

**THE PERCEPTIONS OF FEMALE YOUTH REGARDING MENSTRUATION HYGIENE
MANAGEMENT (MHM) IN ROODEPLAAT RURAL COMMUNITY, TSHWANE**

by

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DECLARATION OF ORIGINALITY

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ABSTRACT

THE PERCEPTIONS OF FEMALE YOUTH REGARDING MENSTRUATION HYGIENE MANAGEMENT (MHM) IN ROODEPLAAT RURAL COMMUNITY, TSHWANE

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Globally, people have different attitudes, beliefs and social norms pertaining to menstruation and these differences have an impact on menstruation hygiene management (MHM). This study was conducted in Roodeplaat rural community, Tshwane.

The aim of this study was to explore and describe the perceptions of female youth regarding MHM in Roodeplaat rural community, Tshwane. The ecological systems approach underpinned this study, as this approach focused not only on the individual, but included the influence of other external environmental factors on the behaviour of female youth. The researcher sought to understand and describe the perceptions of female youth regarding MHM, according to their daily activities or practices. A qualitative study approach was deemed appropriate for the study in addition to a feminism research paradigm. The researcher used non-probability purposive sampling with specific inclusion criteria. Five participants were purposively selected from Roodeplaat rural community, Tshwane. A semi-structured interview, with an interview schedule and voice recorder was used to collect data. The interview schedule comprised of open-ended questions to enable the researcher to explore the perceptions of female youth regarding MHM.

The researcher obtained ethics approval from the Faculty of Humanities Research Ethics Committee. The recorded interviews were transcribed and the emerging data was analysed through thematic analysis and identifying themes and sub-themes from all five participants. The research question was: What are the perceptions of female youth regarding MHM in Roodeplaat rural community, Tshwane?

The research findings generated the following themes: knowledge about reproductive health; menstruation experiences and challenges; MHM and challenges; resources and limitations; social work intervention and recommendations. Findings revealed that participants did not have much knowledge about reproductive health, resulting in a lack of understanding about menstruation and the menstruation cycle. The study further found that

the female youth experienced psychosocial, socio-economic and physical challenges related to MHM; as well as the impact of environmental factors, such as lack of resources to dispose the used menstruation products. It was concluded that despite the fact that menstruation experiences and hygiene management happened uniquely to each participant; it is commonly surrounded by secrecy and myths in different societies.

Participants were able to express their experiences of MHM. It was concluded that female youth lack preparation for menstruation onset and only gain support and knowledge, once they have experienced their menarche. A lack of finances for adequate sanitary products was also a predominant challenge.

General recommendations included the need to place more focus on developing and implementing educational awareness programmes to raise MHM awareness in communities; more social workers need to be trained and appointed in communities to render these services; through community awareness programmes on MHM, social workers can empower female youth with information and knowledge regarding menstruation hygiene health and thereby improve their MHM. The aim and objectives of this study were met and the research question was answered. The researcher emphasised the need for future research on this topic in other communities and provinces with larger samples, to focus on determining possible effective ways of addressing the challenges identified amongst participants in this study regarding MHM.

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CHAPTER ONE: GENERAL INTRODUCTION AND ORIENTATION TO STUDY

1.1 INTRODUCTION

Menstruation affects female youth in their daily life worldwide. Budhathoki, Bhattachan, Castro-Sánchez, Sagtani, Rayamajhi, Rai and Sharma, (2018:1) state that menstruation is a natural physiological phenomenon that occurs in females from an adolescent stage to the initial stage of menopause. Budhathoki *et al.* (2018), state that the first menstruation manifestation occurs between the ages of 11 and 15 years. Boosey, Prestwich and Deave (2014) state that approximately 3000 days of menstruation occur during the female life time.

Globally, people have various attitudes, beliefs, and societal standards regarding menstruation, that have an impact on menstrual hygiene management (MHM) (Mishra & Pandya, 2018:442). For example, in some societies menstruation is associated with uncleanliness and ungodliness, as is believed in certain cultures. Menstruation requires adequate management to minimise the occurrence of infections that may cause disease. Hennegan and Montgomery (2016) state that poor MHM can lead to reproductive tract infection.

When menarche occurs, it is a significant phenomenon that signals reproductive maturity and it should be seen as part of the normal developmental process (Hennegan & Montgomery, 2016). During the reproductive age, most women may face MHM challenges. Menstruation is a normal physiological process that marks the beginning of reproductive life, but in some religious denominations, it is associated with being unclean. Sinah and Paul (2018:71) note that lack of information and cultural beliefs regarding menstruation may cause panic and uncertainty amongst female youth.

Poor personal hygienic practices amongst the female youth lead to reproductive infections and are sometimes due to lack of knowledge and awareness (Hennegan & Montgomery, 2016). Female youth constitutes a group that is vulnerable, particularly in a patriarchal society (Sinah & Paul, 2018:73). Thus knowledge and awareness dictate female youth reaction towards menstruation. The manner in which female youth get exposed to menstruation practices and changes associated with menstruation have an impact on their MHM practices (Sinah & Paul, 2018:73). Their reaction to MHM also depends on their knowledge and preparedness at menarche.

Socio-economic, educational level and cultural background of the family, play a significant role in MHM amongst female youth (Mishra & Pandya, 2018:442). Female youth in poor

families are most likely to be a vulnerable group in MHM due to lack of necessary resources (Sinah & Paul, 2018). Hence hygiene-related practices of female youth during the menstruation period are considered to be important. In essence, proper MHM minimises the risk of reproductive tract infections. Belayneh and Mekuriaw (2019:4) argue that female youth who have better knowledge and understanding about MHM are less vulnerable to the humiliation by their peers normally fuelled by menstruation related matters. The objective of MHM is to address unfriendly societal views and taboos surrounding menstruation. This study explores the perceptions of female youth regarding menstruation hygiene management.

The key concepts in this study are defined below:

- **Perceptions:** The Collins Concise Dictionary (2001:750) defines “perception as the act, authority, process, or a product of perceiving knowledge through the senses of the existence and properties of matter and external world”. Perception is also defined by (Qiong, 2017:18) “as the way that people notice certain things with their senses of sight and hearing”. This can be interpreted as the normal ability to comprehend or notice things. For the purpose of the study, perception entails the way female youth comprehend certain subject or event, as influenced by their lived experiences, thoughts and values.
- **Menstruation:** This is defined as the natural physiological phenomenon that occurs in females from the adolescent stage and initial stage of menopause. Menstruation is also known as menses or periods in most societies. It is a female’s monthly shedding of blood, discharged through the vagina (Budhathoki *et al.*, 2018:10). (Mukherjee, Lama, Khakurel, Jha, Ajose, Acharya, Tymes-Wilbekin, Sommer, Jolly, Lhaki, & Shrestha, 2020:2) defined menstruation as a natural biological process experienced by a female from menarche until they reach menopause. For the purposes of this study, menstruation refers to the monthly discharge of menstrual fluid from the uterus that occurs during a female's active reproductive life.
- **Menstrual hygiene:** It is the best healthcare practice of managing menstruation during the menstruation period (Budhathoki *et al.*, 2018:10). Several authors (Budhathoki *et al.*, 2018:10; Mukherjee, 2020:3; Sinah & Paul, 2018:73) agree that menstruation hygiene involves the use of clean water and soap for bathing and washing the absorbents; adequate space to change and drying reusable sanitary pads or towels and adequate disposal facilities for used sanitary pads.
- **Menstruation hygiene management:** Menstruation hygiene management is the process through which menstruation hygiene is controlled (UNICEF, 2019). Budhathoki

et al. (2018:10), define MHM as an important aspect of hygiene among female youth from the first menstruation until menopause. Ramaiya and Sood (2020:2) define MHM as the process of using adequate menstruation resources to absorb menstrual blood and having access to clean water and soap to bath and wash reusable MHM products during the menstruation period. For the purpose of this study, MHM refers to female youth using adequate absorbents that can be privately changed or washed for the duration of the menstruation cycle, which includes bathing with soap and clean water and having access to dispose the used menstruation management products.

- **Youth:** Based on National Youth Commission Act 19 of 1996, youth is defined as a person between the ages of 14 and 35 years. The National Youth Policy 2015-2020 (April, 2015) also applies the term “youth” to refer to young people aged 14 to 35 years. For the purpose of this study, youth is defined as anyone between the ages of 18 and 30.

1.2 THEORETICAL FRAMEWORK

The researcher considered the ecological systems approach of Bronfenbrenner (1979) as appropriate for this study. The researcher sought to explore and describe the perceptions of female youth regarding MHM. The ecological system approach is suitable for this study as it focuses not only at the individual but also considers how other external environment influence their behaviour. The manner in which female youth manage their menstruation is rooted in their individual understanding and the environment that they interact with, hence the researcher preferred the ecological system approach as the most suitable theoretical framework for this study.

The focus of the ecological systems approach is to give perspective and context on how individuals interact with the environment that they live in, including how they interpret the perspective and context. It further seeks to understand how cultural contexts influence an individual’s behaviour. Friedman and Allen (2011:9) emphasise that the interconnection between the individual and the environment is important and crucial, since it plays a role enabling them to attain an adaptive balance, which is what the ecological system as a theory is concerned about.

The ecological system perspective consists of the scientific study of progressive and development of human beings throughout their life span. Subsequently, female youth are found within the environments that are affected by the social and environmental system that may be of help in shaping their lives and restoring their dignity. The five environmental

systems that form part of the ecological system are discussed below and applied to the study as illustrated by (Friedman & Allen, 2011:9).

Microsystem is an environmental system in which individuals directly interact with their immediate family members as emphasized in the primary socialisation process (Ettetal & Mahoney, 2017:3). Microsystems are the institution and groups in the environment that have direct impact on the life of individuals. These microsystems foster interaction between an individual and their immediate surrounding environment, such as in a home environment, family and community (Bronfenbrenner, 1979:22; Bronfenbrenner, 2005:101). In this study the microsystem constitutes an environment where parents, guardians and/or the significant others are counterparts to the female youth who have started menstruation, belonging to an interactional microsystem.

The researcher aimed to explore and describe the perceptions of the female youth regarding MHM, on which significant others have a direct influence. The relationship that female youth have with their significant others play an important role in how they manage their menstruation, as information and knowledge may be acquired from the family and community.

Mesosystem is a second component of the ecological environment. Mesosystem posits that individual development is not only influenced and shaped by the immediate environment such as family, school, peers and neighbourhood, but it is also influenced or shaped by the interaction between two or more microsystems. The mesosystem comprises the interaction and relationship of more than one setting in which a person vigorously interacts such as family, work and other social circles. (Bronfenbrenner, 1979:22; 2005:101). In this study, mesosystem is utilised to encapsulate the family, guardians, school, work and social life of female youth who have started experiencing menstruation. Thus, the researcher aims to explore the support system of female youth regarding MHM.

Exosystem is the third ecological environment and it refers to the external environment that indirectly influences the behaviour of a person. (Bronfenbrenner, 1979:22; 2005:101) note that an exosystem refers to one or more systems that the primary link is not actively involved as a participant but the events that occur have an impact on the primary link. Exosystem refers to the external factors that may have an impact on female youth's MHM. In this study, it will be used to unpack how certain factors such as poverty, unemployment and lack of financial support impact on MHM.

The fourth ecological environment is the **macrosystem** which refers to the cultural context that influence human development. It is greatly concerned with the culture in which individuals get acculturated. The concept of family, ethnicity and race are significant theoretical tools to the understanding of the cultural environment in which one belongs. The socioeconomic status of person and/or family, ethnicity or race are all aspects that describe the cultural environment where a person lives.

In this study, the macrosystem highlights the intersection of the microsystem, mesosystem, and exosystem in which female youth belong as it pertains to MHM. The researcher aims to explore and describe the perceptions of female youth regarding MHM focusing on cultural and religious beliefs; ideologies and perceptions after experiencing menarche.

Chronosystem is the last system in the ecological environmental systems theory and it is regarded as the final level of the ecological framework. It consists of all the life experiences and events that individuals experience during the course of one's life such as changes in family structure. The researcher is of the view that, in line with the manner in which the environmental circumstances and transitions in human life span, as well as socio-historical circumstances such as child-headed family, may cause a female youth to have challenges in MHM. Chronosystem allows one to identify the impact of life events and experiences on how they function (Bronfenbrenner, 2005:82). In this study, the chronosystem will be explored as MHM does not only affect the external systems of female youth. The effect of MHM on life phases, post events and how those events impacted their current and future functioning will be explored.

1.3 PROBLEM STATEMENT AND RATIONALE

MHM presents several enduring challenges that continue to undermine the dignity of female youth globally, despite extensive research conducted. It has long been known that MHM has an impact on youth development. Most studies regarding female youth MHM has been conducted in Africa.

Female youth in developing countries are reported to be a vulnerable group struggling with MHM, which exposes them to reproductive tract infections. Studies conducted in Ghana and India; respectively indicate how MHM contributes to female youth absenteeism from school and subsequent drop out. Studies addressing MHM mainly focus on disposable sanitary pads. The studies did not investigate reusable sanitary pads and the impact it has on female youth regarding MHM.

Therefore, the researcher finds it relevant to undertake this study on the experience of female youth regarding MHM. The aim of this study is to gain in-depth knowledge and understanding with the perceptions of female youth regarding MHM, with special reference to reusable sanitary pads. Furthermore, the research seeks to contribute to the knowledge base of social workers rendering social work services to female youth, to enable social workers to support these youth. The research question for this study is: **What are the perceptions of female youth regarding menstruation hygiene management in Roodeplaat rural community, Tshwane?**

1.4 AIM AND OBJECTIVES

The aim of the study is: To explore and describe the perceptions of female youth regarding menstruation hygiene management in Roodeplaat rural community, Tshwane.

The objectives of the study are:

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

1.5 OVERVIEW OF RESEARCH DESIGN AND METHODOLOGY

In this section a brief overview of the research design and methodology employed in this study is presented. Chapter three of the study however presents a more detailed outline of the research design and methodology. The qualitative research approach was deemed appropriate for this study, as the researcher wanted to gain a comprehensive understanding of the perceptions of female youth regarding MHM. The qualitative research approach provides the researcher with an insider knowledge and perspective on social action (Babbie & Mouton, 2010:53). Furthermore, a qualitative research approach is in line with the researcher's aims of making sense of perceptions of female youth regarding MHM.

The research was phenomenological in design and this assisted the researcher to identify the essence of the lived experiences from the participants' point of view (Fouché & Schurink, 2011:316; Simon & Goes, 2011:1). Applied research is suitable for this study as the researcher is seeking to address this problem identified in the rural community of Roodeplaat regarding MHM among female youth.

The study population comprised of five (5) female youth from Roodeplaat rural community, Tshwane. Participants for the research were purposively sampled, focusing on those participants who had the characteristics that the researcher wanted (Strydom & Delpont, 2011:350). In this study the sample included participants who are female youth between the ages of 18-30 years of age in Roodeplaat and have started menstruating. The semi-structured interview method was used to collect data in this research study (Isaacs, 2014:320). The researcher used thematic data analysis process as described by Clarke, Braun and Hayfield (2015) to analyse the data. The ethical considerations relevant to this study are described in Chapter 3, Section 3.7.

1.6 OUTLINE OF THE MINI DISSERTATION

This mini-dissertation is made up of four chapters. The first chapter provides a general introduction and orientation to the study; briefly highlighting the theoretical framework as well as the methodological approach and design of the study.

Chapter two provides the literature review. The chapter discusses salient issues relating to female reproductive health, issues affecting MHM, consequences of poor MHM, causes of poor MHM and intervention strategies to address MHM. The nature of services provided for female youth regarding MHM is also discussed. Research methodology and the empirical findings are discussed in detail in chapter three. The chapter then goes on to interpret the findings based on findings from the literature. In the concluding chapter (Chapter 4), key aspects concerning to the research are revisited. Research findings are brought into the context of the overall aims and objectives of the research; key findings are presented and conclusions and recommendations are made.

Chapter two follows with the literature review.

CHAPTER TWO: MENSTRUATION HYGIENE MANAGEMENT

2.1 INTRODUCTION

Females normally experience menstruation or a menstrual period every month. Menstruation is a female's monthly bleeding that starts from early adolescence until menopause. This occurs when the female ovulates and the egg is not fertilized. The female body sheds the endometrium that causes the bleeding. Menstruation bleeding lasts for three to five days during each cycle. Menstruation is part of the female's normal sexual health that occurs during the female reproductive age.

2.2 FEMALE REPRODUCTIVE HEALTH

The fertile period of a female begins from the age of menarche to menopause stage. There are two periodic cycles of a female who is fertile, which are ovarian cycle and menstruation period. These two periodic cycles occur in the context of the ovary and in the endometrium of the uterus respectively (Haroun, 2016:62).

2.2.1 The ovarian cycle

The ovarian cycle has three phases which are the follicular phase, ovulation phase and the luteal phase. The follicular phase entails development of the ovarian follicle and secretion of oestrogen hormone. This hormone plays a role in preparing the ovaries to develop the oocytes in the follicles, which grow at the same time, with only one reaching full development in to the Graafian follicle. The ovulation phase occurs once every month during the fertile period of the female. The phase pauses or does not occur during pregnancy. Last is the luteal phase, which entails formation of the corpus luteum and discharge of progesterone hormone (Haroun, 2016:63).

2.2.2 The menstruation cycle physiology

The menstruation cycle is a complex series of events that influence each other and occur simultaneously. The menstrual cycle is a period between the start of menstruation date to the start of the next menstruation date. There is a relationship between menstruation and the factors that affect ovulation, in the sense that if the process of ovulation is regular, the menstruation cycle will also be regular (Vitzthum, Thornburg, Spielvogel & Deschner, 20210:3).

On the first day of menstruation, the follicular phase starts. At the beginning of this phase, the endometrium is thick and rich in fluids and nutrients designed for nutrition for the embryo (Nguyen, 2020:24). If there is no fertilized egg, the levels of oestrogen and progesterone

are low, so that the upper lining of the uterus, which is the endometrium, sheds and menstrual bleeding occurs. It takes 21-35 days' length for normal menstruation to occur.

2.2.2.1 Menstruation disorders

By the virtue of having a normal menstruation cycle there are chances that menstruation disorders will occur. The menstruation disorders are referred to as the abnormalities that occur during the menstruation cycle. There are several menstruation disorders that female youth or menstruating women all over the world can experience. These may include too little or high volume of menstruation blood; severe pain during menstruation; depression before menstruation; and premenstrual dysphoric disorders. These menstruation disorders have an impact on how female youth and menstruating women view understand and practice MHM. Excessive menstruation bleeding can result in frequent change of menstrual absorbents which may not work positively to female youth who attend public schools that do not have private facilities to change the sanitary pads. The little volume of menstruation blood may result in spotting between the periods (Park, Shin, Jeon, Cho & Kim, 2021:2).

Severe menstruation pain is regarded as the most common disorder during menstruation (Triananinsi, Rahayu & Puspitasari, 2021:24). Menstruation pain is also known as dysmenorrhea, if the pain is felt in the lower abdomen during or after menstruation. Female youth who are overweight, smoke and drink alcohol are at risk for menstruation pain (Triananinsi *et al.*, 2021:24). Other female youth experience depressive disorders before menstruation as a result of their previous menstruation experience. This is due to fear, anxiety and thoughts of the difficulty of getting menstruation management products.

Premenstrual dysphoric disorder is a mood disorder that can be manifested by symptoms such as anger, interpersonal conflicts and irritation. It can be associated with behavioural and cognitive components of malfunctional emotional regulation like impulsivity and personal traits. Kaltsouni, Fisher, Dubol, Hustad, Lanzenberger, Frokjaer, Wikstrom, Comasco and Sundstron-Poromaa (2021:1461) present the argument to emphasize that premenstrual dysphoric disorder symptoms are evident in the initial stage of luteal of ovulation cycle.

2.3 MENSTRUAL HYGIENE MANAGEMENT

MHM is the process in which menstruation hygiene is controlled (UNICEF, 2019). Budhathoki *et al.* (2018:10) defined MHM as an important aspect of hygiene among female youth from the first menstruation until menopause. Ramaiya and Sood (2020:2) defined MHM as the process of using adequate menstruation resources to absorb menstrual blood

and having access to clean water and soap to bath and wash reusable sanitary pads during menstruation period. For the purpose of this study, MHM refers to female youth applying adequate absorbents that can be privately changed or washed, for the duration of the menstruation cycle, which includes the use of soap and clean water to bath and having access to dispose the used menstruation management materials.

2.3.1 Menstruation hygiene management as global public health issue

MHM is a neglected public health, social, and educational issue internationally, as a result of lack of knowledge and awareness, and shortage of private facilities and resources to adequately manage menstruation (Sommer, Caruso, Sahin, Calderon, Cavill, Mahon, & Phillips-Howard, 2016:1). It is clear that there is a need for prioritization, coordination, and investment to address menstruation hygiene challenges. Sommer, Hirsch, Nathanson and Parker (2015:1302-1311), opine that MHM is a global public health topic. All over the world, female youth and women face problems regarding MHM (Thembo, Weiss, Dauya, Bandason, Dziva-Chikwari, Redzo, Mavodza, Losi, Ferrand & Francis, 2020:2). Thembo *et al.* (2020:2), further state that these menstrual challenges arise from various factors such as lack of private space to manage menstruation, cultural and religious taboo, stigmatization, lack of adequate mensuration products or absorbents and lack of access to clean water and sanitation

Sommer *et al.* (2015:1302-1311), mention that there is a growing number of non-governmental organisations (NGOs), social entrepreneurs, United Nations agencies and other institutions coming together to discuss menstruation related issues for female youth. This means that the MHM topic is starting to gain momentum globally. These organizations dedicate their collective efforts to the mobilization of resources to address menstruation related problems, such as embarrassment, taboo and shame experienced by female youths who come from financially challenged backgrounds. The principal purpose of these initiatives include equipping female youth with knowledge about MHM, as well as advocating for equitable access to sanitary pads, water and sanitation facilities.

Efforts have been growing from the academia, activists, development and other stake holders to comprehend and address the challenges affecting menstruating female youth globally (Sommer et al., 2016:1). Phillips-Howard, Caruso, Torondel, Zulaika, Sahin and Sommer (2016:1) confirm that researchers and practitioners have met to discuss international vision in recognition of the need to improve the perceptions and experiences of menstruating female youth regarding MHM. Phillips-Howard, *et al.* (2016:1), further note that due to the dearth of information regarding menstruation management globally, people

should expect the topic to be sensitive. Academics, activists and other stakeholders converged with the primary aim of identifying the gaps and needs to address global, national and local action in response to menstruation hygiene challenges.

Kuhlmann, Henry and Wall (2017:358) present arguments to emphasize that female youth from poor socio-economic backgrounds tend to use old clothes, tissue paper, cotton wool and banana fiber among others to manage their menses, which may also result in negative and unhygienic practices. This is as a result of lack of resources to access commercial sanitary pads. Global reviews and local specific studies show the importance of having access to clean water and sanitation, access to menstruation management resources and having private facility to manage menstruation (Mubashra, Rana, Parveen, Zahid, Juhn & Khan, 2021:52). However, a lack of these resources, means that MHM remains a challenge among female youth from both developing and under developed countries. The researcher maintains that empowering female youth with knowledge, will improve their perception and experiences regarding MHM and expose them to be familiar with all forms of MHM.

2.3.2 Menstruation hygiene management as public health issue in Africa

In Africa, several studies found that female youth have little or limited knowledge on MHM (Miuro, Rutakumwa, Nakiyingi-Miuro, Nakuya, Musoke, Namakula, Francis, Torondel, Gibson, Ross & Weiss, 2018b; Upashe, Tekelab & Mekonnen, 2015a). The lack of knowledge regarding MHM has a negative impact on how female youth experience and manage their menstruation. MHM has over the years become a public health issue (WHO, 2018).

Female youth in Kenya are reported to be losing an estimated 3.5 million school days per month as a result of lack of adequate MHM products such as sanitary pads, referred to as period poverty. It has a long term direct impact on female youth and their ability to compete and achieve academically and can arguably affect their self-esteem, significantly contribute to drop-out from school and others may be vulnerable to childhood marriage (Jewitt & Ryley, 2014:139). Female youth from poor economic background countries globally use inadequate absorbents for sanitary protection, as a result of lack of resources to manage their menstruation adequately. In Kenya, inadequate absorbents include old clothes, leaves, ashes and cow dung and this material can result in infection and discomfort (Sumpter & Torondel, 2013:6).

Oppenheim (2018) points out that it is common in Kenya for female youth to trade sex in exchange for sanitary pads. This indicates how period poverty affects female youth and results in them engaging in various activities that undermines their well-being. Kenya prides

itself on two different types of menstruation management products which are disposable and reusable sanitary pads. Many brands and types of commercial disposable absorbents are available in Kenya, however the majority of female youth cannot afford to purchase them (Geertz, Lyer, Kasen, Mazzola & Peterson, 2016:14). Challenges associated with affordability of commercial and disposable sanitary pads are not only experienced by female youth in Kenya but remains a global challenge.

Verma (2019) states that menstrual poverty is a prodigious concept in sub-Saharan Africa. Female youth and women in sub-Saharan Africa experience either a lack of access to menstrual products, a private facility to manage menstruation or they do not have any way of disposing menstrual waste (Verma, 2019). The lack of adequate menstrual absorbents or products result in female youth and women using old clothes, paper and leaves to manage their menses. The situation is arguably worse for people who are from poor socioeconomic backgrounds.

Boosey, Prestwich and Deave (2014:31) conducted a study in Uganda and found that once a month nearly two-thirds of schoolgirls from rural areas miss school as a result of lack of menstrual products. Furthermore, in Ethiopia more than 50 percent of girls from secondary and preparatory school miss classes during their menstruation period.

Kumbeni, Otupiri and Ziba (2020:1) explain that Ghana failed to adequately acknowledge the issues of MHM and their efforts to address the gaps and challenges surrounding MHM has been unsatisfactory. To maintain good menstruation hygiene practice, the use of reusable and disposable sanitary pads is crucial during menstruation. Lack of access to menstrual products such as sanitary pads, private facilities and lack of knowledge on managing menstruation, especially for female youth, makes them vulnerable to emotional and physical challenges during their menstruation period (Kumbeni et al., 2020:1).

Kumbeni *et al.* (2020:2), posit that MHM is surrounded by taboos and socio-cultural restrictions which have a significant impact on the scientific understanding of menstrual management and practice. Positive menstruation hygiene practice is a primary issue facing female youth particularly in the rural communities.

Ndlovu and Bhala (2015:2) postulate that Zimbabwe implemented numerous initiatives to promote female youth education; however, MHM remains a neglected subject in both the school and society. MHM is a significant part of female development. Ndlovu and Bhala (2015:2) present an argument that in Zimbabwe, menstruation remains apprehensive in cultural taboos and poor hygiene practices which result in health related problems for

female youth and women especially for those that come from poor socioeconomic background communities.

The key element of MHM is having access to clean water which was reported to be a challenge in most parts of Zimbabwe. Ndlovu and Bhala (2015:2) point out that culture and tradition are strongly rooted in the life of the people, resulting in them thinking that changing behaviour is a mammoth task. Thus cultural taboos expose female youth and women to growing vulnerabilities.

Guya, Mayo and Kimwaga (2014:27) point out that MHM is not uniform but practiced differently in line with the cultural, educational and socioeconomic status of a particular community. Guya, *et al.* (2014:27), further states that in Tanzania, there is a lack of MHM education amongst female youth pre menarche. In Tanzania there is no formal MHM education curriculum in school. Female youth depend on informal education for information and knowledge regarding MHM.

Ajari, Abass, Ilesanmi and Abedisi (2021:1) maintained that in Nigeria, the majority of female youth and women who have already started their menstrual cycle commonly use disposable sanitary pads to manage their menses. However, affordability remains a major challenge not only in Nigeria but globally. Post menarche, there is likelihood that quality of life might change or decrease for some female youth, until they reach menopause as a result of various factors that are associated with MHM such as economic impact of menstruation. Okafor-Terver and Chuemchit (2017:179) noticed that in Nigeria, menstruation tends to be unmentionable subject surrounded by silence in the name of culture, taboos, myths and misconception. However, menstruation and MHM are increasingly becoming a critical human right and development issue.

Female youth in underdeveloped and developing countries tend to use old clothes, tissue paper, and cotton or wool pieces to manage their menstruation bleeds. In Egypt the majority of female youth are reported to prefer commercial sanitary pads (Kuhlmann *et al.*, 2017:358). Female youth who are knowledgeable about various absorbents may choose to use commercial sanitary pads because they are more comfortable and unlikely to leak. However, affordability remains a huge barrier for them because of poverty. El Meselhy, Salama and El Mawardy (2020:24) point out that the majority of female youth have imperfect and inaccurate information regarding MHM. This sentiment suggests that poor MHM still exists in Egypt. In most African countries, the natural process of menstruation is a taboo and dealt with secretly. Female youth have inadequate information and knowledge

regarding MHM. This study seeks to explore and describe the perception of female youth regarding menstruation hygiene management in Roodeplaat, Tshwane.

2.3.3 Menstruation hygiene management as public health issue in South Africa

South Africa is not immune regarding menstruation as public health issue. UNICEF (2019:9) emphasizes that it is a fundamental need for female youth and women to have safe and dignified menstruation. Chikulo (2015:1971) states that in South Africa, menstruation remains a taboo subject and presents many challenges to female youth. Cultural taboos that are associated with menstruation, has a negative impact on the dignity of female youth. One effect of poor MHM is school absenteeism by females who do not have resources to actively manage their menstrual bleeds. In South Africa, research by Save the Children Agencies (2015), illustrates that female learners miss school during their menstruation cycle because of limited resources, knowledge and private space to manage menstrual bleeds. This is mostly the case for female youth who come from poor socio-economic backgrounds.

Crankshaw, Strauss and Gumede (2020) argue that there should be no circumstances, inclusive of menstruation related challenges, that compromise the constitutional right to education and dignity of female youth. Vaughn (2013) as cited in Macleod, Du Toit, Paphitis and Kellad (2020:1) states that menstruation has been pointed out as the primary factor associated with school absenteeism. This implies that female youth should be empowered with all the necessary knowledge and skills on how to manage menstruation hygiene. Arguably, this would enable them to enjoy their right to dignity and education without any compromise. Despite the fact that menstruation experiences and hygiene management happen uniquely to individual female youth, it is commonly surrounded by secrecy and myths in different societies (Garg & Anand, 2015:184-184).

Observation has been made in South Africa that many of the female youth lack money to buy sanitary pads and other products related to menstruation hygiene. The female youth who have challenges in affording menstrual products or absorbents turn to rags, socks, note book paper and are further disadvantaged by lack of access to clean water and private facilities to change their absorbents (Haberer, 2018). In South Africa, the topic of menstruation remains a taboo in various cultural groups and therefore female youth can experience shame and embarrassment when they are on their menstrual cycle and without having adequate resources to manage their menses. There is evidence that shows that lack of menstruation management resources might result in female youth being absent from school while on their menstrual cycle. (Khumalo, 2015) indicates that female youth in South Africa can miss five school days per month as a result of menstruation.

In response to the menstruation hygiene challenges, the South African government has launched a project, the Sanitary Dignity Programme, to minimize school absenteeism attributed to menstruation hygiene challenges. The initiative aimed to roll out free commercial sanitary pads to the neediest of female youth (Macleod *et al.*, 2020:1). Haberer (2018:14) maintained that the South African government does not work in isolation in addressing menstruation hygiene challenges, but the government also enjoys support from non-government organisations and communities.

Many cultures in South Africa consider it a taboo to discuss menstruation related issues as it pertains to female youth. It is often viewed as dirty or unclean and in certain contexts restrictions that disallow female youth to attend social gatherings during their menstruation period are often imposed (Solvig, Raja, Goerge, Connell, Gangadharan & Norman, 2019). This challenges national, regional and international communities to find ways to implement MHM strategies that will be in the best interest of female youth. Conversations around menstruation should be allowed as part of sexual discourses of everyday life, intended to demystify false beliefs about menstrual periods, in order to limit use of false beliefs to exclude female youth from social fabric of societies (Solvig *et al.*, 2019).

There is lots of literature regarding MHM globally, which is mostly descriptive in nature, with a focus on explaining menstruation hygiene practices, attitudes, knowledge, stigma, beliefs and cultural taboos and where female youth receive information about menstruation. Much of this literature focuses on MHM amongst girls who attend school. Little is mentioned about female youth who do not attend school. Most articles report that MHM is a challenge among girls from poor socio-economic background and for those who attend public schools. Female youth in underdeveloped and developing countries tend to use old clothes, tissue paper, and cotton or cloths to manage their menstruation bleeds. A literature search yielded a gap in literature on the experiences and perceptions of female youth regarding reusable sanitary pads.

2.4 ISSUES AFFECTING MENSTRUATION HYGIENE MANAGEMENT

Menstruation is a normal and healthy process that is experienced by female youth from menarche until they reach menopause. MHM varies across countries as a result of culture and traditions, available resources to manage menstruation and preferences. Several challenges and barriers regarding MHM exist globally and are subsequently discussed.

2.4.1 Cultural beliefs, myths and taboos

Every female experiences menstruation during their natural reproductive cycle in which menses are passed through the vagina. The first female menstruation which is also known as menarche occurs between the ages of 11 and 15 years and this is also a sign of the onset of puberty. Cultural beliefs, myths and taboos surrounding menstruation play a significant role in MHM, which Gard and Anand (2015:2) argue, is a unique experience to female youth, often surrounded by myths in many societies.

Menstruation remains a taboo subject in the world, resulting in stigmatisation of female youth. For example, mentioning menstruation related topics has been and still is a taboo in India (Gard & Anand, 2015:2). A taboo is a strong societal prohibition that is based on moral judgment and cultural or religious belief. Karki and Espinosa (2018:111) argue that most stringent patriarchal societies associate menstruation with impurity, hold negative views, apply restrictive practices regarding menstruation and religious taboos and cultural norms on menstruation can relate menstruation with evil spirits, embarrassment and shame. Yet the Constitution (Act 108 of 1996) of the Republic of South Africa enshrines human rights within which it guarantees the right to dignity and equality. It reaffirms children's rights and promises the protection of their dignity and equality.

In contrast, it would appear that cultural beliefs, myths and taboo surrounding menstruation tend to violate female youths' right to dignity. Matlala and Mabuza (2011) demonstrate how the South African government failed to address the menstruation taboo and its general perception, until the Former President Zuma pledged to a campaign to support the provision of free sanitary pads to the underprivileged female adolescents who cannot afford sanitary pads. Subsequently, the South African government published a Draft Sanitary Dignity Policy Framework in June 2017 to concretize the provision of sanitary pads that will help poor female youth to regain their dignity and execute MHM.

In some religious denominations like the Zion Christian Church, women are disallowed to attend a church service during their menstruation cycle, supposedly because it is unholy. In some cultures, females must bury their clothes they used during their menstruation cycle, but no literature could be found exploring these religious, cultural beliefs and practices.

2.4.2 Information and knowledge of menstruation hygiene management

In the quest for best MHM strategies, the effect of human knowledge cannot be underestimated. Considering its influence in many factors such as behaviour is of critical importance. Yadav, Joshi, Poudel and Pandeya (2018) state that MHM knowledge levels vary. The power of knowledge and how it influences the behaviour in relation to MHM is important amongst female youth.

Education is another key factor in MHM, (Michael, Iqbal, Haider, Michael, Iqbal, Haider, Khalid, Haque, Ishaq, Saleem, Hassali, & Bashaar, 2020:1-8), as it is influenced by multiple aspects like poverty and shortage or lack of water. The knowledge and understanding of MHM is pivotal amongst female youth. Hence female youth or women must be educated in order to acquire knowledge about MHM. Lack of knowledge and understanding of MHM amongst female youth may result in failure to adequately manage their menstruation hygiene. This is the case with female youth who have their first encounter of menarche. Moreover, lack of knowledge also has an influence on how female youth dispose of used sanitary pads and improper management of menses (UNICEF, 2015). It is clear and understandable that lack of knowledge has affected the level of MHM amongst female youth globally, especially those from developing countries like South Africa.

Female youth from low income countries, enter puberty with a lack of knowledge and misconceptions regarding menstruation, which results in unpreparedness to cope and manage their menstruation hygiene (Chandra-Mouli & Patel, 2017:2). Worse still, caregivers, parents and educators can also be caught in the trap of being ill informed and uncomfortable or unwilling to discuss sexuality, reproduction and menstruation related issues, leaving the youth with the limited support system with regards to knowledge on menstruation.

Providing female youth with adequate knowledge and skills regarding MHM is significant and this could boost their self-esteem and confidence. UNICEF (2019:12) envisages a world where every female youth can engage in social and learning activities freely, without being ashamed or experiencing the stress of menstruation related issues or superfluous barriers to information during the menstruation cycle. The support that UNICEF provides to female youth regarding MHM is aimed at improving female academic performance, minimise female school absenteeism, health and gender equality.

UNICEF (2019:15) commits to supporting female youth in executing MHM to ensure that their dignity and confidence is restored. The initiative by UNICEF also assists female youth to gain knowledge and skills to manage their menstruation adequately and safely through the use of suitable and correct materials and facilities. In countries like Uganda, MHM was launched by the government in 2015 to improve MHM amongst female youth (Miiro, Rutakumwa, Nakiyingi-Miuro, Nakuya, Musoke, Namakula, Francis, Torondel, Gibson, & Ross, 2018).

2.4.3 Socio-economic factors related to menstruation hygiene

Poverty, lack of privacy, discreet waste disposal options, a shortage of water supply, religious, cultural beliefs and lack of knowledge are linked to MHM challenges (Crankshaw *et al.*, 2020:6). In some cultures, it is deemed a taboo to discuss menstruation related issues with parents, which leaves a gap in female youth knowledge about MHM.

Poor MHM affects the majority of female youth globally; especially those from poor backgrounds (Sommer *et al.*, 2016). Hence MHM challenges are associated with the shortage of clean water and soap, lack of changing facilities, privacy and lack of clean as well as disposable absorbents (Sommer & Kjellén & Pensulo, 2013). Importantly, reusable sanitary pads were introduced to improve the level of MHM (Dhingra, Kumar & Kour, 2014). Yet Jogdand and Yerpude (2011) indicate female youth secretly wash and dry reusable sanitary pads owing to possible victimization and stigma by peers.

2.4.4 Water, sanitation and hygiene (WASH)

Chapter 2 of the Constitution (Act 108 of 1996) of the Republic of South Africa states: “*Everyone has the right to have access to sufficient food and water.*” To maintain hygiene water is a primary requirement. Limited or no access to water and sanitation undermine female youth’s potential to properly and adequately manage menstruation hygiene (Schmitt, Clatworthy, Ratnayake, Klaesener-Metzner, Roesch, Wheeler & Sommer, 2017:2). It is evident that millions of people including female youth, lack access to clean water and sanitation facilities (Pouramin, Nagabhatla & Miletto, 2020:2). Female youth also lack private space to change and dispose menstruation materials. Pouramin *et al.* (2020:2), show that lack of access to water directly affects female youth as it pertains to MHM. Achieving positive MHM amongst female youth without access to clean water and sanitation could remain unrealistic and unachievable.

Water, sanitation, and hygiene (WASH) plays a significant role in the lives of female youth of reproductive age, both physiologically and culturally (Kandell, 2015). When female youth lack access to WASH facilities and sufficient hygiene education, it has a negative impact on a female youth's education, sexual and reproductive health, and dignity. Female youth's absenteeism from school during their menstrual cycle has been linked to a lack of proper facilities and MHM products or material such as water and sanitation. Female youths are unable to manage their menstruation safely, hygienically, and with dignity without sufficient sanitation facilities, and are hesitant to use them if privacy is not guaranteed. WASH programs are in existence over the world as an intervention method to address menstruation hygiene issues (Kandell, 2015).

2.4.5 Types of absorbents used during menstruation

Women use various sanitary protection material during menstruation and their preference is influenced by individual or personal choice, affordability, cultural acceptability and easy access to materials. A study in India by Kaur, Kaur & Kaur (2018:1) indicated that the preferences of the absorbents differ amongst females from rural and urban areas, with the most preferred absorbents in rural areas being reusable cloth pads. This is because reusable cloth pads are cost effective, as one pad can be used several times, while in urban areas the most preferred absorbents are commercial sanitary pads.

Kaur *et al.* (2018:2) outline the different products and absorbents that women use for MHM below:

- **Reusable and washable cloth pads**

Various government and non-government organisations have started providing female youth from poor socio-economic backgrounds with reusable and washable cloth pads with the aim of addressing the barrier encountered by female youth regarding MHM. Reusable and washable cloth pads are aimed at minimising cost while maintaining MHM. These kinds of absorbents may be sustainable sanitary options, but human hygiene must always be a priority. The reusable and washable cloth pads must be washed with clean water and soap. The reusable pads are cost effective and can be easily accessed by people of all economic backgrounds. A gap in research that has investigated the perceptions and experiences of female youth regarding the reusable and washable cloth pads has been found (Hennegan, Donal, Wu, Scott & Motgomery, 2016b:2). A description of different types of absorbents follows.

- **Commercial sanitary pads**

These types of absorbents are easily accessible in stores and through online purchase. They are not cost effective compared to reusable and washable cloth pads; are not reusable; and some environments may not be friendly for its disposal. They are mostly preferred by women who are financially stable.

- **Tampons**

Tampons provide internal protection as women insert cotton inside the vagina. This allows tampons to absorb menses before it passes out from the body through the vagina. Tampons are costly, hard to access and may not be suitable to use in some environments.

- **Reusable tampons**

They are used the same way as the disposable tampons. However, reusable tampons are washed for reuse. The reusable tampons are mostly preferred by female youth from poor socio-economic backgrounds as they are economic, reusable and easily accessed. To maintain positive MHM practice, reusable tampons should be washed with clean water, soap and dried in the sun. Access to clean water is essential when using the reusable tampons (Hennegan et al., 2016b:2).

- **Menstruation cups**

Menstruation cups are a new technology made for women who are financially challenged, from poor backgrounds and cannot afford to buy sanitary pads and tampons. The cup is made of silicone rubber and can be worn for up to 6-12 hours. The cup is pain free, comfortable, sustainable, reusable and environmentally friendly (Hennegan et al., 2016b:2). Pokhrel, Bhattarai, Emgard, Schikfus, Forsberg and Biermann (2021:4) point out that the menstrual cup is perceived positively by most female youth. This indicates that they no longer miss classes as a result of MHM challenges.

- **Bamboo fibre pads**

Bamboo pulp may be used as absorbents of menses during a menstrual cycle or period. It has a capacity to absorb a lot of menstrual blood without women feeling unsafe or uncomfortable. Bamboo fibre pads are cost-effective and environmentally friendly. Bamboo fibre pads are naturally reusable and can be easily accessed. The advantage of bamboo charcoal pads is that the blood stains cannot be clearly visible and this minimises irritation.

- **Banana fibre pads**

Banana fibre pads are affordable sanitary pads for poor women and people who are financially challenged to access or afford disposable sanitary pads. Banana tree fibre is used to manufacture banana fibre pads. There is huge potential for this in South Africa as a major banana producer.

- **Water hyacinth pads**

Water hyacinth is used to make cost effective, sustainable and biodegradable sanitary pads. Manufacturing of water hyacinth pads provide females with alternative absorbents for menstruation and easy access to necessary personal hygiene with the primary goal of breaking the stigma and promote MHM. This is also a plant found in South Africa which is seen as a nuisance and yet holds potential to be produced here.

2.5 CONSEQUENCES OF POOR MENSTRUATION HYGIENE MANAGEMENT

MHM continues to gain recognition as a public health issue. This is arguably as a result of the consequences that are experienced by female youth who are unable to adequately manage their menstruation due to lack of knowledge, resources and private facilities amongst other factors (Akhali, Shaik & Kumar, 2020:10). History of silence within government, non-government organisations and private institutions regarding MHM exist globally and has negative consequences, resulting in female youth school absenteeism.

2.5.1 Absenteeism from school

The negative impact of poor MHM on education amongst the female youth cannot be ignored. Globally, poor MHM contributes to school absenteeism amongst millions of female youth (Mohammed, Larsen-Reindorf & Awal, 2020). It is clear that being absent from school may increase the likelihood of female youth dropping out of school. Lack of menstruation hygiene resources such as absorbents and/or sanitary pads; unfriendly or unsupportive environment; lack of water and sanitation at the school facilities, result in female youth school absenteeism. Mohammed *et al.* (2020), further allude to the possibility that some of the female youth do not attend school during menstruation in fear of a menstruation onset accident.

Some of the female youth are afraid to attend school during their menstruation cycle as their educators may request them to stand up and answer questions while they do not have adequate MHM resources. This might result in leakage of menses, bad smell, discomfort and embarrassment. It is part of learning for educators to request learners to write answers to tasks given to them on the blackboard. However, some female learners hesitate to comply with the request, as they fear menstruation accidents and that other learners may see blood spots on their clothes.

Menstruation period or cycle may coincide with school examination and arguably some learners will miss their examination as a result of menstruation. This has a negative impact on female youths' right to education and contributes in increasing gender inequalities between male and female youth. The male youth gain advantage and continue with their education, while female youth drop out of the school because of the psychosocial stress and embarrassment regarding MHM in the school environment. Mohammed *et al.* (2020), state that having access to clean water and sanitation within school premises enables female youth to manage menstruation with dignity and minimises the chances of them from missing school during their menstruation cycle. Their right to education should not be compromised because of their natural and physiological process and lack of resources.

2.5.2 Psychosocial well-being

The poor MHM amongst female youth have psychosocial consequences on their personal and developmental well-being (Hennegan, Donal, Wu, Scott & Montgomery, et al., 2016a). The female youth who have experienced challenges in managing their menstruation may feel ashamed, insecure, anxious and depressed and have a fear of stigmatisation by their peers who have resources, knowledge and are capable of managing their menstruation. The psychosocial well-being of female youth is of paramount importance, as failure to maintain positive psychosocial well-being may affect other aspects of their life, such as education and community engagement.

2.5.3 Menstruation hygiene management and health

MHM will always be associated with health matters. Several studies have associated poor MHM with infections (Hennegan *et al.*, 2016a). The encumbrance of reproductive tract infection is a main health challenge globally and mostly affects people from poor socio-economic backgrounds. Part of this encumbrance can be associated with poor MHM.

Kaur *et al.* (2018:2), assert that the manner in which female youth practice MHM are of great concern, as it has impacts on their health. This indicates the importance of positive MHM. If menstruation hygiene practices are not given adequate attention, it can arguably result in reproductive tract infections and other vaginal infections (Kaur *et al.*, 2018:2). Female youth may develop health problems as a result of poor MHM and genital hygiene. Sharma, Mehra, Kohli and Singh (2017:1946) emphasised that failure to maintain positive MHM will upsurge vulnerability to reproductive tract infections amongst female youth who have commenced with menarche.

2.6 IMPORTANCE OF MAINTAINING POSITIVE MENSTRUATION HYGIENE MANAGEMENT

It is important to maintain positive menstruation hygiene because poor MHM may result in numerous diseases such as reproductive tract infections, pelvic inflammatory diseases, urinary tract infections that may lower self-esteem among girls and increase school absenteeism (Geethu, Elizabeth, Elizabeth, Chintu, Hemalatha & Sivakumar, 2016:2192). Maintaining positive MHM could minimise infections. Positive hygiene practices of female youth during menstruation are considered important, as failure could result in serious health complications (Rani & Reddy, 2019:2). Good menstruation hygiene practices such as the use of adequate menstruation products, changing of menstruation products and washing hands and genitals is essential during menstruation.

2.7 CAUSES OF POOR MENSTRUATION HYGIENE MANAGEMENT

There are a number of reasons that causes poor MHM amongst female youth globally. The causes of poor MHM include poverty, child headed household, and lack of access to absorbents menstrual material, lack of awareness regarding the importance of MHM and female youth attitudes towards MHM.

2.7.1 Poverty

Menstruation is a universal experience for female youth and women from the onset of menarche until menopause. It is however, a unique challenge for female youth and women who come from poor socio-economic or poverty stricken backgrounds. Poverty is identified as a main cause of poor MHM. Cardoso, Scolese, Hamidaddin and Gupta (2021:1) notes that approximately 500 million female youth and women worldwide have limited access to adequate space, privacy and access to menstrual products for MHM. This results in female youth using inadequate menstruation products or absorbents to manage their menstruation.

Cardoso *et al.* (2021:2), further indicates that it is common for female youth and women from under developed and developing countries to be unable to afford menstruation products as a result of poverty. There is a visible and clear relation between poverty and MHM. Poverty has a significant impact on how female youth manage their menstruation globally. Evidence confirms that female youth from poor backgrounds have challenges in positively managing their menstruation (Cardoso *et al.*, 2021:2).

2.7.2 Child headed households

In South Africa, Human Immuno-Deficiency Virus (HIV) and Acquired Immuno-Deficiency Syndrome (AIDS) continue to be a threat with the national prevalence rate estimated at 13,1 percent in 2018 among the South African population. An estimated 19.0% of adults between the age of 15 and 49 years are HIV positive (Statistics SA, 2019). One of the most tragic effects of the HIV pandemic is the rapidly growing number of children left orphaned. The HIV and AIDS pandemic has arguable increased mortality rates among adults which resulted in children being orphaned and deprived of life with their biological parents (Mkhatshwa, 2017:365).

Mkhatshwa (2017:365) explains that the high mortality rate among adults result in child headed households. Children's vulnerability and lack of parental guidance can also affect their MHM as a result of lack of support and access to MHM education, guidance and resources.

2.7.3 Lack of access to absorbents menstrual material

Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo, Mutale, Chilengi and Sharma (2019:4) state that most female youth face MHM challenges as a result of lack of access to absorbent menstrual materials. This exposes female youth to poor MHM and poses a high risk of developing reproductive tract infections and other vaginal infections. Female youth tend to use alternative absorbents, such as old cloth which might not be fit for the purpose, owing to lack of menstrual material. Chinyama *et al.* (2019:6), further explain that other female youth use pieces of blanket or other alternative absorbents which have to be washed with water and soap. The female youth might also not afford soap and may have difficulties in having access to clean water. Chinyama *et al.* (2019:5), point out in their study that cloth fills up rapidly and results in menses leaking to the underwear and leaving stains on their clothes. One may conclude that lack of access to absorbent menstrual material creates uncomfortable menstrual experiences.

2.7.4 Lack of awareness regarding the importance of menstruation hygiene management

Access to truthful and matter-of-fact information is of paramount important and a prerequisite to MHM and practices (Sinha & Paul, 2018:72). Research studies that were conducted globally demonstrates that awareness, knowledge and understanding of menstruation as natural and normal physiological phenomenon is lacking in various parts of the world. The societal norms, beliefs and cultural practices regarding menstruation, make it problematic and challenging for female youth and their significant others to discuss or talk about menstruation. Tembo, Renju, Weiss, Dauya, Bandason, Dziva-Chikwari, Redzo, Mavodza, Losi, Ferrand and Francis (2020:2) demonstrate that sociocultural norms, beliefs and lack of knowledge and awareness contribute to poor MHM.

Sinha and Paul (2018:72) further assert that talking about menstruation is not only a taboo subject for female youth and women, but also for school teachers and even healthcare professionals who feel uncomfortable to engage and talk about MHM. Government, non-government organisations, societies and private institutions should work together to change negative societal views about menstruation and break the culture of silence. Basic education needs to include a MHM curriculum and bring about awareness to prepare girls for menarche.

Communication platforms including television, radio and other social media platforms are proven to be capable to deliver crucial communication or messages to the society. Thus these platforms can be used to bring MHM awareness to the public to minimise barriers to

MHM. School teachers and healthcare providers will benefit from capacity building workshops and training regarding MHM and disseminate accurate information about menstruation.

Shah, Nabwera, Sosseh, Jallow, Comma, Keita and Torondel (2019:2) notes that female youth need access to information to adequately manage menstruation. This view highlights the significance of information regarding MHM. Positive preparation for menarche will minimise the fear, confusion and stigma associated with menstruation and will increase adequate MHM with positive social norms. Lack of preparedness amongst female youth before menarche results in poor MHM (Shah *et al.*, 2019:2).

2.7.5 Female youth attitudes towards menstruation hygiene management

The female youth attitude towards menstruation hygiene can have a negative impact and may arguable predispose them to reproductive tract infections. Their attitudes may be influenced by cultural norms and individual choices regarding MHM (Kaur *et al.*, 2018). Empowering female youth with adequate knowledge can enable them to have positive attitudes towards menstruation hygiene. Ndlovu and Bhala (2016) show that perception also affects attitude. Kaur *et al.* (2018) also hold the position that perception influences attitude towards MHM. Female youths' attitude will have a greater impact on how they respond to MHM.

Several studies in Africa illustrate female youths' negative attitude towards MHM (Miuro *et al.*, 2018b; Upashe *et al.*, 2015a). Other authors indicate that beliefs have a major influence on a person's attitude. When society associates menstruation with taboos, this in turn affects the attitude of female youth towards MHM to be negative. Menstruation hygiene remains a taboo and is seen as a form of ungodliness in many countries globally (Yadav *et al.*, 2018). Ameade and Garti (2016) explain that taboo regarding menstruation hygiene creates fear and panic amongst female youth. The restrictions and taboo that are associated with menstruation hygiene influence negative attitudes amongst female youth in some part of the African continent (Dhingra *et al.*, 2014). Sommer *et al.* (2013), state that some African counties believe that menses may be used to bewitch the person who is menstruating. Therefore, female youth sure that no person ever gets to see the cloth/wrapper that they have used during menstruation. The attitude that menses is taboo, unholy and shameful continues to drive the negative attitude towards MHM amongst female youth.

Wilbur, Torondel, Hameed, Mahon and Kuper (2019:2) found in their study that taboos regarding menstruation influence gender inequality. In some cultural and religions,

menstruating individuals are seen as impure, so they are restricted on using the same water sources in order not to contaminate them (Wilbur *et al.*, 2019:2). These taboos and social beliefs have led some people to develop negative attitudes towards menstruation hygiene, which subsequently affect the manner in which they practice MHM.

2.8 INTERVENTION STRATEGIES TO ADDRESS MENSTRUATION HYGIENE MANAGEMENT

It is impossible to manage menstruation adequately without having access to menstrual products, privacy, water and soap, and disposal facilities for used menstrual products (Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo, Motale, Chilengi & Sharma, 2019:2). However, most underdeveloped and developing countries, especially rural areas, have inadequate facilities such as access to clean water for female youth to wash hands, external genitalia and soiled clothes. Chinyama *et al.* (2019:2), notes that several female youths lack basic adequate MHM products such as soap, sanitary pads, disposal of soiled sanitary pads and privacy to manage their menses. Female youths' participation in society and psychosocial well-being may be affected as a result of lack of MHM materials. As such they might drop out of school or frequently be absent from attending school.

Ssewanyana and Bitanihirwe (2019:106) explains that intervention strategies to address MHM challenges involve the provision of physical resources such as water and sanitation, sanitary pads and other physical menstrual products; and the components that involve knowledge which can help female youth perceptions regarding MHM. The menstrual absorbents are either locally or commercially produced. Improving awareness regarding MHM will minimise stigmatisation and other negative myths regarding menstruation.

Globally, countries have various intervention strategies as a response to menstruation hygiene challenges. The intervention strategies differ based on the respective countries socio-economic background and the societal needs regarding MHM. In South Africa, the government, non-government organisations and private sector joined hands in addressing MHM challenges as it is regarded as a public health issue.

The 1st Draft Sanitary Dignity Policy Framework (Department of Women, 2017:5) indicates that in order to preserve women's dignity during the menstruation cycle it is of paramount importance to ensure that women and female youth have adequate access to menstruation management products such as sanitary pads, water, sanitation and facilities to change their used sanitary pads. Lack of access to menstruation management products or absorbents may results in female youth being absent from school and affecting their health and well-being. This could compromise their right to education. The lack of menstrual absorbents

by individuals from poor households may have numerous unintended consequences regarding education, health, employment and social activities. It is in this regard where the South African government introduced the provision of free sanitary pads to poverty-stricken school-going female youth.

In North West Province, Transnet Teenage Health Program intervened in addressing MHM challenges through Transnet Foundation Health, who introduced several programmes to improve the MHM education, knowledge and practice. The foundation provides education, awareness and menstruation products to the poorest, especially in rural communities of South Africa (Chikulo, 2015:1974).

2.9 ROLE OF MEN AND BOYS IN MENSTRUATION HYGIENE MANAGEMENT

The Constitution of the Republic of South Africa Act 106 of 1996 vested every citizen the right to equality. Gender inequality has given rise to the voice of females being ignored in society and in the development programmes. Kaur *et al.* (2018:2), point out that the principal factor that causes menstruation to remain a taboo is gender inequality. It is for this reason that menstruation hygiene is also neglected. Karki and Espinosa (2018:111) confirm that in most patriarchal societies, menstruation is associated with dirtiness, unholiness and stigmatisation, holding unpleasant interpretations and limiting practices regarding menstruation. Cultural norms and stigmas also restrict menstruating females to participate in some community activities and exclude them from using water and sanitation, as menstruation is regarded as impure. Therefore, all-inclusive interventions that include people of all genders should be encouraged as a response to menstruation hygiene challenges.

Men and boys can play a significant role in providing support and influencing female youth regarding MHM at home, work environment, schools and the community at large through multiple roles such as fathers, brothers, teachers and policymakers (Kaur et al. 2018:5). Most of the literature indicates that men do not support females regarding menstruation hygiene and shy away from discussing menstruation related issues. Kaur et al. (2018:2), further indicate that men do not see the need to provide finances for the purchase of menstrual products, and as a result female youth may be forced to use unhealthy absorbents which will eventually lead to practicing poor menstruation hygiene.

Mahon, Tripathy and Singh (2015:9) present the arguments to emphasize that men and boys can play a major role in providing support to female youth that can assist them to overcome menstruation hygiene challenges. Shah *et al.* (2019:2), state that men and boys may positively influence female youth experiences of MHM. However, little is known about

the knowledge and attitudes regarding menstruation hygiene amongst men and boys in South Africa.

2.10 ROLE OF EDUCATORS IN MENSTRUATION HYGIENE MANAGEMENT

To have positive MHM experiences and achieve adequate menstrual health, female youth require not only access to affordable and safe MHM products, but also access to clean water and sanitation. They also need to be empowered with accurate knowledge about MHM from well informed professionals that include educators, healthcare workers, social workers and other professionals (Mahfuz, Sultana, Rahman, Hunter, Jahan, Akand, Kan, Mobashhara, Rahman, Alam, Unicomb, Luby & Winch 2021:1).

Getting unreliable information and knowledge may increase poor hygiene management. Researchers worldwide including South Africa, Bangladesh, Tanzania and Ghana among others, have explored how socio-cultural and religious exclusions that minimise discussions of menstruation leave female youth unprepared for menarche. This unpreparedness will mostly be followed by poor MHM. Limited access to MHM information and supportive school environment regarding MHM may negatively affect female youths' school attendance and academic performance (Mahfuz *et al.*, 2021:2). The educators have responsibility to empower female youth with knowledge, information and that will assist them to manage menstruation adequately. Educating female youth about menstruation related issues will assist them to openly discuss menstruation with their caregivers and this will subsequently reduce fear, stigma, and low self-esteem and promote positive MHM.

2.11 ROLE OF SOCIAL WORKERS IN MENSTRUATION HYGIENE MANAGEMENT

The researcher is of the opinion that the role of the social workers with regard to the perceptions of female youth on MHM, stretches over several methods of social work within the field of social work practice. For the purpose of this research study, community-based social work is regarded as the primary area of focus to address MHM challenges among female youth. Social work practice involves numerous social work interventions with individuals, families, groups and communities. Chukwu, Chukwu and Nwadike (2017:44) illustrate that social work is a helping profession that is concerned with assisting people who are faced with problems in their lives. Social workers help individual, family, group and communities to address their problems adequately. Social workers do not select what problems and challenges to address; they respond to all problems faced by the people.

Social workers can play a significant role in addressing MHM challenges by mobilising and empowering female youth through their gate keepers, organisations and volunteers. Social

workers use community based social work to assist people who are marginalised and living in poverty to work together to identify their needs, create change and influence their decision-making ability which affect their lives.

Social workers mobilise MHM products and resources for the benefit of the community members who are marginalised and living in a poor socio-economic environment. The social worker needs to focus on the following aspects when providing services at a community based level:

- **Case management**

In this case, the social worker provides case work or direct services to the client, focusing on an individual needs and how an individual client can use available possessions both personal and community based to accomplish their needs.

- **Community development**

The social worker focuses on developing community based resources, developing the under developed resources and linking community members with the available resources that can help them to address their challenges. The social worker focuses on linking female youth with community based institutions or organisations that assist them to gain knowledge, information and resources that can help them to address their needs.

- **Therapeutic intervention**

The role of the social worker is to provide counselling and support services to individuals. For example, social workers can help female youth who are the victims of shaming, stigmatisation and discrimination, as a result of MHM related challenges and to help them to deal with personal emotional and psychological issues affecting their social functioning.

2.12 SUMMARY

This chapter focused on literature and studies that were conducted in response to MHM challenges. Currently, there is no definite solution to the challenges faced by female youth regarding MHM. Several studies that were conducted focused on knowledge of female youth on MHM, lack of access to MHM products, and lack of access to private facilities to manage their menstruation. A gap was identified for a need to explore the perceptions and experiences of female youth regarding reusable sanitary pads. Female youth are faced with several challenges due to menstruation and this study will play a significant role and contribution in addressing challenges faced by female youth.

The next chapter focuses on the research methodology and empirical research findings.

CHAPTER THREE: RESEARCH METHODOLOGY AND EMPIRICAL FINDINGS

3.1 INTRODUCTION

Women and female youth in particular, are faced with many challenges regarding MHM. This chapter provides an insight into the research methodology that was employed in this study. The chapter outlines the research approach, research type and the research design that was used, as well as the research population, sampling technique and sample. The methods of data collection and data analysis, as well as how research quality and trustworthiness of the study was ensured are discussed. The ethical considerations that guided the researcher are also discussed. Furthermore, the empirical findings established through thematic analysis are presented in this chapter, starting with the biographical data of the research participants. The research question for the study is: What are the perceptions of female youth regarding menstruation hygiene management in Roodeplaar rural community, Tshwane? The main goal of the research is: To explore and describe the perceptions of female youth regarding menstruation hygiene management in Roodeplaar rural community, Tshwane.

3.2 RESEARCH APPROACH

The research approach that was appropriate for this study is qualitative. This type of research approach focuses on exploring human attitudes and behaviour within their natural environment (Nieuwenhuis, 2020:60). In line with this assertion, the researcher wanted to gain comprehensive understanding about the perceptions of female youth regarding MHM. Qualitative research approach provides the researcher with an insider knowledge and perspective on social action (Babbie & Mouton, 2010:53). Furthermore, a qualitative approach was in line with the researcher's aims of making sense of perceptions of female youth regarding MHM.

The study followed an exploratory and descriptive research purpose, as the researcher explored the perceptions of female youth regarding MHM in Roodeplaar rural community, Tshwane. Babbie and Mouton (2010:80) state that an exploratory study aims to describe a phenomenon within a group of people. This gave the researcher an opportunity to attain in-depth knowledge into the phenomenon under study. Furthermore, Nieuwenhuis (2020:60) asserts that descriptive studies tend to be concerned with finding answers to "what" questions.

The research paradigm for this study is feminism. The researcher considered feminism to be relevant for the study following explanations by Rana (2018:428-429) who asserts that

feminism is a movement that seeks to advocate for the cultural, political and socio-economic rights of women. The definition of feminism by Li and Bolaria (1994:84) clarifies the relevance of feminism to this study: “An awareness of the special problems women faces in contemporary society and a commitment to better the condition of women”. The more we understand the perceptions of female youth regarding MHM, we will be in a position to redress and create better conditions for them.

3.3 TYPE OF RESEARCH

The researcher considered applied research as the appropriate type of research for this study, as the focus of the study is to help female youth from Roodeplaats rural community to solve problems that they are facing with regards to MHM. Kumar (2011:11) posits that applied research is useful when the knowledge that is gained from research can be applied to understand a particular phenomenon. Furthermore, Cherry (2014:1) defines applied research as a scientific study that focuses on solving practical problems.

Applied research was suitable for this study as the researcher wanted to acquire knowledge about the perceptions of MHM among female youth in Roodeplaats rural community. Moreover, the researcher specifically endeavours to apply the knowledge to solve problems being faced by female youth in Roodeplaats rural community; and to inform the government and community-based organizations about challenges faced by female youth pertaining to MHM. It will also enlighten policy makers and legislative bodies involved in decision making processes aimed at addressing female youth’s challenges in relation to MHM.

3.4 RESEARCH DESIGN

The researcher used a phenomenological research design for this study. Phenomenology aims to explain the development and meaning of lived experience of participants about a particular phenomenon (Fouché & Schurink, 2011:316; Simon & Goes, 2011:1). In this study, the researcher focused on the lived experiences of female youth in relation to MHM. Using phenomenology, it was vital that the researcher described and articulated the phenomenon accurately as experienced by the participants (Fouché & Schurink, 2011:316; Simon & Goes, 2011:1). MHM is a monthly experience of the participants; an encounter they have been experiencing in their lives since their first menstruation cycle. For purpose of this study, participants were given an opportunity to describe their MHM experiences. Participants were encouraged to include any details they find relevant when sharing their experiences. This allowed for an accurate description of their experience.

3.5 RESEARCH METHODS

This section of the research study covered the following topics: study population and sampling, data collection, data analysis, data quality and pilot study.

3.5.1 Study population and sampling

Strydom and Delpont (2011:204) posit that population is the “individuals in the universe who possess specific characteristics, assets or entities that represent all the requirements of interest to the researcher”. Rubin and Babbie (2016:372) define population as a collective of individuals within the society that a researcher wants to attain a general understanding of. Thus, the research population consisted of female youth from the Roodeplaat rural community, Tshwane. Suffice to mention, the researcher was knowledgeable about the population concerned and its elements.

Sampling methods are applied to select the sample of the population that used in a particular study (Kumar, 2011:193) and the researcher used non-probability purposive sampling for this study. This sampling method significantly complemented the research objective of the study. Babbie and Mouton (2010:166) refers to sampling as a method of selecting a group of people or social phenomena to be studied from the large universe to which they belong. However, there is a possibility of leaving out sampling should the population be found manageable. Maree, Creswell, Ebersöhn, Eloff, Ferreira, Ivankova, Jansen, Nieuwenhuis, Pietersen, Plano Clark & Van der Westhuizen (2020:220) state that the researcher uses purposive sampling in circumstances where sampling is done with a specific purpose. The following selection inclusion criteria were used to select the sample of female youth from Roodeplaat rural community, Tshwane:

- Female youth.
- Aged between 18 and 30 years.
- Have started with their menstruation cycle.
- Reside in Roodeplaat rural community, Tshwane.
- Of any religion and cultural belief.
- From any race and ethnicity.
- Able to converse in English.

The researcher used social workers and other workers from Kamcare as gatekeepers to make the community aware of the research and ask them to participate. Kamcare thus acted as an intermediary between the researcher and the participants by informing the potential participants about the research and collecting the potential participant’s contact details, should the person wish to participate in the study. The researcher collected the

contact details of all the potential participants who showed an interest in partaking in the study from Kamcare and contacted them. The two female co-researchers who form part of the research study, interviewed seven participants each and agreed to each give two sets of data recordings (four) for the researcher to transcribe and analyse. This was due to the Ethics Committee insisting that researcher as a male could not interview the participants himself due to the sensitive topic. The co-researchers discussed the letter of informed consent with the four participants and once they voluntarily signed, the interview commenced on a date and time arranged for the individual face-to-face interview between the participants and female co-researchers. Furthermore, due to challenges to recruit more participants, the pilot study participant was included in researcher's sample, as the sampling and selection criteria were the same for the pilot interview and as the data collected was very rich and thick, it is allowed in qualitative, phenomenological studies. Thus five participants were included.

3.5.2 Data collection

To achieve the objective and the goal of the study, the researcher used semi-structured one-on-one interviews to collect detailed data that enabled him to understand the phenomenon. The letter of informed consent was read and discussed with the participants and once the participants agreed to sign the letter then the interviews commenced. The face-to-face interviews were conducted in a classroom at Vhathu Phanda Crèche in New Town, Roodeplaat, where Kamcare is located. Based on Nieuwenhuis (2020:108), an interview can be defined as communication between two or more people where the interviewer asks the participant questions with the purpose of collecting data and explore the ideas, beliefs, views, opinions and behaviours of the participants. In the process the individual participants responded to the question asked by the researcher.

The semi-structured interview comprised many questions directed at the participants. However, the researcher has the responsibility to direct the interview to the direction that the researcher deems interested and applicable to the study (Isaacs, 2014:320). Due to the sensitive nature of the research topic, the researcher did not conduct the interview with the participants himself, as this might have made them uncomfortable and introduced bias in the data. Arrangements were made with two female co-researchers who formed part of the research team to each conduct two interviews with two participants recruited by the researcher and provide the data set (recorded interviews) and field notes of two participants each to the researcher (total of four participants) to be transcribed. The researcher then used this data collected by the co-researchers to do the data analysis.

A semi-structured interview schedule was used to guide the face-to-face interviews. The schedule consisted of open ended questions on: Knowledge about reproductive health; menstruation experience and challenges; MHM and challenges; resources and limitations; social work intervention; and recommendations.

The two female co-researchers voice recorded the individual face-to-face interview after obtaining permission from the participants. The main aim of conducting individual interviews was to generate a wide range of views about the perceptions of female youth regarding MHM from the participants. A positive atmosphere was created to make them feel comfortable to share their perceptions and experiences. Nieuwenhuis (2020:111) points out that towards the end of the interview, participants should be encouraged to focus on responding to the research questions. Due to the socio-economic background of the participants, it was not convenient and feasible to use online data collection via GoogleMeet, Zoom or WhatsApp video call. Being mindful of Covid-19, the researchers adhered to all stipulated Covid-19 regulations throughout the research project.

3.5.3 Data analysis

The researcher followed the thematic data analysis process as described by Clarke, Braun and Hayfield (2015). The purpose of thematic analysis was to give the researcher an opportunity to develop themes and data codes from an exceptional point of view (Clark *et al.*, 2015:223). In qualitative research, data analysis and data collection are regarded as a process that is on-going as opposed to being separate processes. Data analysis requires that the researcher strive to make sense of what is found during data collection. The researcher was guided by the following steps of thematic analysis as defined by Clarke *et al.* (2015:231):

- **Familiarization**

Familiarisation requires the researcher to have a sense of ownership and fully comprehend the data that was collected. The researcher read the transcribed information and listened to the voice recordings repeatedly to familiarize himself with the data. The researcher always tracked back to the research question, goal, objective and theoretical framework during the data analysis period to avoid deviating from the aim and objectives of the study (Isaacs, 2014:322).

- **Coding**

The second phase of data analysis is coding. The primary aim of coding is to limit raw data and remain with lesser data (Schurink, Fouchè, & De Vos., 2011:410). Coding is considered as the initial phase of the research themes and without properly applying this phase, the researcher will have difficulties in identifying smaller and obvious themes (Clarke et al., 2015:234). In this phase, the researcher initiated the process of identifying initial codes post being familiar with the data. The researcher started by one transcript and coded the data in the margins. In the process of identifying the codes, the researcher created a comprehensive list of codes where he described the codes in brief.

- **Searching for themes**

The research question was answered through the identification of the themes (Clarke *et al.*, 2015:236). Searching the themes entails that the researcher develops themes and considers some codes to become themes. The researcher identified themes that helped or enabled him to answer the research question.

- **Reviewing the themes**

The researcher checked themes and data repeatedly to verify and ensure that all the necessary data was not left out. Furthermore, the researcher verified the data to ensure that the themes selected are able to answer the research question appropriately. Clarke *et al.* (2015:238), point out that the researcher must link the identified themes to the research question and the content of the data gathered by means of qualitative research methods.

- **Defining and naming themes**

The researcher ensured that all themes had short and clear descriptions. Defining and naming themes was a continuous process during the analysis as more themes were identified (Clarke et al., 2015:240).

- **Writing a report**

This is the final stage of data analysis in which Clarke *et al.* (2015:242), contend that there are no specific rules and necessities when writing a report. Although there are no specific rules and necessities, the researcher had a strong belief and understanding that the data presentation must remain clear and consistent.

3.5.4 Data quality

Nieuwenhuis (2020:143) posit that trustworthiness is of utmost importance in qualitative research. To ensure valid data quality, trustworthiness must be assessed and the researcher must familiarise himself with the assessment procedures that can be used in

assessing trustworthiness of data analysis constantly. Drawing from Guba's (1981) model of trustworthiness of qualitative research, Maree *et al.* (2020:143-146), present the following facets of trustworthiness in four categories of trustworthiness: credibility, transferability, conformability and dependability.

- **Credibility**

To ensure data was credible, the researcher established that research methods and research design fitted the research question, as well as a theoretical underpinning that contextualised the research question and the methods. Nieuwenhuis (2020:144) states that credibility involves enhancing the development of a rapport with the participants and the participating organizations. In this study, the researcher did not establish a rapport with the participants himself but the two female co-researchers did. The co-researcher applied prolonged interaction through-out the study, aimed at familiarising herself with the topic, as well as getting to know participants better. Due to the sensitivity of the study, the researcher did not get to know the participants directly and instead the co-researchers got to engage with the participants and thereafter inform the researcher.

- **Transferability**

Nieuwenhuis (2020:144) argues that transferability does not involve generalised claims, but invites readers of research to make connections of a study and their own experience. The female co-researchers ensured that the interaction between themselves and the participants was maximised until data saturation. The research topic is sensitive in nature and the researcher ensured transferability through the provision of accurate transcriptions and thick descriptions.

- **Dependability**

Nieuwenhuis (2020:145) states that the analysis process should be documented so that other people can see the decisions that the researcher made and how the researcher went about the analysis process as well as how the researcher arrived at the interpretation. An audit trail of all the research notes, records of data collected and transcripts was kept so other researchers can see all the processes that were followed to reach the findings (Nieuwenhuis, 2016:124).

- **Conformability**

To achieve conformability, the researcher adhered to the ethical clearance process and protocol of the University of Pretoria, Faculty of Humanities, and Research Ethics Committee. An audio trail of how themes and sub-themes were generated of the whole

research process was kept in a saved file. The researcher also pursued inputs from colleagues who are well-versed qualitative researchers who clarified the study by asking questions that shed some light and make suggestions as a form of peer debriefing.

3.6 PILOT STUDY

The researcher conducted a pilot study to test the feasibility of the study, where the interview schedule was tested. A pilot study can be regarded as the preparation or rehearsal of the main research (Strydom & Delport, 2011:237). It is a rehearsal whereby research methods are applied to a limited population to determine, amongst others, possible flaws and ambiguity. In this pilot study interview, the researcher observed an individual face-to-face interview conducted by a female co-researcher (with the permission of the participant), with one female youth participant who had started her menstrual cycle, in Roodeplaat rural community using the same selection criteria as for the main study. The participant was requested by the co-researcher to provide honest feedback about the interview and interview schedule. The co-researcher firstly pre-tested the research tool, with the aim of determining whether the questions contained in the interview schedule would be understood by the participants and subsequently made changes where necessary.

Piloting the interview schedule provided information as to the length of time that was allocated for each interview session, as well as questions that needed to be included or amended so that they will be clear to the participants. This pivotal stage of the research assisted in ensuring that the finalised research tool was user friendly to the participants. The pilot study participant was included in the actual study, due to challenges in recruiting participants in the main study and as the data collected was very rich and thick it is allowed for a qualitative, phenomenological study.

3.7 ETHICAL CONSIDERATIONS

Babbie and Mouton (2010:62-77) posit the most important ethical agreements that prevail in social research is the ethical responsibility of the researcher to safeguard and protect the participants and the potential beneficiaries of the research (Maree et al., 2020:48). The researcher outlines the applicable ethical principles in this study below:

- **Obtain permission for the research**

Maree et al., (2020:48) views obtaining permission to conduct research as a crucial step in research. The researcher applied for ethics clearance with the Faculty of Humanities Research Ethics Committee and therefore commenced with research after the application to conduct the research project was approved. Thereafter, the researcher requested and

obtained permission from the director of non-governmental and community-based organisation Kamcare in Roodeplaat rural community, Tshwane.

- **Informed consent**

Strydom (2011:116) notes that informed assent and informed consent in research denote that everything about the study, including the objective of the research study and anticipated period of the participants' connection; processes that are to be followed during the research process; and the advantages and disadvantages of the research and the risk to which the participants may be exposed, should be revealed to the participants. In adhering to this ethical aspect, the researcher informed the participants through the letter of informed consent about aspects such as the goal of the research, nature of the intervention and the credentials of the research team. They were informed that the interview will be recorded with their permission for data analysis purposes; that the data will be stored for 15 years at the University; that they do not have to answer questions they feel uncomfortable with; and that their identity will be protected. Only once they signed the letter of informed consent voluntarily, then the individual interview commenced.

- **Right to withdraw**

The researcher informed the participants that their participation in the study was not obligatory and binding; participants may withdraw their involvement at any time and stage of the research process (Maree et al., 2020:47). The researcher further made the participants aware that their right to withdraw their participation was unconditional and they will not be discriminated against or judged based on their withdrawal to participate in the study.

- **Confidentiality**

The Constitution of the Republic of South Africa, Act 108 of 1996, gives every citizen the right to have their privacy respected. Strydom (2011:119) concurs with The Constitution's assertion that every individual has the right to privacy. Maree et al., (2020:48) illustrates the significance of confidentiality by emphasizing that participants should be assured that their responses will always be regarded as extremely confidential. Confidentiality was emphasized before the individual face-to-face interviews commenced and that what was said in the interview remains between the researcher and the participant. The researcher ensured that the voice-recorded interviews were kept safe and stored as password protected files; informed participants that the research supervisor will be the only person allowed to access such information; and that the recorded sessions and transcripts will be kept safe by the University of Pretoria for a period of 15 years as required.

- **Confidentiality and anonymity**

Babbie and Mouton (2010:520-527) state that the researcher has the responsibility to safeguard and defend the identity of the participants. The participants may be regarded unidentified when the researcher cannot give the identity of the participants with a specific response given by the participants. For Maree et al., (2020:48), participants' identity should under no circumstances be made known to any person, parties or organization that may or may not be part of research process. The researcher affirmed to the participants that the use of their names will be avoided by using codes or descriptive and assumed names/pseudonyms. The researcher gave assurance to the participants that their names and personal data will be kept private and confidential. The personal information of the participants will only be in the informed consent forms.

- **Beneficence**

De Vos *et al.* (2011:116), define beneficence as “an obligation to maximize possible benefits and minimize possible harm”. The researcher assessed the type of risks, degree, and number of potential risks as explained by Greaney (2012:40). The researcher was honest in informing the participants that there will not be any form of reward or remuneration for participating in the study.

- **Facilitate counselling of participants**

The researcher avoided sensitive questions which might trigger the participants' emotions, because they were expected to share their experience of MHM, which is sensitive in itself. The researcher could not anticipate that the participants will be the same after the interviews and it was important that their emotional state be restored to its original state after their participation in the study. The researcher's two female co-researchers took the responsibility to address the emotional needs of the participants through debriefing after data collection. It was possible that some of the participants might be offended or the questions may trigger an unpleasant feeling about circumstances of their lives. In this case it would be appropriate to refer them for free counselling with Ms. L Landman (Social Worker) with whom arrangements were made. None of the participants needed to be referred for free counselling after the interview.

- **Avoidance of harm**

The researcher avoided any form of harm to the participants during the data collection process and by not conducting the interviews himself, but rather using his two female co-researchers to assist in conducting an extra interview with two extra participants each,

because of the sensitive nature of the study. Thus the researcher merely got the voice recording of the collected data of four participants to analyse from the co-researchers. Extreme care was taken by these co-researchers to promote participants' wellbeing and avoided any possible harm. As face-to-face interviews were conducted at Vhathu Phanda Crèche in New Town, Roodeplaat, the female co-researchers adhered to all covid-19 regulations as stipulated in Disaster Management Act 57 of 2002 as amended. The researchers observed all covid-19 protocols and guidelines to protect both the researcher and participants. The researchers provided free face masks and hand sanitizer to the participants and encouraged them to keep social distancing as regulated in the covid-19 guidelines.

Online interviews were not feasible due to no electricity or internet available in this impoverished community. The co-researchers conducted debriefing with the participants after the interview. None of the participants needed counselling after the interview, thus they were not referred to Ms L Landman, who had agreed to provide free counselling.

3.8 EMPIRICAL FINDINGS

The research findings are presented in this section. The demographic data of the participants is presented first followed by a thematic analysis of the dominant themes and sub-themes that emerged from the interviews. The findings are presented using descriptions from the participant interviews which were then compared and contrasted with evidence obtained from literature sources. As a way of maintaining confidentiality, participants' names were not revealed, but pseudonyms were assigned in the form of assumed names.

3.8.1 Demographic information of the participants

All five participants who took part in the study were female youth between 18 and 30 years' old who have started menstruation. The researcher ensured that all the participants were informed of the purpose of the research and gave their voluntary consent to participate in the study. Demographic data highlighted in this section include age, marital status, number of children, religion, home language, highest educational qualifications and employment status of the participants.

3.8.1.1 Age range of the participants

Figure 3.1 below shows the age range of the female youth who took part in this study.

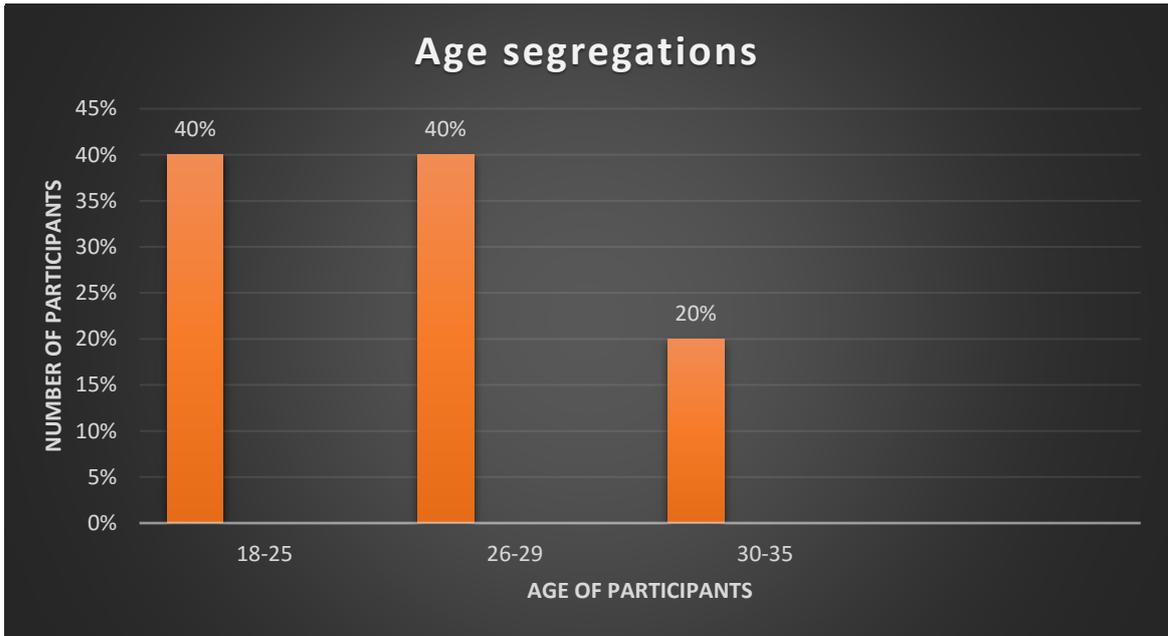


Figure 3.1: Age distribution of participants

As can be seen the age limit of participants was set to female youth between the ages of 18 and 30 years old. Two participants were in the age group 18-25; two were in the age group 26-30; and one participant was in the age group 30-35. The researcher avoided to include participants below the age of 18 years where the researcher would require consent from their parents or guardian.

3.8.1.2 Marital status of participants

Figure 3.2 below illustrates the marital statuses of the participants.

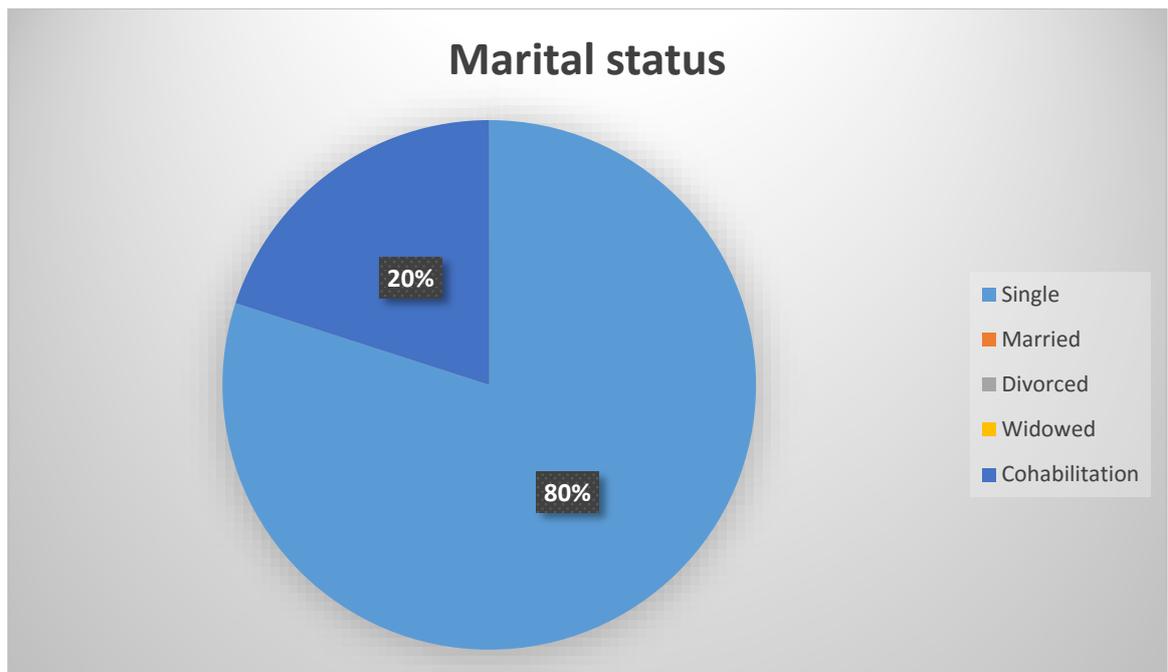


Figure 3.2: Marital status of participants

From the above figure it is clear that four of the participants were single, while only one participant was in a cohabitating relationship. No participants were married. Thus the majority were single, but had children. Only one participant had the emotional and economic support from her partner, contributing to bettering her MHM experience.

3.8.1.3 Number of children of participants

Figure 3.3 below shows the number of children that the participants have.

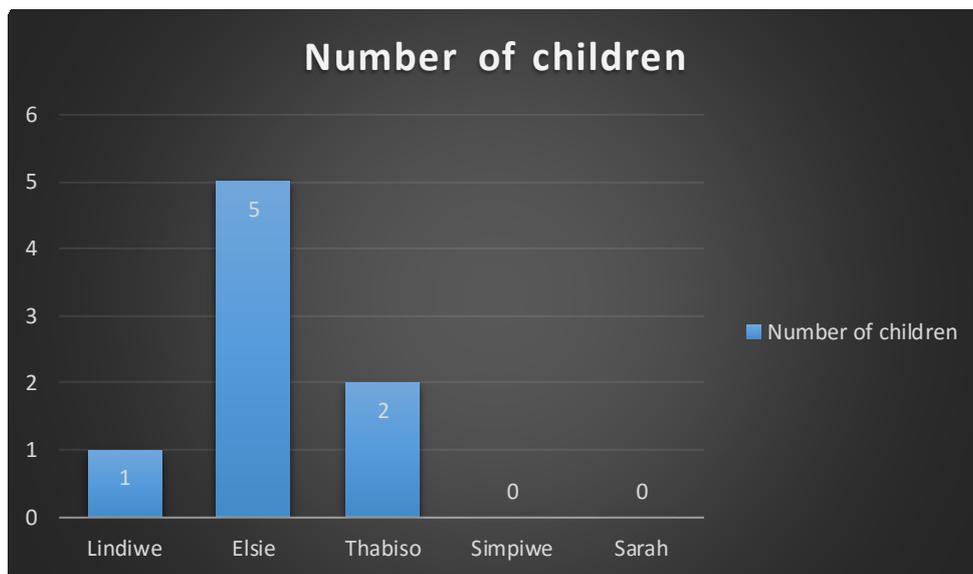


Figure 3.3: Number of children of participants

From the above figure, three participants had children. One participant had five children, 1 participant had two children and another participant had one child. Two participants did not have children and had never been pregnant. Thus the majority had children.

In the figure 3.4 below, the home languages of participants are indicated.

3.8.1.4 Home language of participants

Figure 3.4 below shows the home language spoken by the participants.

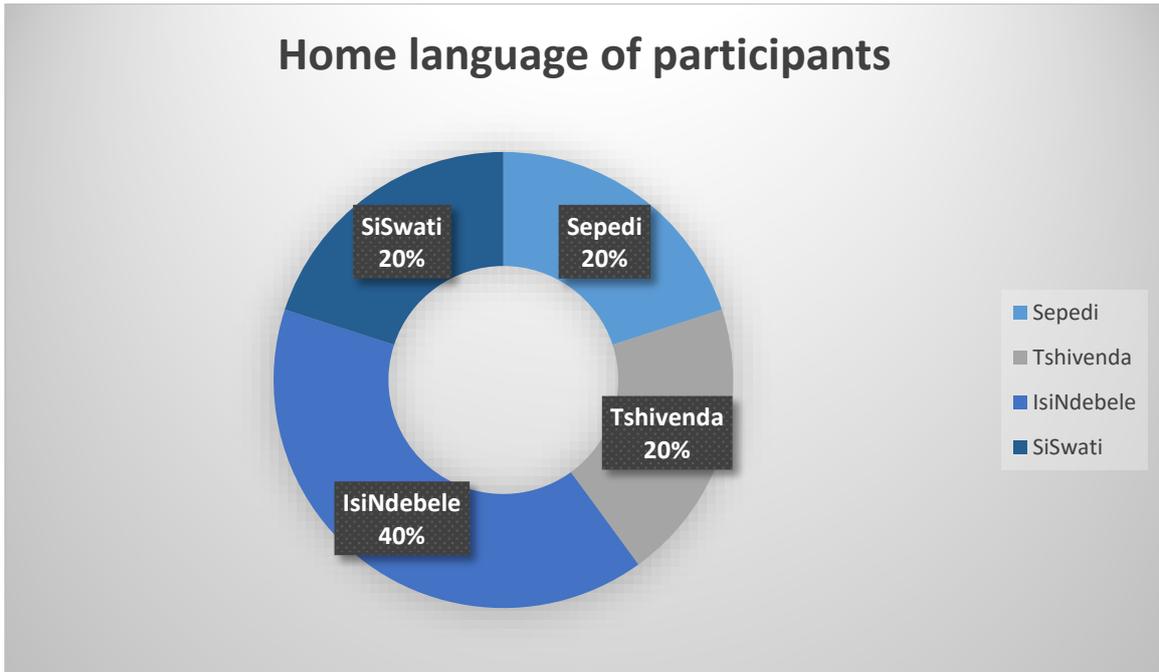


Figure 3.4: Home language of participants

The selection criteria in this study, was English which had to be spoken. The home language of the two participants is IsiNdebele (40%). One participant spoke Tshivenda; participant spoke Sepedi; and 1 participant spoke IsiSwati. English was the language used during data collection process, as all participants were able to speak English.

3.8.1.5 Educational level attained by the participants

Figure 3.5 below indicates the educational level attained by the participants.

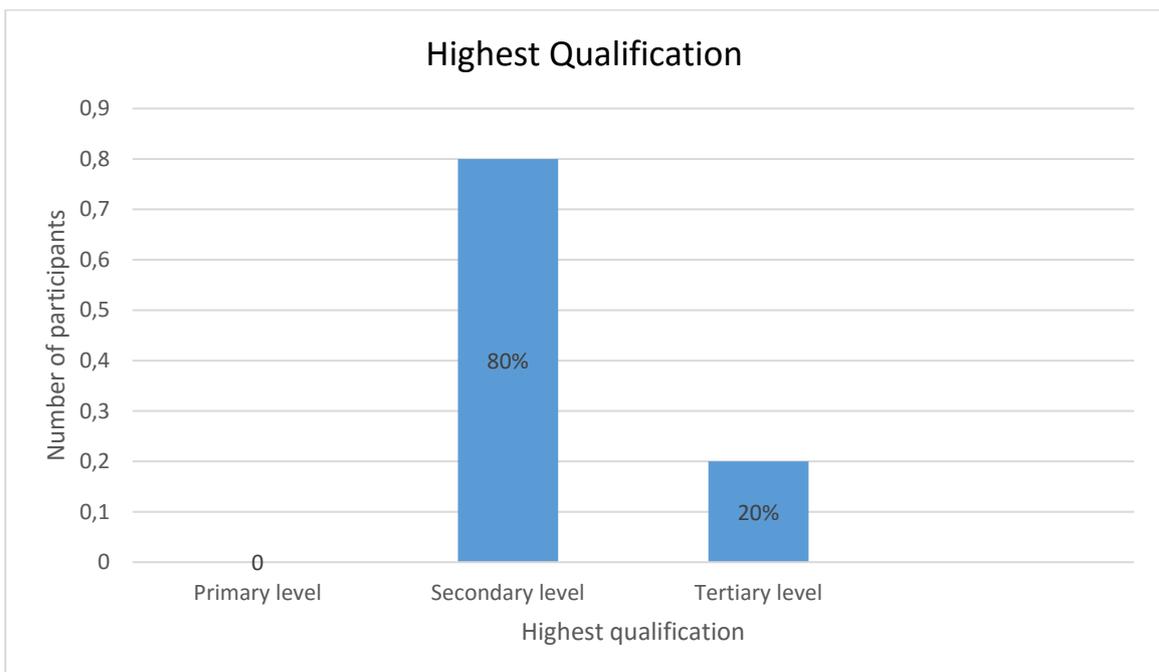


Figure 3.5: Educational level attained by the participants

From the above figure, it is indicated that the highest qualification of the participants was a tertiary level diploma; 3 participants had with matric; and the lowest level was 1 participant with secondary level (Grade 11), having dropped out of school. Thus the majority of participants completed secondary level while only one participant completed tertiary level, and all could thus read and understand the letter of informed consent in order to voluntarily sign.

The study demonstrates that the majority of participants in this study were not highly educated. Education confers numerous health and well-being benefits on female youth (McCammon, Bansal, Hebert, Yan, Menendez & Gilliam, 2020:291). Therefore, female youth who have higher educational qualification have a better understanding of MHM.

3.8.1.6 Employment status

Figure 3.6 below indicate the employment status of the participants.

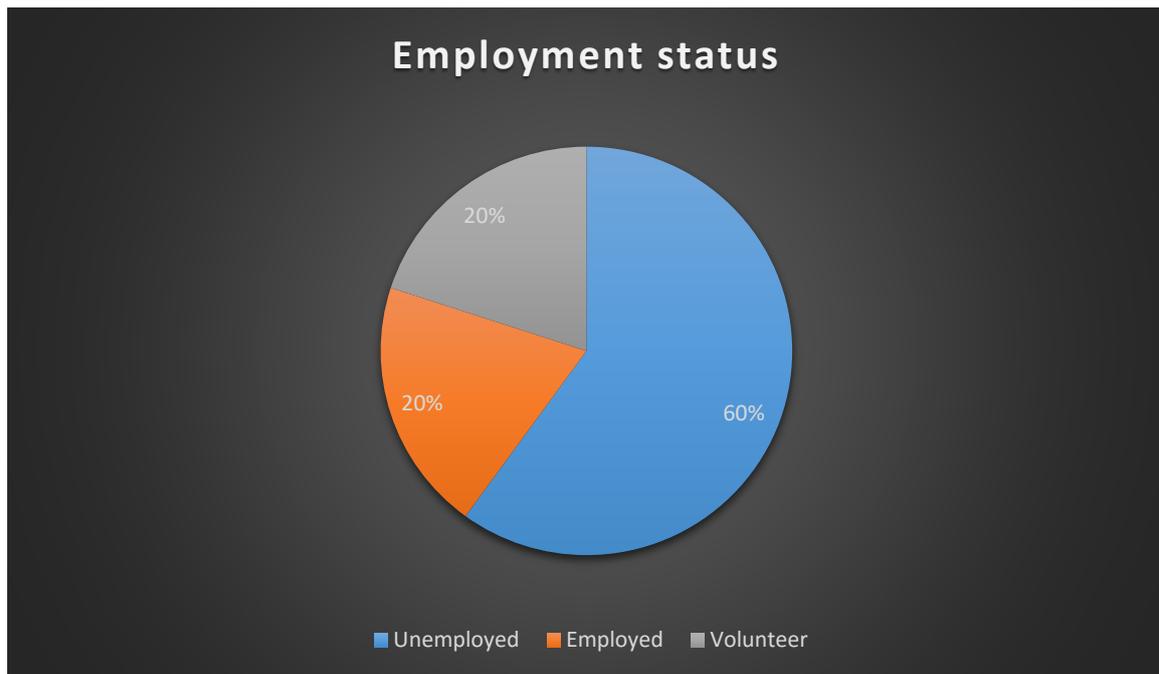


Figure 3.6: Employment status of the participants

The above figure shows that the majority of participants (3) (60%), were unemployed, 20% (1) participants was employed and one participant (20%) was volunteering. Thus the majority were unemployed, showing a link between unemployment, poverty and MHM challenges. Menstruation can be challenging for female youth who are unemployed and living in poor socio-economic background as they are at high risk of lacking resources for safely managing menstruation (McCammon *et al.*, 2020:291).

Many female youths have limited options for menstruation products as a result of lack of employment (UNICEF, 2019:21). Resources, like commercial menstrual products, may be unavailable or too costly, prompting unemployed female youth to use available materials such as cloth from old clothing and cotton among other things. Based on information obtained from (Statistics SA, 2021:93), unemployment remains a major challenge in South Africa and in particular among youth between the ages of 15-34 years.

The next section will focus on the thematic analysis.

3.8.2 Thematic analysis

In this section the themes and sub-themes that emerged from the research are presented and analysed thematically. Findings from the research interviews are corroborated with the participants' direct quotes, as well as information from literature.

The table below presents the themes and subthemes that emerged from the data analysis.

Table 3.1: Themes and sub-themes

	Themes	Sub-themes
1	Knowledge about reproductive health	1.1 Source of information 1.2 Understanding of menstruation or menstruation cycle
2	Menstruation experiences and challenges	2.1 Age at menarche or onset first menstruation 2.2 Place at menarche 2.3 Reaction and experiences at menarche 2.4 Support system 2.5 Impact of menstruation on social life 2.6 Cultural and religious beliefs regarding menstruation
3	Menstruation hygiene management and challenges	3.1 Bathing during menstruation 3.2 Source of information about menstruation hygiene management 3.3 Support received regarding menstruation 3.4 Material used during menstruation 3.5 Disposal of sanitary materials 3.6 Challenges regarding menstruation
4	Resources and limitation	4.1 Community resources
5	Social work intervention	5.1 Social work services
6	Recommendations	Education and awareness regarding menstruation hygiene management

Subsequently, each theme with its sub-themes are discussed in below.

3.8.2.1 Theme 1: Knowledge about reproductive health

Most of the participants in the study received sex education or reproductive health information from their teachers. What was interesting was that three of the participants gained this information when in secondary school and only two participant received sex education or reproductive health information while still attending primary school. Furthermore, only one participant started menstruation while in primary school. This theme was derived from exploration of where did the participants access sex education or reproductive health.

- **Sub-theme 1.1: Source of information**

This sub-theme focused on the source of information of the participants:

“At first it was at school, I think primary or high school, so first it was at school then after matric I was attending with Isiyanoqoba so we have to learn about sex, menstruation circle of a female all of that so I was going. I was attending a stepping stone programme.”

“In grade 10 with an open teacher.”

“In high school, not my mom or grandmother, they are too traditional.”

“At school.”

“In school.”

The responses of the participants showed that all the participants obtained sex education or reproductive health from the school. One participant indicated that her parents were very traditional and she could not discuss sex education or reproductive health with them. Teachers were the main source of information as reported by the participants. The role of parents, guardians and significant others regarding sex education or reproductive health is crucial. Family is the primary source of socialization (Bieliune, 2018:71). However it was interesting to note that none of the participants accessed sex education or reproductive health from the family members. It was clear that families shy away from discussing sex education or reproductive health with female youth. This is in agreement with the sentiment that in some cultural and religious domains, menstruation remains a taboo, including that of the different cultures in South Africa (Haberer, 2018:78). Sex education or reproductive health is a vital aspect of female youth as it prepares them for adulthood.

Parents, guardians and the significant others as primary source of socialization of the female youth are the single largest influence on their development, understanding of sex education or reproductive health and decision making about sex (Ashcraft & Murray, 2017:1). For most parents, guardians and significant others including female youth

themselves, the prospects of discussing sex education or reproductive health, creates anxiety, apprehension and this may result in avoidance of the discussion, hence female youth will depend on other sources of socialization such as school and friends for the source of information.

All the participants did not receive sex education or reproductive health from their families. The gap exists that families are still shy in discussing sex education or reproductive with their female youth, which may subsequently result in female youth depending on other agents of socialization for sex education or reproductive health. Parents, guardians and significant others' conversation with female youth regarding sex education or reproductive health can play a significant role in improving female youth reproductive health by minimizing risky sexual behaviour (Grossman, Jenkins & Richer, 2018:2). This can assist and the information gained from home can be reinforced with the information gained from the school. Leaving schools to educate female youth regarding sex education or reproductive health can create a gap between parents, educators and female youth regarding their experiences and challenges. Parents, guardians, significant others and educators can form a collaboration in addressing female youth regarding sex education or reproductive health.

In line with the ecological system approach underpinning this study, it can be posited that there was lack of interaction between micro system level and meso system level that impacted female youths' understanding of MHM. Female youth gained sex education from the school, while the role of the family as primary source of socialization was silent. According to the ecological system approach, if the female youth parents, guardian and the significant others have a productive relationship this may have positive effects on the female youth's understanding of the MHM. The study shows that school environment was the only level that was effective in educating female youth about sex education and reproductive health.

- **Sub-theme 1.2: Understanding of menstruation or menstruation cycle**

This sub-theme focused on the understanding of participants about menstruation or menstruation cycle:

“Laughing, you know that is a very difficult question, menstruation circle starts when now in the ovaries of the women each and every month you lay an egg so that eggs comes, moves from here (Demonstrated on her abdomen) I don't how to discuss it and then when that egg breaks, that is when menstruation comes from.”

“What I understand about menstruation once you menstruate and get involved in sex that’s where pregnant start there. When you start menstruating you need to speak with open person and that person is not going to be your mother because I was afraid to speak with my mother.”

“I have period pain, I understand that I bleed from my private part and every woman go through that every month.”

“It is my body cleaning itself.”

“Eish, the thing that I understand is cycle which happen each and every month to women or female persons.”

All five participants were able to express their views on their understanding about menstruation or menstruation cycle. Most of the participants were clear when explaining their understanding and knowledge regarding menstruation or menstruation cycle. However, the level of knowledge was different amongst the participants and there were misconceptions and gaps especially in their physiology knowledge.

None of the participants linked menstruation or menstruation cycle to changes in hormonal levels. One participant defined menstruation cycle as it is her body cleaning itself. Two participants understood menstruation or menstruation cycle as the bleeding from the vagina every month, which all women go through. Another participant described menstruation or menstruation cycle a sign of puberty and can get pregnant if they engage in unprotected sex.

Menstruation or menstruation cycle is indeed identified as a delicate physiological process through which a shedding of uterine lining occurs each month in females of reproductive age (Ssewanyana et al., 2017:105). Menstrual cycle is the cycle of natural changes that occurs in the uterus and ovary as an essential part of making sexual reproduction possible (Ramathuba, 2015:2). All five participants had difficulties in describing and outlining their understanding of menstruation or menstruation cycle. As reflected in the data collected from the participants, they all had different opinions and understanding of menstruation and menstruation cycle. Two participants linked menstruation with female reproduction, while the other participant was of the view that her body was cleaning itself, linking menstruation with dirtiness. Menstruation is regarded as a normal physiological process; however, it is viewed differently across cultures and families (Ramathuba, 2015:3). Different opinions on participants’ understanding of menstruation and menstruation cycle indicate lack of common knowledge and understanding about menstruation cycle. Lack of understanding about the menstruation cycle as a process, may results in stigmatization, bullying and discrimination towards female youth who started menstruation. The gap exists that female youth need to be empowered with knowledge and understanding about menstruation or

menstruation cycle, in order for them to be able to understand female physiology and reproductive health.

Findings from this theme show that the participants did not have much knowledge about reproductive health and female physiology, resulting in a lack of understanding about menstruation or the menstruation cycle. This can in turn be an influential factor for poor MHM and the inability to adequately manage menstruation. The responses of the participants thus identify bleeding, pregnancy and period pain as a result of menstruation cycle.

Ettekal and Mahoney (2017:2) points out that ecological system approach explains how human development is influenced by several and/or different types of environmental systems. The focus of the ecological systems approach is to give perspective and context on how individuals interact with the environment that they live in, including how they interpret the perspective and context. The participants' responses showed that they do not have much knowledge about reproductive health and female physiology, which resulted in poor MHM. This clearly indicates that a gap exists between how individuals interact with the environment that they live in. It further indicates that the school environment did not provide adequate education to the participants regarding MHM. The environment in which the participants live had an impact on their access to information and knowledge regarding MHM. These environments include the family systems, which, if they shy away from discussing sex education and reproductive health with female youth, may lead to them not adequately managing their menstruation.

3.8.2.2 Theme 2: Menstruation experiences and challenges

Menstruation is a universal experience, female youth in poor socio-economic or resourceful background face unique experiences and challenges regarding menstruation management (Molly, Kaitlin & Kristen, 2016:301). Menstruation experiences and challenges were a prominent theme throughout the data collection process. All participants had various menstruation experiences and challenges. The experiences and challenges faced by the participants included those from onset of menarche, lack of menstruation absorbents and other resources which are crucial and primary in the management of menstruation.

- **Sub-theme 2.1: Age at menarche or onset first menstruation**

This sub-theme was confirmed throughout the study as all of the participants had experienced menarche. This came after the participants were asked how old they were when they started menstruating.

“I was 9 years old.”

“How old I was; I think 13 years old.”

“I don’t remember, maybe I was 16 years old.”

“Eh, 17 years.”

“I was 16.”

The first menstruation period is referred to as menarche, and this stage is the most significant period of the female youth life, as it forms part of their complex process of physical and emotional development. Malitha, Islam, Islam, Mamun, Chakrabarty and Hossain (2020:2) point out that menarche is the most commonly remembered milestone of puberty for most women, and it is often considered the signals of fertility from both social and medical perspectives. Based on Pandey (2014:41), menarche or onset menstruation is a shocking and fearful event. Menarche is defined as the occurrence of a first menstruation period in female youth (Lacroix, Gondal & Langaker, 2021:4). Female youth experience menarche or onset menstruation at different ages and stages of their development, but usually they experience their first menstruation at the age of 10 to 16 years (Malitha *et al.*, 2020:2).

The variation in the age at menarche that has been recorded globally could be attributed to factors such as genetic, body stature, environmental conditions, nutrition, physical activity, geographic location, urban or rural residence, health status, psychological factors, body mass index, socio-economic status and parental educational level (Tehrani, Mirmiran, Gholami, Hoslehi & Azizi, 2014:2). The study found the age of menarche differs from one person to another, depending on the factors that were outlined above.

In this study, one participant reported that she had started menstruation at the age of 9 years, which is not commonly reported in other studies. One participant started menstruating at the age of 13 years. Two participants reported that they had started menstruation at the age of 16 years, which is a common age reported in studies. One participant reported that she has started menstruation at the age of 17 years, which is a bit later than usual. This can be supported by literature that indicated that the ordinary age of menarche has decreased over the years, hence the participant who started menstruation at the age of 9 years (Tehrani *et al.*, 2014:3). Most female youth, start onset menstruation at the age of 16 years and later, while only one participant started menstruation at the age of 9 years. The current declining and earlier onset of menstruation being experienced globally, has been associated with prevalence of increased body mass index, insulin

resistance, as well as unhealthy lipid profile, culminating in higher risks of cardiovascular diseases, such as hypertension, coronary heart disease, strokes and diabetes in women (Ameade & Garti, 2016:2). Ramathuba (2015:1) states that the average age of onset menstruation is the age of 12 to 13 years in developing countries and South Africa has reported a similar mean age of menarche. This could be as a result of improvement in nutrition, sanitation and better socio-economic status.

- **Sub-theme 2.2: Place of menarche**

This sub-theme focused on exploring the place where the first menarche of the participants occurred. The participants' responses showed that the majority of participants reported the home as the first place where they experienced their first menstruation cycle. There was no specific place mentioned in literature where female youth experience their menarche.

“No, I was at home, I just went to the toilet and I saw blood and I called my mom”.
“I was not at school, when I start menstruating I was at home”.

“You know what, I was at school, I just told my teacher what was happening and she told me to go home”.

From the participant's responses, it was clear that the participants were mostly at their home environment when they experience menarche. Sychareun, Chaleunvong, Essink, Phommavongsa and Durham (2020:38) confirm that inadequate knowledge and understanding of menstruation are of concern, because it may result in female youth experiencing onset of menstruation anywhere and without proper MHM products. Only one participant experienced onset menstruation when she was at school and she did not have menstruation hygiene products available.

- **Sub-theme 2.3: Reaction at menarche**

This sub-theme was quite prominent throughout the study, as all of the participants had a reaction when they experienced onset menstruation. This sub-theme aimed to gauge the participants' experience and reaction at menarche and there was an array of responses received, with the majority reporting that their first experience and reaction was fear and shock.

“Yes (Laughing) you know that day, I was very young, I think I was 13 years, I was at my grandmother's place in Moloto. The unfortunate part is I was with my dad and my grandmother so I was feeling uncomfortable, I was wearing a short skirt. I went to the bathroom I was like [boom] all brown, all tiles, oh, my God, ok fine. I felt embarrassed the fact that my clothes were dirty and my mom had to wash those clothes, I was not open to talk about it and she (mother) was keeping on asking me when have I started and I had to answer.”

“Oh, it was horrible, I was so scared, and I didn’t even tell my mom. I just hide it but I was so amassed, what I did so I just asked myself so many questions.”

“Is like I had injured; I didn’t know where the blood came from to be honest I was scared. I was crying I was even afraid to tell anybody that I see blood and I don’t know where the blood comes from (laughing) everything was not easy that time.”

“No, I just went to the toilet and I saw blood and I called my mother and she came rushing to the toilet and she took me to the doctor and found that out that yeah she was on her period.”

“It was fine; I didn’t panic because I was already told that one day periods will come.”

From the participant quotes, it is evident that the participants had a shocking and fearful experience of menarche or onset of menstruation. Females have a variety of experiences and challenges. There is an increasing recognition that menstruation is experienced negatively amongst female youth, particularly those coming from poor socio-economic background (Hennegan *et al.*, 2016a:2). Sommer (2017:5) states that physically, female youth must learn to manage menstrual blood and may experience menstruation related discomfort, such as period pain and cramps.

This was also reported by one participant who said it was as if she was injured, while the other participants compared menstruation with horrible feeling. Three participants reported that they did not understand what was happening with them when they had their first menstruation. Only one participant did not experience shock, fear and discomfort, as she expected that she will one day start menstruating. This clearly shows that most of the participants experienced menstruation with fear, shock, discomfort and embarrassment. Thakur, Aronsson, Bansode, Lundborg, Dalvie and Faxelid (2014:1) confirm that menstruation has always been surrounded by different perceptions throughout the world.

Bronfenbrenner’s ecological systems approach, points out that an individual’s development is affected by multiple layers of interacting influences, useful for exploring the impact of the environment on female youth, their immediate family/community and the societal landscape (Lahme, Stern & Cooper, 2018:3). In line with the responses of the participants, they have experienced shock, fear and embarrassment as a result of the system failure to prepare them for onset menstruation. Arguably, should they have received adequate menstruation related information they would have had different views of menstruation. The researcher can conclude that failure of one part of the ecological system affects the other.

- **Sub-theme 2.3: Social support**

This sub-theme focused on the social support or lack thereof experienced positively or negatively by the participants:

“My mother supported me.”

“I did not tell her, she saw it herself and called me and my sister and she explained to me what was happening. They told me today you are a big girl and if you play with boys you will become pregnant.”

“She rushed me to the doctor.”

“The teacher bought pads for me and showed me how to put it.”

From the above responses, it is evident that there was a somewhat positive connotation, as all participants enjoyed social support from their significant others. Four participants indicated that they received support from their family, while one participant received support from her school teacher. It was interesting to note that all the participants received support after they had their onset menstruation and only one participant discussed menstruation with her mother before the onset. After they started their onset menstruation, their significant others started being involved and provided support.

Hennegan *et al.* (2016a:21), concludes that parents, siblings, peers, partners, teachers and significant other of the female youth were the primary sources of information. Providing information and resources is another form of support to the female youth. In most settings, mothers served as the primary support system, whereas in other countries such as Ghana, Malawi, South Africa, and Tanzania, mothers were sometimes considered culturally inappropriate, and other female relatives such as aunts or grandmothers were expected to serve in this role (Hennegan & Montgomery, 2016:21). However, individual access to support sources often varied more according to personal circumstances of that country.

- **Sub-theme 2.4: Impact of menstruation on social life**

This sub-theme portrays the impact of menstruation on social life of the participants:

“It depends I have a fitness boot camp that I am running here so when I am on my period it is typical uncomfortable, that’s how it affects my social life.”

“It does not affect my social life.”

“No, I stay at home.”

Menstruation cycle usually passes without major problems; menstruation-associated complaints are observed commonly in female youth. These menstruation complaints may affect female youth social life (Hennegan *et al.*, 2016a:26). It was interesting to note that from all five participants only one reported that menstruation had impacted her social life. The other four participants never experienced effects of menstruation on their social life. There are several factors that may result in female youth having a negative impact of

menstruation, such as lack of menstruation absorbents, pain accompanying menstruation period and irregular menstruation cycle (Esen, Oguz & Serin, 2016:193). In this study, none of the participants failed to attend social events or any other event as a result of menstruation related reasons.

- **Sub-theme 2.5: Cultural and religious regarding menstruation**

This sub-theme deliberates on the misconceptions, culture and taboos regarding menstruation:

“In my culture when I am on my period I don’t cook, I don’t do anything they serve me, so I must sit down and experience that menstruation pain. To be honest it does not involve culture but when you are in menstruation you are not allowed to cook because there is something dirty that comes from your body so you are not allowed to touch food that will be eaten by everyone, so you must sit down, clean yourself and relax.”

“Oh you know my mom with things of superstitions and religion she doesn’t go there, she is a pastor, a Christian she doesn’t believe in superstitions. She never told me about that. Ummmm, some of the comments are funny. No, (laughing and nodding head) you know me and my belief a woman is not supposed to sleep with man when she is menstruating but what I heard people talking in the walls is that it is very nice to sleep with man when you are menstruating (laughing) it is funny but I don’t believe that.”

“A woman is not supposed to enter the kraal when on period.”

“Yeah, I know that I don’t have to attend church and I am not supposed to have (sex) when I am on my period.”

Menstruation is a unique phenomenon to every female youth or woman of reproductive age. However, it is always surrounded by taboos, myths, cultural and religious beliefs. Such taboos, myths, cultural and religious beliefs regarding menstruation, present in many societies, impact on female youth knowledge and understanding about menstruation and MHM. Taboos surrounding menstruation excludes female youth from many aspects of social and cultural life. In some parts of the world, such as India, menstruation is still considered to be dirty and impure (Gard & Anand, 2015:184). This is in line with one participant who indicated that she doesn’t cook when on menstruation, because there is something dirty coming out of her body. It was interesting to note that two participants reported that they do not attend church when they are on their menstruation. Almost all major religions of the world have placed restrictions on menstruating women, such as the prohibition of attending church, eating certain food and sexual contact (Mazokopakis & Samonis, 2018:183). Of the five participants, only one participant mentioned that she is aware of the notion that sexual activity is more pleasant when a woman is on her period. Arguably, all major religious views have played a significant role on how female youth perceive and understand menstruation.

From the data that was drawn from all the five participants, it is clear that the major religions globally show that, without exception, they have placed restrictions on menstruating female youth and women in particular. These religions include Judaism, Christianity, Islam, Hinduism, and Buddhism and all made their contribution regarding menstruation and its negative effect on female youth (Mazokopakis & Samonis, 2018:183). Physical intimacy, cooking and attending places of worship are some of the leading prohibitions that were made regarding female youth on their period.

Findings from this theme show that menstruation remains a challenge for female youth of all ages. The age of onset menstruation or onset menarche, differs from person to person. The literature showed that menarche started from the age of 11 years to 16 years. However, this study revealed that one participant started onset menarche at the age of 9 years, while two participants started at the age of 16 years old. The participants have unique experiences regarding menstruation, as menstruation is a unique phenomenon to all female youth. What was common was all female youth had period pains, but their coping mechanisms differed. The support system was reported to be good and participants learned about menstruation at menarche. This indicates that they did not get information before their onset of menstruation.

The challenges experienced by female youth regarding MHM are not only related to access to absorbents, access to private facilities to change menstruation absorbents and shortage of water, but could be a result of lack of support systems. This finding was supported by the fact that none of the participants enjoyed menstrual support from their significant others before their first menstrual cycle. Their family, guardian and significant others started supporting them only after they had had their first menstrual cycle. Should they have had knowledge and information before their onset menarche, their experience would have been better. The aim to explore menstruation experiences faced by female youth is to be able to come with proper intervention strategies to address those challenges. The participants' experiences were influenced by several factors related to menstruation but what came to the fore was lack of pre-menstruation support, knowledge and information. None of the participants reported an impact of menstruation on their social life. This may be the sign of the participants having good support and coping mechanisms regarding MHM after they have started their onset menstruation.

The ecological system approach further focus on how an individual interacts with the environment that they live in, in this context, the macro system level supports the responses from the participants. The macro system level highlights the intersection of the

microsystem, mesosystem, and exosystem, in which female youth belong, as it pertains to MHM. Greene (2009:200) asserts that the core focus of the ecological systems theory is "... how individuals adapt to environmental demands, it focuses on how an individual's needs, capacities and opportunities for both growth and the individual's ability to adapt to changing external demands are met, provided for and challenged by environment." The participants' responses showed that they are trying by all means to understand the cultural and religious environment which they are living under. It is assumed that an individual human agency has a capacity to overcome external environmental obstacles, when in reality the individuals may have little ability to exercise their will, especially in response to institutional oppression (Greene, 2009:206). This assertion and theory thus supports what is happening in the life of the participants, as they only adhere to and comply with the cultural and religious prescriptions at their disposal.

3.8.2.3 Theme 3: Menstruation hygiene management and challenges

MHM was a protuberant theme throughout the data collection process. All participants have developed their strategies to adequately manage menstruation. All over the world, these strategies vary greatly, as a result of individual personal preferences, socio-economic status, cultural and religious beliefs, educational level, and knowledge regarding MHM (Kaur *et al.*, 2018:2). Menstruation hygiene practices are a major concern globally, because it has a potential to affect female youth negatively and may cause reproductive tract infection and other health related diseases. The notable challenge faced by the participants was the menstruation waste disposal. The main objective of this theme was to explore and describe female youth MHM and challenges that they are faced with. Managing menstruation is considered a major challenge for every female youth (Sadiq & Salih, 2013:1).

- **Sub-theme 3.1: Bathing during menstruation**

This sub-theme show how participants developed MHM strategies to stay hygienic:

"Ummmm, I know that menstruation blood is dirty and dangerous and it can be dangerous to your health as well so I know you need to bath two times or three times a day when you are on your periods."

"Oh, hygiene management, mmm oh, you know I just classify it under one. It is about vaginal hygiene, so what I do is that every month I buy thronging wash before I used to use sun light green bar because the soap is just, ee, because of the ingredients because I was taught by stepping stone that it has less perfume, less harmful ingredients so I used to use that than mmmm, that's it, then I wash twice a day so I try to eat things that are eeee, things like crane berry things that fruits, veggie and eat things that are less on oil because don't wana gain wait. I try to eat healthy so once a week or every 3 days I try to eat plain yogurt sometimes mix it with fruits just to help this part to be always clean."

“Ummmm (Silent for 10 seconds) I bath two times a day.”

“Oh, alright that’s true. When you are on menstruation you must wake up in the morning and bath and around one o’clock you have to bath again because those things have their own smell”

“Oh, menstruation hygiene management? I think is like how you put your pad and when do you change it and how many time. How to clean the area (vagina) do you understand what I mean?”

The responses of all the participants showed that they all have a clear understanding of MHM. All participants associated MHM with bathing during their menstruation period. The participants identified their perceptions of what MHM is, based on their understanding of the term, and all participants were familiar with the term. All five participants reported that they take a bath two to three times a day during their menstruation cycle. What was interesting was that there is a shortage of water at Roodeplaat rural community, but all participants reported bathing two to three times a day during their menstruation cycle. Only one participant mentioned the use of panty liners and precautions for hygiene purposes. As a result of WASH-related issues (Kandell, 2015), many female youth may choose to skip school during their menstruation, rather than deal with their period at school. Other times, female youth do go to school, but they face difficulties such as leakage, discomfort, difficulty concentrating and lack of proper toilet facilities. This could imply that bathing alone is insufficient in the absence of other MHM materials.

MHM is the process in which “menstruation hygiene is controlled” (UNICEF, 2019). Budhathoki *et al.* (2018:10) defined MHM as an important aspect of hygiene among female youth, from the first menstruation until menopause. Ramaiya and Sood (2020:2) defined MHM as the process of using adequate menstruation resources to absorb menstrual blood and having access to clean water and soap to bath and wash reusable sanitary pads during menstruation period. The participants reported that they use water and soap when bathing without the use of any strong chemicals. It was elicited from this study that female youth from Roodeplaat rural community were somehow adequately managing their personal hygiene during menstruation. All the participants reported to be taking a daily bath during their menstrual cycle, to wash their genitalia with water and soap daily. Whether it was in a real bath or just a plastic bucket of water is unknown, as they lived in impoverished circumstances.

These findings were in contrast to Muslim families in India, where there is a very common misconception among the female youth in the slum areas of India that taking a bath during menstruation increases the flow of menstrual blood. As a result of this misconception, taking

a bath during menstruation is strictly restricted in Muslim families, because of the popular belief that bathing during this period increases intricacies during pregnancy (Kumar & Srivastava, 2011:599).

Greene (2009:200) asserts that the core focus of the ecological systems theory is "... how individuals adapt to environmental demands, it focuses on how an individual's needs, capacities and opportunities for both growth and the individual's ability to adapt to changing external demands are met, provided for and challenged by environment." The participants' responses showed that they have developed a strategy to improve hygiene during menstruation and they cannot overturn their challenges.

- **Sub-theme 3.2: Source of information about menstruation hygiene management**

This sub-theme shows the participants source of information regarding MHM:

"I taught myself and other advice I have been getting from my friends, so this is what they use, oh this a new thing that you going to do this pill is here. So we do research, are they safe when we are going to the doctor or the pharmacy we ask because what I noticed from this YouTubers some are just people passing their information so I am looking for a person who is healthcare practitioner because some give you information but you see, yhoos this use on your own risk (Laughing)."

"Yhooo, I can't say anybody taught me, I just learned."

"I just learned, no body taught me."

"My mother taught me about menstruation hygiene management."

"My aunt."

Two participants reported that they have gained MHM information from their respective family and the other three participants reported that no one taught them about MHM; they just learnt themselves. Chandra-Mouli and Patel (2017:2) point out that mothers should be the primary source of MHM information, but they inform female youth late and often communicate their misconceptions. None of the participants reported that they have received MHM information from the school. These results are supported by research findings which noted that mothers are the primary source of information (Chandra-Mouli & Patel, 2017:2).

This study is in divergence with other study findings, indicating that mothers are the primary source of information (Chandra-Mouli & Patel, 2017:2). In this study, the majority of the participants reported that they taught themselves while only one participant obtained

information from her mother. Other sources of information such as relatives were reported by only one participant, who reported that they got MHM information from their aunt.

Greene (2009:200) asserts that the core focus of the ecological systems theory is "... how individuals adapt to environmental demands, it focuses on how an individual's needs, capacities and opportunities for both growth and the individual's ability to adapt to changing external demands are met, provided for and challenged by environment." The participants' responses showed that they are trying by all means to educate themselves and to find information regarding MHM. It is assumed that an individual human agency has a capacity to overcome external environmental obstacles, when in reality the individuals may have little ability to exercise their will, especially in response to institutional oppression (Greene, 2009:206). The responses that other participants taught themselves about MHM support this assertion.

- **Sub-theme 3.3: Support regarding menstruation hygiene management**

This sub-theme deliberates on the type of support that the participants receive and the support that they want regarding MHM:

"The support I am getting is mainly from my partner so emotional support anything so cause recently he has told me if you find anything you find unpleasant just write it down so from my mom yeah and from my dad he has been so supportive, I am a volunteer here around and my dad and partner have been supporting me [kuthi] okay fine if this is you wanna be."

"Oh! Okay, the support that I want when I am on menstruation like I said I want to relax, I don't want to do anything. Especially even touching food that will be eaten by anyone, they must serve me, is like I am dirty and dirty thing is here on me."

"Oh! Okay, the support that I will require from you guys (researchers) is the supply of pads and the wet wipes because you know sometimes when you bath the area (Vagina) with soap what happens, rash happens, irritation happens so I don't even know exact soap that I can use on the area."

"The support that I receive is from my mother, when I tell her that I am on my periods she buys me pads."

"If someone can give me junk food (laughing) I can appreciate. Emotional support I am fine."

It is evident from the responses, that support in all levels regarding MHM is crucial. It was also clear that support regarding menstruation differs from one participant to the other. This means that females require various types of support regarding MHM, based on their personal choices. One participant reported that she had adequate support from her mother who provided her with MHM products. Another participant reported that she would like to

receive support in the form of MHM products. Only two participants mentioned emotional support that she was already receiving from her partner and father respectively.

- **Sub-theme 3.4: Product used during menstruation**

The participants' narratives regarding this sub-theme are indicated below.

"I use pads; I am afraid of tampons."

"Oh! I broke my virginity so I use both sanitary pads and tampons."

"Pads, sometimes pads get full. I like reusable pads"

"Yes, but I have been using the washable pads recently because I have been getting them from Kamcare and they are comfortable, very comfortable."

The majority of the participants reported that they use sanitary pads. One participant used both tampons and sanitary pads. It was evident that participants preferred to use sanitary pads over the other MHM products. Kaur *et al.* (2018:2) support the sentiments provided by the participants, by pointing out that the preference of MHM products is based on individual choice, cultural acceptance, socio-economic status and availability in local market. In this study, the majority of the participants preferred to use commercial sanitary pads. Kaur *et al.* (2018:2) further supports this preference by indicating that female youth from urban areas prefer to use commercial sanitary pads.

In this study, three participants were knowledgeable about reusable sanitary pads. Only two participants were happy about reusable sanitary pads that they received from Kamcare and they indicated that they will no longer struggle with getting access to MHM products. Two participants reported preferring to use reusable sanitary pads because they can be used multiple times and they were easier to use. No participant mentioned the use of the menstruation cup. Economic considerations seemed to be the primary factor for considering using reusable sanitary pads, instead of commercial sanitary pads (Van Eijk, Sivakami, Thakkar, Bauman, Lassorn, Coates & Phillips-Howard, 2015:3). None of the participants reported interest for considering reusable sanitary pads without including socio-economic factors as the main influencer.

In Gambia, reusable sanitary pads were the most frequently used type of menstruation products to absorb menstrual blood (Shah *et al.*, 2019:10). Most participants in this study reported not knowing how to use the reusable sanitary pads. Two participants had an overall idea on how to use the reusable sanitary pads, but had some inaccurate practices. The majority of the participants received the reusable sanitary pads for free from Kamcare, who manufacture them and supply communities, as part of their community development

projects. Millington and Bolton (2015:4) state that reusable sanitary pads are more economical, practical environmentally sustainable than commercial and disposable menstruation products. This was supported by the majority of the participants who are also wishing to learn to use the reusable sanitary pads. None of the participants reported that they will not use the reusable sanitary pads. Ecological systems theory, argues that a person's development is affected by multiple layers of interacting influences. In this study, the participants were not familiar with various MHM products. As a result of them not being taught about this, their development shaped them to the specific products, linked to the cultural acceptance and personal choices of those who contributed on their development.

- **Sub-theme 3.5: Disposal of sanitary material**

The following quotes support the sub-theme:

“I put it in the black plastic and throw it in the dust bin.”

“The disposable pads, I keep a plastic bag to wrap it and throw it at the pit toilet.”

“Oh, I have this small plastic that in the middle of the night I wrap it in and then in the morning I throw it in the pit toilet. Sometimes by the time were not having pit toilet we burned them.”

“I throw it in the pit toilet.”

“Okay, the problem is disposing them (sanitary pads), because we have a place, I am not staying this side, I am staying a beat far so there is a big hole where we go and dump things so rats and everything just dig them up (silent for 3 seconds) so we dump there, so it becomes a problem for households staying near the dumping area because you know sanitary pads might end up in the street. Sometimes I wrap it with toilet paper, then put it in the plastic then throw it in the dust bin in the house, in the dust bin there in black plastic.”

Against the backdrop of menstruation hygiene material used, the researcher explored how the used menstruation hygiene materials are disposed. Elledge, Muralidharan, Parker, Ravndal, Siddigui, Toolaram and Woodward (2018:7) point out that female youth face difficult thoughts during menstruation, regarding where they should dispose their used menstruation sanitary pads. The participants shared the same experience in relation to the disposal of used sanitary material. The majority of the participants reported that they dispose the used sanitary material in the pit toilet with only one participant reporting to be disposing used sanitary pads in a dumping area. Kaur *et al.* (2018:4), present the argument to emphasize that appropriate disposal of used menstruation products remain a challenge globally. Other countries around the world have developed strategies and techniques to dispose sanitary pads, but because of poor menstruation practices, the majority of female youth dispose their sanitary pads as part of solid waste.

Elledge *et al.* (2018:7) explain that female youth currently employ a variety of ways to dispose menstruation hygiene products, including throwing them in the open, burning, or burying them, and through routine waste disposal systems. Disposal practices are often influenced by deeply embedded socio-cultural norms and taboos related to menstruation and menstrual blood. One participant in this study mentioned having a history of burning used menstruation hygiene materials. In this study, none of the participants reported having access to bins or disposal in the toilet.

A study finding by Elledge *et al.* (2018:7) reported that in South Africa, female youth do not throw used sanitary pads in the municipal dustbins, due to fear that dogs will dig out the used sanitary pads, and someone will see them and think poorly of them. This confirms that the majority of participant's notion that they throw used sanitary pads in a pit toilet. Only one participant reported throwing used sanitary pads in the dustbin.

The general practice was that participants reported being comfortable with is disposing their used menstruation products in pit toilets or rubbish bins. None of the participants preferred burning them. The disposal of used menstruation products seems to be influenced by the geographical location of the participants. The participants dispose the used sanitary pads differently, depending on where they are at the time. For instance, their behaviour when they are at home is different than when they are in public places. When in public places, the behaviour of participants who are accustomed to throwing used menstruation hygiene products in the pit toilet changes, according to the toilet type used. For instance, when they are in a place using flush toilets, they flush the products in the toilet. When it does not flush, they take it out, wrap it with toilet paper and throw it in the dustbin inside the toilet. There are those who also say that they wrap it and carry it home with them and dispose it in their pit toilets. In Roodeplaat rural community, the common behaviour seems to be throwing the used sanitary products in the pit toilet. This could have huge implications for blockage of sewers and for polluting the environment. The ecological system theory can be linked on macro level shaped by environmental factors, resulting in polluting the environment, which may again create infections for the very same community.

- **Sub-theme 3.6: Challenges regarding menstruation**

This sub-theme focuses on the challenges faced by participants regarding MHM:

“No challenges.”

“Challenges that lady's toiletry is very expensive so I can hardly afford some of the things that I want.”

“The thing that I need is enough pads even washable cloth pads because I feel like when I use one washable cloth pads I should wash the other. Actually I want more clothes pads.”

“No, I have got my mom and my boyfriend gives me money so that I can buy the child things, back then I was at school and getting stipend and working, I was working at the old age so I was able to buy everything for myself and now is it a bit difficult because we were working at the homes and they will call us once a while to work at the old age to do people’s hair and since I stop it is bit difficult but my mom is helping me with that”

Most of the participants reported to have MHM challenges. Only one participant reported that she did not encounter any challenge regarding MHM, while another participant choose not to respond to the question regarding MHM challenges. Access to MHM material is a notable major challenge encountered by women and female youth in under-developed and developing countries (Crofts & Fisher, 2019:14). Lack of MHM products can often mean that female youth have extensive difficulty in managing their lives during menstruation and can be almost entirely restricted to the home, both due to practical reasons and the stigma frequently attached.

Several studies have found that female youth struggle or miss school during menstruation (Chandra-Mouli & Patel, 2017:2). A key barrier to managing MHM reported by the participants was lack of sanitary pads. Reusable sanitary pads are therefore a preferable alternative for increasing access to MHM material, as they are sustainable and cost effective. It was interesting to note that none of the participants reported lack of water and sanitation, private facilities to change sanitary pads and other menstruation hygiene product as challenges while multiple studies found that they are major barriers to MHM.

3.8.2.4 Theme 4: Resources and limitation

This theme shows the available resources and limitations regarding menstruation hygiene in Roodeplaar rural community, Tshwane.

The availability of community resources and subsequent distribution of MHM material, information and awareness to female youth is just a one of the many issues that are aimed at addressing MHM. Lack of community resources is another factor that contributes to poor MHM. South Africa as a middle income country has limited resources and capacity to address menstruation related challenges (Crofts & Fisher, 2019:14). The sub-themes below support the view that South Africa has limited resources.

- **Sub-theme 4.1: Community resources**

The following quotes show the knowledge of the participants regarding the available resources and limitation in their community:

“Yes, only Kamcare”.

“Like at my age now, I think there is nowhere I can get free pads, unless at Shoprite where they sell eight pads for five rand for those who can’t afford”.

From the above, most of the participants reported that there is lack of resources in Roodeplaat rural community. Only two participants reported about the availability of Kamcare in Roodeplaat rural community, while the other participants acknowledged that at their age, there is no organization that can give them sanitary pads. The other two participants reported that there are no resources at Roodeplaat rural community to address MHM.

Bronfenbrenner’s ecological systems theory, argues that a person’s development is affected by multiple layers of interacting influences, which is useful for exploring the impact of the environment on female youth in Roodeplaat rural community, their immediate family/community and the societal landscape. This confirms that when rendering services to female youth in any situation, the focus should be to look beyond the individual to the range of wider community, social, cultural and economic determinants. Lack of community resources had a negative impact on female youth, practising positive MHM. The ecological systems theory puts emphasis on support to female youth on all levels.

3.8.2.5 Theme 5: Social work intervention

All the participants identified a lack of support services from the social workers. Furthermore, all of the participants conveyed that there are no interventions for individual, family or community support regarding sex education, reproductive health and MHM in Roodeplaat rural community. Arguably, the lack of social work interventions to address MHM and support services to female youth and their family can be a contributing factor resulting in poor MHM. All the participants in the study experience challenges related to support before they experience their onset menstruation. This gap should have been closed by social workers, should they provide community awareness programmes with female youth regarding MHM. Lack of social work interventions may be a factor impacting the ability of participants to manage their menstruation hygiene.

- **Sub-theme 5.1: Social work services**

The role that social work services played or lack thereof in the lives of the participants was reflected in this sub-theme:

“No.”

“Hmmm. No.”

“No.”

“No.”

None the participants reported having been referred to a social worker or had had any interaction with a social worker for any kind of assistance. All participants had reported that they have never been referred to a social worker and cannot identify any personal or community support services that have been identified by professionals to them or in their community.

The role of the social worker is broad, consisting of case work, where the provision of social work services is directed to individuals and these individuals are empowered to use the available resources to address their needs; community development, where individuals are linked to resources and in the case of absence of certain services, resources are developed; and therapeutic services where support and counselling services are provided to individuals to improve functioning and promote healthy family life. In the study, it was however found that none of these significant services have been provided to participants to assist them in coping with challenges that are brought by menstruation related problems. From this information MHM challenges can be linked to lack of social work services as female youth are not receiving any support or being provided with the resources and skills to cope with MHM adequately.

The ecological systems theory, argues that a child’s development is affected by multiple layers of interacting influences, this should be understood in the context of the micro system level which needs other levels to attain adequate goals of development. In this study, it should be understood that social workers have a principal role to work together with other stakeholders in addressing menstruation hygiene challenges in Roodeplaat rural community, Tshwane.

3.8.2.6 Theme 6: Recommendations

This theme was derived in exploring the suggestion and strategies towards MHM in the future by participants and other female youth who have not yet started menstruation cycle.

- **Sub-theme 6.1 Suggestions and intervention strategies regarding menstruation hygiene management**

The participants delineated their suggestions and intervention strategies regarding the adequate management of menstruation in future and for those who have not started menstruation.

“Not really, you know the time I was in school we didn’t have much information regarding menstruation. The school should start educating girls at an early age, you know when my sister was in primary school there was a time where their teacher was teaching them about menstruation at the early age which was a good thing but when I was at that school I don’t remember us being taught about menstruation.”

“Yes, maybe if you can give sanitary pads to less fortunate female youth.”

“Yes, I have been talking to the school principal today that sexual health and whatever I want to volunteer to be the one teaching them, one Saturday there must be a class most of our teenagers they are just having sex because they think sex is just for fun and they are putting themselves through risky sexual conduct because nobody told them anything.”

“Maybe we gather young girls from the age of 9 years and social workers come to educate them and prepare them for the time to come.”

The participants made the following recommendations as summarised by the researcher: MHM education should be prioritised by the Department of Education; female youth should be educated about MHM at an early age; the South African government and other stakeholders should provide free sanitary pads to the less fortunate female youth effectively and efficiently; the advancement of community programmes aimed at educating female youth about MHM; social workers should conduct community awareness programmes that will prepare female youth for menstruation before onset menstruation.

Most of the participants recommended the need of MHM education to be enforced at schools and recommended that social workers should also play a role by conducting community awareness programmes aimed on educating females regarding MHM. Belayneh and Mekuriaw (2019:2) state that most female youth (girls with age ranges of 10 to 19 years old) enter their reproductive stage without preparing themselves, due to the shortage of adequate knowledge. Thus by empowering female youth with knowledge, information and MHM resources will gain in-depth knowledge and confidence that may enable them to manage menstruation adequately.

The ecological systems theory, argues that an individual’s development is affected by multiple layers of interacting influences, useful for exploring the impact of the environment on female youth, their immediate family/community and the societal landscape. This provides a clear perspective that to overcome MHM challenges, the focus should not be fixed on a single system, but there should be interaction between all ecological systems on all levels.

3.9 SUMMARY

The research methodology applicable to this study was discussed in the initial stage of the chapter. The empirical findings were presented starting with the biographical data of participants. Five female youth who have experienced their onset menstruation participated in the study. Data was collected through one-on-one interviews using a semi-structured interview schedule. The researcher analysed transcripts and developed themes and sub-themes from the data collected. Five themes and nineteen sub-themes were identified from the data collected. Each theme was discussed; verbatim quotes from participants were provided to support these themes and findings were substantiated with literature from an in-depth literature review in Chapter two. The findings revealed that all participants have experienced challenges regarding MHM. Lack of support before menarche came out very strongly. Lack of social work intervention was noted to be a contributing factor towards poor MHM. Experiences and challenges encountered by female youth were described and this provided insight into the experiences of female youth regarding to their source of information; knowledge about sex education and reproductive health; access and availability of support and intervention services and social influences such lack of menstrual management products.

The next chapter focuses on the summary, conclusions and recommendations

CHAPTER 4: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

In this chapter, the researcher discusses the summary of the study and how the goal and objectives of the study were met. The chapter will also highlight the study limitations, the key findings, conclusions and the recommendations.

4.2 SUMMARY

The goals and objectives of the research study on the perceptions and experiences of female youth regarding menstruation hygiene management (MHM) in Roodeplaat rural community, Tshwane are discussed, followed by key findings and conclusions.

4.2.1 Aim of the study

The aim of the study was to explore and describe the perceptions of female youth regarding menstruation hygiene management (MHM) in Roodeplaat rural community, Tshwane. The aim was met through the following objectives of the study.

4.2.2 Objectives of the study

The objectives of the study were as follows:

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

Each objective is subsequently discussed in the context of how it was met through this study.

4.2.2.1 Objective 1

Objective 1: To conceptualise and contextualise female reproductive health, the menstruation cycle and menstruation hygiene management (MHM)

This objective was achieved fully by conducting an in-depth literature study on female reproductive health, menstruation cycle and MHM, as discussed in Chapter 2. The chapter provided a description of key concepts used in the literature review and described female reproductive health within menstruation and menstruation hygiene context and reflects on studies that have been conducted in this regard.

The chapter provides an in-depth look at female physiology and reproductive health, taking into account issues affecting menstruation and MHM such as biological, psychological, socio-economic and environmental factors. Furthermore, literature indicates that cultural beliefs, myths, taboos, lack of information and knowledge, attitudes, socio-economic factors and lack of access to MHM products, contributes to positive or negative MHM. The literature review, explored the concepts of menstruation and MHM and the historic background of these concepts, the impact of poor MHM, factors contributing to poor MHM and the challenges experienced by female youth regarding MHM.

Various factors influencing positive or negative MHM were discussed, as well as female youths' attitudes towards MHM. The experiences of female youth were explained. The literature review shed some light on the experience and challenges encountered by female youth regarding MHM and further provided the researcher with a complete understanding of female reproductive health and the impact of MHM on female youth. The empirical results could be substantiated with the literature from this chapter, showing the influence of various factors in MHM.

Chapter 1 of this study described the ecological systems approach as theoretical framework underpinning this study, which is linked to the research findings in Chapter 3.

4.2.2.2 Objective 2

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

The objective was achieved through the literature review and the empirical study findings. The literature study focused on the source of information and understanding of MHM by female youth. It was found that female youth obtained sex education or reproductive health information mainly from school, with teachers being the main source of information. For

other female youth the prospect of discussing sex education or reproductive health creates anxiety and apprehension, which resulted in avoidance of the discussion, hence female youth depended on other sources such as school and friends. The literature study further found that female youth have a lack of information on why they menstruate. They are unable to link menstruation or menstruation cycle with changes in hormonal levels and other physiological changes as part of their reproductive health. Female youth had difficulties in describing their understanding regarding menstruation or the menstruation cycle.

The data collected from the face-to-face, recorded semi-structured interviews, which were transcribed, revealed five themes, namely knowledge about reproductive health; menstruation experiences and challenges; MHM challenges; resources and limitations; and social work intervention and recommendations. Each theme has various sub-themes linked to the theme as discussed in Chapter 3. It was found that female youth have a lack of much knowledge about reproductive health, which results in a lack of understanding of menstruation or MHM.

4.2.2.3 Objective 3

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

The objective was achieved through the literature review and empirical study. The literature focused on the experiences of female youth regarding menstruation, since onset menstruation. This study found that participants had shocking and fearful experiences. The research findings in this regard were revealed in the theme: menstruation experiences and challenges, as discussed in Chapter 3. The challenges that stood out the strongest were the disposing of used sanitary pads and the high cost for commercial sanitary pads.

4.2.2.4 Objective 4

To explore and describe challenges of female youth regarding menstruation hygiene management (MHM) in Roodeplaat rural community

The objective was achieved by means of literature study and empirical research findings. The literature study explored female youth age at menarche, place at menarche, reaction and experience, support system, impact of menstruation on social life and cultural and religious beliefs regarding MHM on individual youth. This study found that participants face several challenges resulting in frustration, fear, shock and psychological stressors, which lead to poor MHM. Participants lacked preparation for menstruation, finding it challenging

to discuss reproductive health, menstruation and MHM with their families, especially before menarche. They only gained support from their families past menarche stage.

Findings linked to this objective were discussed in Chapter 3 under the theme: MHM and challenges, with its sub-themes. The themes are found in Table 3.1. The challenges experienced by female youth regarding MHM included access to menstruation absorbents, access to private facilities to change menstruation absorbents and a shortage of water (WASH), with lack of a support system also contributing to these challenges.

4.2.2.5 Objective 5

To explore and describe resources and support available for female youth related to menstruation hygiene management in Roodeplaat rural community

The objective was achieved by means of literature study and the empirical research. The literature study explored and described the resources and support available for female youth regarding MHM. The lack of community resources, challenges to distribute MHM materials to the community by merely one NGO, namely Kamcare rendering such services amongst other more pressing services and challenges to provide information and awareness on MHM to the whole community, were just some of the many challenges with regard to available resources and support on MHM in this community.

4.2.2.6 Objective 6

To suggest social work intervention strategies for menstruation hygiene management for female youth

Strategies with regards to social work interventions were discussed in the literature study and in the research findings under the theme social work intervention and recommendations. The researcher recommends the social work intervention strategies in the recommendations at the end of this chapter.

4.2.3 Research question

The research question that was posed in the study is:

- What are the perceptions of female youth regarding menstruation hygiene management in Roodeplaat rural community, Tshwane?

The research question was answered by conducting this qualitative research study, through which interviews were conducted with the female youth who started with their menarche residing in Roodeplaat rural community, Tshwane. Data from five participant interviews

were collected and were analysed by the researcher. From the data analysis, themes and sub-themes were identified which were discussed in chapter three of this mini-dissertation. Six themes and nineteen sub-themes emerged from the research study and were utilised to answer the research question.

4.2.4 Limitations

The following limitations in the study were identified:

- **Data collection and analysis:** The researcher was advised by the Faculty of Humanities, Research Ethics Committee, not to conduct the interviews for data collection directly himself, due to the sensitivity of the topic, but to engage two female co-researchers to collect the data and record the sessions for him to transcribe and analyse. The researcher did not have the opportunity to observe the non-verbal communication of the participants, nor to experience the interviews and meeting the participants himself. This could have affected the richness and thickness of the data.
- **Study time frame:** Due to the researcher not conducting the interviews himself for data collection and having to await two female co-researchers to conduct the interviews and collect data for him to analyse, the data collection process of the study took longer. The impact of Covid-19 was also a main barrier, as the researcher was unable to physically reach University of Pretoria libraries due to Covid-19 restrictions and the researcher's fear of the pandemic. Thus only e-books and e-journals could be accessed online from the library for the literature study.
- **Sampling methods and sample:** Non-probability purposive sampling was used to select five participants using specific selection criteria. It was difficult to get participants as the two female co-researchers also targeted research samples from the very same research population as the researcher. Thus the one participant interviewed for the pilot study, from the same area, using the same sampling and selection criteria, was included in the main study.
- **Small sample size:** The sample size and findings are of a single community and age group in the Roodeplaat rural community, Tshwane, Gauteng, and thus might not be representative of the perceptions and experiences of female youth in other rural communities or provinces and thus limits its generalizability.

4.3 KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The key findings, conclusions and recommendations for each theme are presented in this section.

4.3.1 Key findings and conclusions with regards to the literature study

In this section, the key findings, conclusions and recommendations with regards to the literature are discussed.

- **Key findings**

The ecological systems approach underpinned this study, as this approach focuses not only at the individual, but includes other external environmental factors that influence behaviour. The manner in which female youth manage their menstruation is rooted in their individual understanding and the environment that they interact with, hence the researcher preferred the ecological systems approach as the most suitable for this study. The focus of the ecological systems approach gave perspective and context on how participants interact with the environment that they live in, including how they interpret the perspective and context. Using this approach resulted in the exploration of different systems in the female youth world and how they viewed and made sense of their world.

The literature study provided an in-depth look at MHM, pointing out challenges faced by female youth and their families regarding MHM. An in-depth look at MHM identified the connection between lack of knowledge and resources related to menstruation hygiene challenges. Another key issue, taking into account the impact of poor MHM of female youth, was the role of the social worker related to support services for female youth. In the literature the role of the social worker is clearly defined, but the execution of social work functions related to MHM is however not specifically addressed and is greatly influenced by the availability of resources.

- **Conclusions**

The ecological systems approach was suitable as a theoretical approach to underpin this study and the link between the individual and environmental was evident. From the key findings it can be concluded that there is a gap in service delivery and support for female youth. Rural areas are greatly affected by lack of resources needed to effectively create awareness and provide support services to female youth. It can also be concluded that social work plays a vital role in providing much needed support services to female youth as the experiences of female youth are affected by numerous factors related to reproductive health, menstruation and MHM, as well as by environmental factors.

4.3.2 Key findings, conclusions and recommendations with regards to the research findings

In this section, the key findings, conclusions and recommendations with regards to the research findings are discussed, specifically focussing on each theme.

4.3.2.1 Theme 1: Knowledge about reproductive health

This theme focussed on the participants' knowledge of sex education and reproductive health. Two sub-themes came out from this theme, namely source of information and understanding of menstruation or menstruation cycle.

- **Key findings**

The participants did not demonstrate a clear understanding of the concepts reproductive health, menstruation or menstruation cycle. Most of the participants did not know why women menstruate. All the participants had knowledge about menstruation or menstruation cycle, however the level of knowledge was different amongst the participants and there were misconceptions and gaps, especially in their physiological knowledge. None of the participants for instance linked menstruation or menstruation cycle to changes in hormonal levels. One participant defined menstruation cycle as it is her body cleaning itself. Two participants understood the menstruation or menstruation cycle as it was bleeding from the vagina every month, which all women go through. Another participant described menstruation or the menstruation cycle as once a person starts menstruating and engages in sexual activities that's where they can fall pregnant.

From the findings of the study it can be concluded that female youth experience psychosocial, socio-economic and physical challenges related to MHM, as well as the impact of environmental factors such as lack of resources to dispose the used menstruation products. It may further be concluded that despite the fact that menstruation experiences and hygiene management happen uniquely to individual female youth it is commonly surrounded by secrecy and myths in different societies.

- **Conclusions**

The participants had limited knowledge regarding reproductive health, menstruation or menstruation cycle and can be linked to lack of education. Most of the participants could define reproductive health, as they have personal experience of menstruation, but they had limited knowledge regarding menstruation. Participants were not educated about menstruation before the onset of menstruation, which could have equipped them with the skills necessary to understand female reproductive health better. Knowledge regarding reproductive health is worrisome, as many female youths could not link their menstruation cycle with their hormonal levels.

- **Recommendations**

The family should take responsibility to provide sex education and reproductive health to their female and male children and youth, including menstruation and MHM to help reduce the stigma around menstruation, specifically amongst boys.

The inclusion of such sex education and reproductive health information in the school curriculum is recommended, with age appropriate inclusive education for both girls and boys, inclusive of menstruation to help minimise MHM challenges.

School health programs should be supported and promoted by the Departments of Education, Health and Social Development, in order to bridge this gap and also help in achieving a positive change in the behaviour and level of awareness amongst female youth.

Community awareness campaigns and wider coverage in mass media will help bridge the knowledge gap found.

The Departments of Education, Health and Social Development and non-governmental organisations, should collaborate in providing in-depth education to both female and male youth regarding sex education, reproductive health and menstruation, to help destigmatize menstruation.

4.3.2.2 Theme 2: Menstruation experiences and challenges

This was a very significant and noticeable theme throughout the study and is linked with all other themes which emerged from the data collected. This theme was linked to knowledge about sex education, reproductive health, menstruation hygiene health and MHM. The sub-themes included age at menarche or onset menstruation, place of menarche, reaction and experiences at menarche, support system, impact of menstruation on social life and cultural and religious beliefs regarding menstruation. Menstruation is a universal experience with female youth from poor socio-economic backgrounds facing unique experiences and challenges. Menstruation experiences and challenges were a prominent theme throughout the data collection process. All participants had various menstruation experiences and challenges regarding menstruation. Female youth experienced menarche or onset menstruation at different ages and stages of their development, but mostly experienced first menstruation at the age of between 10 and 16 years.

- **Key findings**

Most of the participants had a shocking and fearful experience of onset menarche or first time menstruation. The majority of the participants understood what was happening with

them when they had their first menstruation. Only one participant did not experience shock, fear and discomfort, as she expected that she will one day start menstruating. This clearly shows that most of the participants were unprepared and experienced menstruation with fear, shock and discomfort.

All the participants enjoyed social support from their significant others after they were able to disclose that they had seen their onset menstruation. Three participants indicated that they received support from their family, while one participant received support from her school teacher.

These menstruation complaints may affect female youths' social life. It was interesting to note that from all five participants only one participant reported that menstruation had impacted her social life. The other four participants never experienced negative effects of menstruation on their social life. None of the participants failed to attend social events or any other events as a result of menstruation.

Findings from this theme show that menstruation remains a challenge for female youth of all ages. The age of onset menstruation or onset menarche depended on each participant. The literature showed that menarche start from the age of 11 years to 16 years old. However, this study revealed that some fell out of this standard criterion, with one participant starting onset menarche at the age of 9 years, while two participants started at the age of 17 years.

The participants had unique experiences regarding menstruation, as menstruation is a unique phenomenon to all female youth. What was common was all female youth had period pains, but their coping mechanisms differed. The support system was reported to be good, but the interesting part was that they all learned about menstruation when they had already starting menstruating. This indicated that they did not get information before their onset of menstruation.

The challenges experienced by female youth regarding MHM are not only related to access to (WASH) - water to wash, sanitary absorbents, hygiene - access to private facilities to change menstruation absorbents and dispose of their used products safely, but also to lack of support systems. This finding was supported by the fact that none of the participants have support from their significant others before their first menstrual cycle. Their family, guardian and significant others only started supporting them while they already had their first menstruation cycle. If they had knowledge and information before their onset menarche, their experience would have been better. The aim to explore menstruation

experiences faced by female youth is to be able to come with proper intervention strategies to address those challenges. The participant's experiences were influenced by several factors related to menstruation, but what emerged clearly in this study was the lack of pre-menstruation support and knowledge. None of the participants reported that the impact of menstruation on their social life. This may be the sign of the participants are managing with their coping mechanisms regarding MHM having good support from friends. Female youth experience menstruation at different ages and stages of their development, but usually they experience first menstruation at the age of 10-16 years. The variation in the age at menarche recorded globally could be attributed to the following factors: genetic, body stature, environmental conditions, nutrition, physical activity, geographic location, urban or rural residence, health status, psychological factors, body mass index, socio-economic status and parental educational level. The participants experienced menstruation with fear, shock and discomfort. Despite negative experiences reported, the positive experience reported were that they enjoy social support from their significant others once they break the silence regarding their onset menstruation. Due to their current experience post menarche, participants experienced menstruation without major problems; menstruation-associated complaints which were commonly observed amongst participants was menstruation pains. Menstruation did not affect the participants' social life as a result of experiences in managing menstruation. Furthermore, the literature highlighted that female youth experience menstruation uniquely.

- **Conclusions**

Participants had negative experiences regarding menstruation as a result of lack of preparation and support before their first menstruation cycle. Lack of knowledge on menstruation related matters, is a major challenge for female youth regarding MHM. Socio-economic factors also contribute to female youth experiences on menstruation, as some participants did not have access to MHM products on their onset menstruation.

- **Recommendations**

Education should be provided to female youth in primary school pre-menarche (between ages 9 and 10), including the basic biology and physiology of reproductive health and menstruation, including the possible physical and emotional changes, together with practical guidance on using menstruation sanitary absorbent products/materials.

Female youth should learn how to track their menses monthly cycle, in order to be able to plan better for their menstrual cycle.

Training should be provided to female youth regarding the use of menstruation hygiene products.

Parents, guardians, siblings and significant others should guide and prepare female youth for their onset menstruation cycle.

4.3.2.3 Theme 3: Menstruation hygiene management and challenges

The focus of this theme was on MHM and challenges of female youth. Five sub-themes emerged from this theme. These sub-themes included mainly bathing as a major strategy for MHM and secondly, source of information regarding MHM. The other sub-themes included: products used during menstruation, disposal of sanitary material and challenges regarding MHM. All participants have developed their strategies to adequately manage menstruation. All over the world, these strategies vary greatly as a result of individual personal preferences, socio-economic status, cultural and religious beliefs, educational levels and knowledge regarding MHM.

- **Key findings**

The notable challenge faced by the participants is the menstruation waste disposal. There is a lack of resources where they can dispose used MHM products in Roodeplaat rural community. The main objective of this theme was to explore and describe female youth MHM and challenges that they are faced with. The responses of all the participants showed that they all have a clear understanding of MHM. All participants associated MHM with bathing during their menstruation period in order to keep clean.

The participants use water and soap when bathing without the use of any strong chemicals. It was elicited from this study that female youth from Roodeplaat somehow adequately managed their personal hygiene during menstruation. All the participants reported to be taking daily baths during their menstrual cycle, washing their genitalia with water and soap daily.

This study findings are in contrast with other findings that indicated that mothers are the primary source of information. In this study, the majority of participants reported that they taught themselves about MHM, while only one participant obtained information from her mother. All participants preferred to use disposable sanitary pads to manage their menstruation; they mostly resorted to reusable sanitary pads, due to the affordability and the Kamcare project where they received free reusable sanitary pads. The study found that female youth experience challenges regarding the affordability of MHM products. The

stigma associated with menstruation emerged strongly; that menstruation remains a taboo associated with being dirty. In addition, the lack of appropriate support structures regarding access to information, menstruation products and disposing used menstruation products was found to be a significant challenge. Despite the negative barriers to MHM on female youth, a positive aspect associated with MHM was the availability of Kamcare in the community and accessible commercial sanitary pads at shops in Roodeplaat rural community.

- **Conclusions**

It is evident from the responses that were obtained from the participants in this study that support in all levels regarding MHM is crucial. Preference of MHM products is based on individual choice, cultural acceptance, socio-economic status and availability in local supermarkets or stores. In this study, the majority of the participants preferred to use commercial sanitary pads and used the reusable sanitary pads as their last option.

- **Recommendations**

The Department of Environmental Affairs should provide waste management resources in Roodeplaat rural community, as well as other rural communities for sanitary product disposal. Kamcare should educate the Roodeplaat rural community more about the safe use of their reusable sanitary pads, before distributing them in the community.

4.3.2.4 Theme 4: Resources and limitations

The availability of community resources and subsequent distribution of MHM material, information and awareness to female youth is just one of the many issues that are aimed at addressing MHM. Lack of resources is another factor that contributes to poor MHM. From the research findings, most of the participants reported that there is lack of resources in Roodeplaat rural community. Only one participant reported on the support from Kamcare in Roodeplaat rural community, while the other participants acknowledged that at her age there is no organization that can give her sanitary pads. The other two participants reported that there are no resources at Roodeplaat to address MHM.

- **Key findings**

Participants do not have an alternative organization that provides information and resources regarding MHM, besides Kamcare. They depend on Kamcare for their reusable sanitary pads. Lack of community resources contribute to poor MHM. The study revealed that the availability of community resources and subsequent distribution of MHM materials, information and awareness to female youth is just a one of the many issues that are aimed

at addressing MHM. Lack of resources is another factor that contributes to poor MHM. The results revealed a high shortage of MHM resources in Roodeplaat rural community, Tshwane. Kamcare was the only available organisation in Roodeplaat rural community to assist them with reusable sanitary pads. There are no community centres or activities that are in place to assist female youth to gain access to information and MHM resources in Roodeplaat rural community beside the newly established Kamcare.

- **Recommendations**

Female youth should be educated about other sources of information regarding MHM around Roodeplaat rural community. Free commercial and reusable sanitary pads should be provided at the most convenient areas that are easy to access around Roodeplaat rural community.

4.3.2.5 Theme 5: Social work intervention

This theme focuses on the social work intervention regarding MHM in Roodeplaat rural community. One sub-theme emerged shedding light on the role of social workers in addressing reproductive health and its related challenges.

- **Key findings**

All five participants conveyed that there has been no intervention to provide individual, family or community support regarding sex education, reproductive health and MHM in Roodeplaat. None of the participants reported ever interacting with the social workers. Arguably, lack of organisations rendering social work intervention to address MHM and support services to female youth and their family in this community can be a contributing factor resulting in poor MHM. No mention of other government departments or NGO's rendering similar services to Kamcare was made. All the participants in the study experienced challenges related to external support. Lack of knowledge, awareness and organisations offering social work intervention in the area may be a factor impacting the ability of participants to manage their menstruation hygiene.

- **Conclusions**

None of the participants reported having interaction or being referred to the social worker for any kind of assistance. All participants have reported that they have never been referred to a social worker and cannot identify any personal or community support services that have been identified by professional to them or in their community. From this information, MHM challenges can be linked to lack of knowledge and awareness, as well as a lack of services in this area by government departments or other NGO's, besides Kamcare who is trying

their best with the little staff they have. Social work services to female youth are not being provided to all with the limited resources.

- **Recommendations**

Government departments and more NGO's should get involved in this community, so that social workers can conduct awareness campaigns and market social work services in Roodeplaat for the community, so that they can be aware of where to access social workers and the services that they render.

Social work intervention can be considered of utmost importance in educating families and communities and providing them with support

4.3.2.6 Theme 6: Recommendations

The purpose of this theme was to investigate the participants' recommendations for strategies and intervention methods to address menstruation hygiene challenges in the Roodeplaat rural community, Tshwane. One sub-theme emerged, namely, education and awareness regarding MHM, shedding light on the services that female youth in the Roodeplaat rural community recommended to help with MHM challenges.

- **Conclusions**

All five participants contributed by recommending services that they believe will help with MHM. The majority of participants advocated for the Department of Education to educate female youth about MHM at a young age. Community projects addressing MHM were also suggested by the participants.

- **Recommendations**

The Department of Education, in collaboration with other relevant stakeholders, should develop programs that will attract female youths' attention and educate female youth and communities at large about MHM.

4.4 RECOMMENDATIONS

The recommendations for social work intervention with female youth regarding MHM, as well as recommendations for policy follow.

4.4.1 Recommendations for social work

The following recommendations are made for social work services:

The development and implementation of MHM awareness programmes in Roodeplaat rural community, Tshwane by the Department of Education, Department of Health and the Department of Social Development is essential, as MHM is the responsibility of all three departments and not only of the NGO's such as Kamcare, who are struggling to meet the demand. The implementation of this strategy should involve social work professionals from all spheres as MHM is an issue that affects people across society.

Government should place more focus on developing and implementing educational and awareness programmes to raise menstruation hygiene health and management awareness in communities, both rural and urban areas, in an effort to improve MHM challenges and address stigma, shame and discrimination related to menstruation.

More social workers should be appointed in communities to address menstruation hygiene health and management awareness. They should be provided with training on female reproductive health to be more equipped with expertise and knowledge with regards to menstruation, enabling them to transfer knowledge, create awareness and support female youth in this regard.

The inclusion of menstruation hygiene health and management as a focus area for awareness initiatives of social work at national, provincial and district level is recommended. It should be a priority area for support services to female youth and their families. These services should be focused on menstruation hygiene health and management awareness, education and support and should aim not only to educate and equip female youth with the necessary skills to manage menstruation adequately.

Through menstruation hygiene health and management awareness initiatives, the stigma surrounding menstruation should be reduced. These services should also be focused on educating boys and men, as they can play a significant role in supporting female youth regarding MHM. Parents and guardians should also be included in these awareness initiatives.

4.4.2 Recommendations for policy

The South African government should develop a MHM policy that focuses primarily on MHM amongst the youth. The South African government should make it mandatory to provide MHM products at a reduced rate or free of charge to female youth, like in other developed countries, such as Scotland.

Given that improper disposal of menstrual products can serve as a breeding ground for infections and diseases and affect the environment, government should raise awareness and make provision for safe waste disposal facilities in all communities. Non-governmental organizations (NGOs) should be provided with resources to allow them to assist the government in achieving this.

REFERENCES

- Ajari, E.E., Abass, T.P., Ilesanmi, E.B. & Adebisi, Y.A. 2021. Cost implications of menstrual hygiene management in Nigeria and its associated impacts. Available: <https://www.preprints.org/manuscript/202105.0349/v1>. (Accessed on 13/07/2021).
- Ameade, E.P.K. & Garti, H.A. 2016. Age at Menarche and Factors that Influence It: A Study among Female University Students in Tamale, Northern Ghana. *Journal pone*, 11(5):1-10.
- Ashcraft, A.M. & Murray, P.J. 2017. *Talking to Parents About Adolescent Sexuality*. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5517036/pdf/nihms877495.pdf>. (Accessed: 06 October 2021).
- Babbie, E. & Mouton, J. 2010. *The practice of social research*. 10th edition. Cape Town: Oxford University Press South Africa.
- Belayneh, Z. & Mekuriaw, B. 2019. Knowledge and menstrual hygiene practice among adolescent school girls in southern Ethiopia: a cross-sectional study. *BMC Public Health*. Available: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-7973-9>. (Accessed: 10 May 2021).
- Bieliune, S. 2018. Culture as a tool for school improvement: the case of children's socialisation centres. *Economics and culture*, 15(1):70-77.
- Boosey, R., Prestwich, G. & Deave, T. 2014. Menstrual hygiene management amongst schoolgirls in the Rukungiri district of Uganda and the impact on their education: A cross-sectional study. *Pan African Medical Journal*, 19(253):1-13.
- Bronfenbrenner, U. 2005. *Making Human Beings Human: Bio-ecological Perspectives on Human Development*. CA: Sage.
- Bronfenbrenner, U. 1979. *The Ecology of Human Development*. London: Harvard University Press.
- Budhathoki, S.S., Bhattachan, M., Castro-Sánchez, E., Sagtani, R.A., Rayamajhi, R.B., Rai, P. & Sharma, G. 2018. Menstruation hygiene management among women and adolescent girls in the aftermath of the earthquake in Nepal. *BMC Women's Health*, 18(33):1-8.

Cardoso, L.F., Scolese, A.M., Hamidaddin, A. & Gupta, J. 2021. Period poverty and mental health implications among college-aged women in the United States. *BMC Women's Health*, 21(14):1-7.

Chandra-Mouli, V. & Patel, S.V. 2017. Mapping the knowledge and understanding of menarche, menstrual hygiene and menstrual health among adolescent girls in low- and middle-income countries. *Reproductive Health*, 14(13):1-16.

Cherry, K. 2014. What is applied research? Online: verywellmind. Available: www.psychology.about.com. (Accessed: 2020/04/20).

Chikulo, B.C. 2015. An exploratory study into Menstrual Hygiene Management amongst Rural High School for Girls in the North West Province, South Africa. *African Population studies*, 29(2):1972-1987.

Chukwu, N., Chukwu, N.N. & Nwadike, N. (Eds). 2017. *Methods of Social Practice*. Nsukka: University of Nigeria Press Ltd.

Collins Concise Dictionary. 2001. Glasgow: Harper Collins.

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*. Available: <https://reproductive-health-journal.biomedcentral.com/track/pdf/10.1186/s12978-020-0896-1.pdf>. (Accessed: 19/07/2021).

Crofts, T. & Fisher, J. 2019. *Menstrual Hygiene in Ugandan Schools: An Investigation of Low-cost Sanitary Pads*. Available: https://www.heart-resources.org/doc_lib/menstrual-hygiene-ugandan-schools-investigation-low-cost-sanitary-pads/. (Accessed: 13 October 2021).

De Vos, A.S., Strydom, H., Fouché, C.B. & Delport, C.S.L. 2011. *Research at grass root for the social science and human service professions*. 4thedition. South Africa: Van Schaik.

Department of Women. 2017. *Sanitary Dignity Policy Framework*. 1st Draft, June 2017.

Dhingra, R., Kumar, A. & Kour, M. 2014. Knowledge and practices related to menstruation among tribal (Gujjar) adolescent girls. *Studies on Ethno-Medicine*, 3(1):43-48.

El Meselhy, H.M., Salama, A.A. & El Mawardy, S.R. 2020. Menstrual hygiene among secondary school students. *Menoufia Medical Journal*, 33(1):24-28.

Elledge, M.F., Muralidharan, A., Parker, A., Ravndal, K.T., Siddigui, M., Toolaram, A.P. & Woodward, K.P. 2018. Menstrual Hygiene Management and Waste Disposal in Low and Middle Income Countries—A Review of the Literature. *International Journal of Environmental Research and Public Health*, 15(7):2-20.

Esen, I., Oguz B. & Serin, H.H. 2016. Menstrual Characteristics of Pubertal Girls: A Questionnaire-Based Study in Turkey. *Journal of Clinical Research in Paediatric Endocrinology*, 8(2):192-196.

Ettekal, A.V. & Mahoney, J.L. 2017. Ecological System Theory. In Peppler, K. (Ed.). *The SAGE Encyclopedia of Out-of-school learning*. Thousand Oaks: Sage.

Fouché, C.B. & Schurink, W. 2011. Qualitative research designs. in De Vos, A.S., Strydom, H. Fouché, C.B. Delpont, C.S.L. (Eds.), *Research at grassroots for social sciences and human service professions*. 4th ed. Pretoria: Van Schaik Publishers.

Garg, S. & Anand T. 2015. Menstruation related myths in India: strategies for combating it. *Journal of family medicine and primary care*, 4(2): 184-186.

Geertz, A., Lyer, L., Kasen, P., Mazzola, F. & Peterson, K. 2016. *Menstrual Health in Kenya Country Landscape Analysis*. Available: https://menstrualhygieneday.org/wp-content/uploads/2016/04/FSG-Menstrual-Health-Landscape_Kenya.pdf. (Accessed on: 24/07/2021).

Greene, R.R. 2009. Human Behaviour Theory and Social Work Practice. 3rd ed. New Jersey: Transaction Publishers.

Grossman, J.M., Jenkins, L.J., Richer, A.M. 2018. Parents' Perspectives on Family Sexuality. *International Journal Environ Res Public Health*. 2018 Jan; 15(1): 107.

Guya, E., Moya, A.W. & Kimwaga, R. 2014. Menstrual Hygiene Management in Secondary schools in Tanzania. *International Journal of Science and Technology*, 3(1):27-40.

Haberer, L. 2018. Menstruation and School Girls in South Africa: An Intervention Study. Accessed on 19/07/2021.

Hennegan, J., Donal, C., Wu, M., Scott, L. & Montgomery, P. 2016a. Measuring the prevalence and impact of poor menstrual hygiene management: a quantitative survey of schoolgirls in rural Uganda. *BMJ open*, 6(12):1-14.

Hennegan, J., Donal, C., Wu, M., Scott, L. & Montgomery, P. 2016b. Schoolgirls' experience and appraisal of menstrual absorbents in rural Uganda: a cross-sectional evaluation of reusable sanitary pads. *Reproductive health*, 13(103):1-12.

Hennegan, J. & Montgomery, P. 2016. Do menstrual hygiene management interventions improve education and psychosocial outcomes for women and girls in low and middle income countries? A systematic review. *Journal Pone*, 11(2):1-21.

Isaacs, A.N. 2014. An overview of qualitative research methodology for public health researchers. *International Journal of Medicine and Public Health*, 4(4):318-323.

Jewitt, S. & Ryley, H. 2014. It's a girl thing: Menstruation, school attendance, spatial mobility and wider gender inequalities in Kenya. Available: <https://www.science-direct.com/science/article/pii/S0016718514001638>. (Accessed on 24/07/2021).

Jogdand, K. & Yerpude, P. 2011. A community based study on menstrual hygiene among adolescent girls. *Indian J Maternal Child Health*, 13(3):1-6.

Kaltsouni, E., Fisher, P.M., Dubol, M., Hustad, S., Lanzenberger, R., Frokjaer, V.G., Wikström, J., Comasco, E. & Sundström-Poromaa, I. 2021. *Brain reactivity during aggressive response in women with premenstrual dysphoric disorder treated with a selective progesterone receptor modulator*. Available: <https://www.nature.com/articles/s41386-021-01010-9.pdf>. (Accessed 24/08/2021).

Kandell, H. 2015. *Water, Sanitation and Hygiene and Menstrual Hygiene Management: A Resource Guide*. WASH Advocates, UNICEF. Available: <https://menstrualhygieneday.org/wp-content/uploads/2016/04/WASH-MHM-Resource-Guide-2015.pdf>.

Karki, R. & Espinosa, C. 2018. Breaking Taboos: Menstruation, Female Subordination and Reproductive Health, the Case of India. *Insights of Anthropology*, 2(1):111-120.

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*, 18(17):1-9.

Khumalo, G. (2015, July 22). Fight to keep young girl at school. *South African News Agency*. Available: <http://www.sanews.gov.za/features-south-africa/fight-keep-young-girls-school>. (Accessed on: 19/07/2021).

- Kuhlmann, A.S., Henry, K. & Wall, L. 2017. Menstrual Hygiene Management in Resource-Poor Countries. *CME Review Article*, 72(6):356-375.
- Kumar, A. & Srivastava, K. 2011. Cultural and Social Practices Regarding Menstruation among Adolescent Girls. *Social Work in Public Health*, 26(9):594–604.
- Kumar, R. 2011. *Research Methodology: A step-by-step guide for beginners*. 3rd ed. London: Sage.
- Kumbeni, M.T., Otupiri, E. & Ziba, F.A. 2020. Menstrual hygiene among adolescent girls in junior high schools in rural northern Ghana. *Pan medical journal*, 37(190):1-13.
- Lacroix, A.E., Gondal, H. & Langaker, M.D. 2021. Physiology, Menarche. Available: <https://www.ncbi.nlm.nih.gov/books/NBK470216/>. (Accessed on: 07 October 2021).
- Li, P. & Bolaria, B.S. (1994). *Essentials of contemporary sociology*. Mississauga, Ontario: Copp Clark Longman Ltd.
- Macleod, C.I., du Toit, R., Paphitis, S. & Kelland, L. 2020. Social and structural barriers related to menstruation across diverse schools in the Eastern Cape. *South African Journal of Education*, 40(3):1-9.
- Mahfuz, M.T., Sultana, F., Rahman, E.C., Hunter, F., Jahan, F., Akand, Khan, S., Mobashhara, M., Rahman, M., Alam, M., Unicomb, L., Luby, S.P. & Winch, P.J. 2021. *Global health action*, 14(1):1-10.
- Mahon, T., Tripathy, A. & Singh, N. 2015. Putting the men into menstruation: The role of men and boys in community menstrual hygiene management. *Waterlines*, 34(1):8-14.
- Malitha, J.M., Islam, A., Mamun, A.S., Chakrabarty, S. & Hossain, G. 2020. Early age at menarche and its associated factors in school girls (age, 10 to 12 years) in Bangladesh: a cross-section survey in Rajshahi District, Bangladesh. *Journal of Physiological Anthropology*, 39(6):1-9.
- Maree, K. (Ed), Creswell, J.W., Ebersöhn, L., Eloff, I., Ferreira, R., Ivankova, N.V., Jansen, J.D., Nieuwenhuis, J., Pietersen, J., Plano Clark, V.L. & Van der Westhuizen, C. 2020. *First steps in research*. 3rd ed. Pretoria: Van Schaik Publishers.

Matlala, A. & Mabuza, K. 2011. Zuma promises free towels for women. The Sowetan, 10 January 2011. Available: <http://www.sowetanlive.co.za/news/2011/01/10/zuma-promises-free-towels-for-women> (Accessed on: 15 April 2020).

Mazokopakis, E.E. & Samonis, G. 2018. Is Vaginal Sexual Intercourse Permitted during Menstruation? A Biblical (Christian) and Medical Approach. *A Journal of Clinical Medicine*, 13(3):183-188.

McCammon, E., Bansal, S., Hebert, L.E., Yan, S., Menendez, A. & Gilliam, M. 2020. Exploring young women's menstruation-related challenges in Uttar Pradesh, India, using the socio-ecological framework. *Sexual and Reproductive Health Matters*, 28(1):291-302.

Michael, J., Iqbal, Q., Haider, S., Michael, J., Iqbal, Q., Haider, S., Khalid, A., Haque, N., Ishaq, R., Saleem, F., Hassali, M.A. & Bashaar, M. 2020. Knowledge and practice of adolescent females about menstruation and menstruation hygiene visiting a public healthcare institute of Quetta, Pakistan. *BMC Women's Health*, 20(4):1-8.

Miiró, G., Rutakumwa, R., Nakiyingi-Miiró, J., Nakuya, K., Musoke, S., Namakula, J., Francis, S., Torondel, B., Gibson, L.J. & Ross, D.A. 2018a. Menstrual health and school absenteeism among adolescent girls in Uganda (MENISCUS): A feasibility study. *BMC women's health*, 18(4)2-13.

Millington, K.A. & Bolton, L. 2015. Improving access to menstrual hygiene products. Available: <http://www.gsdr.org/wp-content/uploads/2015/10/HDQ1280.pdf>. (Accessed on: 13 October 2021).

Mishra, U. & Pandya, P. 2018. Impact assessment of awareness program developed on menstruation hygiene for the school going teenage girls of Hallol district in Gujarat. *International Journal of Applied Home Science*, 5(2): 441-447.

Molly, S., Kaitlin, S. & Kristen, B. 2016. *Adolescent Experience of Menstruation in Rural Kenya*. Available: https://journals.lww.com/nursingresearchonline/Abstract/2016/07000/Adolescent_Experience_of_Menstruation_in_Rural.6.aspx. (Accessed on: 07 October 2021).

Mubashra, A., Faridi, T.A., Rana, M.S., Parveen, I., Zahid, M.T., John, A. & Khan, S. 2021. Knowledge, Attitude and Practices towards Menstrual Hygiene among Government and Private School Girls. *Original Article*, 4(1):51-61.

Mukherjee, A., Lama, M., Khakurel, U., Jha, A.N., Ajose, F., Acharya, S., Tymes-Wilbekin, K., Sommer, M., Jolly, P.E., Lhaki, P. & Shrestha, S. 2020. Perception and practices of menstruation restrictions among urban adolescent girls and women in Nepal: a cross-sectional survey. *Reproductive Health*, 17(81):2-10.

National Youth Commission Act 19 of 1996 (Published in the *Government Gazette*, (17130) Pretoria: Government Printer).

National Youth Policy: 2015-2020. 2015. The Presidency, Republic of South Africa.

Ndlovu, E. & Bhala, E. 2015. Menstrual hygiene – A salient hazard in rural schools: A case of Masvingo district of Zimbabwe. *Journal of Disaster Risk Studies*, 8(2):1-8.

Nguyen, T.H. 2020. Menstrual Cycle in Female Workers. *Journal of Asian Multicultural Research for Educational Study*, 1(1):29-34.

Nieuwenhuis, J. 2020. Qualitative research designs and data-gathering techniques. In Maree, K. (Ed), Creswell, J.W., Ebersöhn, L., Eloff, I., Ferreira, R., Ivankova, N.V., Jansen, J.D., Nieuwenhuis, J., Pietersen, J., Plano Clark, V.L. & Van der Westhuizen, C. *First steps in research*. 3rd ed. Pretoria: Van Schaik Publishers.

Okafor-Terver, I.S. & Chuemchit, M. 2017. Knowledge, belief and practice of menstrual hygiene management among in-school adolescents in Katsina state, Nigeria. *J Health Res*, 31(2): 179-87.

Oppenheim, M. 2018. *Kenyan girls forced into sex in exchange for sanitary products. Independent*. Available: <https://www.independent.co.uk/climate-change?CMP=ILC-refresh> (Accessed on 24/07/2021).

Ortner, S.B. 2014. Too soon for post-feminism: the ongoing life of patriarchy in neoliberal America, *History and anthropology*, 25(4):530-549.

Oxford Dictionary .2003. English dictionary second edition. Oxford University Press.

Park, Y., Shin, H., Jeon, S., Cho, I. & Kim, Y. 2021. Menstrual Cycle Patterns and the Prevalence of Premenstrual Syndrome and Polycystic Ovary Syndrome in Korean Young Adult Women. *Healthcare*, 9(56):1-13.

Phillips-Howard, A.P., Caruso, B., Torondel, B., Zulaika, G., Sahin, M. & Sommer, M. 2016. Menstrual hygiene management among adolescent schoolgirls in low- and middle-income countries: research priorities. *Global Health Action*, 9(1):1-9.

Pokhrel, D., Bhattarai, S., Emgard, M., Schikfus, M., Forsberg, B.C. & Biermann, O. 2021. Acceptability and feasibility of using vaginal menstrual cups among schoolgirls in rural Nepal: a qualitative pilot study. *Reproductive Health*, 18(20):1-10.

Pouramin, P., Nagabhatla, N. & Miletto, M. 2020. A Systematic Review of Water and Gender Interlinkages: Assessing the Intersection with Health. *A system review*, 2(6):1-25.

Qiong, O. 2017. A Brief Introduction to Perception. *Studies in Literature and Language*, 15(4): 18-28.

Rani, P. & Reddy, R.G. 2019. Menstrual Knowledge and Hygiene Management of Adolescent Girls. *Current Journal of Applied Science and Technology*, 33(4):1-6.

Ramaiya, A. & Sood, S. 2020. What are the psychometric properties of a menstrual hygiene management scale: a community-based cross-sectional study? *MBC Public Health*, 20(525):2-11.

Ramathuba, D.U. 2015. Menstrual knowledge and practices of female adolescents in Vhembe district, Limpopo Province, South Africa. *AOSIS Open Journals*, 38(1):1-6.

Rana, N. 2018. International Journal of Advanced Educational research. *Feminism in Literature*, 3(1):428-429.

Rubin, A. & Babbie, E. 2011. *Research methods for social work*. New York: Brooks/Cole Cengage Learning.

Schmitt, M.L., Clatworthy, D., Ratnayake, R., Klaesener-Metzner, N., Roesch, E., Wheeler, E. & Sommer, M. 2017. Understanding the menstrual hygiene management challenges facing displaced girls and women: findings from qualitative assessments in Myanmar and Lebanon. *Conflict and Health*, 11(19):1-11.

Schurink, W., Fouché, C.B. & De Vos, A.S. 2011. Qualitative data analysis and interpretation. In De Vos, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. (Eds.), *Research at grassroots for the social sciences and human science professions*. 4th ed. Pretoria: van Schaik Publishers.

Shah, V., Nabwera, H.M., Sosseh, F., Jallow, Y., Comma, E., Keita, O. & Torondel, B. 2019. A rite of passage: a mixed methodology study about knowledge, perceptions and practices of menstrual hygiene management in rural Gambia. *BMC Public Health*, 19(277):2-15.

Simon, M.K. & Goes, J. 2011. What is phenomenological research? Available at: <http://dissertationrecipes.com/wp-content/uploads/2011/04/Phenomenological-Research.pdf> (Accessed 2020/04/30).

Sinha, N.R. & Paul, B. 2018. Menstruation hygiene management in India: The concerns. *India J Public Health*, 62(2):71-73.

Solvig, N., Raja, L., George, C.E., O'connell, B., Gangadharan, P & Norman, G. 2019. Analysis of Knowledge of Menstruation, Hygiene Practices, and Perceptions in Adolescent Girls in India. *Modern Health Science*, 2(1):16-21.

Sommer, M., Caruso, B. A., Sahin, M., Calderon, T., Cavill, S., Mahon, T. & Phillips-Howard, P.A. 2016. A time for global action: addressing girls' menstrual hygiene management needs in schools. *Journal of PLoS medicine*, 13(2):1-9.

Sommer, M., Kjellén, M. & Pensulo, C. 2013. Girls' and women's unmet needs for menstrual hygiene management (MHM): The interactions between MHM and sanitation systems in low-income countries. *Journal of Water Sanitation and Hygiene for Development*, 3 (3):283-297.

Sommer, R.N., Hirsch, J.S., Nathanson, C. & Parker, R.G. 2015. Comfortably, Safely, and Without Shame: *Defining Menstrual Hygiene Management as a Public Health Issue*. *Farming Health Matters*, 105(7): 1303-1311.

Ssewanyana, D. & Bitanihirwe, B.K.Y. 2019. Menstrual hygiene management among adolescent girls in sub-Saharan Africa. *Global Health Promotion*, 26(1):105-108.

Statistics South Africa. 2021. *Quarterly Labour Force Survey*. Available: <http://www.statssa.gov.za/publications/P0211/P02111stQuarter2021.pdf> (Accessed 27 September 2021).

Statistics South Africa. 2019. *Mid-year population estimates*. Available: <https://www.statssa.gov.za/publications/P0302/P03022018.pdf> (Accessed on 28/06/2021).

Strydom, H. 2011. Ethical aspects of research in the social sciences and human service professions. In De Vos, A.S, Strydom, H, Fouché, C.B & Delpont, C.S.L. 2011. *Research at grassroots: For the social sciences and human service professions*. 4th edition. Pretoria: Van Schaik: 113-130.

Strydom, H. & Delpont, C.S.L. 2011. Sampling and pilot study in qualitative research. In: De Vos, A.S., Strydom, H., Fouché, C.B. & Delpont, C.S.L. (Eds). *Research at Grassroots: For the social science and human service professions*. 4th ed. Pretoria: Van Schaik Publishers.

Sumpter, C. & Torondel, B. 2013. A Systematic Review of the Health and Social Effects of Menstrual Hygiene Management. *Plosone*, 8(4):1-15.

Sychareun, V., Chaleunvong, K., Essink, D.R., Phommavongsa, P. & Durham, J. 2020. Menstruation practice among school and out-of-school adolescent girls, Lao PDR. *Global Health Action*, 13(2):38-48.

Tehrani, F, R., Mirmiran, P., Gholami, R., Moslehi, N. & Azizi. 2014. Factors Influencing Menarcheal Age: Results from the Cohort of Tehran Lipid and Glucose Study. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4166004/pdf/ijem-12-03-16130.pdf> (Accessed 07 October 2021).

Tembo, M., Renju, J., Weiss, A.H., Dauya, E., Bandason, T., Dziva-Chikwari, C., Redzo, R., Mavodza, C., Losi, T., Ferrand R. & Francis, S.C. 2020. Menstrual product choice and uptake among young women in Zimbabwe: a pilot study. *Pilot and feasibility studies*, 6(182):2-12.

The Constitution of the Republic of South Africa 108 of 1996. Pretoria: Government Printers.

Triananinsi, N., Rahayu, E.K. & Puspitasari, N.A. 2021. The Effect of Yoga on Menstrual Pain Reduction in Adolescents. *Muhammadiyah Journal of Epidemiology*, 1(1):24-30.

Upashe, S. P., Tekelab, T. & Mekonnen, J. 2015a. Assessment of knowledge and practice of menstrual hygiene among high school girls in Western Ethiopia. *BMC Women's Health*, 15(84):2-8.

Van Eijk, A.M., Sivakami, M., Thakkar, M.B., Bauman, A., Lassorn, K.F., Coates, S. & Phillips-Howard, P.A. 2015. Menstrual hygiene management among adolescent girls in India: a systematic review and meta-analysis. *BMJ Open*, 6(3):1-12.

Verma, R. 2019. Menstrual hygiene in Africa: No pad or no way to dispose it. Available: <https://www.downtoearth.org.in/news/waste/menstrual-hygiene-in-africa-no-pad-or-no-way-to-dispose-it-63788> (Accessed on 12/07/2021).

World Health Organization. 2018. *Patterns and perceptions of menstruation*. Available: <https://apps.who.int/iris/handle/10665/39663>. (Accessed 09 December 2020).

Yadav, R.N., Joshi, S., Poudel, R. & Pandeya, P. 2018. Knowledge, Attitude, and Practice on Menstruation Hygiene Management among School Adolescents. *Journal of Nepal Health Research Council*, 15(37):212-216.

APPENDICES

6.1 APPENDIX A: Ethical Clearance



UNIVERSITEIT VAN PRETORIA
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Faculty of Humanities
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HumanITIES 100.
— Since 1919 —

6 September 2021

Dear Mr S Ngoveni

Project Title: The perceptions of female youth regarding menstruation hygiene management (MHM) in Roodeplaat rural community, Tshwane

Researcher: Mr S Ngoveni

Supervisor(s): Dr CL Carbonatto

Department: Social Work and Criminology

Reference number: 20636891 (HUM031/0521)

Degree: Masters

I have pleasure in informing you that the above application was **approved** by the Research Ethics Committee on 26 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

Research Ethics Committee Members: Prof KL Harris (Chair); Mr A Bizos; Dr A-M de Beer; Dr A dos Santos; Dr P Gutura; Ms KT Govinder Andrew; Dr E Johnson; Dr D Krige; Prof D Maree; Mr A Mohamed; Dr I Noomé; Dr J Okeke; Dr C Puttergill; Prof D Reyburn; Prof M Soer; Prof E Taljard; Ms D Mokalapa

Room 7-27, Humanities Building, University of Pretoria, Private Bag X20, Hatfield 0028, South Africa
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6.2 APPENDIX B: Kamcare permission



15 July 2021

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

Dear Dr Carbonatto

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

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

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

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

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

Kind regards



MRS LIEZEL LANDMAN
MANAGER: COMMUNITY DEVELOPMENT

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

6.3 APPENDIX C: Kamcare letter for provision of counselling



15 July 2021

The University of Pretoria
Faculty of Humanities
Research Ethics Committee

To whom it may concern:

RE: Counseling for research participants

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

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

My details are as follows:

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

Kind Regards,



MRS LIEZEL LANDMAN
MANAGER

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

6.4 APPENDIX D: Letter of informed consent



Date: 01/06/2021

Name: Ngoveni Sydney
Email: ngoveni.sydney@gmail.com
Cellphone No: 082 076 5305

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 on menstruation hygiene management in Roodeplaat rural community, Tshwane. The informed consent gives a brief explanation of the purpose and procedure of the research and the rights of participation. Please go through the form before you make an informed decision regarding your voluntary participation. Feel free to ask questions about the proposed study before signing the consent form.

Title of the study

The perceptions of female youth on menstruation hygiene management in Roodeplaat rural community, Tshwane.

Purpose of the study

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

Procedures

The researcher used social workers and other workers at Kamcare as gatekeepers to make you aware of the research and ask you to participate. Kamcare acted as an intermediary between the researcher and you, by informing you about the research and collecting your contact details, as you indicated an interest in participating in the study. The researcher collected your contact details together with those of all the potential participants who showed an interest in partaking in the study from Kamcare and contacted you. The researcher will be responsible for conducting a face-to-face interviews in order to collect data on your perceptions of menstruation hygiene management as a female youth. Once you sign this letter, you agree to take part in the study. The researcher will arrange to conduct a face-to-face interview with you when it suits you best. The interview will be recorded, with your

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permission, to ensure that all the information you are sharing is captured for research purposes. The duration of the interview will be approximately 45 minutes to an hour. A semi-structured interview schedule will be used during the interview to guide the interviewing process. Please note that the recording will only be used for the purpose of data analysis for research purposes and will be kept confidential. You have a right to access your data at any time you wish to do so.

Risks and discomforts

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

The researcher will avoid any form of harm to you during data collection process by not conducting the interviews himself, but rather using his two female co-researchers to assist in conducting an extra interview with two extra participants because of the sensitive nature of the study. Thus the researcher will merely get the set of collected data from the co-researchers to analyse. Extreme care will be taken to promote your well-being and avoid any possible harm. As face-to-face interviews will be conducted at Roodeplaat Community Hall or Vhathu Phanda Crèche in New Town, Roodeplaat, the female co-researchers will adhere to all covid-19 regulations as stipulated in Disaster Management Act 57 of 2002 as amended. The researcher will observe all covid-19 protocols and guidelines to protect both himself and you as a participant. The researcher will provide you with a free face mask and hand sanitizer and encourage you to keep social distancing as regulated in the covid-19 guidelines. Online interviews will not be feasible due to no electricity or internet available in your community. The co-researchers will do debriefing with you after the interview. If you need counselling after the interview, you will be referred to Ms L Landman from Kamcare, who has agreed to provide free counselling.

Benefits

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

Participants' rights

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

Confidentiality

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

Data usage and storage

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

Access to the researcher

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

Should you need counselling after the interview you can contact the counsellor Ms L Landman at 072 150 3994. Kindly note the services are free of charge.

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

Yours sincerely,



Sydney Ngoveni
Researcher

SECTION B: INFORMED CONSENT OF PARTICIPANT

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

Participant: -----
Date: -----
Signature: -----

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

Researcher: -----
Date: -----
Signature: -----

6.5 APPENDIX E: Request for permission to conduct research


UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Humanities 100.
1919 - 2019
Department of Social Work
& Criminology

14 July 2021

Ref.: Ngoveni Sydney (20636891)
Email: ngoveni.sydney@gmail.com
Cellphone No: 082 076 5305

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

Dear Mrs Landman

REQUEST FOR A PERMISSION TO CONDUCT RESEARCH IN YOUR FACILITY

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

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

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perceptions of female youth on menstruation hygiene management in Roodeplaat rural community, Tshwane.

The objectives of the study are:

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

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

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If they meet the selection criteria, they will be included in the study and sent a letter of informed consent via email. The empirical part will entail conducting individual face-to-face interviews using an individual interview schedule with the participants. I fully understand Covid-19 situation, but unfortunately it is unrealistic to plan for online individual interviews. This is not possible in Roodeplaat rural community, due to the fact that the potential participants reside in informal settlements where the people do not have electricity, data nor smart phones and cell phone reception is very poor. The researcher planned to conduct face-to-face individual interviews with participants at the venues made available, adhering strictly to social distancing, wearing of face masks and hand sanitizing, as well as other Covid-19 protocols. This will be done to observe the COVID-19 conditions as well as to protect the health and safety of the researcher and the participants.

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

Yours sincerely,



Sydney Ngovehi
Researcher



CL Carbonatto - Supervisor

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Lefaphe la Bomothe

6.6 APPENDIX F: Interview schedule

MSW (HEALTH CARE) 2020 GROUP **INDIVIDUAL FACE-TO-FACE INTERVIEW SCHEDULE**

Meeting data

Date: To be confirmed

Start time: To be confirmed

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

Elapsed time:

Participant data

Number of voluntary participants that attended:

Introduction

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

Theme	Question
1. Biographical information	Age Gender Marital status Number of children Religion Home language Highest qualification
2. Knowledge about reproductive health	<ul style="list-style-type: none"> • When did you learn about sex education or reproductive health and where did you access this information? • What do you understand by menstruation or menstrual cycle?
3. Menstruation experience and challenges	<ul style="list-style-type: none"> • How old were you when you started menstruating? • Can you remember this experience and how it made you feel?

	<ul style="list-style-type: none"> • Were you prepared and supported for your onset of menstruation and by whom? • Who was the first person you told about it and what was their reaction? • What advice did they give you and was it useful? • Were you ever teased about menstruating? How did you react to the teasing? • Tell me about your current menstruation experiences? • How does menstruation affect your social life? • Do you talk to anyone about your menstrual experiences? • Who offers you support during menstruation? • What are cultural beliefs or practices regarding menstruation you know of?
<p>4. Menstruation hygiene management and challenges</p>	<ul style="list-style-type: none"> • What is your understanding of menstrual hygiene management (MHM)? • Who told you about MHM? • What type of support do you receive or do you want? • What challenges do you experience regarding MHM? • What do you do to cope with MHM challenges? • What strategies do you implement to address these challenges? • What do you need to manage your period properly? • What MHM products have you used from your first period onwards?

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

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

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

6.7 APPENDIX G: Letter from language editor

714 Lochiel Street
Faerie Glen
Pretoria 0181, South Africa

December 13, 2021
The Academic Director
University of Pretoria
Pretoria

Dear Sir/Madam,

Ref: Editing services for mini-dissertation for Sydney Ngoveni

This is to confirm that I have edited the mini-dissertation prepared by Sydney Ngoveni for submission to the Faculty of Humanities, Department of Social Work and Criminology, University of Pretoria in partial fulfilment of the requirements for the degree of Master of Social Work in Health Care. The mini-dissertation is entitled: **The perceptions of female youth regarding menstruation hygiene management (MHM) in Roodeplaat rural community, Tshwane.**

The editing process was performed to ensure that the mini-dissertation conforms to the usage of professional business English with regards to grammar, punctuation and spellings. The editing did not in any way contribute to the structure, content or any other aspects that might add to the academic quality of the dissertation. The content and structure of the mini-dissertation remains the responsibility of the author.

Regards,



Silvester Hwenha

Research and M&E Consultant

MPS International Agriculture and Rural Development (Cornell University, New York, USA);

BSc Agric. Economic (University of Zimbabwe)

Email: shwenha@gmail.com

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6.8 APPENDIX H: Declaration from technical editor

DECLARATION OF TECHNICAL EDIT

I declare that I have edited the dissertation entitled: The perception of female youth regarding menstruation hygiene management (MHM) in Roodeplaat rural community.

My involvement was restricted to the technical editing of the document. I check that the spacing in the document is consistent, edit and number headings, insert captions, apply styles, create the table of contents and make sure that the document is of good quality.

Sincerely



EC Nagel

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