it is not visualised by others. Menstrual discharge was also misused for black magic purposes and cloths therefore had to be washed during the night when others were asleep. Females live in constant fear of being cursed and therefore hide bloodied cloths as it is seen as dirty, polluted and shameful. Similar sources indicate that menstrual waste was used for witchcraft and connected to danger. Once again it has to be buried since witches are believed to go after the human blood. If not, the menstrual cloths will be found and the females will then be cursed with infertility. Touching of females who menstruate is also considered to be a taboo. These restrictions are more common in rural areas than in urban ones (Kaur et al., 2018:2).

According to Steenkamp (2003:97-98), making use of traditional or natural remedies are also a part of the culture and religion of Africans. A considerable number of females in South Africa prefers using alternatives to medical treatment and seek treatment from traditional healers for several problems related to the female reproductive system and

organs with up to ninety-two plant species that are being used to treat specifically menstrual disorders (Steenkamp, 2003:97-98).

In order to cope with the above-mentioned challenges, participants had developed ineffective strategies.

Sub-theme 5.5: Strategies and ways of coping with challenges

From the study it became evident that participants had to improvise and develop strategies in order to manage and cope with the challenges that they face with regards to MHM. Some prove to be effective, while others were found to still be limited and often posed additional difficulties for the individual. This can be supported by the following quotations from the participants:

> *"I think the best way is to ask from, like, ask any help from anyone who has more than what you have, if ever you have challenges with water, like you were making an example, just ask where there is or ask how to go about it, like ask when you need help, ask." (Participant 1)*

> *"We get water with buckets and I am not sure what you call 'imbombos', it's a drum type situation, we've got, ah, a wheel barrow that we get because it's a tap that is nearby that we can get buckets of water that stays inside and also with the rain, sometimes it helps because in every corner of the house outside we get to fill in the water from the rain. It's easier for me when I am at home because there is also a sort of like a bucket outside with water for us to be able to wash hands with and things like that. If there is no water in the tap where we usually get the water from, we normally use the water to wash the dishes and stuff. The water that we got from the rain, so you'd find that, that water is limited also, we use it for, for cooking, cleaning, we use it for washing dishes. It doesn't rain all the time, so when those limitations are in place it makes it difficult for us to carry on, you can't bath the way you'd want to, you only have to probably wash your armpits and your face, private areas and that's it." (Participant 2)*

Once again MHM was compromised. Later on, in the interview she also reflected back on when she was younger and said that:

> *"As I said I grew up in the village with my grandmother because she was old and couldn't go to the stream anymore to get some water, we would be the ones getting water." (Participant 2)*

Here one can see that age played a role and older persons experienced the challenges and difficult strategies to be worse and also experienced it to be more limited. This relates to the chronosystem as described by the ecological systems approach, which indicates that the ageing process as part of the time dimension also has a role to play.

> *"You have to have a solution like find out where there is water, like a dam or where there is a municipality with a boho, then you have to go there and get some more water, just enough to help yourself and so that the toilet can stay clean. You have to take the water in the buckets and then you have to walk far and then carry it and bring it home. It's because of now you are going to walk and it's another job to carry the water and anytime when you are on your period and you have to go to the toilet and just pee and use the water but other people at home also use the water and you become so helpless. Maybe just have buckets in the house so that if you are on your period and there is no water there is a solution that is close by and you don't have to walk to get water frequently." (Participant 3).*

> *"There is no water supply and sanitation. We are using a tap for water. If you want fresh water then you have to buy it in town. Yes, you pay to come to town and it is expensive. The taxi picks me up, I get the water and then he drops me again. The taxi is R18 to come and buy 5L of water. If I want to drink the water, I first boil it and let it cool up and after that I drink it. I'll rather take water and boil it and put it in a 2L because I think to do that is better than to drink water from that tap since it is not clean, so I'm boiling water." (Participant 4)*

> *"There is always this one tap in town at the churchyard, it always has water, so everybody from the location goes to that tap and you can imagine how long that que is with people with their buckets and imagine that sometimes the little kids come with buckets from home. They have to walk with that full bucket, so it's stressful, it's very stressful." (Participant 5)*

Most of the strategies that were implemented proved to only partially provide relief and can therefore be considered to be ineffective. Strategies included walking far in order to fetch water with buckets, which posed additional physical implications, especially when individuals are on their period. Rain water was also caught up in buckets, but is not always available due to limited rainfall. Additionally, individuals travelled from Ikageng to Potchefstroom via public transport in order to buy clean water. This posed financial implications, including travel and water costs and once again this relates to the concept of period poverty. This is something that should already be available, taking the socio-economic status of the country into consideration. It was also unclear if boiling water is stored properly in order to avoid further contamination.

Globally females have developed strategies to handle challenges during menstruation. These differ from country to country, depending on the person's preferences, resources available, socio-economic status, traditional beliefs, cultural values and educational level (Kaur et al., 2018:1). However, due to existing limitations, females often manage menstruation with strategies that are not hygienic or are uncomfortable, especially in poorer areas (Kaur et al., 2018:1).

According to the WHO Guidelines for Drinking-water Quality, the process of boiling water to a rolling boil is effective for pathogenic bacteria, protozoa and viruses to be inactivated. It is suggested that after the water has been boiled, it has to be removed from the heat and cooled down in a natural manner. Ice can be added. It is important to protect it from recontamination after being boiled, especially during storage. This is however a concern at times as this is not known or taken into consideration. (WHO, 2011:1).

Experiencing challenges and environmental limitations also affected participants' participation in daily activities.

Sub-theme 5.6: Participation in daily activities

The challenges that were experienced affected participants in many areas and also seemed to affect their participation in daily activities. When participants were asked how the challenges and environmental limitations affect their participation in daily activities, the following answers were provided:

> *"Like those things doesn't affect me as much because after putting on my pad it is a normal day, I know that some certain people don't have the resources, money, to buy those pads so they are forced to stay at home, especially those who are schooling, they are forced to stay at home because they cannot afford sanitary pads" (Participant 1)*

> *"I'm not able to participate, I think, I always think back that I might mess myself up and I don't want to be the laughingstock or I don't want to be embarrassed, at the same time and also, am, with sports, I used to avoid every time, I would avoid, if there is netball, because I play netball, I'll avoid and act as if something is wrong with me, just avoid anything that would have to do with sports." (Participant 2)*

> *"Especially if there is no water and then if you go to the toilet and just go and pee then obviously there is just blood so sometimes you feel like okay let me just rather not go because of the situation until I am fine and when my menstruation is done then I can now go to school or to work." (Participant 3)*

> *"It becomes really horrible, for myself, I'm not productive the way I am supposed to be or I am not fully in my day because I worry about how I feel at that moment or how I smell and not being able to focus, but it is just one of those things but there is nothing a person can do about that." (Participant 5)*

From the study it became clear that individual's participation was affected due to the environmental challenges that were experienced within the macro- and exosystem of individuals when considering the ecological systems approach, some more than others.

This also relates to the social implications of menstruation as a result of the challenges that were experienced with regards to MHM.

During menstruation, females are limited in their daily activities and they are often scared to go to work school or engage in social activities (Kajumba, 2020:1). Stellenbosch University conducted studies in South Africa and found that approximately 30 percent of girls in the country do not attend school during menstruation, due to being unable to buy sanitary products (Mlaba, 2020:1). It has also been documented that poor sanitation and MHM in schools, which did not meet the World Health Organisation's minimum standards, contributed to increased absenteeism among girls (Lahme & Stern, 2017:3). Statistics indicate that in Africa, one in every ten girls miss school during menstruation (Majola, 2019:1). Due to a lack of proper disposal systems, broken toilet doors/locks, lack of water taps and poor water supply, many girls also report not going to school (Kaur, et al., 2018:4). Many girls choose to not go to school during menstruation due to social and WASH-related challenges. In other instances, girls do attend school but then face issues such as leakage, odour, discomfort or being unable to concentrate (Kandel et al., 2015:2). Studies mostly focus on schoolgirls and conclude that MHM is more challenging for girls attending public schools than for those who attend private schools (Kuhlman et al., 2017).

Existing studies hypothesize that school attendance among girls may improve if menstrual products are provided (Hennegan, 2020:639). Through self-efficacy improvement, MHM programmes can help females to gain skills to bridge health, freedom and developmental challenges, such as gender-based violence, early marriage and absence from school (UNICEF, 2019:13). Significant attention by the Government of South Africa has developed with regards to the accessibility problem to sanitary products and the influence it has on school attendance (Department of Women, Youth and Persons with Disabilities, 2017:3).

It was found that there is a connection between factors within the school environment such as unhygienic sanitation facilities and inadequate resting areas that often exacerbated the challenges experienced by the scholars and included aspects such as physical discomfort, teasing and feeling distracted during classes. This in turn influenced academic participation and school attendance. Girls that did not have adequate sanitary products to manage their menstruations over the past few months, reported to be more

likely to miss school compared to those that had sufficient products. The number of days that were missed, was however unclear (Crankshaw et al., 2020:2). Limited access and the affect it has on school attendance seem to be a main theme that is represented in studies done all over the world. Discrimination also has negative effects on individuals, including restricted mobility and freedom to make choices; poor attendance and participation in daily activities such as school and community life; compromising their safety and being stressed and anxious. Females in humanitarian crises experience these challenges on an acute level (UNICEF, 2019:13). Gender discrimination that exists due to sociocultural beliefs and gender-unfriendly policies in school environments creates additional barriers for girl's school attendance (Lahme & Stern, 2017:4).

Despite the challenges that were being experienced due to constrictions within the different levels of the environment, participants reported that the environment also consists of resources that served to be beneficial during MHM. This will now be discussed as the next sub-theme.

Sub-theme 5.7: Environmental resources

Through the study it was also found that several resources were available within the exosystem of participant's environment. These were not created by them, but influenced them in a positive manner. However, they were also limited and various challenges were also experienced when accessing them. The following reflects the voices of participants with regards to environmental resources:

> *"If ever money is the resource, yes, because I need money to buy those pads. Okay currently I am working, at first I got it through my parents but now I am working." (Participant 1)*

> *"Most of the time is the school and, and my cousin but not just the school as in the whole, there's a certain teacher that has been of help to some of the girls and she's not doing it from the budget of the school I belief, she's doing it on her own goodwill, I believe. The clinic, they don't really give us pads, they give us the pills if you say you are in pain, they don't have handovers of, of pads but if you go on that day when you've got a period and you are complaining about some, ah, pains and things like that, they would give you a pill and probably about plus minus two pads for you to use. I don't think they've got sufficient pads for everyone because when you sit in that que obviously you hide what you are coming in there to do, so I don't know because the que starts, especially in the clinics in our township, by the time you get there let's say it's like seven o'clock, the que is already long, there are old people that are waiting there for their meds, there is people that have come with their kids, so it's different types of, am, medication that needs to*

be handed out so you never know who is coming in there for what, so I don't think they've got enough essentials for everyone." (Participant 2)

This is one example of a resource that was also very limited and that posed additional challenges. Later on, she also explained that:

"I've been going to the clinic and they gave us cards, ah, on injections, contraceptives, they do give us injections for us to not fall pregnant and I don't know how will that affect my health, so I've never asked. But the clinic has been helpful." (Participant 2)

This speaks to poor health care education. Further on she also mentioned that:

"The department of agriculture that came to install the water tanks for us or if it was the department of health, I am not sure but there was a department that came into my mother's home to install those big JoJo tanks and the drainage thing so that the rain could be able to get the water into a bigger tank." (Participant 2)

"There is a time that the people would take bins, like the municipality, would take the bins and it is very big and you can close it, so I am able to take my pads and tie them in a plastic and put it in there. So, if there's like a big bin that is going to cover and you use plastic that is not see-through and you put it there and just wait for the municipality to come and collect it and then I'll rather throw it in there than other bins. I didn't want to go the clinic for a check-up unless these is a problem. I really don't like clinics, I don't like medication, but my experience is that I feel good and better because I get the help that I need. It's very helpful because when I need a solution and I know I can't always help myself and I sometimes need people to help me medically and assist me and when they give me the medication, I know exactly what to do and what is happening." (Participant 3)

"At the clinic they are just explaining, last time I was having STI, I was not understanding about STI but they just explained what is STI and I was taking pills to clean myself inside and that helped me a lot. Because at the clinic it is safe and you can maybe meet with a counsellor if you have been stressed about your menstruation, the counsellor can counsel you and tell you more about what is happening, this is the usual thing and what you are experiencing with your body. We are just receiving money from a grant." (Participant 4)

"As I've mentioned yes there are clinics and doctors. At the clinics for pills for the pain. There is always a lot of people so and the privacy there is not so private, so you don't get to be as open about your matter or situation, so jah, that's the only problem. And it's small and you'd find one and the other one is like twenty blocks away from you and you can't really get there, so it is quite limited." (Participant 5)

Other resources that she talked about included:

"I get the privilege of getting a JoJo tank or get buckets that are filled." (Participant 5)

From the study it became evident that although clinics are limited and also pose several challenges such as limited supplies, essentials and capacity, long waiting times as well as limited privacy, they served to be one of the most important environmental resources within reproductive health management since they provide free treatment and reproductive health care as well as education and counselling services. Other environmental resources within the exosystem included schools, the Department of Agriculture, SASSA grants and the municipality.

Existing interventions are mainly divided into two categories. Hardware interventions refer to interventions that provide physical resources such as menstrual absorbents and WASH facilities, whereas software interventions mainly address the psychosocial components of MHM including education with the aim to address discrimination and stigmatisation. Some interventions include a combination of both (Hennegan, 2020:639).

UNICEF (2019:13) states that menstruation onset comes with several challenges that arise during adolescence, but also with opportunities. Menstruation programs focusing on health and hygiene can be used as an entry point for other projects, like sexual and reproductive health education and life skills development. Investments in adolescent females' well-being, has proven to cause triple dividends: for girls, for the women they will be when they are older, and for their children. MHM is therefore a key objective of the Sustainable Development Goals (UNICEF, 2019:13). SDG 6.2 highlights female's right to menstrual health and hygiene, with the goal: "to by 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations" (United Nations, 2015:22).

Menstruation itself as well as MHM has always been challenging for females and it is therefore impressive how attention on the matters have already increased. Many different role players, including social workers, have contributed to this transformation. Worldwide, national and even international non-governmental organisations (NGOs) educate and advocate to eliminate taboos and strengthen attention and existing programmes. On international, national and reginal levels, organisations and governments implemented goals, policies and standards to address the matter. It has also been a research topic of

interest at key universities in order to gain evidence. Knowledge technologies such as menstrual calendar apps have also been developed (Tellier & Hytell, 2017:10).

Significant attention by the Government of South Africa has developed with regards to the accessibility problem to sanitary products and the influence it has on school attendance. Efforts on national level have also been made. In 2017, a Policy Framework on Sanitary Dignity, as the custodian of the promotion and advancement of gender equality and empowerment of women, was developed by the Department of Women, Youth and Persons with Disabilities (2017:3). The Sanitary Dignity Program, as part of this, is guided by the National Sanitary Dignity Implementation Framework (SDIF). This was drafted with the aim to further enhance the framework and the implementation thereof. Furthermore, it aims for sanitary dignity to be promoted, as well as for norms and standards with regards to sanitary products provision to be provided to indigent females. Social justice and basic human rights are also promoted and emphasised within this (Department of Women, Youth and Persons with Disabilities, 2017:15).

The laws, policies and guidelines of South Africa also provides a framework for sexual and reproductive health service delivery that is supportive and rights-based with high propriety on accessibility to health care. The Constitution of the country guarantees the right to such accessibility for all. The environment of healthcare provision within South Africa is evolving rapidly. Despite the progress that has been made within some areas of the South African health system and it being considered as a resource in addressing sexual and reproductive health issues, some sources report that the country is still falling behind with regards to certain health outcomes such as prevention and care for reproductive health issues as well as in accessing treatment. Other on-going challenges that effect the effectiveness and quality of the health sector includes “a quadruple burden of disease, inequitable distribution of health resources, emphasis on curative healthcare, dependence on the public healthcare system by the majority of the population and weaknesses in the areas of health resources and leadership”. The social-demographic differences among the various racial groups within South Africa also affects the implementation of population policies (Susuman, 2018: 1-2).

It becomes clear from this theme that MHM is a crucial part of general menstrual management. As part of the research study, the effectiveness of re-usable pads was also

analysed as part of an empowerment initiative that has been implemented within South Africa in order to improve the menstrual experiences of females, which can also serve to be a resource.

3.6.2.6 Theme 6: The reusable pad initiative

Kamcare is an NPO in Gauteng, South Africa that promotes and distribute reusable menstrual products as part of community development in the Kameeldrift rural area and surrounding provinces. They provide social and training services by professionals to all people (Kamcare, 2021:1). For the purpose of this study, this has also been distributed within the Ikageng, Potchefstroom. This theme focuses on the effectiveness of the initiative of providing reusable pads with regards to MHM. Hennegan (2020:638) emphasises that initiatives that aim to address menstrual needs might be valuable, but it is important to consider that not all good motives can guarantee positive results. Community developments seem too often fail in reaching the desired outcomes and can cause unintended harm and it is therefore important to work from an evidence-basis, which is what the study aimed to provide.

Sub-themes that were identified within this theme includes an initial fear of making use of something new and different, effectiveness and experiences of using the re-usable pad and recommendations with regards to using the re-usable pad.

Sub-theme 6.1: An initial fear of making use of something new and different

During the study it was challenging to obtain participants as individuals portrayed a great resistance in making use of something new and different, with something so important that they cannot take risks with such as menstruation. Most of the participants showed a fear of making use of the product in the beginning stages and this can be supported by the following quotations:

> *"Jah, at first, okay, I got my periods early in the morning, neh, so I was so scared to use them, okay, so my worry was that, it so soft, like, it seems like if my periods will, I don't know how to put it, but that the blood will be on that surface of something, I don't know how to put it, my fear was its gonna leak, like okay, I said okay it is in the morning and I am meeting someone, I cannot use this one cause I am not sure, so I had to put the normal one." (Participant 1)*

> *"I've been scared to use it almost every day. As I said to you earlier it's something that is pretty new for me." (Participant 2)*

"I was scared because I did not know what it is and if it is going to work or what." (Participant 4)

"Yes, because I taught it is not secure enough and it is something new and different and different is always scary but yes it turns out to be brilliant." (Participant 5)

Despite this most of the participants eventually found it to be comfortable and effective once they have used it.

Sub-theme 6.2: Effectiveness and experiences of using the re-usable pad

Participants did portray an initial fear of using the re-usable pad due to it being unknown and something new, but most of them had positive experiences once they tried it and stated the following:

"So later then I used it when I was home, now it was later I think after six, jah, okay I even forgot that I had that period, it was so comfortable. I think it is even better than these ones cause this one its thick or thin, its thicker than the other one, we are speaking about the other one. So, I would say that my experience, it's okay, because I didn't use it maybe for two months or more than a month, just three days, I think it is okay." (Participant 1)

"I looked at it at first I laughed because it reminded me of the first days of my period when I used to use vests and cloths, an old cloth, and for me it was a very good idea especially in times like these, ah, where people don't have money because everything is expensive in nowadays, if at least some girls would have these types of pads, it would be really something good. I haven't noticed anything different for now because I've just used it once not once, once but not like I have used the pads prior in before years, I've just use it now, so it's difficult for me to give you an answer whether there is improvement or non-improvement because I see that is a nice cloth but I don't know what's inside the cloth, all and all it's a cloth, it looks like a pad, it feels like a pad but I wouldn't say there is a difference or not a difference because honestly speak I will get them because they look nice." (Participant 2)

"That cloth one, when you had an STI before it helps you, it helps to stay clean, maybe if you are like sleeping with some and then you get STI then you use this cloth, it helps you. That pads that you are washing is safer than the normal one. I was not feeling comfortable when I am using it but I was just using it until it become normal and it helped me because you just clip, it's not like you have to plak it, you just clip it onto your panty then after using it you just have to wash it and it is safer than the other one, it is different than the other one, you can just put it in your bag and take it everywhere. It's better than the one that I am throwing away, it's much better. It's helped me because I am not using much money." (Participant 4)

"It changed the beginning of it, it became more positive because I knew that I was prepared now, I felt more secure than when I don't have anything at all, so I always keep it in my bag." (Participant 5).

Through this it becomes evident that it also influenced the perspectives of participants in a positive manner.

Participant 3 did experience some anxiety with regards to using the re-usable pad:

> *"I think the worry is that, you have to check at the back that the blood didn't go through when you sit, like maybe if I am wearing skirt or trousers, I have to ask my friends if it is still fine at the back because I will feel that it goes through my pants, you see, so I have to ask my friends if I am still okay."*

However, most of the participants indicated that they will use it again but mostly as a back-up for when disposable products are not available, meaning that they actually still preferred disposable products over re-usable products. Participants stated for example that:

> *"Aw, that one I am still sceptical about but I saw that, you know, the leaking that I was worried about it's not necessary, but I will try, I think I will try, I am not sure." (Participant 1)*

> *"We need to understand that this pad it's probably a main use for occasions like for a backup, so it's not something that you would use on a daily basis. It's a good backup for any lady, a lady living in town or a lady like me, living in a township, it is a good backup to have, yes" (Participant 2)*

> *"You don't throw away that one, so I am using two materials, when the one that you throw away is finished then I use the other one. It's my backup." (Participant 4)*

> *"I'll use it for emergencies, I'll leave it in my bag for like emergencies like when I start my period unexpectedly and I think that I'll want more than one. It's a back-up, not something that I'll use every day or when I use a tampon then I'll put that on as well." (Participant 5).*

Most of the participants also mentioned that additional hygiene practices are necessary when using the product and this once again provides evidence that proper hygiene management is crucial when using re-usable materials, as mentioned earlier on. Participants made the following statements with regards to hygiene management of the re-usable pad and experiences of cleaning and changing it:

> *"My worry was the smell because I was not sure, I had to use the fabric softener like too much, because I was warried about the smell that, okay I've washed it, I've rinsed it, I am not sure about the smell so I've used the fabric softener too much, that was my worry. Changing was easy for me because my worry was if I only got one non-disposable, then what is going to happen when I am washing it, so I had to go back and use the disposable one, so jah I was lucky in that point, so that is why I was saying should I use the second one, because it was easier, changing it makes it easier." (Participant 1)*

> *"These ones, you don't just throw them in the dustbin, you have to wash them yourself, you have to take care of them yourself, am, because as I had said earlier that periods are, the smell is not something very nice, even if you were to hide these, because they are made of cloth, am, you need to make sure that you wash them even if they were in your bag, if they were not washed for a day, you would feel a smell coming from your bag, so somehow one of the reasons why I love the non-disposable pads, it's because they make you responsible, you would know that you are on your periods and using non-disposable pads, so you need to wash them. When you look at the size of these pads it's not something that would take the whole bucket, if you got just enough water or it's said the water that you bath with in the morning you could use the same water to wash the pad." (Participant 2)*

> *"Yes you have to change more often than with normal pads because the cloths easily get wet, you see it doesn't have something like they put on the pads, it goes to your pants directly and then goes out, so you can't guarantee that it is not going to get wet and you can only use it for a few hours, so you have to check it often and then because you didn't have lots of those cloths you just have to manage yourself and make sure that you don't smell. There is more hygiene and things, that you must wash it, you need to make sure that you can use it and then use another one after so many hours and then clean it properly, it must be clean, make sure there is no smell of the blood, soak it further, I'd advise to soak it, and when you have soaked it then wash it and then rinse it with clean water and make sure that okay now it is clean and then maybe put it outside where the sun is, so if there is germs or whatever it has to be cleaned, because you never know, it can actually affect your virginity or vagina." (Participant 3)*

The researcher was also interested in how participants experienced the design of the re-usable product and when participants were asked what they think about the design of the re-usable pad, the following statements were made:

> *"It feels kind of uncomfortable between the legs because of the button. Especially if you are sitting down most of the time, it can feel as if you have a pimple between your thighs. All and all it's a nice design; it's something thoughtful and also with regards to the thickness, am, it is fine, especially for washing. If you are going to wash it, it's not too thick; it won't get like balls, like in the middle." (Participant 2)*

> *"It is cute, I love the pattern and the whole design and it's comfortable, the material." (Participant 5)*

Additionally, participants were also asked if they would recommend to others to use the re-usable pad and the following was said:

> *"I will definitely, cause the thing that would make me to recommend it, it is simpler, the first one it is cash, you know you don't have to worry about buying sanitary towels every month. This one its un-disposable, you use it, you wash it, you don't have to spend a lot of money. I think that one makes me to say no this one I would recommend because especially to someone who cannot afford it, it is so so easy." (Participant 1)*

> *"I do recommend it to those that doesn't have money to buy the disposable ones, because it is helpful, all you need to do is you need to make sure you have as many as you can have and you will be able to wash them and soak them and make sure that they are clean and only then you can use it again, so I would refer that they can use it because it is very helpful and if you don't have money then you don't have to stress, you can use what you have, so you'd be like okay I don't have money and I don't have money at home but at least I've got something, I've got a solution to my problem and I'd use it and when I would feel it is wet, I would turn it around and ask someone if they have another one so that this one can dry and then you can also use it, as long as you make sure you wash it and soak it so that the smell of that blood doesn't come out, because if you don't wash it and you use it again, it does smell and you can imagine that on top of that the other blood is coming, so it will be worse, so I can advise that it is good for you, especially the pad that you guys gave us, it's very helpful." (Participant 2)*

This once again emphasises the importance of proper hygiene management when using re-usable materials to absorb menstrual blood.

Participant 3 expressed something different by saying:

> *"That girls they don't want to use it, they say they don't want to touch their blood, I like that pad because I can wash it and I was trying to explain to them that this one is safer that the other."*

> *"Yes, actually I would because it is cheaper, if I can put it like that and it would not only be available to women but to younger girls as well like imagine you are in class and you start you period then you can just pull that out and I love the fact that it has a little clip, that's my favourite part." (Participant 5)*

Most participants would recommend it, especially to those that are less-advantaged. However, others felt that individuals might have a fear of touching their own blood when cleaning the product. Although most participants would recommend it to others and eventually found the re-usable pad to be effective, they had some recommendations with regards to the product itself.

Sub-theme 6.3: Recommendations with regards to using the re-usable pad

Some aspects with regards to using the re-usable pad was lacking and was identified within some of the recommendations that participants made with regards to the usage of the product itself. Participants said the following:

Participant 1 stated that it will be more effective if you have more than one of the products:

> *"Definitely, even more than two, but two for now I think it would be easier, because it made my life easy, especially for me because it was the first time and I was even sceptical." (Participant 1)*

> *"I don't know if it could come with the, there are those types that go grrrr, I am not sure what those are, but I don't know if those would be better. So, if maybe the buttons were flatter. I would recommend maybe someone if they were to come to our school and talk about the topic, give every girl one or so." (Participant 2)*

Overall, participants seemed to have positive experiences regarding making use of re-usable pads and advantages that were mentioned of the product included that it is simpler, comfortable, cost-effective, safer and more secure, easy to use and serves to be a reliable back-up product to use. It also teaches females a sense of responsibility as you have to take care of the product by cleaning it properly. This was unfortunately also one of the disadvantages. According to participants you have to change regularly, put additional cleaning and hygiene measures in place and have regular check-ups to prevent leakages. A need for education on how to make use of the product effectively was also expressed. Not only were recommendations made specifically with regards to the re-usable pad, but also to the study in general and will be discussed as the final identified theme.

3.6.2.7 Theme 7: Recommendations

During the study participants expressed needs and made general recommendations of how MHM for all citizens can be improved. This theme addresses these aspects and includes the following sub themes: an all-inclusive approach and better accessibility to re-usable products as well as proper facilities.

Studies in Africa and Asia emphasise the importance of early and appropriate education on reproductive health, more specifically menstruation, in order to eliminate misconceptions, to build self-esteem and to prepare girls to ultimately reduce stress and shame (Lahme & Stern, 2017:2). It is recommended that this should form part of the curriculums in schools (Mohammed & Larsen- Reindorf, 2020:1). Better advocacy, education and facilities has been recommended in order to improve the abilities of females to manage their menstruation efficiently. Many others support these findings and recommendations (Lahme & Stern, 2017:2). Recommendations that were made within this study includes the following:

Sub-theme 7.1: An all-inclusive approach

Participants expressed that the youth should be included with regards to decisions being made within the country relating to menstruation and another participant was of the opinion that everyone should contribute to better MHM, not only the less privileged. This can be interpreted as a recommendation for an all-inclusive approach in solving menstrual related challenges. This can be supported by the following:

> *"I wish in fact, if the youth would be involved in, would be more involved in decision making of such details with regards to, to the issues that are made by only just adults and, and not, they don't take consideration of what we feel, they make decisions on their own instead of involving us as youth, it's not just about menstruation, I understand that also boys go through other difficulties in their lives that we don't know about as girls, so I wish they could involve youth as much as, ah, possible." (Participant 2).*

> *"I feel like those who are privileged also need to contribute in finding a solution so that everyone can get as many pads as they need." (Participant 3)*

Other recommendations were also made in terms of accessibility.

Sub-theme 7.2: Better accessibility to re-usable products and proper facilities

As mentioned earlier, accessibility is a major challenge that are being experienced within menstruation hygiene management and not only to menstrual absorbents, but also to supporting supplies and facilities. In order to address these challenges, participants recommended the following:

With regards to the re-usable pad participants stated that

> *"I think it should be accessible to everybody." (Participant 1)*

> *"non-disposable, is there any way that those can be made available? I don't know probably in the spaza-shops that we have here, or in the clinics really not necessarily, because in the spaza-shops I've realised now that they are selling masks but I understand that they are free at the hospitals but is there any possibility that those can be available in the clinics?" (Participant 2)*

She also stated further in the interview that she recommends:

> *"To install water tanks, especially in the household, especially in the households that are child-headed, it would help to put in some water tanks at the, ah, homes where it is only old people that stay there and they stay with their grandkids and nobody is there, so water tanks would help and also installing water tanks and right types of toilets. (Participant 2)*

Majola (2019:2) found that a lack of access to the necessary menstrual hygiene materials and supplies, does not only affect attendance in daily activities, but also has a rippling effect on the development of the economy on a communal level and the country as a whole. Accessibility to not only basic menstrual hygiene materials, but also to supporting supplies and facilities is a major concern. This also includes not having mirrors for uniforms to be checked for bloodstains (Mohammed & Larsen-Reindorf, 2020:1).

These recommendations that were made by participants speaks to the unmet needs that were experienced with regards to MHM and cannot only be addressed by the participants themselves, but by other stakeholders such as the government and different departments within the macro system and other levels of the environment of the individual when considering the ecological systems approach. Participants do not have control over most of the environmental challenges that were experienced and had to rely on role-players in the macro system. Nevertheless, they were affected by this.

3.7 SUMMARY

From the above discussion it becomes evident that a number of biographical factors such as gender, age, socio-economic status and culture has a major influence on the menstrual experiences of individuals. This can be divided and found within the different levels of the individual's environment as described by Bronfrenbrenner's Ecological System's Approach, which underpinned this study and was used as a framework to analyse the collected data. It became clear that there are various environmental factors that influence menstrual hygiene perceptions of female youth, specifically in the Ikageng, Potchefstroom area. The study can thus confirm that the environment does play a role within menstrual experiences. The different environmental levels present not only with challenges but also limited resources with regards to MHM and causes positive or negative perception outcomes.

The final concluding chapter follows.

CHAPTER 4: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

In this chapter a summary is firstly provided, which includes the research objectives and how they were met, the research question and how it was answered as well as the limitations of the study. Thereafter the key findings, conclusions and recommendations of the study are addressed.

4.2 SUMMARY

The aim and objectives of the study and how they were met follow:

The aim of the study was: to explore and describe the perceptions of female youth regarding Menstruation Hygiene Management (MHM) in Ikageng, Potchefstroom. The aim was met through the following objectives:

The research objectives of the study were:

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

4.2.1 Objective 1

To conceptualise and contextualise female reproductive health, the menstrual cycle and Menstrual Hygiene Management (MHM)

The first objective was met through conducting an in-depth literature review on the female reproductive system (section 2.2); the bodily organs as important parts of the

reproductive system (section 2.2.1 and 2.2.2), the menstrual cycle (section 2.3) and the different phases thereof (section 2.3.1, 2.3.2 and 2.3.3). MHM is an important aspect of menstrual management and maintaining reproductive health and the term as well as the different aspects thereof (section 2.4) were also addressed. Additionally, this was compared with the participants' concepts of the terms: reproductive health, the menstrual cycle and MHM within the empirical findings that were presented in the thematic analysis in chapter 3. The following sub-themes were generated in this regard:

- Sub-theme 3.1: Poor or only basic understanding
- Sub-theme 3.2: Connotation of maturity and being able to reproduce
- Sub-theme 4.1: Concept of hygiene management
- Sub-theme 4.2: Understanding of hygiene practices
- Sub-theme 4.3: Understanding of disposing of menstrual waste correctly
- Sub-theme 4.4: Understanding of MHM needs

4.2.2 Objective 2

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

Education is an important part of knowing how to manage menstruation adequately and the implications of a lack of this (section 2.3.4.1) were presented within the literature review that was conducted. The influence that cultural beliefs have on this were also addressed within the review (section 2.3.4.2).

As part of the study the researcher had to establish where the differences in understandings of concepts came from and therefore explored the sources and experiences of sexual reproductive health education. This was viewed through the ecological systems approach that was fully described in chapter 1. The ecological systems approach focuses on the person-in-environment and the interactions between persons, families, groups or communities and their environment when educated on sexual reproductive health (Teater, 2014:23). The sources of education were presented in the thematic analysis in sub-theme 3.3: Sources of knowledge of chapter 3 and although different sources of knowledge were evident, they remained to be within the immediate environment of the individual, also known as the micro system of the ecological system. The concept Menstrual Health and Hygiene (MHH) includes both

Menstrual Hygiene Management (MHM) and other influencing factors that connect menstruation with overall well-being, health, education, equality, equity, empowerment and human rights. Menstrual health was built on the concept and considers the wider implications of the physical, socio-political and environmental factors that influence menstruation on mental, physical and emotional levels (UNICEFF, 2019:13).

4.2.3 Objective 3

To explore and describe the experiences of female youth regarding their menstruation in Ikageng, Potchefstroom.

This objective was firstly met through exploring the initial menstrual experiences of participants and was presented in the thematic analysis in chapter 3 within the following sub-theme:

- Sub-theme 1.1: readiness for menarche.

The current menstrual experiences of females in Ikageng, Potchefstroom were also explored and presented in the thematic analysis in chapter 3, in the following sub-themes:

- Sub-theme 2.1: The normality of experiences
- Sub-theme 2.2: The psychological implications
- Sub-theme 2.3: The social implications
- Sub-theme 2.4: The physical implications.

Differences were recognised in this regard and was supported with related information from the literature review that was conducted within chapter 2, sections 2.2, 2.3, 2.4.3.1, 2.4.3.2 and 2.4.4.

Additionally, menstrual hygiene materials, supplies and facilities were also discussed within the literature review under point 2.4.2. Materials and supplies that were preferred by females in Ikageng, Potchefstroom and their experiences thereof were also addressed within the thematic analysis in chapter 3, sub-theme 4.5: Preferred materials, other supplies and the effectiveness.

4.2.4 Objective 4

To explore and describe the challenges of female youth regarding Menstrual Hygiene Management (MHM) in Ikageng, Potchefstroom.

To meet this objective, the researcher conducted a detailed literature review on the challenges that are experienced worldwide with regards to MHM. World Vision (2018:1), emphasize that multiple factors contribute to the challenging menstruation experiences of females, including a lack of adequate materials and facilities, physical pain related to menstruation, fear of disclosure and a lack of knowledge about the menstrual cycle. This was presented in section 2.4.3 of the literature review and varied from a lack of reproductive health education, cultural beliefs, norms and taboos, poverty and a lack of access, stigma and discrimination as a human rights issue, as well as covid-19 challenges.

Challenges that were experienced by females in Ikageng, Potchefstroom were also explored during data collection and were presented in the thematic analysis in chapter 3, theme 5: Challenges being experienced with regards to MHM. Some of them correlated with the challenges that were identified within the literature review and included accessibility and cost, a poor waste disposal system, poor WASH facilities and cultural beliefs. These challenges were also analysed through using the ecological systems approach that was introduced in chapter 1, 1.3 in order to establish the influencing factors on the different levels of the female's environment, in order for them to maintain menstrual management (Teater, 2014:23). Most of the challenges can be identified, within the exosystem or macrosystem of individuals when considering the ecological systems approach, meaning the more outermost levels, which also indicate that individuals have less control over these challenges, but remains to be affected by them.

Strategies of coping with these challenges were also addressed within the literature review under point 2.4.3.3, where it was established that individuals often reverted to ineffective strategies. Similar findings were obtained with regards to female participants in the Ikageng, Potchefstroom area and was presented in the thematic analysis in chapter 3, sub-theme 5.5: Strategies and ways of coping with challenges.

4.2.5 Objective 5

To explore and describe resources and support available for female youth related to Menstrual Hygiene Management (MHM) in Ikageng, Potchefstroom.

Sources of support with initial and current menstrual experiences were explored amongst females in Ikageng, Potchefstroom and were described in the thematic analysis in chapter 3, in the following sub-themes:

- Sub-theme 1.1: Sources of support and education during menarche
- Sub-theme 2.5: Current sources of support
- Sub-theme 2.6: Being able to talk about menstruation

These were also linked to the ecological systems approach and most of these sources prove to be within the microsystem of individuals, therefore having a direct impact on them. This is the closest system to the female and includes structures which they have direct contact with within their immediate surroundings for example home, school or work and mostly includes family, teachers, peers, community members or caregivers (Ryan, 2001:2).

Resources available for menstrual management were also included in the literature review that was done and was discussed under section 2.4.5 of programmes and policies, enhancing MHM. In order to meet this objective, this was further explored and described in the thematic analysis in chapter 3, in order to establish which environmental resources are available for females in the Ikageng, Potchefstroom area. These were discussed under sub-theme 5.7: Environmental resources. When considering the ecological systems approach that was introduced in chapter 1, 1.3, these can be located within the exosystem of the individual's environment. Most of the resources however still proved to be limited and posed additional challenges for the individual when accessing them.

In addition to this, one of the empowerment initiatives within South-Africa as a resource and the effectiveness thereof was explored in-detail amongst the females in Ikageng, Potchefstroom and discussed in chapter 3 within theme 5: The re-usable pad initiative.

4.2.6 Objective 6

To suggest social work intervention strategies for Menstrual Hygiene Management (MHM) for female youth

In order to meet this objective, the researcher conducted an extensive literature review in order to establish what gaps still remain to be evident within literature that address the issue of MHM (section 2.5).

The researcher also explored what the females of Ikageng, Potchefstroom would recommend in order to improve menstrual experiences and this was presented in theme 6: Recommendations from the thematic analysis in chapter 3. This was used to draw up conclusions and support recommendations that will be made later by the researcher. The recommendations that will be outlined in the recommendation section, speak about the improvement of menstrual management services for South African citizens in line with the ecological approach.

All of the above-mentioned aspects of menstrual management influenced how MHM was perceived and experienced by the females in Ikageng, Potchefstroom. Through meeting each objective, the researcher was therefore able to ultimately meet the overarching aim of the study.

4.2.7 The research question

The research question for this study was: **What are the perceptions of female youth regarding Menstrual Hygiene Management (MHM) in Ikageng, Potchefstroom?**

Through conducting a qualitative research study with a transcendental phenomenology research design, the researcher was able to answer the above question. This study involved interviewing five female youth participants from Ikageng, Potchefstroom, who are currently within a reproductive age and selection criteria of 18-30 years of age, who have started with their menses and received a reusable pad from Kamcare as well as who have provided informed consent. After the data was collected from the one-on-one interviews that were conducted, it was thematically analysed. The ecological systems approach underpinned the study. Themes and sub-themes that were generated from the data were discussed in chapter 3. Seven themes related to the perceptions of female youth regarding MHM, emerged from the data that ultimately contributed towards the research question being answered.

4.3 CONCLUSIONS

This section will focus on the conclusions that were made from the literature review.

4.3.1 Conclusions from the literature review

The ecological systems approach underpinned this study as a framework to analyse and interpret the findings on the perceptions and the influencing factors on the different levels of the female's environment, in order for them to maintain MHM. The ecological perspective focuses on the person-in-environment and the interactions between persons, families, groups or communities and their environment (Teater, 2014:23). Understanding this requires that the entire context of the ecological systems and their relationship that form the person's environment and in which growth occurs, must be considered (Bronfrenbrenner, 1994:4). The theory divides the person's environment into five complex levels, each having an effect on a person's development. This includes the microsystem, mesosystem, exosystem, macrosystem and chronosystem

The ecological systems approach enables one to take a holistic approach to see diverse points of entry into difficult situations (Teater, 2014:23). This helped to explain and make sense of the perceptions of female youth regarding MHM. In order to do this, environmental factors that can influence these perceptions on different levels had to be considered, as suggested by the theory.

A comprehensive review was done with the aim to summarise existing literature on the topic of MHM and to determine what gaps in research are still present. It became clear that more research in South African context had to be done on this topic and was supported by various sources. Taking the review into consideration, it was however concluded that MHM is very broad and that there are multiple aspects that should be considered when studying a related matter, in order to obtain a comprehensive understanding and true reflection. Through the review, it was determined that MHM perceptions are influenced by various environmental factors, both positive and negative. Challenges with regard to MHM included a lack of reproductive health education, cultural beliefs, norms and taboos, poverty and a lack of access, stigma and discrimination as a human rights issue and covid-19 challenges. This influences the way in which menstrual management is perceived and can affect the individual on physical, emotional and social levels. Positive interventions that have been developed and the effectiveness thereof

however required more attention, as it is hardly represented in existing literature. Based on this, the study aimed for this to be further explored and described, specifically in the Ikageng, Potchefstroom rural community. Within areas such as this one, organisations such as Kamcare, attempted to empower females in various provinces in South Africa, by providing reusable pads to community members, in order to enhance their MHM experiences. It was however not clear what the effectiveness of such programs are and had to be further studied. It was crucial for females to share their experiences in this regard as it influences the way in which overall MHM is perceived.

4.4 KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS FROM THE EMPIRICAL STUDY

The key findings, conclusions and recommendations for each theme that was generated from the research findings is presented in this section.

4.4.1: Theme 1: Experiences during the onset of menstruation

It was evident that each participant had a unique experience during their first menses, which influenced their perception and future experiences of menstruation. Two common sub-themes were identified, namely readiness for menarche and the source of support and education during menarche.

4.4.1.1 Key findings

In contrast to the two participants who had support and felt prepared for menarche, three of the five participants had less support and education in preparation for menarche, which left them without an understanding of what was happening to them and feeling shocked. This phenomenon is known as menarche shock and occurs as a result of not receiving support or being educated on what is happening to them, leaving them to feel unprepared. Once again, the importance of having reliable and trusting sources of support and education within the immediate environment of the individual (micro system) is emphasised.

Not all the participants had proper support or education before or during menarche, which created misconceptions and several other psychological implications, such as experiencing fear and confusion. The support that others received was very limited, for example when participant 4 explained that her grandmother did help her, but did not explain to her what is happening to her and why. Although initial support and education

was not necessarily available for all participants, after some time, some source of support or education did become available and proved to be beneficial to most of the participants. Taking the ecological systems approach into consideration, these sources were mostly within the individual's immediate environment (the microsystem), not necessarily only within the family, but also at schools such as teachers or peers.

4.4.1.2 Conclusions

Education and support are crucial before or during menarche in order to prepare individuals and to avoid psychological implications such as experiencing shock, confusion and feeling unprepared. A direct link can thus be made between individuals who are educated and supported by family or teachers for menarche. The unavailability of this education and support will cause individuals to be unprepared and several challenges will be experienced. This support and education should be received from structures within the individual's immediate environment, namely the micro system, as they are more reliable and trusting to handle such a sensitive matter.

4.4.1.3 Recommendations

- A clear need for education and support before or during menarche is being expressed. It is recommended for this to be provided by trusting and reliable structures within the more immediate environment of the individual, such as parents/caregivers, older siblings, teachers and clinics.
- Guidance or supportive programmes should be developed, in order for such structures to be educated on how to provide such support and education, as well as why it is important. When they are adequately educated on the matter, empowered with the necessary information and made aware of the importance of this, this will in turn be transferred to their children and again to their children. A positive empowerment cycle is thus created. A lack of or poor support or education availability during menarche can be as a result of the structures within the microsystem not being educated or supported themselves when they experienced menarche and they are most probably not knowledgeable on what and how to provide this.
- When structures within the immediate environment of the individual are not able to provide the necessary support and education due to a number of reasons, other educated role-players should be able to fulfil this role. This can for example include social work interventions, such as one-on-one educational sessions, group work sessions with more

than one individual, for example with teenagers at schools or community work such as educational programs.

- A need for education was also expressed by participants.

4.4.2 Theme 2: Current menstrual experiences

This theme focused on the current menstrual experiences of participants since it proved to differ from initial experiences. This was attributed to a number of reasons, related to physical and psychological changes that might occur with development, as described by the chronosystem of the ecological systems approach (Ryan, 2001:2). This theme included six sub-themes namely the normality of experiences, psychological implications, social implications, physical implications, current sources of support, as well as being able to talk about menstruation.

4.4.2.1 Key findings

Most participants considered their current menstruation experiences to be normal and manageable, while others were concerned about abnormalities and irregularities. They knew something was wrong, but they did not know why and that it was a part of their reproductive health. Some of the things that participants considered as abnormal related to premenstrual symptoms (PMS), commonly experienced my menstruators. Once again considering not being educated by structures within the microsystem on menstruation and being healthy in this regard, it could explain why participants were unaware or ignored and led to believe they are experiencing abnormalities. The concern and uncertainty that came with this, was associated with psychological implications that were experienced. It was evident that menstruation and the different aspects thereof can have psychological implications for individuals. These psychological implications included feeling worried, sad, lonely, angry, moody, confused, sensitive, experiencing mixed-emotions, being stressed, experiencing feelings of unfairness and wanting to withdraw. Some participants expressed that they were psychologically affected when other people within their microsystem experienced menstrual management difficulties. More positive psychological related experiences included feelings of relief and being more productive in daily tasks.

Furthermore, participants not only experienced psychological implications, but also social challenges during menstruation, in their daily interaction with peers and other structures

within the microsystem, namely the mesosystem within the ecological systems approach. These included feeling bad, embarrassed, irritated, uncomfortable, fearful, worried about leaking and having emotional pain. They felt that others did not understand them. A lack of freedom, withdrawal and being bullied or teased were other social challenges encountered. This refers to the positive social experience that was mentioned in the acknowledgement that sometimes exists between pears regarding menstruation.

Menstruation also affected participants on a physical and biological level, relating to the concept of reproductive health. Some participants were more aware of their reproductive health, while others were not. This could be ascribed to their poor knowledge and ignorance, due to being uneducated or supported during the initial stages of menstruation from structures within the microsystem of the participants. This appears to have resulted into neglect or unawareness, affecting the physical well-being of participants and the way in which they take care of themselves. Physical difficulties that were experienced included: unawareness of reproductive health, limited knowledge in this regard, experiencing rashes or sores due to poor menstrual hygiene, physical body changes due to PMS, having STI's and having to manage this during menstruation. Nevertheless, it is clear that the influential factors of current menstrual experiences differed between individuals. Despite this, individuals were severely affected by this on physical, emotional, social and psychological levels. It is therefore clear that menstrual management is a health and social issue, and is crucial to consider in the field of social health care. Having support during menstruation is thus emphasised.

It was evident that as participants grew older, some of them become less reliant on the support of others and mostly relied on themselves as it became more manageable. Within the ecological systems approach, this links to the chronosystem, explaining changes in the way things are experienced as individuals grow older. Participant 5, for example, expressed that she does not currently rely on any support and that she is individually responsible for her menstrual management.

It was thus clear that being able to talk and express oneself in terms of menstruation experiences and needs, is important, but unfortunately not always possible. Although challenging due to a number of reasons such as cultural beliefs, all participants were able

to talk to at least one person within the microsystem of the ecological systems approach, which is the closest system of individuals (Ryan, 2001:2). They seemed to realise the importance of having support and being able to express and talk about menstruation, the challenges that are experienced as well as the management thereof.

4.4.2.2 Conclusions

Although participants' current menstrual experiences differed from their initial experiences due to a number of reasons, including their age and development, support and being able to talk about menstruation with structures within the microsystem of their environment remained important. Some participants did become somewhat less reliant on this as they grew older, relating to the chronosystem of an individual's environment, when considering the ecological systems approach. Ultimately, menstruation affects individuals on psychological, social and biological levels and having support in order to address these implications is crucial.

4.4.2.3 Recommendations

- More educational and awareness campaigns that are evidence-based should be implemented within South Africa to address the issue of poor reproductive health care amongst menstruators and their lack of awareness. This could eliminate menstruators being unaware of what is normal and could in turn lessen psychological implications such as chronic worrying. In order for this to happen, structures within the microsystem (immediate environment) of individuals have to be properly educated and informed on the matter, including parents/caregivers, teachers or health care service providers at local clinics.
- Since menstruation affects individuals on different levels, the different departments of the country should work together to address the issues and challenges related to MHM. This includes the Departments of Education, Health as well as Social Development. Through the study it became clear that proper MHM and a lack thereof, is not an isolated problem that can only be addressed with one simple project or intervention. It requires a multi-dimensional, multi-sectoral, strong and more hands-on long-term solution from all areas and different levels of the country.
- Not only females should be included, but also males, as we have learned from the above findings that ignorance amongst males also creates social and psychological implications such as bullying and teasing.

- Participants also expressed a need for a more all-inclusive approach. They for example suggested that the youth should be included with regards to decisions being made within the country relating to menstruation. A participant suggested that everyone should contribute to better MHM, not only the less privileged.

4.4.3 Theme 3: Concept of reproductive health and menstruation

This theme focused on the concept and knowledge of participants on reproductive health and menstruation that forms a part of this, as well as the different aspects thereof. This is a direct reflection of how participants perceive menstruation and the management thereof. This theme was divided into three sub-themes and included: poor or only basic understanding, as well as a connotation to maturity or being able to reproduce. The sources of knowledge were also included as a sub-theme.

4.4.3.1 Key findings

Understanding menstruation, but also reproductive health as a broader spectrum and the different aspects thereof is important in order to know as a part of MHM. Most participants were not able to provide a detailed description of what reproductive health entails, with their descriptions being superficial. Menstruation as a part of reproductive health was also specifically explored and the explanations provided were very basic, influencing their menstrual experiences. This limited understanding of some of the participants of their reproductive health, showed a lack of knowledge of the reason menstruation occurs, as well as the importance thereof. Some participants, however, did attach a deeper meaning to these concepts with making a direct connotation between menstruation and their ability to reproduce. Some perceived this connotation positively, while others perceived it more negatively.

Many different understandings regarding menstruation and reproductive health were shared; therefore, the sources of knowledge and education were explored, in order to understand where these understandings and differences came from. Apart from family members, health care clinics and schools were major sources of knowledge, within the immediate environment, the microsystem of the ecological systems approach. This is the closest system to the female and includes structures which they have direct contact with, within their immediate surroundings for example home, school or work, and mostly includes family, teachers, peers, community members or caregivers (Ryan, 2001:2). As

some of the participant's sources of knowledge were elders and other significant others within the microsystem, it can only be assumed that this is related to cultural beliefs.

4.4.3.2 Conclusions

Participants only gave superficial and basic descriptions of important terms such as reproductive health and menstruation, reflecting a lack of proper education on these concepts, despite experiencing them on a regular basis. The importance of having adequate educational structures within the immediate environment of individuals is again emphasised. As most of the sources of education was within the micro system of individuals, it is assumed that the education that took place had a cultural component to it, including taboos and stigmatisation, with less biological knowledge. Other important role-players with regards to education included clinics and schools, which emphasises the importance of the health and educational systems of South Africa and the role that teachers and health care providers play in the lives of the youth.

4.4.3.3 Recommendations

- Role-players such as teachers and health care providers should be made more aware of their importance with regards to educating individuals on reproductive health and menstruation. They often assume that this is provided at home by parents/caregivers, which is not always the case and it is important for them to be available and ready to take on this role.
- More focus should be placed on not only educating individuals on menstruation, but more on reproductive health as a broader phenomenon, including the different components of this such as sex education, reproductive health status, the importance of regular check-ups, as well as MHM. Participants showed a lack of general knowledge, emphasising the importance of thorough reproductive health educational programmes and MHM.
- Such education should form part of the curriculums at schools so that early intervention can take place. This can be supported by studies in Africa and Asia that emphasise the importance of early and appropriate education on reproductive health, more specifically menstruation, in order to eliminate misconceptions, to build self-esteem and to prepare girls to ultimately reduce stress and shame (Lahme & Stern, 2017:2). Mohammed & Larsen-Reindorf (2020:1) recommend this forms part of the curriculums in schools.

4.4.4 Theme 4: Menstrual hygiene management (MHM)

MHM is an important aspect of overall menstrual management and can affect the individual in many different ways as influenced by various environmental factors. This theme focused on MHM in general as well as the various different aspects thereof included sub-themes: concept of hygiene management; understanding of hygiene practices; understanding of disposing of menstrual waste correctly; understanding of MHM needs; preferred materials, other additional supplies and the effectiveness.

4.4.4.1 Key findings

It was interesting to note that despite participants' limited understanding of reproductive health and menstruation, they presented with a better and relatively good understanding of how to maintain proper hygiene during menstruation with various valid practices in doing so. Together with a good concept on what MHM is, it was evident that participants had knowledge of good hygiene practices and how to maintain proper hygiene. It is not clear why this difference was present, as the sources of knowledge remained to be the same. When one looks at the definition of MHM most of the aspects were covered within their explanations, except for WASH (access to water for washing, access to safe and convenient facilities to dispose of used menstrual management materials), which were the challenges experienced addressed later. Changing pads regularly and bathing/washing frequently, were two main topics that were really strongly presented with regards to hygiene practices and how to maintain good hygiene. Most participants shared this when asked about how they manage hygiene during menstruation, reflecting their awareness of the importance of MHM. This indicated that they had better education on MHM by the sources within the microsystem, rather than other aspects of the menstrual management, when taking the ecological systems approach into consideration.

Participants reflected adequate understanding of how to dispose of menstrual waste in a hygienic, safe and dignifying manner. This was despite the fact that several environmental challenges were experienced within the macrosystem of individuals when considering the ecological systems approach. Participants provided very basic answers on their MHM needs and did not seem to realise that menstruation management is far broader than just a need for absorbents. They refrained from taking into consideration that other supplies and facilities that are usually provided by officials within the exosystem, such as the government, are also necessary. This portrayed a very limited

understanding of MHM needs, despite them having a good understanding of MHM in general and how to practise it.

The main materials that were mentioned within this study were absorbents, including disposable sanitary pads, tampons and re-usable sanitary pads made of materials such as cloths. Considering the human rights standards, it seemed as if only three characteristics were met with regards to using re-usable materials such as a cloth, including accessibility, availability and acceptability, with quality compromised. In contrast to this, availability, acceptability and quality were met with regards to the sanitary pad and tampon, but accessibility appeared to be somewhat problematic.

4.4.4.2 Conclusions

It is clear that it is crucial to manage hygiene during menstruation and when compromised, this can affect the individual, not only on physical levels, but also on social and psychological levels. MHM is a very broad spectrum and includes various aspects, however, participants did not seem to realise this and did not seem to take into consideration that infrastructure, supplies, facilities and services are essential when managing menstruation hygiene.

4.4.4.3 Recommendations

- Despite this population being aware of proper hygiene management during menstruation and its importance, this must be included into educational programmes for youth and important role-players. A lack of this can lead to severe consequences.
- NGO's and other local government facilities that have proven to serve as environmental resources, such as health care clinics and schools, could for example be further equipped with better facilities and more knowledge to address MHM. As seen in the study, some of the participants in their area did not receive support from their immediate environment and were often forced to reach out to other support structures within their environment. It is important for these structures to be fully equipped to assist the individual in this regard as support is crucial during MHM. Fisher (1997:442) acknowledges the ability of these organisations to strengthen local and social initiatives in order to provide services, recognising the fact that NGOs are based on the fundamentals of "empowerment" and "participation" (Fisher, 1997:442). Since these organisations work on grassroots level, utilising them could be most effective in addressing challenges such as accessibility and cost-implications.

4.4.5 Theme 5: Challenges being experienced with regards to MHM

This theme focussed on the challenges experienced with regards to MHM, as it became evident that several challenges were experienced, which made it difficult for the female youth in Ikageng to effectively manage hygiene during menstruation. This theme included seven sub-themes, namely, accessibility and cost, a poor waste disposal system, poor WASH facilities, cultural beliefs, strategies and ways of coping with challenges, participation in daily activities and environmental resources.

4.4.5.1 Key findings

Various challenges were identified within the study that were experienced by participants regarding MHM. These could be considered as environmental constraints and while some could be identified within the macrosystem of individuals, others were specifically related to the exosystem of the ecological systems approach, as participants were not necessarily directly involved with these factors, but were still affected by them:

Accessibility and cost

Although the preferred materials were available, participants seemed to be experiencing some challenges with regards to accessing them and buying them due to the cost involved, with most of the participants from low- and middle- socio-economic classes. Thus, it is understandable that it could be difficult for them to afford sanitary materials. The socio-economic statuses of participants and the influence it had on accessibility could be associated with the macrosystem, when considering the ecological systems approach, as it does not refer to a specific environment of one person, but the already established circumstances in which the individual is developing (Guy-Evans, 2020:4). The accessibility challenge therefore specifically related to environmental limitations and such challenges could ultimately affect the quality of MHM and the way in which menstruation is perceived.

A poor waste disposal system

A proper waste disposal system appeared to be unavailable within Ikageng, Potchefstroom and created challenges with regards to MHM. This related to the exosystem of participants, in the ecological systems approach, as they did not have control over this, but were affected by it. It was clear that this challenge affected participants physically, socially and psychologically. It was also evident that unsafe micro- and meso systems existed, due to poor menstrual waste disposal systems, as well as poor sanitation within the environment.

Poor WASH facilities

Challenges with regards to WASH facilities was an extremely profound sub-theme that was identified within this study, which could be associated with the exosystem of the ecological systems approach. Not only did participants have no access to water, but also no access to clean safe water. Available water appeared to be contaminated and caused physical implications. Similar to a waste disposal system, participants did not have control over the availability and conditions of sanitation systems and other WASH facilities, as it is not maintained by the local government and municipality as should be.

Cultural beliefs

The affect that culture had on MHM was another strong theme that was recognised within the study, linked to the macrosystem as part of the ecological systems approach, since it was within the outermost level of the participants' environment (Ryan, 2001:2) and an already established system in which they lived and perceived experiences within (Guy-Evans, 2020:4). It was clear that cultural beliefs associated with menstruation did influence individuals and served to be a barrier in participating in daily activities such as going to church, making food and not being allowed to eat certain foods. This therefore affected them socially and psychologically as well as their MHM, which relates to the physical well-being that was affected. This could influence the way in which menstruation was perceived, causing certain attitudes. It however seemed that as individuals got older and obtained more independence and freedom, they outgrew these beliefs (chronosystem – the influence of the ageing process) and others remained to find them helpful. From the study it was evident that participants had to improvise and develop strategies in order to manage and cope with the challenges that they faced with regards to MHM. Some proved to be effective, while others were ineffective, posing additional challenges for the participants. Most of the strategies that were implemented proved to only partially provide relief and could therefore be considered to be ineffective. These strategies included walking far in order to fetch water with buckets, posing additional physical implications, especially when participants had their period. Rain water was also caught up in buckets, but was not always available due to low rainfall. Additionally, participants travelled from Ikageng, Potchefstroom via public transport, in order to buy clean water. This posed more financial implications, including travel and water costs, related to the concept of period poverty. Basic services and infrastructure are something that should be available in all communities, but unfortunately are not being provided by the local government and municipalities, although it is a basic human right. For

participants with these poor socio-economic circumstances, this was an extra unnecessary expenditure.

It was clear that participants were affected by the environmental challenges that were experienced within the macro- and exosystem, when considering the ecological systems approach. This was over and above the social implications of menstruation experienced, as a result of these environmental challenges experienced with regards to MHM.Several resources were available within the exosystem of participant's environment, which were limited, but influenced them in a positive manner. Various challenges were also experienced when accessing them, such as limited supplies, essentials and capacity, long waiting times as well as limited privacy. The clinics served to be one of the most important environmental resources within reproductive health management, since they provided free treatment and reproductive health care, as well as education and counselling services. Other environmental resources within the exosystem included schools, the Department of Agriculture, SASSA grants and the municipality.

4.4.5.2 Conclusions

Although on different levels, MHM was compromised due to limitations existing in the environment and participants often have to implement strategies to cope with these challenges. However, these also just seem to be effective up until some point, as it poses different difficulties. The MHM pf participants in the selected community in the North West province was influenced by various environmental factors, both positive and negative. However, at this point in time the negative seems to be outweighing the positive. From this it can be confirmed that environmental factors do indeed influence the menstruation experienced of female youth in the selected community in the North West province and ultimately, the manner in which it is perceived.

4.4.5.3 Recommendations

- Awareness must be created on environmental challenges that are being experienced in this area, in order for important stakeholders to become aware of the struggles that are being faced. This should be specific to the needs of this area as challenges in other areas might differ. Some of the challenges that were experienced by female youth in Ikageng, Potchefstroom, is within their outermost levels such as a lack of provision of basic services, including a poor waste disposal system and lack of WASH facilities. This requires higher intervention and assistance from stakeholders in positions that have

greater influence and power, on provincial and national levels of government. As seen in the study menstrual management has far greater implications than one realises and investing in this aspect of female reproductive health, would be beneficial for the youth, but also for the country as a whole. Since menstrual management is often left unspoken and swept under the carpet due to stigma of having to keep it private, the researcher is of the opinion that more important role players should start talking openly about the aspect of MHM. Others, especially children and youth, will then become more comfortable to open up about this important aspect of reproductive health and feel free to express their needs and challenges in this regard.

- Provision of sanitary products and additional menstrual management supplies should be free of charge and more available to female youth. Many argue that since menstrual products are a necessity and not a luxury, it should be as easily accessible as condoms and femidoms. Minister in the Presidency responsible for Women in SA, Susan Shabangu, argues that access to free contraceptives and medical treatment for STIs is provided for by the current health system, whereas sanitary products, especially to indigent females, are not provided, as most of them are unable to afford these essentials (Department of Woman, Youth and Persons with Disabilities, 2017:3). Period poverty is considered to be one of the main contributors to not being able to manage menstruation with dignity.
- This process should be strictly monitored and constantly evaluated in order to make improvements and adjustments where necessary, as well as to avoid and limit influential factors that could negatively affect this process, such as corruption and poor management of resources and means.
- In order to address the implications and influence of cultural beliefs on MHM, the researcher would recommend that NGO's and social workers, as well as other health care providers and teachers should work together with community leaders in order to negotiate, mediate and reach an agreement with regards to how the influence of culture on MHM could be addressed. Once again, a multi-dimensional and inter-sectoral approach is needed, as these individuals also work on grassroots level and have a great influence within communities. They have to be considered in solutions and interventions in addressing the problem, as well as within policy development in this regard.

4.4.6 Theme 6: The reusable pad initiative

This theme focused on the effectiveness of the initiative of providing reusable pads with regards to MHM. The environment consists of various environmental resources. One such resource is an initiative launched by Kamcare, an NPO in Kameeldrift rural area, Tshwane, that provides social services in the community, and also promotes MHM by training women in the community to manufacture reusable sanitary pads, thereby empowering them and distributing these products to female youth in the community, as a part of their community work initiatives (Kamcare, 2021:1). For the purpose of this study, these products were also distributed within Ikageng, Potchefstroom. Hennegan (2020:638) emphasises that initiatives that aim to address menstrual needs might be valuable, but it is important to consider that not all good motives can guarantee positive results. Sub-themes that were identified within this theme included an initial fear of making use of something new and different, effectiveness and experiences of using the re-usable pad and recommendations with regards to using the re-usable sanitary pad.

4.4.6.1 Key findings

The theme focussed on the positive intervention that developed and improved MHM to be further explored and described specifically in a rural, informal settlement within Ikageng, Potchefstroom. Within areas such as this, organisations such as Kamcare, have attempted to empower females in South Africa, by providing reusable pads to community members, in order to enhance their MHM experiences. It was however not clear what the effectiveness of such programs was and therefore had to be further explored. It is crucial for females to share their experiences in this regard, as it influences the way in which overall MHM is perceived.

It was challenging to recruit participants for this study, as individuals portrayed a great resistance in making use of something new and different, especially with something so important and personal, that they did not want to take risks with. Participants portrayed an initial fear of using the re-usable pad, due to it being unknown and something new, but most had positive experiences once they tried it and eventually found it to be effective. This thus influenced the perspectives of participants in a positive manner. Some anxiety with regards to the use of the product was however experienced, but despite this, most of the participants indicated that they will use it again, mostly as a back-up for when disposable products are unavailable, meaning that they still preferred disposable products over re-usable products.

Most participants mentioned that additional hygiene practices are necessary when using the product, providing evidence that proper hygiene management is crucial when using re-usable materials. The researcher was also interested in how participants experienced the design of the re-usable product and participants were therefore asked about their opinion on the design of the re-usable pad. Although some recommendations were made with regards to the clip of the pad to be flatter, most participants seemed to appreciate the design, pattern and material of the product. Additionally, participants were asked if they would recommend to others the use of a re-usable pad, which most said they would, especially to those who are less-advantaged. However, some felt that individuals might have a fear of touching their own blood when cleaning the product, which could be a cultural myth. Although most participants would recommend it to others and eventually found the re-usable to be effective, they had some recommendations with regards to the product itself. Some recommendations that participants made with regards to the usage of the product itself, included that it will be more effective if you have more than one of the products.

Overall, participants seemed to have positive experiences regarding the use of re-usable pads. Advantages that were mentioned included that it is simpler, comfortable, cost-effective, safer and more secure, easy to use and serves to be a reliable back-up product to use. It also teaches females a sense of responsibility, as one has to take care of the product by cleaning and drying it properly. This was also one of the disadvantages, namely that one has to change regularly, put additional cleaning and hygiene measures in place and have regular check-ups to prevent leakages. A need for education on how to make use of the product effectively was also expressed.

4.4.6.2 Conclusions

To conclude, it is evident that environmental resources play a major role in improving the menstrual management experiences of females and empowering them to address the challenges that are being experienced. Projects in reproductive health and more specifically in enhancing MHM, is necessary and this initiative launched by Kamcare in making and distributing re-usable pads was praised. It appeared to be a good project and intervention in addressing challenges that are being faced by female youth in impoverished communities. However, this was not evidence based and it was unclear whether it is indeed effective and actually being used after being distributed. After conducting this study, it can be reported and agreed upon that this initiative ultimately

proved to be effective, despite a few recommendations that were made that calls for some adjustments and improvements. However, since the product is still very new, the interest is still very low, but should grow once awareness and education with regards to the product increases. This study was able to confirm that the initiative developed by Kamcare, is indeed effective and did not cause any harm.

4.4.6.3 Recommendations

- Initiatives such as the reusable pads project by Kamcare, should be encouraged and be implemented in more areas of South Africa, especially to the less privileged, who cannot choose between reusable materials or disposable products, as they face challenges such as period poverty.
- More women in these communities should be trained to make these products, as it serves as an opportunity for those that make the pads to learn new skills such as sewing and entrepreneurial skills.
- When the pads are distributed, it is recommended that an educational pamphlet should be provided, in order to inform recipients on how to use the reusable product and to emphasise that additional hygiene practices are crucial in order to maintain proper MHM when using the product. Presentations can be done by healthcare workers or other relevant professionals that have been educated on the matter such as social workers or teachers to promote these products.
- More awareness and marketing of the benefits of the reusable product such as cost-effectiveness and it being simpler, is also necessary, as most individuals might not even be aware of the option of making use of reusable pads, especially when facing challenges.
- The researcher also agrees with the recommendation made by participations of having more than one of the products available, namely at least two reusable products to increase the effectiveness, as well as better hygiene management to be able to wash one while making use of the other. Distributing three products to each recipient will even be more effective.

4.5 RECOMMENDATIONS FOR FUTURE RESEARCH

The following recommendations are made for future research:

- Since the study was limited to one of the nine provinces of South Africa, it is recommended for the study to be conducted on a larger scale in other provinces, in order

for the findings to be generalised. This will allow greater insights in how MHM is experienced and perceived country wide.

- Other menstruators such as transgender and non-binary individuals should also be included in the study sample, with the focus not only on females. This will also contribute to the study being more generalised, for more accurate representation of the diverse South African population in attempts to be inclusive of all individuals despite their gender, age and sexual orientation.
- Additionally, a mixed method approach is also recommended as it could be interesting to also include quantitative results into a study, such as how many individuals make use of disposable products versus how many individuals make use of reusable products, as well as the access to such products and the challenges faced. This can then be compared to the qualitative findings for triangulation.

4.6 LIMITATIONS OF THE STUDY

The limitations of this study included the following:

- Purposive sampling was employed and the researcher got the names and contact details of the participants who had shown interest in participating from the gateway organisation, to determine whether they meet the selection inclusion criteria. Interest in participating in the study was initially very low. The fact that the researcher relied on this approach to obtain access to the selected community in the North West province, however, somewhat limited the recruitment of participants and prolonged the study period.
- One of the inclusion criteria for individuals to participate in the study included that they had to use a reusable sanitary pad that they had received from Kamcare. The researcher found that individuals showed a great resistance towards using something unknown and new, taking time to test this product. It was thus challenging to select participants who had received and used this product distributed by the gateway organisation. Those that did eventually agree to participate took some time to get comfortable with the idea of eventually using the product, which prolonged the data collection process.
- Due to the recruitment challenges, the study sample was very small. A phenomenological research design was used, which allows for a small number of participants to be included. Only females and no other menstruators were included in the study.

- Menstruation is a very sensitive issue and the possibility exists that the participants might not have provided a true reflection of their perceptions. The researcher had to ensure participants that their identities would be protected by providing them with pseudonyms before the interview to protect their identity and that the recordings would be kept confidential and only accessed by the researcher and her supervisor for research purposes. Participants became more comfortable at later stages of the interviewing process and no emotional harm was caused, nor referral for counselling services required.
- Collecting rich data to a point of data saturation was time consuming, as the duration of the interviews were longer than planned. Thus, the transcriptions of the interviews were also time consuming.
- This research was conducted in one province of South Africa, namely North West, and the findings can therefore not be generalised, but rather applied to populations with similar biographical characteristics.

4.7 FINAL CONCLUDING REMARKS

Finally, it can ultimately be concluded that despite of limitations that were experienced, the study was able to reach its objectives and main aim. It found many environmental factors that influenced the perceptions of the female youth in a selected community in the North West province both negatively and positively. Through the study the researcher was able to prove that one of the positive environment resources – the empowerment initiative launched by Kamcare, of reusable pads – was indeed effective. One theme that repeatedly presented itself throughout the study was the importance of education with regards to not only MHM, but also to multiple other aspects of reproductive health care. The recommendations made are essential to enhance MHM and initiatives made in this regard in the future.

REFERENCES

Alzate, M.M. 2009. The role of sexual and reproductive rights in social work practice. *Journal of Woman and Social Work*. Available: https://shareok.org/bitstream/handle/11244/25158/10.1177.0886109909331695.pdf;jsessionid=3D0081B83DF655C5D866C27FA2049440?sequence=1 (Accessed 2022/06/22).

Anney, V.N. 2014. Ensuring the quality of the findings of qualitative research: looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2):272-281.

Anureet, W. 2020. *Menstruators: A gender neutral & inclusive term for all our period conversations.* Available: https://www.shethepeople.tv/home-top-video/menstruators-a-gender-neutral-inclusive-term-for-all-our-period-conversations/ (Accessed 2021/05/18).

Babbie, E. 2017. *The basics of social research*. 7th ed. Boston, MA: Cengage Learning.

Begum, M., Sharma, H.K. & Das, S. 2016. Menstrual Disorders: causes and natural remedies. *Journal of Pharmaceutical, Chemical and Biological Sciences*, 4(2): 307-320.

BioNinja. 2021. *Reproduction.* Available: http://www.old-ib.bioninja.com.au/standard-level/topic-6-human-health-and/66-reproduction.html (Accessed 2021/11/15).

Bronfenbrenner, U. 1994. *Ecological models of human development. International Encyclopaedia of Education.* Available: https://impactofspecialneeds.weebly.com/uploads/3/4/1/9/3419723/ecologial_models_of_human_development.pdf (Accessed 2020/04/26).

Census Community Profile Databases. 2011. *Ikageng*. Available: https://census2011.adrianfrith.com/place/676005 (Accessed 2022/06/23).

Chandra-Mouli, V. 2015. Twenty years after international conference on population and development: where are we with adolescent sexual and reproductive health and rights? *Journal of Adolescent Health*. Available: https://ecommons.aku.edu/cgi/viewcontent.cgi?article=1064&context=eastafrica_fhs_mc_obstet_gynaecol (Accessed 2022/06/22).

Chirwa, C. 2014. *Common period myths in South Africa.* Available: https://www.lil-lets.com/za/en/lil-lets-talk/5-common-period-myths-in-south-africa/ (Accessed 2021/05/20).

Christiano, D. 2019. *What causes menstrual clots and are my clots normal?* Available: https://www.healthline.com/health/womens-health/menstrual-clots#causes (Accessed 2021/07/24).

Chumlea, W.C., Schubert, C.M., Roche, A.F., Kulin, H.E., Lee, P.A., Himes, J.H. & Sun, S.S. 2003. Age at menarche and racial comparisons in U.S. girls. *Official Journal of the American Academy of Paediatrics.* Available: https://pediatrics.aappublications.org/content/111/1/110/f1 (Accessed 2021/05/18).

Clarke, V., Braun, V. & Hayfield, N. 2015. Thematic analysis. In Smith, J.A. (Ed). *Qualitative Psychology: A practical guide to research methods*. 3rd ed. Thousand Oaks, CA: Sage.

Crankshaw, T.L., Strauss, M. & Gumede, B. 2020. Menstrual health management and schooling experience amongst female learners in Gauteng, South Africa: a mixed method study. *Reproductive Health*, 17(48): 1-2.

Department of Women, Youth and Persons with Disabilities. 2017. *Sanitary Dignity Policy Framework.* June 2017.

Department of Women, Youth and Persons with Disabilities. 2019. *Department of Women on Menstrual Hygiene Day.* 28 May. Available: https://www.gov.za/speeches/department-women-menstrual-hygiene-day-28-may-2019-0000 (Accessed 2021/06/16).

De Vos, A.S., Strydom, H., Fouché, C.B. & Delport, C.S.L. 2011. *Research at grass roots for the social sciences and human service professions*. 4th ed. Pretoria: Van Schaik Publishers.

Dictionary.com. 2021. *Female*. Available: https://www.dictionary.com/browse/female (Accessed 2021/01/22).

Disaster Management Act 57 of 2002: Regulations: Alert level 1 during Coronavirus Covid-19 lockdown, 2020 (Published in the Government Gazette, (43725) Pretoria: Government Printer).

Easterby-Smith, M., Thorpe, R. & Jackson, P. 2008. *Management research*. 3rd ed. Sage publications Ltd, London.

Family Planning Victoria. 2021. *The menstrual cycle*. Available: https://www.fpv.org.au/for-you/reproductive-and-sexual-health/menstrual-cycle (Accessed 2021/06/07).

Fisher, W.F. 1997. The politics and anti-politics of NGO practices. *Annual Review of Anthropology*, 26(1):439-464.

Franklin, A. 2018. *You're more likely to get an STI during your period – here's why.* Available: https://www.health.com/condition/sexual-health/std-risk-during-your-period (Accessed 2021/06/16).

Geismar, N. 2018. Participatory development and menstrual health management in South Africa: A case study of Project Dignity. *Independent Study Project (ISP) Collection*. Available: https://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=3868&context=isp_collection (Accessed 2021/06/17).

Green, A. 2016. *The five best contraceptives backed by science.* Available: http://echo-consortium.com/1618-2/ (Accessed 2021/06/14).

Guy-Evans, O. 2020. *Bronfenbrenner's ecological systems theory.* Available: https://www.simplypsychology.org/Bronfenbrenner.html (Accessed 2021/03/15).

Harries, J., Constant, D., Wright, V., Morroni, C., Müller, A. & Colvin, C. 2019. A multidimensional approach to inform family planning needs, preferences and behaviours amongst women in South Africa through body mapping. *Reproductive Health*, 16(159): 1.

Hennegan, J. 2020. Interventions to improve menstrual health in low- and middle-income countries: do we know what works? In Robel, C., Winkler, I.T., Fahs, B., Hasson, B., Kissling, E.A. & Roberts, T. (Eds). *The Palgrave handbook of critical menstruation studies*. Singapore: Springer Nature Singapore Pte Ltd.

Hennegan, J., Shannon, A.K., Rubli, J., Schwab, K.J. & Melendez-Torris, G.J. 2019. Women's and girls' experiences of menstruation in low- and middle-income countries: A systematic review and qualitative metasynthesis. *PLoS Med*, 16(5):1.

Hirsch, L. 2019. *The female reproductive system.* Available: https://kidshealth.org/en/teens/female-repro.html (Accessed 2021/10/27).

Hyde, J.S. & DeLamater, J.D. 2011. *Understanding human sexuality*. 11th ed. New York: McGraw-Hill.

Ingraham, R.F., Sharma, B.B. & Joe, K. 2021. *Menstrual health during Covid-19: How water, sanitation and hygiene can improve equity.* Available: http://info.primarycare.hms.harvard.edu/blog/menstrual-health-hygiene (Accessed 2021/06/07).

Janelle, T. 2017. *The 5 most essential benefits of your period.* Available: https://www.anigan.com/blogs/blog-posts/most-essential-benefits-of-your-period (Accessed 2021/06/14).

Johnson, R.B. & Onwuegbuzie, A.J. 2004. Mixed methods research: a research paradigm whose time has come. *Educational Researcher,* 33(7):14-26.

Johnson, T.C. 2020. *Your guide to the female reproductive system.* Available: https://www.webmd.com/sex-relationships/guide/your-guide-female-reproductive-system (Accessed 2021/04/13).

Kajumba, P. 2020. *WASH and MHM*. Available: https://www.sexrightsafrica.net/blog/wash-and-mhm/ (Accessed 2021/11/15).

Kamcare. 2021. *Kamcare, Social and training services.* Available: http://www.kamcare.org/ (Accessed 2021/06/21).

Kandel, H., Teague, J. & Walter, E. 2015. *Water, Sanitation, and Hygiene and Menstrual Hygiene Management: a resource guide.* Available: https://menstrualhygieneday.org/wp-content/uploads/2016/04/WASH-MHM-Resource-Guide-2015.pdf (Accessed 2021/11/15).

Kaur, R., Kaur, K. & Kaur, R. 2018. Menstrual hygiene, management, and waste disposal: practices and challenges faced by girls/women of developing countries. *Journal of Environmental and Public Health*, 10(11):1-3.

Kgware, M. 2016. *Menstruation and menstrual hygiene management in selected KwaZulu-Natal schools.* Oxfam, 21 June: 42.

Knudtson, M.D. & McLaughlin, M.D. 2019. *Menstrual cycle.* Available: https://www.msdmanuals.com/home/women-s-health-issues/biology-of-the-female-reproductive-system/menstrual-cycle (Accessed 2021/01/18).

Kuhlman, A.S., Henry, K. & Wall, L.L. 2017. Menstrual hygiene management in resource-poor countries. *Obstetrical & Gynaecological Survey*, 72(6):1.

Lahme, A.M. & Stern, R. 2017. Factors that affect menstrual hygiene among adolescent schoolgirls: a case study from Mongu District, Zambia. *Woman's Reproductive Health*, 4(3):198-211.

Liddell, J. 2020. *Social work and the reproductive justice framework.* Available: https://swhelper.org/2020/01/27/social-work-and-the-reproductive-justice-framework/ (Accessed 2022/06/22).

Louw, D. & Louw, A. 2014. *The development of the child and the adolescent.* 2nd ed. Bloemfontein: Psychology Publications.

Macupe, B. 2018. Call for probe as pads pile up in KZN. *Mail & Guardian,* 20 April: 1.

Magubane, T. 2018. Sanitary towels are not SABS approved. *The Mercury,* 15 April: 1.

Majola, B. 2019. *The cycle of the menstrual burden.* Available: https://www.sahrc.org.za/index.php/sahrc-media/opinion-pieces/item/1789-the-cycle-of-the-menstrual-burden (Accessed 2020/01/21).

Makofane, M.D.M. & Shirindi, M.L. 2018. The importance of data collection for qualitative research in social work. In Shokane, A.L., Makhubele, J.C. & Blitz, L.V. (Eds.). *Issues Around Aligning Theory, Research and Practice in Social Work Education (Knowledge Pathing: Multi-, Inter- and Trans-Disciplining in Social Sciences Series Volume 1).* Cape Town: AOSIS.

Maree, K. 2020. Planning a research proposal. In Maree, K. (Ed.). *First steps in research.* 3rd ed. Pretoria: Van Schaik Publishers.

Maree, K. & Pietersen, J. 2020. Sampling. In Maree, K. (Ed.). *First steps in research.* 3rd ed. Pretoria: Van Schaik Publishers.

McFadyen, J. & Rankin, J. 2016. The role of gatekeepers in research: learning from reflexivity and reflection. *Journal of Nursing and Health Care*, 4(1):82-88.

Mlaba, K. 2020. 3 Organisations run by young women that seek to end period poverty in South Africa. *Global Citizen*, 9 October: 1.

Mohammed, S. & Larsen-Reindorf, R.E. 2020. Menstrual knowledge, sociocultural restrictions and barriers to menstrual hygiene management in Ghana: evidence from a multi-method survey among adolescent schoolgirls and schoolboys. *PLoS One*, 15(10): 1.

Ndondo, J. 2022. *South Africa's youth population, unemployment and economic growth prospects.* Available: https://www.ivint.org/south-africas-youth-population-unemployment-and-economic-growth-prospects/ (Accessed 2022/06/22).

Nieuwenhuis, J. 2020. Analysing qualitative data. In Maree, K. (Ed.). *First steps in research.* 3rd ed. Pretoria: Van Schaik Publishers.

Nieuwenhuis, J. 2020. Introducing qualitive research. In Maree, K. (Ed.). *First steps in research.* 3rd ed. Pretoria: Van Schaik Publishers.

Nieuwenhuis, J. 2020. Qualitative research designs and data-gathering techniques. In Maree, K. (Ed.). *First steps in research*. 3rd ed. Pretoria: Van Schaik Publishers.

Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J. 2017. Thematic analysis: striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1):1-13.

Nwadike, V.R. 2021. *What Helps Menstrual Cramps: 6 Home Remedies and OTC Options to Manage Pain.* Available: https://www.healthline.com/health/womens-health/menstrual-cramp-remedies#Why-menstrual-cramps-happen (Accessed 2022/01/04).

Oxford English and Spanish Dictionary. 2021. Perception. Available: https://www.lexico.com/definition/perception (Accessed 2021/05/04).

Pharmacy180.com. Anatomy *of the female reproductive system.* Available: http://www.pharmacy180.com/article/anatomy-of-the-female-reproductive-system-3709/ (Accessed 2021/11/15).

Pichardo, G. 2020. *Menopause.* Available: https://www.webmd.com/menopause/guide/menopause-basics (Accessed 2021/04/20).

Piedmont. 2021. *Do women need periods?* Available: https://www.piedmont.org/living-better/do-women-need-periods (Accessed 2021/06/14).

Punzi, M.C. & Hekster, O. 2019. *Technical brief for the integration of menstrual health in SRHR*. UNFPA ESARO, 12 April: 1-2.

Rapp, A. & Kilpatrick, S. 2020. *Changing the cycle: period poverty as a public health crisis.* Available: https://sph.umich.edu/pursuit/2020posts/period-poverty.html (Accessed 2021/06/04).

Republic of South Africa. 2015. *National Youth Policy.* Available: https://www.youthpolicy.org/factsheets/country/south-africa/ (Accessed 2020/04/25).

Rubin, A. & Babbie, E. 2017. *Research methods for social work.* 9th ed. Boston, MA: Cengage Learning.

Ryan, D.P.J. 2001. *Bronfenbrenner's ecological systems theory.* Available: https://dropoutprevention.org/wp-content/uploads/2015/07/paquetteryanwebquest_20091110.pdf (Accessed 2020/04/26).

SACSSP. 2019. *Policy guidelines for course of conduct, code of ethics and the rules for social workers.* Available: https://socialdev.mandela.ac.za/socialdev/media/Store/documents/SACSSP-Code-of-Ethics.pdf (Accessed 2020/04/09).

SAHR. 2016. *Achieving universal access to sexual reproductive health service: the potential and pitfalls for contraceptive service in South Africa.* Available: https://www.hst.org.za/publications/South%20African%20Health%20Reviews/9%20Achieving%20universal%20access%20to%20sexual%20and%20reproductive%20health%20services.pdf (Accessed 2022/01/07).

Sarma, B. 2018. *Five health risks of poor menstrual hygiene.* Available: https://www.heydaycare.com/5-health-risks-of-poor-menstrual-hygiene/ (Accessed 2021/06/15).

Scorgie, F., Foster, J., Stadler, J., Phiri, T., Hoppenjans, L., Rees, H. & Muller, N. 2015. "Bitten by shyness": Menstrual hygiene management, sanitation, and the quest for privacy in South Africa. *Medical Anthropology, Cross-cultural studies in health and illness*, 35(2):161-167.

Seladi-Schulman, J. 2020. *Everything to know about female reproductive organs.* Available: https://www.healthline.com/health/womens-health/female-reproductive-organs (Accessed 2021/04/13).

Sida. 2016. *Menstrual hygiene management.* Available: https://cdn.sida.se/publications/files/sida61960en-menstrual-hygiene-managementfeb-2016.pdf (Accessed 2021/05/05).

Solomons, L. 2021. NPOs collaborate to launch SA's first-ever sanitary pad vending machine. News 24, 14 April: 1.

Sommer, M., Hirsch, J.S., Nathanson, C. & Parker, R.G. 2015. Comfortably, safely and without shame: defining menstrual hygiene management as a public health issue. *American Journal of Public Health*, 105(7):2.

South African Venues.com. 2020. *About Potchefstroom.* Available: https://www.sa-venues.com/maps/northwestprovince/potchefstroom.php (Accessed 2021/07/20).

Steenkamp, V. 2003. Traditional herbal remedies used by South African women for gynaecological complaints. *Journal of Ethnopharmacology, 86(2003):97-108.*

Stoppler, M.C. 2019. *Female reproductive system.* Available: https://www.medicinenet.com/female_reproductive_system/article.htm (Accessed 2021/04/13).

Stoppler, M.C. 2020. *Puberty: first signs, symptoms, ages and stages in girls and boys.* Available: https://www.medicinenet.com/puberty/article.htm (Accessed 2021/04/14).

Sumpter, C. & Torondel, B. 2013. A systematic review of the health and social effects of menstrual hygiene management. *Plos one*, 8(4):1-20.

Susuman, S. 2018. Reproductive Health situation in South Africa: emerging policy issue. *Journal of Asian and African studies*, 00(0):1-11.

Teater, B. 2014. *An introduction to applying social work theories and methods*. 2nd ed. New York: Open University Press.

Tellier, S. & Hyttel, M. 2017. *Menstrual health management in East and Southern Africa: a review paper.* Available: https://esaro.unfpa.org/sites/default/files/pub-

pdf/UNFPA%20Review%20Menstrual%20Health%20Management%20Final%2004%20June%202018.pdf (Accessed 2020/04/26).

The Economic Times. *The cost of not maintaining menstrual hygiene.* Available: https://economictimes.indiatimes.com/tdmc/your-money/the-cost-of-not-maintaining-menstrual-hygiene/printarticle/68387779.cms (Accessed 2021/06/21).

Tither, J.M. & Ellis, B.J. 2008. The impact of fathers on daughters' age at menarche: a genetically and environmentally controlled sibling study. *Developmental Psychology*, 44(5):1409-1420.

United Nations. 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development. UN: NY*. Available: https://sdgs.un.org/2030agenda (Accessed 2020/01/21).

United Nations International Children's Emergency Fund. 2019. *Guidance on menstrual health and hygiene.* Available: https://www.unicef.org/wash/files/UNICEF-Guidance-menstrual-health-hygiene-2019.pdf (Accessed 2020/04/25).

UN Water. 2020. *Mitigating the impacts of Covid-19 on menstrual health and hygiene.* Available: https://www.unwater.org/mitigating-the-impacts-of-covid-19-on-menstrual-health-and-hygiene/ (Accessed 2021/06/17).

U.S. Department of Health and Human Services. 2021. *CDC's Global Water, Sanitation, and Hygiene (WASH) Program.* Available: https://www.cdc.gov/healthywater/pdf/global/programs/global-wash-overview-fact-sheet.pdf (Accessed 2021/11/15).

Villia-Torres, L. & Svanemyr, J. 2015. Ensuring youth's right to participation and promotion of youth leadership in the development of sexual and reproductive health policies and programs. *Journal of Adolescent Health.* Available: https://www.sciencedirect.com/science/article/pii/S1054139X14003310 (Accessed 2022/06/22).

WASH, SNV. 2014. *Girls in control: compiled findings from studies on menstrual hygiene management of schoolgirls.* Available: https://snv.org/cms/sites/default/files/explore/download/snv_girls_in_control_baseline_report.pdf (Accessed 2020/04/26).

Webb, R. 2019. *Menstrual health and HIV.* Available: https://www.aidsmap.com/about-hiv/menstrual-health-and-hiv (Accessed 2021/06/16).

Wibur, J., Kayastha, S., Mahon, T., Torondel, B., Hameed, S., Sigdel, A., Gyawali, A. & Kuper, H. 2021. Qualitative study exploring the barriers to menstrual hygiene management faced by adolescents and young people with a disability, and their carers in the Kavrepalanchok district, Nepal. *BMC Public Health*, 476(2021): 2.

World Economic Forum. 2021. *There are 3 barriers blocking good menstrual hygiene for all women. Here's how we overcome them.* Available: https://www.weforum.org/agenda/2019/11/menstruation-in-different-cultures-period-taboos/ (Accessed 2021/06/07).

World Health Organisation. 2020. *Female genital mutilation.* Available: https://www.who.int/news-room/fact-sheets/detail/female-genital-mutilation (Accessed 2021/07/07).

World Health Organisation. 2021. *Reproductive Health.* Available: https://www.who.int/westernpacific/health-topics/reproductive-health (Accessed 2021/05/20).

Wright, R.L., Bird, M. & Frost, C.J. 2015. Reproductive Health in the United States: A Review of the Recent Social Work Literature: Table 1. *Social Work Advance Access Published.* Available: https://www.researchgate.net/publication/280559472_Reproductive_Health_in_the_United_States_A_Review_of_the_Recent_Social_Work_Literature_Table_1 (Accessed 2022/06/22).

APPENDICES

APPENDIX 1: RESEARCH ETHICS COMMITTEE APPROVAL LETTER

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Humanities 100 Since 1919

11 August 2021

Dear Mrs A Coetzee

Project Title:	The perceptions of female youth regarding menstrual hygiene management (MHM) in Ikageng, Potchefstroom
Researcher:	Mrs A Coetzee
Supervisor(s):	Dr CL Carbonatto
Department:	Social Work and Criminology
Reference number:	20694777 (HUM044/0521)
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 Bomotho

Research Ethics Committee Members: Prof I Pikirayi (Deputy Dean); Prof KL Harris; Mr A Bizos; Dr A-M de Beer; Dr A dos Santos; Ms KT Govinder Andrew; Dr P Gutura; Dr E Johnson; Prof D Maree; Mr A Mohamed; Dr I Noomè; Dr C Puttergill; Prof D Reyburn; Prof M Soer; Prof E Taljard; Prof V Thebe; Ms B Tsebe; Ms D Mokalapa

APPENDIX 2: LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Humanities 100.
1919 - 2019
Department of Social Work & Criminology

04 March 2021

Ref.: Coetzee, A. (20694777)
Tel.: 0732315218
Email: anastashiac388@gmail.com

The Supervisor
NG Welfare
Potchefstroom

Dear Sir/Madam

REQUEST FOR A PERMISSION TO CONDUCT MSW RESEARCH AT YOUR FACILITY

I, Anastashia Coetzee, am a registered postgraduate student in the 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 froma 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 thestudy is: “The perceptions of female youth on menstruation hygiene management in Ikageng, Potchefstroom”. The goal of the study is to explore and describe the perceptions of female youth on menstruation hygiene management in Ikageng, Potchefstroom.

The objectives of the study are:

- To describe female reproductive health, the menstruation cycle, sexual reproductive healtheducation and menstruation hygiene management

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University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel +27 (0)12 420 2410
Email: Charlene.caronatto@up.ac.za
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- To explore and describe female youth in Ikageng, Potchefstroom, 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 Ikageng, Potchefstroom regarding menstruation, factors creating challenges, their coping mechanisms, resources and support
- To explore the experiences of female youth in Ikageng, Potchefstroom 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 between the ages of 18-25 years who benefitted from reusable sanitary towel project developed by Kamcare, an NGO in Pretoria. has to be conducted in an informal settlement Ikageng, Potchefstroom area.

We hereby request for your organisation to act as a gatekeeper in order for the researcher to get access too potential participants. Kamcare will provide the reusable sanitary products, which will be couriered to the researcher for the research purposes. Your organisation will merely be responsible for informing female youth in the informal settlement Ikageng, Potchefstroom area of the research project and to collect the contact details of those interested in partaking voluntary in the project. These contact details will then be given to the researcher, who will contact those interested. The first 4-6 participants, who meet the selection criteria and are willing to participate voluntarily and sign the letter of informed consent, will be included in the study. Your organisation will then be given the reusable sanitary pads to hand out to these participants included in the study only.

The empirical part will entail conducting individual face-to-face interviews using an interview schedulewith the participants at a venue in the community. Covid-19 protocols will apply, to observe the COVID-19 conditions, as well as to protect the health and safety of the researcher and the participants. The interviews will be dealt with confidentially and all data will only be used for research purposes by the researchers and her supervisor. The identity of the participants will be protected using pseudonyms.

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 favorably and grant permission at your earliest convenience.

Yours sincerely,

Anastashia Coetzee

Researcher

Dr C.L. Carbonatto

Senior lecturer and Supervisor

APPENDIX 3: NG WELFARE PERMISSION LETTER

ons raak lewens
ons gee hoop

NG WELSYN POTCHEFSTROOM
Geregistreerde Kinderbeskermingsorganisasie
074-510 NPO
Maherrystraat 28, Potchefstroom, 2520
potch.admin@ngwelfare.co.za
T: 018 297 7347 / 8317

NG WELFARE POTCHEFSTROOM
Registered Child Protection Organisation
Non Profit Organisation
28 Maherry Street, Potchefstroom, 2520
PO Box 470, Potchefstroom, 2520
F: 018 297 7348 / 086 553 8821

Kinder- en Gesinsorgdienste | Child and Family Care Services

28 July 2021

For attention: Dr Carbonatto

Department of Social Work and Criminology
University of Pretoria

With this letter, I am giving permission for master's degree student A Coetzee from the Universityof Pretoria to conduct her research in our organisation.

I understand the research project is about giving sanitary pads to youth staying in informal settlements in the selected community in the North West province. As I understand the students want to find out what the experiencesof these youth are regarding managing their menstrual cycle. I think it is a wonderful research project and will give my support in any way possible.

NG Welfare is also willing to act as a go-between for the researcher and the participants by informing the potential participants about the research project and providing their contact detailsshould the person wish to participate in the study, to give to the researcher.

If you need any more information, please contact me on 018 297 7347.

Kind regards

SUENE HUMAN

SOCIAL WORKER

REG. NO 10-43505

APPENDIX 4: LETTER GRANTING COUNSELING SERVICES FOR PARTICIPANTS

ons raak lewens
ons gee hoop

NG WELSYN POTCHEFSTROOM
Geregistreerde Kinderbeskermingsorganisasie
074-510 NPO
Maherrystraat 28, Potchefstroom, 2520
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Kinder- en Gesinsorgdienste Child and Family Care Services

28 July 2021

The University of Pretoria

Faculty of Humanities

Research Ethics Committee

To whom it may concern:

Title of the study: the perceptions of female youth of menstruation hygiene management in a selected community in the North West province

I, Suene Human, hereby confirm that Johanna Kgomongwe will provide counselling free of chargefor the participants of the above-mentioned study conducted by the MSW (Healthcare) student should there be a need after the research interview.

Johanna's details are as follows:
Name: Johanna Kgomongwe
Organisation: NG Welfare Potchefstroom
Contact details: 018 297 7347
Qualification: Social Auxiliary worker
SACSSP registration: 5000814

Kind regards

SUENE HUMAN
SOCIAL WORKER
REG. NO 10-43505

APPENDIX 5: LETTER OF INFORMED CONSENT

Date:
Name: Anastashia Coetzee
Email: anastashiac388@gmail.com
Cellphone No: 073 231 5218

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 regarding Menstrual Hygiene Management (MHM) in a selected community in the North West province. The informed consent gives a brief explanation of the purpose and procedure of the research and the rightsof participation. Please go through the form before you make an informed decision regardingyour 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 regarding Menstrual Hygiene Management (MHM) in a selected community in the North West province.

Purpose of the study
The purpose of the study is to explore and describe the perceptions of female youth on Menstruation Hygiene Management (MHM) in a selected community in the North West province.

Procedures
You have been informed of the study and provided your contact details for the researcher to contact you to partake in the study. The researcher will be responsible for conducting an individual face-to-face interview in order to collect data on your perceptions regarding Menstrual Hygiene Management (MHM) as a female youth and the experience of using reusable sanitary pads from Kamcare. Once you sign this letter, you agree to take part in thestudy. The researcher will arrange to conduct an individual face-to-face interview with you when it suits you best. The interview will be recorded, with your permission, to ensure that allthe 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 during the interview 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 any time if you wish to do so.

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University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel +27 (0)12 4202599
Email: Nontembeko.bila@up.ac.za
www.up.ac.za

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 Menstrual Hygiene Management (MHM). The researcher will debrief you after the interview is concluded and should you experience a need for counselling, you will be referred to Ms J Kgomongwe a social auxiliary worker from NG Welfarefor free counselling. You do not have to answer any question that will make you feel uncomfortable during the interview.

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 (MHM) forfemale 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 atany time and without negative consequences to you or your family members. There will be no penalty or loss of benefit if you decide not take part in the research. You have a right to withdraw from the research at any time without having to explain why.

Confidentiality

The information shared during the interview will be kept confidential amongst all participants 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 Departmentof 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 social auxiliary worker, Johanna Kgomongwe, at 018 297 7347. Kindly note the services are free ofcharge.

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

Yours sincerely,

Anastashia Coetzee: 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 answeredto 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: _____

APPENDIX 6: INTERVIEW SCHEDULE

Interview schedule

MSW (Healthcare) 2020 group research

- Biographical information
  1. Gender:
  2. Age:
  3. Residence:

- Concept of menstruation
  1. What is your understanding of reproductive health?
  2. What is your understanding of what menstruation is?
  3. What is your understanding of menstrual hygiene?
  4. Where did these understandings come from?

- Onset of menstruation
  1. What was your experience when you had your first period?
  2. Who was there to support you or educate you on what was happening toyou?
  3. What materials and supplies did you use to manage you first period?

- Current menstruation experience
  1. Do you talk to anyone about your menstrual experiences?
  2. What kind of support do you receive during menstruation?

- Menstrual hygiene management
  1. What do you need to manage your period?
  2. What do you do to stay hygienic during your period?
  3. What materials do you currently use to manage your periods?
  4. How do you get access to these materials and supplies?
  5. How has your experience of the re-usable sanitary pad been?
  6. Explain the process of changing products?
  7. Explain what do you do with used products?
  8. What challenges do you experience during MHM?

9. What strategies do you implement to address these challenges?

- Cultural beliefs
  1. What are your cultural beliefs regarding menstruation?

- Environmental influential factors
  1. What resources in your environment do you utilise during menstruation?
  2. What limitations in your environment do you experience in managing your periods?
  3. What do you do to overcome these limitations?

- Psychological impact

1. How does menstruation affect you on a psychological level?

- Social impact
  1. How does menstruation affect your social life?

- Health impact
  1. How would you describe your reproductive health?
  2. Have you ever received health care for such problems?
  3. How did you experience this?

- Recommendations
  1. What do you think could improve your MHM experiences?

APPENDIX 7: DECLARATION FROM EDITOR

DECLARATION OF LANGUAGE EDITING

Rihette Meyer Language Services
Date: 1 May 2022
3479 Disa Circle
Betty's Bay
7141

Department of Social Work and Criminology
University of Pretoria
Private Bag X20
Hatfield
0028

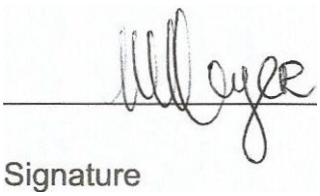
Dear Sir/Madam,

Declaration of Language Editing

I, **Rihette Meyer**, hereby declare that I have personally read through the Dissertation of:
Anastashia Coetzee, (Student number: 20694777).

The perceptions of female youth regarding Menstrual Hygiene Management (MHM), and have edited language errors where needed.

Yours sincerely
Rihette Meyer



Signature

1 May 2022

Date