

**ADOLESCENT GIRLS' COMMUNICATIVE EXPERIENCES IN
NEGOTIATING ISSUES RELATING TO MENSTRUATION AT AN INFORMAL
SETTLEMENT IN NAIROBI, KENYA**

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DECLARATION

Declaration by Candidate

This thesis is my original work and has not been presented for a degree in any other University. No part of this thesis may be reproduced without the prior written permission of the author and/or Moi University.

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DEDICATION

I dedicate this thesis to my daughters, Valentine and Sasha, to whom my pursuit to understand bringing up daughters was a motivation to studying the topic on adolescent girls' communication.

ABSTRACT

Adolescence is a crucial stage in life that is challenging to most girls because of the physiological and psychological changes they undergo, compounded by the socio-economic implications of the onset of menstruation. In Kenya, there have been on-going campaigns and subsequent provision of sanitary towels to adolescent girls in urban informal settlements and among some marginalized communities as part of the efforts to ensure equitable access to education among females in poor neighbourhoods. However, scholars have argued that addressing adolescent girls' concerns requires a holistic approach that takes into consideration all the contextual factors that exacerbate the situation. The purpose of this study was to explore the menstrual communication of adolescent girls with parents, guardians, teachers, siblings and friends at school and at home in an urban informal settlement in Nairobi, Kenya. Its main focus was to examine adolescent girls' experiences in communicating their menstruation-related concerns, such as the need for sanitary towels and medication, and the need for permission to visit the wash rooms to change their sanitary towels during unexpected onset of menstruation at school. Further, the study investigated how the adolescent girls constructed the meanings of their menstrual experiences and how menstruation affected their lives. The study adopted a phenomenological approach to explore the meanings and interpretations of menstruation from the point of view of 22 adolescent girls aged between 15 and 17 years over a six-month period. The study explored the adolescent girls' own experiences of menstruation through journaling, body mapping, focus group discussions and individual interviews. The findings suggested that most parents did not prepare their daughters for menstruation, hence the girls found it difficult to initiate conversation about these issues when the time came. The majority of the participants treated menstruation-related issues with privacy, and could only share them with close friends and peers who offered information and psychological support during the moments of discomfort, especially when they experienced menstrual pains. In classroom situations, adolescent girls often found it difficult to discuss issues relating to menstruation, especially with their male teachers. The study further noted that, because of the culture of taboo surrounding the discourse on menstruation, adolescent girls established space for negotiating menstruation through the use of metaphorical language. Importantly, the metaphors selected reflected the socially constructed notions of menstruation within the adolescent girls' lifeworld. Based on these findings, the study concluded that the adolescent girls' lived experiences, together with the socially constructed meanings of menstruation, ultimately shape their communicative experiences. It was therefore argued that provision of sanitary towels is not sufficient in addressing issues related to menstruation among adolescent girls. To assist the girls manage menstruation effectively, there is also need to create a supportive environment by working with the communities to de-stigmatize menstruation and to sensitize teachers, parents and males about the need to offer support to girls undergoing menstruation, as well as giving a voice to the girls to speak out their concerns.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
APHRC	African Population and Health Research Centre
ARH&D	Adolescent Reproductive Health Development Policy
CAH	Child and Adolescent Health Development
CBO	Community Based Organizations
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
CFK	Carolina for Kibera
CRC	Convention on the Rights of the Child
FAWE	Forum for African Women Educationists
FDG	Focus Group Discussion
FGDR	Focus Group Discussion Respondent
FHLC	Foundation of Hope Life –Centre
GOK	Government of Kenya
HIV	Human Immunodeficiency Virus
ILO	International Labour Organization
IPPF	International Planned Parenthood Federation
IRB	Institutional Review Board
IRIN	Integrated Regional Information Networks
KBC	Kenya Broadcasting Corporation

KCSE	Kenya Certificate of Secondary Examination
KESSP	Kenya Education Sector Support Programme
MDG	Millennium Development Goals
MOE	Ministry of Education
NCST	National Council of Science and Technology
NGO	Non-Governmental Organization
PEPFAR	President Emergency Plans for AIDS Relief
PIFGDR	Pilot Focus Group Discussion Respondent
PMS	Premenstrual Syndrome
SHG	Self-Help Group
STI	Sexually Transmitted Diseases
UN	United Nations
UNESCO	United Nations Environmental Scientific and Cultural Organization
UNFPA	United Nation Population Fund
UNGEI	United Nations Girls Education Initiative
UNICEF	United Nations Children Education Fund
VAT	Value Added Tax
VCT	Voluntary Counselling and Testing
WFP	World Food Programme
WHO	World Health Organization

OPERATIONAL DEFINITION OF KEY TERMS

Adolescence: According to the Adolescent Reproductive Health Development Policy of Kenya, adolescence is the age between 10 and 19 years (GOK, 2003)

Menstrual related issues: In this study, menstrual related issues refer to the concerns of menstruating girls and women such as sanitary towels, toilet facilities, medication, and time to change among others.

Lived-experience: According to Given (2008), “lived experience incorporates the actual experience itself along with the meanings attributed to the experience by the person experiencing it” (p. 322).

Lifeworld: Coined by Husserl, the word life-world means “the every-day world of practical lived experience” (Ladkin, 2005, p. 112) or “the world as lived and experienced” (Crossley, 2005, p. 184). Similarly, the word lifeworld is used in this study to mean the world as lived and experienced by adolescent girls, in the contexts of school as well as home.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter provides an overall introduction to the study by summarizing the key issues that inspired the researcher to conduct the study. It is divided into subsections. It begins with the background to the study that provides insight into the challenges that adolescent girls face in relation to menstruation. This is followed by the statement of the problem where the crux of the study or the problem that inspired the research is highlighted. The overarching objective of the study is then outlined, followed by the research questions that guided the study. Thereafter, the scope of the study is discussed, followed by limitations, justification and the significance of the study. The chapter ends with a discussion of the theoretical approaches that guided the study.

1.2 Background to the Study

Adolescence is a momentous phase of life, a period of major physiological and psychological changes as an individual transits from childhood to adulthood (WHO, 2009; O'Connor & Kovacs, 2003; Chebii, 2012). In addition to the physical development, there are emotional, cognitive and psychosocial changes that take place in the adolescents at this stage of their lives (Africa, Deventer & Barnard, 2008). Emotional changes at adolescence include sensitivity to physical appearance, temperament, irritability and in some cases depression (O'Connor & Kovacs, 2003). Accompanying the emotional changes are the cognitive changes that include adolescents reasoning and thinking concretely. On the other hand, the psychosocial changes during adolescence comprise how the adolescents relate with their parents, peers, the family and the members of the society (ibid).

Moreover, adolescents have been estimated to form a fifth of the world's population by the World Health Organization (WHO), while World Bank estimates that in 2007, 1.5 billion people were aged 12-24 years mostly lived in the developing World (World Bank, 2007). This large segment of the population has, therefore, become a concern of many organizations, including WHO's Department of Child and Adolescent Health Development (WHO/CAH) which has contributed immensely in strengthening the health sector in a bid to make it responsive to the adolescent issues (WHO, 2009).

Further attention has been given to the reproductive health concerns of adolescent girls, particularly regarding their bodies, schooling and progression to motherhood. In this case, menstruation features not only as a reproductive health concern, but also as a complex cultural, social, economic and educational issue, especially in a bid to realize the Millennium Development Goals. It is not only a sign of maturation process in adolescent girls, but also holds a social significance in the way adolescent girls and women relate with other members of the society (Kotoh, 2008). Despite being a biological event, it determines the social status of women even in the societies where women are thought to be free (Kirk & Sommer, 2006; Fingerson, 2006).

Adolescence is a crucial stage in life for both boys and girls, but it is more so for girls, because it is a developmental transition marked by the ambivalence in the feelings of menarche. At menarche, adolescent girls struggle between being independent and seeking the support of the people they live with. Yet, this connection becomes difficult to negotiate, especially with the confusing feelings at that point of life (Lee, 2008). Lee documents the complexity of menarche as captured from menarche narratives (stories) where memories of women illuminated their first-period memories.

Studies have shown that menstruation is considered shameful, compelling women and girls to conceal this female experience in some societies. For example, a study conducted in Nyanza Province in Kenya indicates that girls are embarrassed about their menstrual experiences (McMahon, Winch, Caruso, Obure, Ogutu, Ochari & Rheingans, 2011). According to the study, girls view the body experience as a social stressor. Furthermore, most girls and women presuppose menstruation as messy, gross and embarrassing. Besides, this biological event is viewed with negativity as a polluting experience that has to be kept in check (Bobel, 2010). With this negative view, menstruation becomes a frustrating experience (Fingerson, 2006).

Another significant discussion on adolescence is sex education, where menstruation is the main unique female experience in relation to sexuality (Bobel, 2010). Subsequently, Fingerson (2006), like many other researchers such as (Kirk & Sommer, 2006), finds it odd that menstruation has generally been ignored in mainstream research yet it has a huge significance in women's health and well-being. Even with the increased interest in body scholarship, research is limited in terms of menstruation, because considerable amount of time and resources has been allocated to other aspects of women's lives compared to this feminine experience (Davis, 2007).

A growing body of literature has investigated the impact of menstruation on the adolescent girls (Rembeck, 2008; McMahon *et al.*, 2011; Kirk & Sommer, 2006; Fingerson, 2006; Kotoh, 2008). For example, in the United States, Fingerson (2006) has conducted a study on adolescent in which she posits that menstruation is considered shameful and a source of disempowerment, although in recent times there is a changing perception among the adolescent girls about menstruation, perceived as source of power. Rembeck, Moller and Gunnarsson (2006) have examined the thoughts, feelings

and attitudes that 12 year old Swedish girls had about menstruation. Their study demonstrates that adolescent girls have negative feelings towards the process, which lowers their self-esteem. Studies carried out in Asia, have presented menstruation as a hygiene crisis in societies with strict religious practices. For example, in India and Nepal, menstrual hygiene is considered important, to the extent of isolation or banishment of menstruating adolescent girls. In such cases menses is considered contaminating to holy spaces of the homes and religious spaces such as temples (Farage, Miller & Davis, 2011; Raut & Tandon, 2011; Kirk & Sommer, 2006).

Another study of women from 34 countries focusing on their reaction to menarche reports general negative emotions, although a few participants had a positive reaction towards it. A paltry number reported mixed reactions of positive and negative reaction to menarche (Bobel, 2010). Bobel (ibid.) also points out the ambivalence surrounding menstruation in the western societies where girls are applauded at menarche for being a woman, but instructed to hide the attainment of this stage of life. This mixed treatment of menstruation is confusing to the adolescent girls. In fact, in a Zimbabwean study, both domestic workers and professional women depicted the same emotions of fear and worry associated with this biological event (Bobel, 2010). These studies have demonstrated that menstruation is viewed with negativity all over the world (Bobel, 2010).

The reality of menstruation for many women is not fixed, but is composed of distinct experiences reshaped by the culture and the social economic contexts of individuals (McMahon *et al.*, 2011). This makes the onset of menstruation a physiological and psychological milestone in a woman's reproductive life (Swenson & Havens, 1987). Yet, in many African societies, women's reproductive health is relegated to the private

domain, and becomes invisible when it relates to the woman's menses. This experience tends to have a derogatory or indirect reference in most African communities. Sometimes it is referred to as 'that time of the month,' or 'seeing the moon' or 'stomach aches' or even 'going to the moon' (Kirk & Sommer, 2006). Nonetheless, menstruation is an experience that does not occur once, it actually happens for more than a half of a woman's life (Fingerson, 2006). Science and medicine have documented scientific facts and assumptions about women's bodily experiences. Nevertheless, in the midst of this debate, the voices of adolescent girls who have recently experienced menstruation are largely unheard.

1.3 Problem Statement

One of the most significant moments in the life of a growing girl is becoming a woman; the transition from childhood to womanhood. With this change come challenges relating to their health, psychological and psychosocial processes. Some of the health challenges include premenstrual syndrome and menstrual pains while psychological and psychosocial challenges range from body image, low self-esteem and loss of self-confidence (O'Connor & Kovacs, 2003; Rembeck, 2008).

In Kenya, there have been ongoing campaigns by the government, well-wishers and non-governmental and subsequent provision of sanitary towels to adolescent girls in urban informal settlements. This provision of sanitary towels has also been extended to some rural and arid areas in an effort to ensure that adolescent girls do not miss school during menstruation. Findings from research show that female adolescents from poor resource backgrounds do not attend school during their monthly periods due to lack of sanitary towels (Muvea, 2011). In effect, this approach seemingly views the problem associated with menstruation merely as a socio-economic one, which could simply be

addressed by providing sanitary pads to the adolescent girls in resource-poor communities.

According to Heise, Ellsberg and Gottemoeller (1999) human behaviour is a result of interplay of the personal, situational and socio-cultural factors. In this context, challenges related to menstruation among adolescent girls in informal settlements range from the social, economic, and cultural issues. A holistic approach to addressing inequalities resulting from menstruation should thus include a focus on the challenges that adolescents face in communicating about menstruation, a component that is largely missing in current literature. This calls for an in-depth understanding of the meaning of menstruation to these girls, and how their experience of menstruation affects how they reflect on what it means to be a woman in their lifeworld. Further, it is of significance to understand how adolescent girls communicate these experiences to their parents, guardians, siblings, teachers and peers, and how these experiences shape their lives.

1.4 Objective of the Study

This study sought to explore how adolescent girls schooling in a mixed day secondary school, and living in an informal settlement, make meaning of menstruation. It further, investigated how the girls communicate about their menstrual experience, with the intention of understanding, what it means to them, while generating knowledge which would help break the culture of silence on menstruation. When this silence is broken, and menstruation is demystified, the girls will be able to talk about their experience both at home and school without feeling embarrassed.

1.5 Research Questions

To achieve the objective above, the study focused on answering the following questions:

- a) What meanings do schooling adolescent girls make of their menstrual experiences?
- b) How do adolescent girls communicate their menstrual experiences?
- c) How are adolescent girls' experiences of menstruation grounded in their daily lives?
- d) In what ways do menstrual experiences affect the way adolescent girls live?

1.6 Scope of the Study

Some studies (Fingerson, 2006; Nzioka, 2004) have shown that adolescent girls are faced with many challenges in relation to their bodies. These concerns range from unhealthy sexual behaviours, lack of menstrual knowledge, menstrual management, and taboos related to menstruation. Research on adolescent girls has also focused on eating disorders, self-esteem, body image and appearance, hair issues, and physical exercises, among others (Fingerson, 2006; Rembeck, 2008). Previous studies have extensively focused on menstrual management and hygiene (McMahon *et al.*, 2011; Bharadwaj & Patkar, 2004; Dasgupta & Sarkar, 2008), cultural beliefs (Bharadwaj & Patkar, 2004; Kotoh, 2008) and some femicare products, such as eco-feminists who propose the use of menstrual cups and homemade cloth pads (Bobel, 2010). At the same time, there have been multiple studies on taboos, cultural practices and menstrual attitudes in relation to this complex experience (Kirk & Somer, 2006; Kotoh, 2008). Stemming from these, this study focused on the meanings of menstruation and how the adolescent girls communicate their experiences at school and at home.

In addition, studies have been done on terms of the physiology of menstruation (O'Connor & Kovacs, 2003), health education (Allen, Kaestle & Goldberg, 2011), and media advertisement of feminine products in relation to this phenomenon (Bobel, 2010; Fingerson, 2006). However, this study took a different perspective; it viewed

menstruation not just as a physiological process, but as an experience of post pubescent living and schooling in a poor neighbourhood.

In terms of the approach, the study of the female body has received attention from scholars in different fields, for example. In this regard, poststructuralist feminism in the developed world explored female bodies in relation to social empowerment (Fingerson, 2006; Agnew, 2012). From the media contexts, the body is studied in the view of television films and popular magazines representations (Lucal, 2013; Bobel, 2010). However, this study explored the female body, attending to menstruation as a communication concern among secondary school adolescent girls living in an informal settlement.

From the existing body of literature (Fingerson, 2006; Bobel, 2010; McMahon *et al.*, 2011; Kotoh, 2008 & Agnew, 2012), studies on menstruation have focused on the adolescent girls from different backgrounds taking different perspectives as well, in relation to menstrual management, cultural beliefs, taboos and menstrual practices. Studies on menstruation have been conducted globally for example in America, Asia, Europe and in Africa, on adolescent girls and women of different ages and backgrounds in terms of resources, the resource-poor settings and the resource rich areas. Taking a phenomenological approach, this study focused on the post menarche Kenyan adolescent girls from a government mixed day secondary school in an urban informal settlement.

Menstruation is a process that takes place in females between the ages of 12 and 45 years, and this study was limited to secondary school adolescent girls between the ages of 15 and 17 years. The study was interested in menstrual experience. Therefore, only girls who had experienced menstruation for more than two years met the sampling

criteria, because for a phenomenon to be an experience it must have been experienced longer; secondly, the first 1-2 years of menses are usually characterised by irregular periods (Sharma, Teneja, Sharma & Saha, 2008), and therefore, menstruation cannot be considered as an experience then. Lived experience with regards to menstruation has a strong bearing on how girls will communicate to their parents, guardians, teachers and peers, even with their children in the future regarding this subject for the rest of their lives.

The study was conducted in an urban informal settlement in an African context that has been viewed to have gendered dynamics in terms of communication. However, the study's interest was not the gender dynamics of communication, but the meaning of menstruation to adolescent girls, and how they communicated these experiences.

1.7 Limitations

Generating data in a mixed day secondary school was not easy, especially on a topic that could lead to stigmatization of the adolescent girls. Even after I had sought consent from the adolescent girls and their parents, the journals were not easy to monitor. The girls did not have cell phones; therefore, reaching them was not easy, especially during the school holidays. The difficulty in administering and monitoring of the journals led to a low response rate, with only 10 journals received out of the initial 22 at the end of the study. Other challenges that affected the response rate of the journals were the privacy of journals both at school and at home. Some girls feared that members of the family, especially their siblings, could find them, while at school the boys were a threat.

Another limitation of the study was the transfers of students. The study began with a sample of 22 participants, two girls transferred even before the study commenced. Later, another participant dropped out of school leaving the study with 18 participants while

one was in the same class, but withdrew from the study after the administration of the journals. However, the study was still valid because a phenomenological study requires between 1 to 25 participants, therefore it was still within the limit.

This study being a phenomenological study required the researcher to set aside all assumptions, feelings, attitudes and perception about menstruation in order to generate the essence of the phenomenon that is 'true'. It was not easy to totally bracket out every assumption, feeling and perception of menstruation being a woman with knowledge about the same experiences. However, this did not affect the validity of the study.

1.8 Justification of the Study

Even with the importance of the menstrual process, in research most studies in the past have tended to place emphasis on menstrual pathology, while other studies have focused on the physiological and psychological challenges of menstruation such as concealment and menstrual hygiene (Fingerson, 2006). Some studies have focused on menstrual practices and perceptions, taboos and attitudes that adolescent girls have towards menstruation (Rembeck, 2008; Raut & Tandon, 2011; Kotoh, 2008). Menstrual hygiene and management have also been researched on and exemplified by Bharadwaj and Patkar (2004), who take stock of countries in Asia and the sub-Saharan Africa.

Most literature that describes menstruation involves research on older women. In this case, the data generated in the earlier studies was from older women's recounting of their menstrual experiences, as held in their memories. Other researchers, like Fingerson (2006) and Rembeck (2008), have interviewed girls as young as 12 years at menarche. The present study investigated the menstrual experiences of adolescent girls between the ages of 15 and 17 years, because by this age most adolescent girls have regular periods. The study focused on their experiences at the moments of menstruation, the 3-5

days of the menstrual cycle, and at other times of the menstrual cycle. Unlike previous studies, this study also sought to find out how the girls communicated these experiences to their parents, guardians, siblings, peers and teachers, therefore placing importance on the communication aspect of the process.

1.9 Significance of the Study

One of the significant discussions on adolescent schooling girls is the relationship between their body experiences and their education. For adolescent schooling girls, menstruation is a crucial moment, as they transit from childhood to adulthood. Therefore, a deeper understanding of menstruation is important in a bid to educate girls to view it as a natural body process in their daily lives. Moreover, every adolescent is unique and has different reproductive needs. Access to sex education is a right for young people as ingrained in international treaties and conventions such as the Convention on the Rights of the Child, the International Covenant of Economic, Social and Cultural Rights, and the International Conference on Population and Development Programme of Action (IPPF, 2009). Sex education plays a key role in a bid to curb the spread and infection of HIV among the adolescences. Therefore, an understanding of what adolescent girls go through during menstruation, will inform the girls themselves about their reproductive health needs serving as an empowerment to these girls.

According to Kamaara (1999), reproductive health problems are one of a host of other socio-economic problems facing the Kenyan youth. She argues that these reproductive health needs have not been met hence making the adolescent girls more disadvantaged. She further notes that there is a dire need for sex education, which the Kenyan government seemed not committed to. This study will be useful to health experts, program planners, their support staff, researchers and other professionals.

So far, there has been minimal attention given to the significance or meaning of menstruation to girls as they transit through puberty, with researchers more focused on girls' psychological response to the event and its consequences to their self-esteem (Kirk & Sommer, 2006). Menstruation being a phenomenon that encompasses many spheres of women's lives cannot be ignored. To understand the meaning of menstruation to adolescent schooling girls, there is need to explore how and what they communicate about this body experience. By exploring what goes on in adolescent girl's lives during menstruation, one can understand their experiences in their lifeworlds. This knowledge will be useful to parents, teachers and other stakeholders in better understanding of adolescent girls. Policy makers and education stakeholders could use this study to revise the curriculum to give it a provision for the treatment of female issues in discussions that would be more meaningful, and recognize that menstruation is a body experience in the adolescent girls' lived world.

The Kenyan Ministry of Education and other African countries will benefit in the process of rolling out programmes on provision of sanitary towels in schools. This year (2013), for example, the Kenya government has allocated Ksh 210 million to provision of sanitary towels to adolescent girls in some government schools in Kenya. This study contributes to the programme by enlightening the government to include menstrual education in the sanitary towels programme. By educating them on the natural body process as well as providing the sanitary towels, girls will be empowered to manage their menses with confidence; improving school attendance, academic performance and their self-esteem.

The study will also act as a 'silent empowerment' to the girls, some of whom might have been given sanitary towels which act as a form of economic empowerment. The

ability to have them talk about their lives or experiences is equally important. In the past, menstruation was treated with silence, resulting in stigma and marginalization of women and girls. Therefore, this study is useful for teachers to make it possible for pupils to speak of their silenced experience in the classroom. By talking about it, the culture of silence on menstruation will have been broken, eventually demystifying it as an unclean process, and making the adolescent girls accept it as a natural body process. It is only through their bodies that the adolescent girls experience the world. It encourages adolescent girls to celebrate menarche as transition a point in their lives by viewing and menstruation as normal and natural for any healthy adolescent girl.

1.10 Theoretical Framework

Phenomenology is a movement that originated in Europe in the early 19th century as a counter revolution to positivism. In Europe, then, scholars who were tired of positivism became interested in developing a new philosophical approach that would explain the conscious experiences of human lived phenomena that are connected to human habits in their world (Stark & Trinidad, 2007). Phenomenology rallies the argument that reality exists within a given context, and out of that many constructions are possible (Somekh & Lewin, 2011). It countered positivism by contesting that knowledge or epistemology is maximized when we get information through a subjective view and this subjective view is about how individuals experience reality. Therefore, when looking for information through a phenomenological lens you are looking for that which is clear and that which can give you substance of the multiple ways or dimensions of reality both to the participant and to you the researcher (Somekh & Lewin, 2011).

Phenomenology has various phases; the first was from Kant (1786) who introduced the concepts of phenomena as whatever is known, but did not go beyond (Given, 2008). Hegel followed in 1807 and expanded the notion of phenomena and said it is a state of

being in existence. It was then taken up further by Brentano and Stumpf who introduced other concepts such as intentionality and inner perception. By intentionality they expressed it as the ability to create a mental object from one's reality, while inner perception meant the personal awareness of lived experience (Given, 2008).

The second phase of phenomenological development was through the works of the German philosopher Edmund Husserl (1859-1938), commonly referred to the father of phenomenology. Husserlian phenomenology, commonly known as the descriptive tradition, held the assumption that experience is perceived through human consciousness and that it is this consciousness which should be subjected to scientific study (Given, 2008; Somekh & Lewin, 2011; Wojnar & Swanson, 2007). Edmund Husserl took up the debate and furthered two important tenets, inter subjectivity and lifeworld (Somekh & Lewin, 2011; Given, 2008; Crossely, 2005).

Husserlian approach to phenomenology holds the assumption that all humans who have common experiences share some common features which he called eidetic structures. Therefore, the concept of bracketing is meant to aid in achieving objectivity in human experiences. Husserl advocates for bracketing in order to achieve a rigorous and objective result in a phenomenological study. Wojnar and Swanson (2007) assert that it is important to retract from personal biases in a quest for pure consciousness. More important is the belief that meaning resides in the lived experiences, and that this can only be teased out through a close and specifically "one-to-one" transaction between the researcher and the object of research" (Wojnar & Swanson, 2007 p. 173). Bracketing is a descriptive phenomenological technique is employed to achieve objectivity and scientific rigor in studying human lived experiences. A thorough inspection and definition of this phenomenon leads to the understanding of its structures (Wojnar &

Swanson, 2007). It is only when the phenomenon is met on its terms without any preconceptions, biases nor any prior personal knowledge on the phenomena does a researcher gain insight into the subject matter.

Apart from Husserl, other philosophers who have contributed to immensely to this paradigm, where they extended what were initiated by Husserl. They developed and refined the concept of phenomenology. With the contributions of the philosophers mentioned above, there emerged an independent approach to science that departed from empirical science. This new approach (hermeneutics) furthered a restoration of precision and thoroughness in science with a focus on the conscious experiences as lived by individuals (Given, 2008).

Hermeneutics a theory of interpretation and understanding has its etymology from the Greek god of interpretation Hermes, who in Greek mythology interpreted the messages from the gods to human beings (Given, 2008). In the process of relaying these messages, Hermes interpreted the messages to the receivers. Further, hermeneutics was crucial in the interpretation of the bible, in what was called biblical hermeneutics.

With its long history in the ancient Greece, stretching to the interpretation of the bible to Christians, hermeneutics is a crucial theory in the interpretation of texts and utterances. In the 18th to 19th century, Friedrich Schleiermacher (1768-1834), initiated the concept of interpretation as a process that happens when people interact with texts or utterance. His distinction between psychological and grammatical interpretation, opened the way to solving problems in understanding of texts (Stanford Encyclopedia of Philosophy, 2009; Given, 2008).

Two levels of interpretation were extended by Schleiermacher, the grammatical and technical. In this sense, the interpretation of text which could be spoken or written is

dependent on language. Whilst technical interpretation, constituted the interpretation of texts (written or spoken utterances) as it relates to the source or the speaker/writer. Therefore, according to Schleiermacher, interpretation is a mental process (Mulwo, 2008).

Another philosopher who contributed immensely to hermeneutics was Wilhelm Dilthey(1833-1911). Drawing the distinction between natural sciences and human sciences, Dilthey, endeavoured to develop a human science that was distinct. Further Dilthey broadened hermeneutics, by dividing spiritual sciences into experiences, expression and comprehension, which laid the foundation on the concept of understanding, in the exploration of meanings (Stanford Encyclopedia of Philosophy, 2009; Given, 2008).

In the 20th century, Martin Heidegger (1889-1976) simply continued the debate of phenomenology by giving two branches of phenomenology: hermeneutics and existentialism. Hermeneutics also commonly known as the interpretive phenomenology describes the nature of being human and being concerned about one's world. The emphasis in this case is not cognitive knowledge or understanding how things are, but lived experiences. This lived experience is based on a particular juncture of one's life, set of circumstances, relations and conditions. It's also crucial to note that language is the primary vehicle for describing the meaning derived from the lived experiences (Little John & Foss, 2009). Heideggerian phenomenology also referred to as hermeneutics or interpretive phenomenology perceives that individual understanding is contextual in terms of culture, history or society. Equally important is the relevance of individuals and their various contexts as influencing how they make choices and what meaning they attach to their lived experiences. Individuals cannot separate themselves

from the influence the varied contexts and the meanings these contexts give to their lived experiences (Wojnar & Swanson, 2007). Hermeneutics is the process of unearthing the hidden and normally taken for granted human experiences, making them significant in human life. Hermeneutics not only describe human experiences, but also search for the underlying and embedded meanings of the phenomenon as it is in the natural life as lived in the world. Moreover, a hermeneutic inquiry has its centre point on human experiences (Lopez & Willis, 2004).

Martin Heidegger (1889-1976), in his famous book, '*Being and Time*' (1927), a phenomenological ontology based on the concept of *Dasein* (being-there), proposes that we exist in the world, because we are present in the world. In this text, Heidegger further elaborates on the concepts of understanding, assertion and interpretation. Understanding in this sense is the way *Desien* gets to know the world. Martin Heidegger asserts that "the experience of being in the world is the basis for understanding and interpretation" (Given, 2008, p.327). Whilst interpretation a result of an encounter between a reader and text is determined by the fore structures of the reader (Given, 2008; Mulwo, 2008). Heidegger, further introduced the concept of hermeneutic circle to explain how fore- structures or prior knowledge, has a bearing on the interpretation and understanding of text. That understanding is not linear, but happens in circles. Further that we understand because the subject of our understanding has been asserted through language. According to Mulwo (2008) we understand because we can self-understand as well as understand the everyday experiences in the lived world.

Following Heidegger was Hans-Georg Gadamer (1900-2002) who furthered philosophical hermeneutics. Gadamer, whose goal was to show how human understanding takes place believed in tradition as important to understanding. Using

the metaphor of fusion of horizons, Gadamer argued that the understanding of the world is determined by prior experiences, which people carry forward when interacting with new horizons achieving new meanings (Given, 2008). Therefore, a new horizon is learning as a result of new meaning formed by the fusion of horizons. In addition, Gadamer in his book *Truth and Method* (1960) posits that human beings understand the world through language (Mulwo, 2008).

In the recent years, significant influence on the development of hermeneutics has been seen in the works of significant philosophers such as Paul Ricoeur (1913-2005). In agreement with Heidegger and Gadamer, on interpretation and understanding, Ricoeur laid emphasis on the historicity of *Dasein* as proposed by Heidegger. According to Ricoeur, pre-understanding is crucial in understanding human beings. Further, language is crucial because it is through language that meaning is carried. Therefore, understanding the 'symbol' is important in understanding because through interpreting the symbol once can understand the many meanings that exist, resulting in self-understanding (Mulwo, 2008, Given, 2008).

Jurgen Habermas (1929-) a contemporary philosopher, is among some of the world's influential philosophers. With regards to his interests in the social sciences, he further developed the concept of lifeworld in social theory. According to Habermas' social theory which is grounded in communication, the lifeworld is the background environment which constitutes, linguistic meanings that arise from culture and the society. Therefore, interpretation is dependent on the social -cultural forms of human societies (Stanford Encyclopedia of Philosophy, 2009).

Wojnar and Swanson (2007) contend that explaining the concept of intentionality and meaning from the participants or the individual's first hand and from his or her lived

experience are the mainstay of phenomenology. The core of phenomenology is the possibility of individuals explaining their experiences of the phenomenon being studied, because the truth can only be acquired from the lived experiences of the individual (Creswell, 2007; Le Vesueur, 2003). Further, Wojnar and Swanson (2007) credit phenomenology for illuminating into the ignored experiences of human beings, with the aim of exploring the meaning making process of human lived experiences.

Seeking to eventually analyze the perceptions of human beings, phenomenology contends that reality is only understood through examining individual embodied experiences. Through phenomenology, meaning of the usually “taken-for-granted assumptions on knowing can be deeply understood. Therefore, a “phenomenological analyst seeks to capture the meaning of common features of essences of an experience or event” (Stark & Trinidad, 2007, p. 1374). Employing the phenomenological approach the study recognized the significance of exploring the nature of an individual’s lived experiences in their life-world (Crossley, 2005).

Following the works of Husserl, Schleiermacher, Wilhelm Dithley, Heidegger, Hans-Georg Gadamer, Paul Ricoeur, Jurgen Habermas, this theory was mostly used in the field of nursing, as a crucial element to holistic nursing. According to Wojnar and Swanson (2007), “holistic nursing draws from Western and traditional health care practices as well as nurses; and patients’ experiences, emotions, health beliefs, and values. The concepts of healing, and wholeness are central to holistic nursing” (p. 172). Nevertheless, this theory is applicable to other studies, which place importance on lived experiences taken for granted in the society. In this section, the application of the theory of phenomenology to this study is explained.

This study was majorly guided by the phenomenological approach which recognizes the significance of lived experiences as the essence to be studied. At the point of conceptualizing the study, phenomenology as a theory guided the study by shedding light on the taken-for-granted human experiences of menstruation. Secondly, it guided the framing of the research questions into phenomenological questions. The first question sought to understand the meaning of menstrual experiences to adolescent girls; the second question explored how the adolescent girls communicated these experiences. The third sought to understand how menstruation as a lived experience positioned adolescent girls in their daily lives, living and schooling in an urban informal settlement. The fourth question inquired how menstrual experiences affected the way adolescent girls lived their lives.

At the sampling stage, the theory guided how participants were sampled, the sample frame and criteria. It guided the purposive sampling of those participants who had experienced the phenomenon (menstruation). Starks and Trinidad (2007) reiterate that “each approach involves use of purposive sampling methods to recruit participants who have experienced the phenomenon under study” (p. 1374). While the sample size was also guided by the theory, such that phenomenological studies require a small sample size since, Creswell (2007) advises on a sample between 5 and 25 participants, while Starks and Trinidad talk of a typical range being between 1 and 10 persons. This study purposively sampled one class which had 22 adolescent girls aged 15-17 years. The participants had experienced menstruation for at least two years, prerequisite for selection of the participants into the study. The participants must have experienced the phenomenon of menstruation; therefore, the study required the adolescent girls only, not the teachers, nor the parents.

At the point of data generation guided by phenomenology, the interview strategy was used, where both individual interview and Focus Group Discussions (FGDs) formed the data generation instruments, to allow participants describe their menstrual lived experiences, first hand. To understand the experiences of menstruation, journals were used to elicit data at the moments of menses. In addition, body mapping, a participatory approach to research, was used to make the participants relax, self-reflect, create a dialogue on the menstrual experiences of the participants. The individual interviews probed the participants to attain clarity and details on the subject of study; at the same time I suspended my knowledge on menstruation, feelings, thoughts, experiences, perceptions and biases in order to actively listen to the participants in a bid to generate the essence of the subject of inquiry from the participants themselves.

Phenomenological analysis of the data generated was done by teasing out the significant statements that appertain to the phenomenon (menstruation) understudy. Colaizzi's (1978) method was employed in the analysis of the data generated from the different data generation tools. Once the significant statements had been described the essence of the phenomenon of menstruation (further explained in chapter three) to the girls was thus obtained. The meanings were placed in clusters of themes; nuances were also identified before a text description of the essence of the phenomenon.

This theory was not without shortcomings, especially with regard to the concept of bracketing, where it was not easy to totally abandon knowledge on the subject of the study. Therefore, I abandoned all knowledge, personal biases, feelings, attitudes and perceptions of menstruation, only at the point of generating data.

The second theory that guided this study was the social construction theory, which can be traced to early philosophers such as Giambattista Vico, and in later developments to

the works of Peter Berger and Thomas Luckman that culminated in a book titled *The Social Construction of Reality* (Given, 2008). The key idea emerging from social construction is that “what one takes to be knowledge of the world and self finds its origins in human relationships” (Given, 2008, p. 817).

The social construction theory, examines how reality is constructed in the world. The theory postulates that meanings are not an individual construct, but a result of interaction of human beings in everyday life. This theory uncovers the ways in which human beings participate in the process of construction meaning of social phenomena. Once these constructs are in place they are maintained, constantly so that they can remain the way it is, resulting in societal norms. Therefore, meaning is intersubjective, because it is a result of the members of a group or community’s shared meanings of a particular phenomenon (Given, 2008; Mulwo, 2008; Barrow, 2010).

To elaborate further, Mulwo (2008) argues that the social reality perceived by the public emerges from a construction of each member of any given group as accumulated overtime from the reality of everyday life (Mulwo, 2008). He recognizes “that meaning of different individuals in a society relate to, and are to some extent dependent upon meanings of others” (p. 92). Furthermore, the members of the society use language to communicate these shared meanings making language the most essential system that enable human beings to construct reality. As human beings construct social reality, they create knowledge out of it. The process of constructing reality is therefore dynamic, with constant interpretations, maintenance and re-affirming of these social constructs in a bid to make them persist (Barrow, 2010). The social construction theory was therefore useful in this study because it explained the existence of multiple realities as a product of social constructions by the different members of the society.

In this study the phenomenological theory, both descriptive and interpretive provided complementary framework within which this study was conceptualized and developed. The phenomenology helped excavate the meanings of menstruation. It also concerned itself with the methodology and philosophy of interpreting the meanings of menstruation, whereby the interpretation of the menstrual process by the adolescent girls was important in the researcher's understanding of adolescent girls. Phenomenology (hermeneutic theory) was significant in explaining about the multiplicity of meanings as generated by the girls. However, phenomenology was not sufficient in explaining the root of these constructs in the society, where the social constructivist theory provided the needed explanation. Therefore, the social construction theory was important in providing the understanding of the process of meaning production in the society.

1.11 Summary

So far, this chapter has presented a background against which the study was conducted. From the background of this study, it has been noted that World Bank, WHO and its significant departments which are international agencies, recognize the importance of adolescent girls in the realization of the Millennium Development Goals. The provision of sanitary protection to adolescent girls has been viewed as a way of reducing absenteeism from school and subsequent drop-out of adolescent girls, yet it does not completely stop absenteeism of adolescent girls from school.

Menstrual related problems in this sense are multifaceted, needing more than just providing the sanitary care. An understanding of the experience itself and how the girls communicate these experiences could be useful in curbing the menstrual challenges of adolescent girls in their private and public lives. Guided by phenomenology theory, the study sought to explore the meanings of menstruation, while the social construction

theory drew light into the social construction of the phenomenon. The next chapter further explores the literature on menstruation as a lived experience, and undertakes a review of menstrual practices and perception in various communities, eventually highlighting the gaps that this study sought to fill.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviews past literatures that are related to the study. The review of literature by other researchers and scholars was useful in enabling me identify the key areas that have been researched on, the weaknesses of past researchers, and the gaps that the present study intended to fill.

This chapter is divided into five sections: the first ‘Adolescent Development’ explored the different developmental changes that take place during this transition point in the lives of all adolescents, and thereafter anchors itself on the changes that are specific to the female adolescents. These changes are physical, psychological and emotional in nature, rooted in the hormonal changes that take place in the adolescents’ bodies. The study discusses menstruation as an adolescent change. This significant change is further discussed in relation to the societal beliefs and taboos, practices that relate to the phenomenon, and the language used to describe the body change.

The second section, ‘Adolescent Girls’ Communication’, discusses reproductive and health issues in relation to female adolescents from their perspective. This section invited the voices of the adolescents from both the economically privileged, and the marginalized to tell their experiences through studies that have been conducted by other scholars. Furthermore, the section targeted to underscore the importance of girls communicating their body experiences, privileging the voice of the girls to accentuate their feelings and thoughts. The third section explored campaigns on adolescent girls’ needs in terms of efforts made in provision of sanitary protection, disposal, sanitation, hygiene, and policies on sustainable sanitary towels provision for female adolescents.

While the forth section discusses theories that provided lens into the study, and the last section gives the rationale or the gap that the study filled.

2.2 Adolescent Girls' Development

Adolescence, a formative stage in human life, is the link between childhood and adulthood (Klimstra, 2012). This stage is marked by physical changes in body size, and ability to reproduce, as well as psychological changes including the ability to think critically, an expanded reasoning capacity, identity formation and sensitivity to the new body image (Chebii, 2012). The transition from childhood to adulthood is not a smooth journey, that is why Rembeck (2008, p. 1) terms it as a 'winding road'.

Literature suggest that adolescence is divided into three stages, namely the early stage, which is between the ages of twelve and fifteen, the middle stage, between age of fifteen and seventeen, and the last stage is between seventeen and nineteen years. At menarche (first menstruation), a female adolescent already has pubic hair and breasts, with a curvy figure. Other expected changes are body odour, sprouting of acne and even an attack of dandruffs (O'Connor & Kovacs, 2003). Early adolescence is actually the most difficult time for the adolescents who are still children, yet their bodies are getting transformed.

O'Connor and Kovacs (2003) identify hormonal changes, sporadic growth of the body and the organs, development of secondary sexual characteristics and the distributed body fats and muscle change at puberty. At this developmental juncture, the adolescents become visibly preoccupied with their own body and self-attaching great importance to their peers (O'Connor & Kovacs, 2003). At middle adolescence, a female is physically, but not emotionally, socially and cognitively mature. Mid-teenage period marks a stage of intense change in the behaviour of the teenagers. On the other hand, late teenage is

usually a stage with minimal physiological growth compared to the earlier stages. There is a decline in growth, and this marks the end of primary and sexual changes in the female adolescents, as it marks the onset of adulthood and a possibility of fertility as well (Kids Growth, 2010).

Psychological development at adolescence is a key component in the transition from childhood to adulthood. This includes the cognitive and socio-emotional components of the development (O'Connor & Kovacs, 2003). Like the physiological development, this development is also composed of three stages, the early, middle and the late stages (O'Connor & Kovacs, 2003). Early adolescents are usually sensitive with their physical appearance, with most female adolescents dissatisfied with their body images, always wanting to cut their weights. The rapid changes in their bodies become a cause of concern making them shy, and in need for privacy. At this stage, the female adolescents become curious about sex matters, with a new feeling about their bodies. Friends become more appealing at this stage than family members especially parents who are viewed by the adolescents as imperfect with many faults that are normally pointed out by the adolescents themselves (Kids Growth, 2010).

To fit into these groups, the adolescents tend to conform to the behaviour, physical appearance and speech of the group members. Unger (2001) notes that at this stage adolescences rebel against unfairness by authorities and social injustices, offering a dress rehearsal for adulthood. Therefore, middle adolescence, most pubertal changes are already in place. This then means that the adolescents become increasingly concerned with their newly acquired physical appearance which they believe is a concern to other people as well. The female adolescents at the same time become engrossed in grooming, exercising, and using make-up, and dress for body image. Unlike the early adolescents,

the middle adolescents tend to develop feelings of tenderness towards the opposite sex making sexuality matters a major activity, sometimes being tempted to engage in risky sexual activities or abuse drugs (Kids Growth, 2010).

During this developmental stage, the experiences of the adolescents are not restricted to their homes because of their interaction with adults outside their home. A common feature among the middle adolescence is the complaints of interference from adults who they already have a lowered opinion about on teenagers' independence. Adolescents adore friends; a fall out with friends could cause depression and anxiety at this stage in their lives. Peer group approval as well as trust in each other means more than their parents (Kids Growth, 2010).

At this stage of their lives, adolescents are untidy, annoying and do not clean up. Hiding their need for parental affection and love is also common at this stage. Late adolescence, from the age of 17 years onwards, marks the end of physical development and a period of emotional stability. Moreover, adolescents are less concerned about their bodies and have developed a clear sexual identity and self-esteem. The need and dependence on peers declines paving way for development of close relationship with parents. The dependence on peer group wanes with a development of individual friends, who could also be intimate friends from the opposite sex (Kids Growth, 2010).

Critical thinking and an improved ability for self expression abound here, especially the young adults thinking about their future lives and career establishment. They pride in the ability to work and earn a living, on the other hand, late adolescence is marked by a kind of settling down where teenagers, though still adamant and rebellious, tend to make major choices in their lives. At this later stage of adolescence, they tend to distance themselves from their parents spending less time with them. This stage also

marks identity formation of the adolescents who engage in stable relationships with peers as to make up for the disturbed relationship with their parents (O'Connor & Kovacs, 2003).

2.2.1 The Nature of Menstruation

To understand the process of menstruation, it is important to define the debut of menstruation. Menarche is termed as the first period or bleeding of a female adolescent. This is the most important event in an adolescent girl's life (Zegeye, Megabiaw & Mulu, 2009). At adolescence, girls experience the onset of menstruation or menarche which is a "unique marker of female maturation" (Rembeck, 2008, p. 1) and the beginning of a woman's reproductive life.

The two hormones, follicle stimulating hormone (FSH) and luteinizing hormone (LH) are responsible for the production of oestrogen, a female hormone that triggers the secondary sexual characteristics in the female adolescents such that a rise in the level of oestrogen causes the maturity of female reproductive organs (Kids Growth, 2010). This leads to the thickening of the uterus wall which crumbles due to lack of fertilization and subsequently bleeding, which is referred to menstruation.

However, the reception of this experience is determined by the preparation for the onset of menstruation and subsequent menstrual knowledge acquired by the female adolescent (Epigee Women's Health, 2012). Negotiating this stage, for the adolescent girls, depends on prior knowledge on menstruation. On the other hand, the community and the family may celebrate this moment or ignore it (Kirk & Sommer, 2006). Moore's (1996) anthropological study amongst the Marakwet reveals that this stage is looked at with great expectations from the elders to the young. For young girls, Moore notes, it is at this stage that adolescent girls are faced with the need to belong to a group, the

challenges of adjusting to the new body image, acne, dandruff and in some even body odour. O'Connor and Kovacs (2003) concur that this moment is a special event in many cultures. The new prospects of marriage presented by the fertility may interest parents because they can now enhance their economic status from dowry paid for their daughter (Kirk & Sommer, 2006).

Literature on adolescent development indicates that the onset of menarche is not fixed. According to Epigee Women's Health (2012), the onset of menarche could be as early as 9 years or as late as 16 years. Late menarche is termed as primary amenorrhea. This variation of the age of menstrual onset results from many factors such as genetics, nutritional and health status, socio-economic factors, geographical location, environmental conditions and the physical fitness of the adolescent (O'Connor & Kovacs, 2003).

The menstrual cycle as well varies among the adolescent girls the normal ovulatory cycle being between 21 and 35 days, with an average of 28 days. The onset of menarche is characterized by irregular and heavy bleeding which may last for the first two years among the female adolescents, menstruation at this age lasting for 3-10 days at an average of 5 days for most adolescent girls. In most cases accompanying menarche and menstruation, as O'Connor and Kovacs (2003) observe, are menstrual complaints or problems among the female adolescents, heavy menses being a common complaint among teenage girls resulting from hormonal changes in the body. Worth noting is the fact that during the first year after menarche, only 15 percent of the adolescent girls menstruate regularly.

At adolescence, girls face physiological and symptomatic challenges, most notable the premenstrual syndrome (PMS), which greatly affects the way the adolescent girls relate

with teachers and other students at school, parents and siblings at home. Accompanying the hormonal changes are irritability, tiredness, tension and depression, while at the onset through to the end of the menstrual process, are more discomforts ranging from backaches, bloating around the stomach area, swelling around the ankles resulting from the retention of fluids. Most challenging is dysmenorrhea, which is experienced by females between the ages of 15 and 25. These stomach and back pains could result in prolonged bed rests, and need for medication meaning that some adolescent girls could miss out on both school and social activities at these times (Chebii, 2012).

Dysmenorrhoea a common complaint in 60% of post-menarche adolescent girls is linked with the ovulatory cycle of the adolescent girls. This occurs later even up to one year after the onset of menstruation, at the same time, the menstrual cycle takes about a year as well to be regular and is usually particular to individuals (Epigee Women's Health, 2012; Sharma *et al.*, 2008). Abdominal pains that only come at the time of menstruation range among individuals in severity, and usually impact on the daily activities of the menstruating adolescent girl.

According to Rembeck (2008), this stage of life entails three phases, the entry, passage and the exit. He argues that the meaning is attached to adolescence usually varies from one person, society and community to another. The adolescents' responses to these changes are also as varied as the individuals themselves. Some adolescents become irritable, some anxious while others start having problems with their self-concept which in turn impacts on their self-esteem. At the same time, the self-esteem of adolescent girls decline at early adolescence. It is crucial therefore to note that parents play a crucial role in the healthy development of the adolescents as suggested by contemporary research. Psychologists in these researches point out the importance of parent –

adolescent relationship, parental support, and guidance for the adolescents to achieve independence (Rembeck, 2008).

Finally, it is important to note that an improved self-esteem is connected to an adolescents' body-esteem, which is usually formed at the onset of pubertal changes, and develops throughout adolescence, where hormonal factors beyond individual control determine one's body image. Rembeck (2008) therefore advocates for a successful transition that would translate to a greater stability of the adolescents such that the adolescents would achieve healthy relationships and general well-being, at the same time mastering their roles in the society.

2.2.2 Menstrual Shame and Secrecy

Literature on menstruation has documented this natural process as a cause of embarrassment among girls and women in most societies globally. In America, Fingerson (2006) says that at menarche, teenage girls are encouraged to view menses as embarrassing. This is a result of the negativity and ambivalence of the debut menses or menarche. Menses is therefore perceived as dirty, messy and a nuisance to the teenagers experiencing it (Fingerson, 2006).

A study conducted in New Zealand by Agnew (2012) posits that menstruation is a social embarrassment among teenage girls; both at school and at home, menstruation "introduces girls to the cultural baggage of secrecy and shame" (Agnew, 2012, p. 40). Even worse is when the adolescent girls interpret their bodies as the other as internalized by the girls, is associated with the menstruating shameful body. Therefore, being a menstruating girl is shameful and evidence of menses should be concealed. At school, girls work hard to manage menstruation and, more, to conceal the signs from

other students in mixed- sex schools, especially from the boys and male teachers (Fingerson, 2006).

Menstruation being exclusively specific to normal adolescent girls, and pre-menopausal women, positions girls in a binary division from the boys so that they are considered as the 'other', while boys are not faced with the baggage of shame and secrecy in relation to menstruation. Menstruation therefore becomes symbolic, drawing the divide. When this 'otherness' is internalized by the adolescent girls, they not only feel trapped in their shameful bodies, but also view their bodies as a 'site of shame'. This increased discourse of shame becomes engraved in the girls' subjectivities leading to a lasting negative perception towards menstruation (Agnew, 2012).

According to Agnew (2012), the shame associated with menstruation could be connected to the female genitalia. Agnew demonstrates the lack of knowledge on the female genitalia as girls and women are often unable to locate and identify the structure of their genitals. For many women, the stigma and shame is connected to their vaginas and the surrounding area which is often considered unspeakable and unpleasant. As an embarrassing or shameful experience, girls and women are advised to conceal it or use a language that obscures meaning. However, when discussed in reproductive terms the discourse changes from societal to medical minimizing the embarrassment (Agnew, 2012).

Compounding adolescent maturity is the visibility with which body changes bring. They change in the shapes; weight and size make girls very uncomfortable. Worse is the duty to conceal evidence of menstruation. Within the various contexts the adolescence girls have to negotiate the concealing of any evidence that they are menstruating. This is more crucial at school where they need to keep it a secret from both peers and teachers,

yet they need to access menstrual supplies to manage their menstrual flow (Agnew, 2012).

The messages of secrecy on menstruation process in the domain of embodied experiences necessitate that menstruation should be hidden both in talk and physically because it is a social taboo and embarrassing to talk about or when people know an individual's menstrual status. Even maturity and feminine sexuality which is closely connected to menstruation earns the same negativity (Agnew, 2012).

In addition, girls also learn that one's menstrual status should be kept a secret from boys and men. Shrouded in this secrecy, silence is imposed on the individuals, curtailing their liberty. When a woman's menstrual status is discovered by others it has the potential to bring shame to the individual. Therefore, the rigid rules of managing menstruation have to be learnt to avoid failure. The fear of spotting or staining one's clothes becomes the fear of every woman, because through this, a woman's menstrual status is announced (Agnew, 2012). The privacy of an individual's menstrual status also extends to the menstrual products such that men and women alike view menstrual products with negativity. A woman who does not conceal her menstrual supplies is viewed as careless (Agnew, 2012).

In the sub-Saharan Africa and Asia, societies are conservative about menstrual-related issues; the pubertal changes that are characteristic of pubescent girls are unlikely to be a subject neither of a discussion at home nor at school, because of the shameful nature of the topic. This therefore is avoided in talks by the members of the community, family and the girls themselves (Kirk & Sommer, 2006). In such communities, the male members of the family, fathers, brothers, male cousins and uncles have scanty knowledge on menstruation (Kotoh, 2008; Kirk & Sommer, 2006).

Secrecy about menstruation is also evident in Asian and African literature on menses. For example, a study on adolescent girls in Nepal indicates that teenage girls do not ask their parents about the physical body changes occurring at puberty because it is embarrassing to ask such. On the other hand, their mothers do not offer explanation on the physical changes occurring to their daughters during puberty. Therefore, the adolescent girls go through puberty without the intervention of their parents (Raut & Tandon, 2011).

In other literature in the Asian context, Dasgupta and Sarkar, (2008) have explored the menstrual hygiene among adolescent girls. Dasgupta and Sarkar observed the lack of information about menstruation, resulting from beliefs and taboos that are related to the socio-cultural practices of the community. These beliefs and restrictions also discourage talks on menstruation in the society. In most African and Western societies, the rules and restrictions that govern menstrual talk require the use of euphemism to prevent members of the opposite gender from understanding the menstrual communication (McMahon *et al*, 2011; Kotoh, 2008).

Studies in Kenya indicate that menstruation is treated with privacy in most communities. A study by McMahon *et al* (2011) indicates that being an embarrassing experience, the teenage girls; find it difficult to talk about it. The girls felt that the experience has to be kept secret from classmates at school, to avoid teasing from male students. Menstruation has therefore been silenced in the Kenyan context, because it is an embarrassing topic even in conversations (Chebii, 2012).

Moreover, the messages of shame regarding menstruation are reflected in the media; for example, the current advertisement on Kenya television of 'Always', a sanitary towels brand popular with most women and girls, presents an adolescent girl tying a sweater

round her waist to conceal some spotting or stained uniform. The advert uses some blue watery liquid to demonstrate the protection of the brand compared to ordinary sanitary towels. Yet there is no blue blood from any woman, indicating that menstrual blood is disgusting and embarrassing.

2.2.3 Menstruation as a Crisis

At menarche, girls are faced by a hygiene crisis in managing their bodies not only because of menstruation, but to keep themselves clean and fresh. According to Agnew (2012), the discourse of hygiene is not only limited to the management of menstruation, but also women's bodies in general. For girls, this becomes a hygiene crisis because they have been children all along and suddenly, their bodies become problematic. Menstruation therefore becomes a symbol of dirt and pollution that need to be managed to avert tainting the body. Not only are women encouraged to manage menses, but also other normal body secretions by wearing panty shields.

Agnew (2012) contends that:

Blood has always held a social taboo. Blood has always meant injury and illness. It is therefore difficult to change the mindset that menstrual blood is actually a sign of health and fertility, menstrual blood is portrayed as dirty, smelly and disgusting. Menstruating girls and women are constantly warned their body will let them down they must guard against leakage (p. 34).

Agnew (ibid.) further demonstrates the cultural and social meaning of blood stain. That staining clothes with other forms of stains are considered normal, while stains from menstrual blood are culturally and socially constructed as stains on a woman's reputation and cleanliness. It therefore becomes a basic need for adolescent girls and by extension women to access menstrual related information and supplies to manage the situation. These may include menstrual supplies, menstrual education, sanitary facilities and disposal systems. When these needs are not met, women and post-pubescent girls

face discrimination and marginalization, leading to seclusion, absenteeism or school drop-out, and exclusion from social and religious events (Bharawaj & Patkar, 2004).

One other crisis is menstrual discomfort, which may differ from one individual to another. According to Kirk and Sommer (2006), it may include “simple discomforts such as lower back pains, bloating, cramping, moods swings and other symptoms related to menstruation” (p. 4). Any or a combination of these discomforts cause a strain on the adolescent girls and need to be managed for them to fully involve themselves in daily activities both in the private and public spheres. In developing countries, especially those in Africa, adolescent girls have to grapple with all these discomforts, and sometimes result in exclusion from daily activities at this time of the month for example, they absent themselves from school. However, in the developed world, the adolescents have an access to a variety of painkillers and other pharmacological products to ease this discomfort (Kirk & Sommer, 2006). The situation is even worse for circumcised adolescent girls, especially the infibulated ones. This kind of circumcision creates more health and hygienic challenges. According to Kirk and Sommer (2006), “where the vaginal aperture is inadequate for menstrual flow, a blockage and build-up of blood clots is created behind the infibulated area. This can be a cause of protracted and painful periods (dysmenorrhoea), increased odour, discomfort and potential for additional infections (p. 4). Worth noting as well is the dependence of menstrual management on cultural, social and economic conditions of the girls.

Most adolescent girls in the rural setting are ill equipped with the knowledge to manage menstruation since they are not prepared early for the onset, and the management of this biological event. The sudden physical developments accompanied by menstruation with its hygienic requirements complicate the lives of the pubescent with resultant

implications on their “academic performance, school attendance and self-esteem” (McMahon *et al.*, 2011, p. 2). For adolescent girls who do not acquire any menstrual management knowledge, experiencing this biological event as “frightening, confusing and shame-inducing” (McMahon *et al.*, 2011, p. 1). Therefore, the plight of adolescent girls in rural settings is worth noting with their attempts to cope with menstruation even when there is a deficit of latrines, inaccessibility of water, lack of sanitary provisions such as towels, total or insufficient access to menstrual knowledge due to menstruation being treated with secrecy and therefore a taboo subject (McMahon *et al.*, 2011).

The lack of menstrual knowledge among adolescent girls coupled with fear and anxiety at the menarche lead to poor management of the menstrual flow, which has been cited as the cause of reproductive tract infections among girls, with the aggravated occurrences leading to reproductive health problems (Khanna, Goyal & Bhawsar, 2005). According to Farage *et al.* (2011), menstrual management plays a significant role in how the adolescents negotiate menstruation. They underscore the significance of genital hygiene in the bid to manage menstruation, and highlight the adolescents’ negative perception resulting from poor genital hygiene. They also agree that menstruation brings hygiene challenges to the lives of the adolescents.

Data from various studies from various parts of the world informed the current study. One such study is a study carried out in Rajasthan (Khanna *et al.*, 2005), one of India’s poor states, characterized by high levels of poverty- with 31 per cent of the population living below the poverty line in the rural areas. With a strong preference for sons in this state, a paltry 19 per cent of the girls between the ages of 15 and 17 years go to school. In such social cultural contexts, adolescent girls’ needs related to menstruation and schooling are not a priority leading to girls withdrawing from school, to baby sit, work

to contribute towards family income, and get married. Because of gender discrimination, they are deprived of opportunity for schooling, access to proper health care, and nutrition. This study also indicated the lack of awareness of menstrual related issues among the poor girls before the onset of menstruation. Without menstrual knowledge, several misconceptions, practices and traditional beliefs concerning menstruation lead to unsafe and unhygienic practices among the poor adolescent girls. This according to the study was the cause of reproductive health problems (Khanna *et al.*, 2005).

Drawn from a situational analysis of sexual and reproductive health needs among adolescents, the data for Khanna *et al.* (2005) was generated using qualitative methods such as focus group discussions, and key informants interviews. While the quantitative methods involved a sample survey of the adolescent girls schooling and those out of school with a sample size of 800 girls representative of the urban and rural population. The participants were aged 13-19 years. Using a systematic sampling procedure the researches drew participants from eight rural and eight urban localities interviewing 730 participants (Khanna *et al.*, 2005).

Among the Indian Brahims, observing menstrual pollution (menstrual blood is believed to be contaminating by the Indians) is mandatory in their homes. The home space is categorized in terms of purity or Brahim-hood, such that in a traditional Tamil Brahims homestead, the purity of the house from the back to the front is observed. Therefore, adjusting these distances to keep the spaces in the house that have to remain unpolluted at all times is crucial. The onus of women in this society is to maintain this purity by adjusting their spaces and keeping away from these spaces while menstruating (Narasimhan, 2011). It is thus mandatory to keep away menstruating women from the

kitchen and the prayer room. In the same study, Narasimhan observed that the “innermost spaces of a household have to be kept as pure as possible” (p. 246). In this society, women are the keepers of purity, even scrutinizing the people who enter their houses. To ensure this purity, female servants are allowed to absent themselves from work when on their menses (ibid.).

Raut and Tandon (2011) portray menstruation as a contaminating process in the Nepali society. In the contemporary Nepal, menstruating women are considered unclean, dirty and untouchable, with everything they touch becoming impure too (Raut & Tandon, 2011). The Nepali word for menstruation ‘*nachhunu*’ loosely translated means ‘untouchable’. During menses social restrictions accompany superstitions; girls are banished into a dimly lit menstrual hut, while the utensils they use are not used by others in the house. Build more than a mile away from the homestead, ‘*chhaupadi*’ is meant to keep the menstruating girl away from the family “to ‘protect, relatives and neighbours from any ‘ills’ ...” (Raut & Tandon, 2011, p. 3). In cold weather, the hut becomes extremely cold occasioning reported deaths, while during the hot weather the unventilated room becomes extremely hot.

Talking about menstruation in the Nepali society is also regulated, with discussions on menstrual-related issues with parents being looked at as shameful. Being a taboo topic, a girl does not receive menstrual information in time to prepare her for the body changes that occur at puberty. Consequently, majority of the girls are taken by surprise when their bodies change physically. According to Raut and Tandon (2011), the taboo nature of menstruation largely contributes to the lack of menstrual knowledge and information at menarche.

At menarche girls' lives suddenly change with restrictive superstitions governing their daily lives. For a moment they cannot touch any of the male members of their household, neither can they move freely. With their freedom curtailed, they cannot even enter their own homesteads. Their daily lives activities are also restricted because they could contaminate anything they touched (Raut & Tandon, 2011).

Dasgupta and Sarkar (2008) reiterate the uniqueness of menstruation to females as a significant change. They note the peculiarity of the Indian case where adolescent girls are vulnerable and neglected, as menstruation is viewed as unclean stage in life. Observing hygienic practices during menstruation is important for women and adolescent girls, to avoid vulnerability to reproductive tract infections. This makes women with knowledge on menstrual hygiene less vulnerable to these infections. Hygienic practices are important not only to avoid infections, but also the mental health of the adolescent. Kirk and Sommer (2006) observed that "poor protection and inadequate washing facilities may increase susceptibility to infection, with odour of menstrual blood putting girls at risk of being stigmatized" (p. 4). These according to Kirk and Sommer (2006) have implications on the adolescents' mental health.

In Ghana, they believe that a menstruating woman or girl could pose harm to others in the family, and the community necessitates imposition of restrictions on girls on menarche. Compounding is the mythological examination of women as a possible cause of human failure due to the menstrual fluid which is considered polluting. The belief system of the traditional society serves to promote discrimination against the women which cause them to internalize the negative stereotypes, preventing them from achieving their full potential, when younger especially from their reproductive years until after menopause (Kotoh, 2008).

Kotoh's (2008) study employed both the qualitative and quantitative methods to generate data from 300 adolescent girls aged between 13 and 19 years. Kotoh used a multi-stage sampling procedure to select participants from three ethnic groups from three districts. Using questionnaires and focus group discussions, she focused on menstrual-related practices, the perceptions of the participants and the consequences of the above. From the FGDs a majority of the adolescent girls perceived menstrual blood as polluting to sacred places or objects. The blood believed as waste, was deemed contaminating necessitating the girls to keep off places in their homes and in the community at large to avoid contaminating them. The results of her study indicated that menstruation was a polluting and unclean process meant only for reproduction (Kotoh, 2008).

The study also indicated that menstrual information received by girls at puberty focused on maintaining of hygiene and preserving the menstrual taboos (Kotoh, 2008). Some of the hygienic and taboos presented included maintaining a good personal hygiene, not sharing bathing vessels with members of the opposite sex, use of sanitary protection, avoidance of men, seclusion from religious groups, not fasting while on menses among others. Among other restrictions during menstruation was banishment. The findings from the study indicated the tradition practice of banishing menstruating girls in menstrual huts during menses. Girls were also kept off the village streets to avoid meeting with the traditional priests. However, these practices according to Kotoh (2008) have a positive side, as the women and girls managed to rest from the house chores only at these times of the month.

In Uganda, pupils make sanitary towels using locally available materials (IRIN, 2011). Using soft cotton cloth, which is absorbent, they cover it with polythene to prevent it

from leakage. These reusable absorbents are durable, and effective in managing the menstrual flow. Fifteen years old pupils at Awich primary school in Northern Uganda province of Gulu reported the lack of menstrual provisions as a leading cause to the use of paper at the onset of menstruation. However, the paper padding could overflow, leaking and causing embarrassment. This according to IRIN attracts teasing from other pupils embarrassing the adolescent girl who may eventually opt to drop from school (IRIN, 2011).

The inadequacy of toilet facilities compounds the inaccessibility of sanitary protection among the adolescent girls. The toilets do not offer sufficient privacy for the changing of the sanitary protection. Another challenge is shortage of female teachers in the schools who would provide menstrual knowledge to the adolescent girls in schools in this region. All the above in one way or another contribute to adolescent girls' absenteeism (IRIN, 2011).

Related to menstrual issues are health related issues which occur as a result of lack or poor management of menstruation. Rashes around the private areas of women and girls were revealed as common manifestations; infections such as urinary tract infections were also rampant. These infections are linked to washing, and drying of clothes/sanitary protection, caused by lack of privacy and space for drying. Another major area is the disposal of used sanitary napkins including rags, pads, and pieces of blankets or cotton wool. The facilities for disposal are usually lacking (Bharawaj & Patkar, 2004). It is therefore crucial to provide facilities necessary for safe and proper management of menstruation.

McMahon *et al.* (2011) have conducted a study in Nyanza Province, the Western region in Kenya to explore the perception and negotiation of menstruation by adolescent girls

in a school setting as well as the barriers that these girls face as they manage menstruation. The findings in their study point to scarcity of menstrual supplies, insufficient menstrual knowledge and the confusion surrounding menstruation as the barriers to schooling for the adolescent school girls (McMahon *et al.*, 2011). The same study cites lack of water resulting in the inability to bathe as a factor that made it difficult for the adolescent girls to sufficiently manage menstruation. Bathing at school is more difficult because the bathrooms lack sufficient privacy, lack water or had cold water. Where water is available, it is still not easy for the post-pubescent to bathe because they risk being seen by other pupils, leading to shame. The study also indicates that there was no place for the girls to dry their absorbent menstrual protection after showering (McMahon *et al.*, 2011).

McMahon *et al.* (2011) cite other studies from the developing world, one being an intervention pilot study in Ghana that found that after six months of sanitary supplies provision absenteeism from school dropped significantly among the schooling adolescent girls, with an increased concentration as well as participation in class activities even at the time of menstruation. At the same time, the adolescents reported decline in negative feelings always connected to the chances of one soiling one's clothes at these moments.

Literature that exists informs of health books meant to guide women on how to negotiate through the menstruation period. For example research conducted in the early and mid-twentieth century prominently advised on hygiene and concealment of menstruation. Top on priority was to conceal menstrual odour deemed unhygienic and disgusting. Literature on hygiene and management of menstruation gave tips on how to avoid menstrual odour. For example, Valeria Parker (as cited in Fingerson, 2006)

cautions against menstrual odour which she describes as offending, while Karl Karnacky (as cited in Fingerson, 2006) gives a solution to the “smell” as the use of tampons. Ironically, the fear is about other people smelling the foul menstrual odour and what they would think of the menstruant (Fingerson, 2006).

2.3 Adolescent Girls Communication

In most African and Asian cultures, menstruation is a taboo subject. Because of this, it invariably receives regulated talk or is totally ignored within families, at school and in the society. According to Kirk and Sommer (2006), the culture of silence with which this process is treated makes it perceived as dirty and embarrassing fit to be concealed. Furthermore, being specific to women and girls, the menstrual process is branded a women’s weakness (Chebii, 2012).

These discourses of secrecy and shame lead to a need for a language to hide menstrual related talk in dominant societal discourse. Further, issues of blood are considered a social taboo in most societies in the world (Agnew, 2012). Blood has always been equated to injury and sickness. Consequently, euphemisms have been adopted by many communities to describe menstruation. For example, the phrase ‘going to the moon’ in its many variations has been adopted in many cultures to refer to this biological event. This language serves to hide the fact that there is lack of menstrual knowledge in most communities (Kirk & Sommer, 2006). As discussed earlier, menstruation is considered a contaminating process in the Hindu community necessitating restrictions from both public and private space. Considered impure and untouchable, interpersonal and group space is adjusted. The girls in this society learn from a very early age that space is adjusted at these moments of their menstrual cycle (Kirk & Sommer, 2006).

The restrictions associated with menstruation internalized by women and girls in these conservative societies require them to adjust space even within their households. In a Tamil Brahmin home, “the conception of space consists of a private/inside sphere called the *akam* and a public/outside sphere called *puram*” (Narasimhan, 2011, p. 245). These spaces are considered crucial and should be respected in a traditional Brahmin house especially in the village, where the purity of the house recedes from the front to the back (ibid.).

Exclusion and seclusion in Nepal as stipulated by local cultural expectations require that menstruating women do not occupy public space; this has led to female teachers abstaining from attending classes for the several days when menstruating, while those who do not conform receive criticism from the community. This not only disrupts learning in the school system, but also sends negative messages about adolescent girls and women (Kirk & Sommer, 2006). In a study on Ghanaian adolescent girls, restrictions abound as postulated by their taboo system, where menstruating girls are prohibited from religious spaces such as mosques, shrines and churches. At home the family kitchen space is prohibited because they are considered dirty (Kotoh, 2008).

The cost of sanitary supplies in low-income settings, make it challenging for girls from poor families to access sanitary towels. Coupled with men controlling the household budgets, insufficient sanitary protection leads to Ugandan adolescent girls absenting themselves from school to manage their menstrual cycle (Kirk & Sommer, 2006). In such circumstances, adolescent girls are hesitant to ask for money from their fathers, yet coming from poor neighbourhoods their mothers may not have money as well.

In Kenya, adolescent girls absent themselves from school every three to four days of the month, as they negotiate their menstrual cycle to avoid possibilities of

embarrassment(Chebii, 2012).. Adolescent girls' progress from the state of excluding themselves from activities at school such as sporting, and class activities, to absenting themselves and later dropping out completely from the school space. The causes of school dropout range from teasing from boys, caused by stained uniform, stigma and marginalization, insufficient toilet facilities and menstrual supplies at school, teenage pregnancy and early marriages (Kirk & Sommer, 2006).

The extreme exclusion from public and private space is the cultural practice of banishment, where menstruating women are sent away from their homes into menstrual huts. These huts could be dimly lit with only a small window and constructed a mile from the family home. At the same time, the menstruating female is fed using a plate and a cup that is not shared with another member of the family. This seclusion and confinement from the family and societal space communicates the contamination of menstrual blood (Kirk & Sommer, 2006).

2.3.1 Cultural Negative Views on Menstruation

Fingerson (2006) defines taboos as restrictive laws that use exacting imperatives ('yes,' 'no,' 'you must,' or 'you must not') that exist to protect people from perceived danger. They date to the older days, in the 1900s when swimming, exertion of the body, engaging in sexual intercourse while menstruating and engaging hard menial jobs were restricted for women because their hormonal cycles lowered concentration abilities. Menstrual taboos serve to protect both the menstruating girl/woman and the community from the 'dangerous powers'. Fingerson (2006) observes that in some western contexts, women were said to have "enhanced psychic influence over themselves, and their surrounding" (p. 43). However, the contradiction in this case is the perception that women had power as well as the menstrual blood during menstruation.

Fingerson (2006) posits that, “taboos are restrictive law meant to protect people from perceived dangerous power” (p. 43). These taboos which are superstitious by nature are a result of the perception that menstrual blood was powerful (Fingerson, 2006). In some religious societies, the capacity for a woman or a girl to bleed without dying is equivalent to the power to control life. For example, in some cultures, which worshiped a goddess, the menstrual blood is considered a source of power in the maiden mother and crown figure (Bharadwaj & Patkar, 2004). Consequently, “menstrual blood was feared as it was believed to be contaminating, yet magical at the same time” (Fingerson, 2006, p. 43).

Studies from the Western settings (Euro-American), as evidenced by studies in contemporary US society, present menstrual taboos although inhibiting women and girls from some activities, but not viewed by adolescent girls as limiting. In such studies, the findings reveal that adolescent girls were restricted from swimming and rigorous sporting activities while menstruating. Fingerson (2006) cites this perception as a result of girls understanding of their bodies, hormonal changes and their menstrual cycle. Earlier in the 1900s, menstrual taboos and restrictions prohibited girls and women from rigorous physical exercises, sex, swimming or exerting jobs (Fingerson, 2006).

A study by Kirk and Sommer (2006) found out that menstruation is deemed a weakness and not a natural biological process that occur in a normal woman’s life. The lack of factual knowledge on the phenomena is the root of euphemisms and myths that serve to shroud the phenomenon in secrecy. It is treated with silence leading to the stigmatization of the females undergoing this process. Discussions around this subject are therefore preserved to the female members of the family because it is a taboo to discuss with the male members of the family. Girls in these studies elucidate the

inability to discuss menstrual related concern with any of their parents. The inability to discuss menstrual experience with their parents, contribute to the lack of menstrual information. This leads to the perception that menstruation is shameful and needs to be concealed both at school and at home (Kirk & Sommer, 2006, p. 2).

Among the Hindus, menstruation is deemed polluting leading to the menstruating women being termed untouchable. Worth noting is the fact that girls learn quite early the cultural expectations of the society, such as avoiding the kitchen and the temple during menstruation. Bharadwaj and Patkar (2004) found that the Islamic law prohibits a menstruating woman from touching the Koran, praying and fasting.

Recent evidence from studies in Nepal suggest that even in the 21st century, girls are banished when menstruating to live in a shed or hut also called “*chhaupadi goth*”, which is built from stone, grass or sticks which is usually used as a cow or goat shed (Raut & Tandon, 2011). This shed is usually dirty and unventilated leading to the woman freezing or sweltering depending on the weather (Raut & Tandon, 2011). In Ghana, traditional communities view menstruation with negativity because of traditional beliefs, post menarche females are restricted because of the belief that menstrual blood is polluting (Kotoh, 2008). Owing to these retrogressive menstrual practices and beliefs, girls at an early age, imbibe the negative stereotype in the male dominated society (ibid.).

Kotoh (2008) notes that menstrual practices are a hurdle in the quest to empower women because the practices encourage gender discrimination. She also observes that the survival of traditional menstrual practices thrives on the concept of cultural relativism, the principle used to describe what is right or wrong in a society from the point of view of its members (Kotoh, 2008 p. 40).

Study findings by Chebii (2012) indicate that in most African communities, girls on their periods are not allowed into the kitchen to cook nor participate in play with other children. It is also trivial that women are not allowed to make pickle at these times of their cycle because it was believed to rot (Kirk & Sommer, 2006). However, these menstrual beliefs are not only restricted to the Hindus, but also rampant among the non Hindus. These beliefs create a form of stigma and a perception that menstruation is shameful while menstrual blood is harmful. Nevertheless, menstrual blood is free of toxins (Chebii, 2012). The restrictions on females during menses were to avoid: cooking for men, sex during menses, visiting holy places and fasting. The restrictions also showed that the girls were mature and could get pregnant if they had sex and evil would befall the family of anyone who broke these taboos (Kotoh, 2008).

2.4 Campaigns on Adolescent Girls' Needs

Numerous efforts have been put in place at global and national levels to empower women, especially in the developing world, taking into cognizance the prevalence of harmful traditional practices in relation to reproductive health. These efforts are geared towards freeing women and girls to attain gender equality.

Beginning at the international level, in September 2000, world leaders representing 191 countries of the United Nations ratified the 2000 UN Millennium Declaration. This declaration outlined eight Millennium Development Goals (MDGs) that were meant for the betterment of life for the citizens of the member nations, especially those of the developing world. In particular, the second MDG goal 'to achieve Universal Primary Education', and the third 'to promote gender equality and empower women' resonated with the betterment of life for women (WHO, 2009).

In Kenya, these MDGs targeted at eliminating gender disparity in primary and secondary education not later than 2015. A key obstacle to achieving this goal has been linked generally to the reproductive health of girls and specifically the needs of adolescent girls that have to be addressed as recognized by the Adolescent Reproductive Health Development Policy (ARH&D, 2003). The ARH&D policy recognizes adolescent girls as vulnerable and with unmet needs generally in relation to their bodies and specifically to menstruation as a challenge to adolescent girls.

Subsequently, the government of Kenya has ratified many declarations ranging from the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), developed in 1976, the Convention on the Rights of the Child (CRC) of 1989, Vienna Declaration and Programme of Action (1993) that aimed to promote gender equality in education, International Conference on Population and Development (1994), which endeavoured to propel awareness of gender issues in all sectors from education to reproductive Health, the Beijing Declaration and Platform of Action (1995) which sought to promote women's enjoyment of their rights, to the Dakar Framework of Action whose goals are to ensure that all children especially girls successfully go through the free compulsory education by 2015. The eighth goal of the Dakar Framework of Action sought to eliminate gender disparities at all levels of education by giving quality education by 2015 (Chege & Sifuna, 2006).

In Kenya, the government and its development partners through the Ministry of Education, Science and Technology developed the Kenya Education Sector Support Programme (KESSP). The objective of this programme was to provide quality education to all Kenyans irrespective of their socioeconomic status (KESSP, 2005). One way of achieving this objective was the partnership with the United Nations Girls

Education Initiative (UNGEI) and civil societies which has been able to implement its gender and education investment programme to tackle barriers to girls' education in Kenya. Some of these identified barriers were school fees and other costs related to education. UNGEI launched in April 2000 in Dakar, aimed at ensuring that by 2015 provision of primary schooling for all children would be possible. To achieve this, UNGEI has both global and national partners; at the global level they include UN agencies like ILO, UNESCO, UNFPA, UNICEF, and WFP among others. Nationally it has partnered with civil societies such as Forum for African Women Educationists (FAWE). The UNGEI partnership initiated in 2004, with the Kenyan government with the aim to coordinate and promote girls' education activities has made gains in the reviewing of girls' education policy and supported research and documentation of the best practices in Kenya. Since its inception in Kenya, UNGEI has managed to make gains in providing research, advocating for reviewing of education policy towards achieving gender parity (UNGEI- Kenya, 2011).

Although a lot of effort has been made by the Kenyan Government and its development partners, gender parity and provision of primary education has not yet been achieved. This has been contributed partially by adolescent girl's absenteeism. Recent studies have attributed this absenteeism to menstrual management among adolescent girls. One of such studies conducted by African Population and Health Research Centre (APHRC) in urban slums of Kibera, Korogocho and Viwandani sought to find out problems faced by adolescent girls in Kenya. The study cited lack of sanitary protection, menstrual attitudes and taboos as some of the problems. According to United Nations Children's Fund, one in ten African girls, who miss school during menses, eventually drops out of school because of menstrual related issues. Depending on the level of schooling (either basic/primary or secondary schooling) dropping out spells doom in the lives of the girls.

The causes of dropping out in relation to menarche are varied ranging from inaccessibility to affordable sanitary protection, social taboos and the culture of silence that menstruation is treated with (AllAfrica, 2011).

The findings from these studies have led to campaigns on sanitary ware provision to adolescent girls in most African countries. In Kenya, there are many organizations that have taken up the task to provide sanitary wear to needy adolescent girls. For example, Foundation of Hope Life-Centre (FHLC) rolled out a programme for this purpose in 2007. The organization has since been able to provide needy girls with sanitary towels and further extended this provision to needy orphaned girls and widows (FHLC, 2011). Foundation of Hope Life-Centre has also sponsored 1,000 poor girls in Kenya by soliciting funds from donors and volunteers. This has been possible through their target on contributions from shops and supermarkets which donate sanitary towels. The organization has also stepped up publicity by word of mouth, media and religious institutions to contribute towards this cause (FHLC, 2011).

The Kenya Broadcasting Corporation (KBC), through their sister radio station, Metro FM, led a campaign in Kibera and Korogocho informal settlements in donating sanitary towels to the adolescent girls on monthly basis (Africa News, 2011). Another informal settlement that has benefited from such campaigns is the *Mukuru* slum area in Nairobi, where a project “*Huru*” began in 2008. This project aimed at providing reusable sanitary towels to schooling adolescent girls. Funded by Johnson & Johnson, PEPFAR, the Elton John Foundation, and America Share/Micato Safaris, the project involved young people from *Mukuru* hired to make and assemble the sanitary towels. Each pack had five sanitary towels meant for use during the day and three for night use with three pairs of panties, a water proof bag that could be re-used to store the towels and soap for

washing the sanitary towels. The provision of the kits was accompanied by information on HIV/AIDS prevention, contacts for counselling services within the neighbourhood and Voluntary Counselling and Testing (VCT) services, and a manual on how to use the sanitary towels (Fleischman, 2011).

Afri-can Foundation in partnership with women in Kisumu in April 2011 produced 600 packages with 4 sanitary towels. With the involvement of the community banks and schools, the towels were sold. This followed a market-approach strategy to sanitary provision that saw the sanitary towels being sold in a real market. Donors, however, were sought to support this project (Afri-can, 2011). According to Otieno (2011), *Safaricom* contributed immensely to keep girls in school by donating sanitary towels to 43 secondary schools in Rachuonyo District, Karachuonyo Constituency. Over 5,000 girls benefitted from this gesture which cost the organization 2.1 million Kenya shillings. The one year supply constituted of a draw string bag, 24 packets of sanitary towels and three pairs of underwear. This was *Safaricom's* initiative to boost development and empower the local community in provision of adequate education and health care to the young generation (ibid.). In the budgetary allocations of financial year 2011/2012, 240 million Kenyan shillings were set aside for the provision of free sanitary wear to school girls. This is a result of the persistent pressure and campaigns from the Kenyan female parliamentarians on the plight of the girls during menstruation (Siringi, 2011).

Many girls' school life has been difficult on the days they are menstruating because of the inadequate protection such as unhygienic scanty toilet paper which leaks leading to humiliation and embarrassment. A thirteen-year old standard seven female pupil from Kibera spoke of the embarrassment that goes with the mess when one soils her uniform.

She said that a girl has to tie a sweater around the waist to hide the soiled patch. This announces that one has messed herself, staying at home is preferred by the girls to avoid the shame (Gathaigah, 2011).

Following the budget allocation in June 2011, the then Kenyan Education Secretary Professor Godia announced that money would be provided to schools to buy sanitary towels for their female students and pupils at the beginning of the term in September 2011. The funds which were to be dispersed together with the free learning were going to start off the project. The government planned to give guidelines to schools on the procedure of procurement of these items. The Ministry of Education planned to adopt the same system that had been used for free education programmes in both secondary and primary schools. This programme was meant to benefit the schools in the drought hit zones just like the food programme. However, the funds were not sufficient considering the estimated 2.7 million girls aged between 9 and 18 years in needed the sanitary wear. Another 1.3 billion was still needed to make the programme viable in the whole country. There was also need to provide under wear to hold the pads to make this project successful (Siringi, 2011).

The allocation of funds for sanitary towels that was expected to take off in September 2011 was postponed to January 2012 due to insufficient funds. The allocation of 240 million Kenyan shillings, according to the then Kenyan Permanent Secretary of Education James Ole Kiyapi, would only benefit half a million girls, yet the ministry targeted a million girls. The ministry is therefore sought for more funding from donors, having singled out United States Agency for International Development. At the same time, the programme which initially targeted the drought stricken area, intended to expand the programme when funds become available. It also targeted only the standard

seven and standard eight school girls, yet girls aged between nine and eighteen required sanitary protection (Siringi, 2011).

In May 2012, the then Prime Minister launched the government of Kenya primary schools sanitary towels programme in Nairobi. That year (2012/2013) the government had allocated 300 million to the programme which had also passed a legislation that would see funds allocated to sanitary towels projects. While launching the programme, the premier reiterated the need for sanitary towels being treated as essentials and receiving mandatory financial allocations from the government. He also lamented that adolescent girls did not enjoy equal opportunities with the boys because of their menstrual experiences. In cognizance of adolescent girls dropping out of school, and getting married early, the premier regretted that girls had to go through such demeaning and undignified experiences, because they lacked sanitary towels. To empower them, adolescent girls needed to be on an equal footing with the boys. This, according to the premier, could only happen if girls were retained at school during their menstrual moments. The Prime Minister Raila Odinga then directed the treasury to allocate Ksh 2.6 billion to the sanitary towels programme during the next financial year (Kiberia, 2012). However, during the 2013/2014 financial year, the government has allocated a paltry 210 million Kenyan shillings to the sanitary provision programme claiming that although the policy was sensible, they had no statistics to judge the beneficiaries of the sanitary towels (Institute of Economic Affairs, 2013). This programme only targeted the public primary schools in the urban informal settlements and the marginalized areas of Kenya.

2.5 Theories of Embodied Experiences

This section discusses theories that have informed studies on embodied experiences. The section begins with a discussion on the feminist debates that have informed most

studies on women and their experiences. Next, it examines the phenomenological theory, and the different perspectives of the theory. Lastly, the section gives examples of studies that have been guided by the phenomenological approach.

2.5.1 Feminist Debates on the Female Body

The feminist agenda drive any discussion on women issues especially with an intention to empower them. Therefore, menstruation being particularly a woman experience, the feminist debate on their bodies has to be driven by the feminist agenda. This, therefore, means that the feminist theory is crucial in the discussion on the adolescent girls discourse about their embodied experiences.

Feminism is a movement that emerged in the 19th century, beginning with the first wave of feminism, which historically fought for the rights of women to vote, termed as the ‘suffrage’. Among other rights that women fought for at that time were access to higher education, ownership of property, and independence from husbands. This wave began in the 1840s (Gamble & Gamble, 2003). Historically, the gains of the movement advantaged women in the Western part of the world in terms of legal representation, espoused by their right to vote. This empowerment is the quest to challenge “the dominant patriarchal framing of social discourses that have long presented women with reductive gender-stereotyped role options” (Winston, Carletide, McLeod & Mustafa, 2012, p. 264).

Emerging after the World War II, the second wave of feminism was characterized by the publishing of Simone de Beaviour’s book, “*The Second Sex*”. Her publication ushered in feminism in a new way, taking the shape of an organized political movement. Furthermore, the civil rights reforms at the time, in addition to the manufacturing of birth control pills, set pace for women liberation. The passing of the Equal Pay Act in

1963 by congress, the National Legislation for Women's Employment and the Civil Rights Act of 1964 gave the legal strength to the new laws, which saw the discrimination of citizens on the premise of sex, religion, colour, race and national origin eradicated. These enactments jump-started the movement. Betty Friedan's book "*The Feminine Mystique*" published in 1963, gave feminism a new political dimensions causing women to rebel from viewing domestic tasks as a responsibility. Women then began questioning unequal salaries and power issues. It is then that the personal became political. What lay in the private sphere of women's lives like children, family, sexual behaviour and women's roles became subjects of political debates (Gamble & Gamble, 2003).

The third wave feminism departs from the earlier forms by recognizing the diversity of women in terms of classes, ethnicities and even their sexual orientation. In celebrating this diversity, the third wave feminism recognizes that women do not face the same challenges globally. It therefore, endeavours to champion these differences and celebrate them as well. The struggle to bridge the existing inequalities between men and women is a major objective of the third feminist wave. Developing into a movement in the 1990s, this wave has become a social and political movement which has brought great changes in the world. The movements' effort to end injustices against women brought about by social classes, sexism, inequalities in access to education, physical and sexual violence, and HIV/AIDs has been applauded (Gamble & Gamble, 2003). The third feminist wave sought to change the perception portrayed by the earlier feminist waves, from the perception that feminists are irate activist, an older way of thinking. The main goal of this wave is to champion the relevance of feminism making it attractive to both men and women (Winston *et al.*, 2012).

In the recent years, attention has been directed towards the once neglected study of the body. Feminists and social scientists have recognized this area as important. This has attracted many debates from feminists, ranging from the private/public debates, the 'personal is political' brought about by the second wave of feminism of the 1960s to the postmodernist debates of the body being a social construction exemplified by theorist who subscribed to Foucault, who views the body as a "discursive body, a cultural text, a surface upon which culture could be inscribed" (Davis, 2007, p. 53). This, according to Foucault, leads to the body becoming "a site for understanding the workings of modern power or for reading culture" (Davis, 2007, p. 53). It is also the connection between the society and an individual. The site of that knowledge is inscribed on and can "tell stories" of the lives as lived (Shapiro, 1999).

Cultural practices, according to Shapiro (1999), "train the female body in docility and obedience to cultural demands while at the same time being experienced in terms of power and control" (p. 144). Further, Katrak (2006) views tradition as exiling to the female body, especially within patriarchal societies. She also deems it a means to control female sexuality, and bodies by mystification of the cultures and practices. Gender roles have also been cited as a contributing factor to power politics on female bodies. Within the family and extending to the society in patriarchal societies, female bodies are controlled by the traditions (Katrak, 2006).

The feminist movement differs from one part of the world to another in terms of its goals, yet the universal still remains as "equality and appreciation of and for women" (Winston *et al.*, 2012, p. 263). In some societies, gains have already been made in relation to equal opportunities and pay for women, while others are still struggling for basic human rights or do not even have a public voice or platform to express their

concerns, however, these diversities should be celebrated because of the potential of this movement to transform the lives of women and bring change. Winston *et al.* (2012) reiterates that “while these aims seem wildly different they are united under the umbrella of feminism, an umbrella which aims to protect women from the storm of patriarchy” (p. 263).

The African feminist movement is one of these strains of the feminist movements. The endeavour to explain women’s experiences according to their contexts contributed to the emergence of this movement which is isolated and unique from the western feminist debates because of the African setting which is different from the western context. One of the differences between Euro/American contexts (referred to as the Western contexts in this study) is the family structure, which is viewed in the west as the nuclear family. However, this is not the case in most African societies (as much as it was promoted by the colonial and neo-colonial eras) which recognize the extended family (Arnfred, 2002).

Another important difference between the African feminist perspective and the Western feminist perspective is the place of a woman. This features prominently in the works of two African feminists Oyeronke Oyewumi and Ifi Amadiume. The two are critical of the western perspective of feminism especially the social category ‘woman’. Oyewumi criticizes the ‘woman’ as a social category emanating from the western patriarchalizing gaze which invents ‘woman-as-other’. Oyewumi on the other hand, points out that “in the western context, physical bodies are always also social bodies” (Arnfred, 2002, p. 15).

According to Arnfred (2002), African feminist thinkers contradict the notion of “woman-as-the other” (p. 11). Oyewumi (2002) asserts that the position of woman is

that of mother, which is important in most African family systems. In the African context, family relations are respected especially those from maternal side. Women in these contexts are also powerful because of the power to procreate and carry the lineage ties ahead. Paradoxically, at the same time bodily aspects like menstruation render women powerless at given periods of the year. The cultural contradictions of being a woman and living the life of a woman find themselves in the space of menstruation. The relational world is also crucial in the African context where family relationships stretch far and wide from blood relatives to those related through marriage.

In this respect, Oyewumi disputes the applicability of the notion 'woman' as the other as propagated by the Western feminists, who view women as enslaved because of their inability to escape procreation. That the very capacity that women get pregnant, give birth and breast feed is a curse, which pulls women down as they bear the burden of motherhood. Motherhood in some Western contexts is viewed with negativity, that when women procreate, it is a passive submission to nature. In more radical contexts, motherhood in the western contexts is perceived as a calamity to a woman's body that isolates it from the rest of humanity making it a 'victim of species' (Arnfred, 2002).

In the past, most studies on the female body have adopted the feminist methodologies, with a view to advocacy. The critical feminist theory, and the standpoint feminist theory and the muted feminist theory have been the theories that researchers have adopted. However, this study was interested in the meaning of the body experiences to adolescent girls as individuals. Although, the study is conducted in the African context, where motherhood is revered, schooling girls considered menstruation as an aspect of sexuality rather than that of reproduction.

2.5.2 Phenomenology

Phenomenology, a philosophical discipline and method of inquiry central to the interpretive paradigm, is grounded in the belief that the truth can only be found in human experience; phenomenology becomes best suited for studying human experience (Le Vesseur, 2003).

Five assumptions were extended in relation to phenomenology: the first was its rejection of researcher's objectivity, and the belief that an understanding of a phenomenon can only be achieved when a researcher brackets out all the inherently held feelings, attitudes, thought, knowledge and assumptions related to the phenomena under study. The second assumption was that phenomenology attended to the phenomenon discomfoting by attending to activities and practices in the daily lives of the individuals being studied. This would bring a deeper understanding of the meaning and nature attributed to the phenomenon (Little John & Foss, 2009). This is what Ladkin (2005) called "back to the things themselves" (p. 111). This kind of research encouraged attention to those experiences that were usually taken for granted in life, yet forming human everyday interactions and a reflection of the larger societal, cultural and political spectra (ibid.).

The third assumption was the place of individuals who are a reflection of their own specific cultural background, the society and historical condition (Little John & Foss, 2009). While the fourth assumption to the research process and how individuals situate themselves in the research process; in phenomenological studies data generated is in form of conscious experiences that should be interpreted by the researcher and given meaning unlike the traditional analysis of data. Lastly, phenomenology placed significance in the process of generating data, such that it did not expressly determine what it was intended to generate before hand, but let the scholarly inquiry become open.

In this sense, it was a discovery oriented method that utilized meaning questions to arrive at the many possible meanings of phenomena (Given, 2008). In summary, the phenomenological lens help a researcher to look for that which was clear and directed the substance of the multiple ways and dimensions of reality. The main goal of a phenomenological study is to describe the meaning of any phenomena (Starks & Trinidad, 2007).

Most phenomenological studies are research in nursing; for example, Beck (1992) has researched on postpartum depression in which seven women who had the experience were interviewed with a view to generating a narrative of their experience. The women's narratives were then analyzed according to Colaizzi's (1978) method. The clusters of themes with significant comments were then discussed. The themes included participants contemplating death, loneliness, guilt, anxiety, loss of control and the need for another child (Beck, 1992).

In another phenomenological study, Rather (1994) has examined the lived experiences of nurses returning to the University to study their bachelor's degree in nursing (BSN). The data on the 15 registered nurses was crucial in acquiring a holistic account of their experiences. Guided by critical hermeneutic theory, the study findings indicated that most registered nurses felt that there was a mismatch between their experiences espoused in their prior skills and the education received in the bachelor's classes.

2.6 Rationale Based on Literature Review

Many studies have been highlighted in the discussions about menstruation in this study. It was crucial to summarise each study in order to show the gap that this study filled.

Fingerson (2006) posits that girls use menstruation as a source of power. Using individual and group interviews, the study generated data from 26 girls and 10

adolescent boys between the ages of 13 and 19. In the study, Fingerson (ibid.), interviews the high school students and unveils teenage feelings and experiences of menstruation. Placing cognizance to the school context, media and medicine the study recognizes how these shape menstrual experiences of adolescent girls. For example, in the school context, rules and restrictions about using the bathroom and the permission to use them are important. In this feminist study, Fingerson argues that girls can use menstruation as a source of social power.

Agnew (2012) argues that menstruation is a shameful process that needs to be concealed. The body process needs to be concealed because of the societal norms that prohibit women and girls from divulging their menstrual identity to members of the opposite sex. She extends that in a bid to remove them from social space; girls isolate themselves and even miss school. This is aggravated inadequate menstrual supply.

Agnew conducted her study in an intermediate school in New Zealand with a view to understanding the discourses that shape the understanding of menstruation. Guided by the Feminist poststructuralist theory, Agnew (2012) sought to understand how the meaning of menstruation is constructed historically, socially and culturally. Her interest was to understand what girls learn about themselves as menstruation women against the restrictions and rules surrounding the process. Observing puberty education lessons (a girl only lesson), interviewing two female teachers and conducting two FGDs of five girls each, she discovered the discourses of consumerism, dread and celebration which she said had not been discussed research earlier. She also discovered the discourses of shame, secrecy and menstrual hygiene.

In Asia, Dasgupta and Sarkar's (2008) study mainly focused on menstrual practices and taboos in the Indian society. The society determined how menstruating women were

expected to behave in the society. The study intended to elicit what beliefs were held by the participants about menstruation, how they conceived the menstrual process and their source of menstrual information. Conducting the study on 160 adolescent girls from a secondary school, the study used questionnaires. The study findings indicated that mothers were the first informants on menstruation, with friends following. In this study, more than half of the participants were not aware of the existence of sanitary towels at the attainment menarche resulting to old cloths to manage menstrual bleeding. Concerning the methods of disposal, most of the adolescent girls recycled the clothes, while those who used sanitary pads disposed them properly. The study recommended the media, family, teachers and health workers to educate girls on the risks of inappropriate menstrual protection, as well as the eradication of menstrual misconceptions regarding menstrual hygiene.

Conducting a study on 210 adolescent girls aged 11-17 years; Negriff *et al.* (2009) examined menstrual disorders among the girls. The quantitative study focused on anxiety, depressive symptoms, premenstrual syndrome, dysmenorrhea and how these altered the health of adolescent girls (Negriff *et al.*, 2009). On the other hand, Kirk and Sommer's (2006) study examined the relationship between the management of menstruation among adolescent girls and their schooling. Focusing on contexts in the developing countries, the study paid attention to the effects of the socio-economic contexts on adolescent girls' management of menstruation at school. The taboo systems of these societies were cited as contributing to adolescent girls' seclusion and exclusion from societal activities.

In Africa, Kotoh's (2008) study employed both the qualitative and quantitative methods to generate data from 300 adolescent girls aged between 13 to 19 years. Kotoh used a

multi-stage sampling procedure to select participants from three ethnic groups from three districts. Using questionnaires and focus group discussions, she focused on menstrual-related practices, the perceptions of the participants and the consequences of the above. From the FGDs a majority of the adolescent girls perceived menstrual blood as polluting to sacred places or objects.

In Kenya, McMahan *et al.* (2011) conducted a study in Nyanza Province, where they investigated the perception that adolescent girls have about menstruation. Further, they examined the problems that girls faced in the management of their menstrual experiences in a rural setting where water is scarce. Their study found out that lack of menstrual knowledge and menstrual supplies the cause of school absenteeism by adolescent girls. Chebii (2012) also observes menstruation as both a health and educational concern in the Kenyan context. In her study, she recognized the need to meet adolescent girls' menstrual needs in a bid to eliminate gender disparity in both primary and secondary schools leading to the achievement of the Millennium Development Goals (MDGs). This study posited that lack of adequate menstrual supply among adolescent girls contributed to schooling girls not achieving their full potential in relation to schooling. This study also pointed out the silence and stigma associated to menstruation.

In terms of content, most studies in the past (as indicated above) investigate menstrual management and practices, other studies paid attention to sanitation and hygiene in relation to disposal of sanitary ware. Some researchers investigated knowledge and information on menstrual issues among adolescent girls, others on taboos, identity and the linkage between menstruation and schooling. However, this study places importance

on the experiences of adolescent girls about menstruation; it privileges the experiences; the conscious experiences as told by the girls themselves.

Theoretically, most studies in this field were guided by the feminist theory, the critical feminist theory, and the feminist poststructuralist theory. My study took a different perspective, as it prioritized the experiences of the girls. Guided by the phenomenological theory, gave relevance to the taken for granted everyday experiences of menses. This theory was important because it established the place of first hand experiences from the participants, as the source of understanding the body process.

Most studies that adopted the phenomenological approach are in the nursing field aiming to discover lived experiences of patients some with terminal diseases such as cancer. In this case phenomenological research is believed to enable nurses gain an in-depth understanding of what it is like for patients with such chronic diseases. Through the lens of the patient presented through their experiences, the nurses acquire rich knowledge on these diseases enhancing nurse care practices. Examples of such studies include Wojnar and Swanson (2007) who investigated wholeness, caring and the human healing of families, communities and individuals from a phenomenological approach. This study presented holistic nursing as drawn from Euro/American perspective of health care practices. Another study discussed miscarriage as lived experience, and what a woman goes through at such moments of life (Wojnar, 2005).

The methods used to generate data in previous studies included in-depth interviews, Focus Group Discussions and observations. These methods are generally sufficient to generate qualitative data for studies on menstruation. Some quantitative studies employed questionnaires alongside the interviews. However, this study went further to use journals and body mapping alongside the individual interviews and the FGDs. In

this study body mapping was used as a participatory activity that set the participant reflecting on their experiences as well as setting the debate for the FGD session.

Contextually, other studies in the past have placed emphasis on girls in rural and marginalized arid areas. Those conducted in informal settlements were majorly interested in menstrual hygiene, and management practices. However, this study drew its participants from an informal settlement focusing on post pubescent girls, schooling in a mixed setting but only interested in the meaning and communicative experiences of menstruation among the adolescent girls.

This study is therefore unique and new because of the theory that guided the study, the context, the methods and content. Placing cognizance on the place of communication in tackling menstrual related problems among secondary school adolescent girls from an urban informal settlement is also unique. Moreover, a new field of study especially being conducted at the time when the government free sanitary towels programme has just begun.

2.7 Summary

This chapter has interrogated related studies on menstruation. The chapter began with an elaboration of the adolescent development among girls, paying close attention to the nature of menstruation. In the sections that followed, it presented the discourses related to menstruation, the discourse of shame, secrecy and hygiene. Further, the taboos, myths, perceptions and cultural norms related to menses were presented in details. Then the campaigns on adolescent girls needs are presented in details. A discussion on the feminist debates on female bodies, detailed the feminist movement, eventually explaining why the present study did not adopt the theory as much as other researchers

in the past have adopted it. The rationale of the study based on the literature reviewed was also discussed before the justification of the gaps filled by the study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the research design and methodology. It begins with an introduction to the chapter, followed by the research design which is the layout of the study. In the study, the research design includes the philosophical paradigm; a key aspect of the research design, and the research approach. The third section discusses the negotiation of access to the research site and the participants, while the fourth discusses the sampling procedure. The data generation process is the fifth, followed by the data analysis. Thereafter sections on the challenges of the study and triangulation follow, and then issues of trustworthiness in the research are discussed. Lastly, an explanation of the ethical considerations that were observed in undertaking this study is highlighted.

3.2 Research Design

The research design of this study was the plan of action that began from the philosophical assumptions, that guided the study, the methodology, sampling procedures, data generation and analysis techniques, and the interpretation of data collected (Given, 2008; Creswell, 2009). In my study, the research design was the direction which my study took. The research design, an advanced planning for the actual research, entailed detailed plans, which are discussed in the sections that follow.

3.2.1 Research Paradigm

All research is based on various fundamental beliefs about the world and therefore a grasp of the relationship among different basic viewpoints promoted a deeper understanding of the nature of inquiry. This is what made a consideration of paradigms a practical and philosophical enterprise important (Richards, 2003). The word 'paradigm' has been used by many researchers, some referring to it as worldview.

Creswell (2007), for example, uses the word “worldview” to mean assumptions and contends that there exist many definitions for paradigms. He maintains the need for a researcher’s cognizance of assumptions s/he brings to their study.

Mack (2010) defines paradigms as “a loose collection of logically related assumptions, concepts or propositions that orient thinking and research” (p. 6). On the other hand, Jwan and Ong’ondo (2011) contend that a philosophical paradigm is essentially a researcher’s outlook of the world comprising of how this world is construed. In this study, this translated to the role of a researcher in a study, and therefore guiding the whole process of research from who conducted the research, to the extent of involvement by the researcher.

All researchers work within a paradigm that tends to lean towards a certain philosophy. Although this may not be obvious, it usually guides the process of researching. It is therefore impossible for a researcher to engage in a fruitful research without being grounded in a philosophical foundation. Jwan and Ong’ondo (2011) underscore the philosophical paradigms with a researcher’s awareness of how they impinge upon their inquiry in research.

Research is guided by an array of assumptions that cannot be underestimated. These assumptions give the study a direction and a clear orientation; the assumptions are identified as ontology and epistemology (Cohen, Mannion & Morrison, 2007; Jwan, 2010; Denzin & Lincoln, 2005; Mack, 2010). In agreement, they point out the two main philosophical assumptions while underscoring the importance of the two in the process of doing research. These are ontology and epistemology, as discussed in the sections that follow.

3.2.1.1 *Ontology*

Ontology, according to Given (2008), can be conceptualized as the nature of reality or the assumptions that one has about reality. These ontological assumptions are perceived as being along a continuum with the two extreme where one is the objective reality while the other is the subjective. The two ends of the continuum are termed as the ontological positions, which are realism and relativism (Richards, 2003; Denzin & Lincoln, 2005). Creswell (2009) asserts that in the course of planning for research, a researcher needs to think of what philosophical worldviews they are bringing to their study and if the strategy employed in generating data and the procedures are in agreement.

The realists look at the world as an objective entity governed by rules and regulations; therefore, proposing that there is an objective truth (Jwan, 2010). In this case, the researcher's role would be to find out the truth that exists out there or the objective reality. This translates to the role of the researcher, whom in this case becomes neutral and endeavours to unearth this supposed truth. On the other hand, the relativists take a subjective approach or position holding the view that the world is a creation of one's own mind. This individual perception is within the person and can only be interpreted by the individual (Blanche *et al.*, 2006). Jwan (2010) further argues that "reality is internal to, and dependent on, the individual's perception and experience; it is not only that which is perceived, but that which is interpreted by the individual" (p. 55).

The study on communication of menstrual experiences among adolescent girls from an urban informal settlement was subjective. The nature of knowledge explored from this phenomenon was the product of the cognition of each participant, or the adolescent girls who took part in the research as well as the creation of their own minds. The meanings the participants gave to their menstrual experiences were also particular to each of them

depending on how they perceived their menstrual experiences, how they experienced them in their particular cultural and social contexts which were at school and at home.

The knowledge generated from this research was relative, being no definite truth each individuals' meaning was considered to be their truth, because how each individual made sense of menstruation was specific to her. However, reality was also co-created or constructed in the society especially about societal norms and values that related to menstruation such as taboos and social norms. In such cases, these constructions were not static as well; they changed in tandem with the changing contexts.

My role as a researcher in the study was determined by ontological assumptions, being a relativist who viewed the world in a subjective manner, with no definite truth, or reality. I understood that the reality existed in the cognition of my participants, and dependent in their contexts. Because of this I understood that there was no one way of seeing things but that there existed many ways or multiple realities. Therefore, during the generation of data, I gave my participants the free will to express their reality of menstruation.

3.2.1.2 Epistemology

Epistemology is “the nature of evidence and knowledge, the rules and principles by which we decide whether and how social phenomena can be known and how knowledge can be demonstrated” (Mason, 2006, p. 16). Further, epistemology is described as how we acquire knowledge, and how this knowledge is transmitted to other human beings (Mack, 2010; Cohen *et al.*, 2007).

Creswell (2007) notes four worldviews in research as post-positivism, constructivism, advocacy and participatory and pragmatism. Denzin and Lincoln (2005), on the other hand, propose positivism and constructivism as the most common epistemological

paradigms. Subsequently, the ontological positions of realism and relativism are consistent with epistemological viewpoint of positivism and constructivism respectively (Jwan, 2010).

Interpretivism, which is also termed as constructivism, lays great emphasis on individual's ability to construct meanings from a phenomenon. Mack (2010) posits that the interpretivist paradigm was heavily influenced by hermeneutics and phenomenology. The interpretive-constructivism epistemology attempts to find out how individuals make cognizance of a phenomenon by generating data from these people, interpreting and understanding how such issues influence them in their different contexts. Due to this, the preferred data generation technique for interpretivists/constructivists is interviewing (Jwan & Ongondo, 2011).

This study uses the term interpretivism to refer to the interpretive-constructivist epistemology. This paradigm recognizes that the researcher and the participants not only construct reality but also interpret the same in ways that are specific to each participant. Ascribing to the interpretivist-constructivist paradigm, I generated data from the participants' construction of the meaning of menstruation, and their interpretation of the same utilizing data generation tools that drew light into the complex issues of menstruation. According to Jwan (2010 posits that) "knowledge is relative to the knower and rests on interpretations made by him or her hence the label, interpretive" (p. 57). This study was based on the relativist ontological stance, and in an interpretive-constructivist epistemological paradigm. It took the view that the participants (the female adolescents) made certain meanings out of menstruation and sought to interpret the meaning adolescent girls assign to menstruation.

In this study, knowledge was generated from the participant's meanings of menstruation as constructed by each participant. Using journals, body mapping, FGDs and individual interviews, I interacted with the participants of the study (adolescent girls), held in-abeyance prior experiential knowledge on the phenomenon, personal biases, perceptions and attitudes to understand the meaning of menstruation as held by my participants. The data was the constructions of menstruation by my participants.

Phenomenology, an approach, always considered as central to the interpretive paradigm, with the goal of giving a priority to lived experiences, had its assumptions. One of the assumptions was the importance of exploring persons to generate essence on the menstruation. I also positioned myself in the research process as a co-researcher, to make my participants at ease also minimizing power-relations in researching on a sensitive matter. Prioritizing menstruation, a body process that affects adolescent girl's daily practices, I used meaning questions as I sought to understand the meaning of menstruation to schooling adolescent girls. Not guided by prior literature, the study explored the meaning and reflections of menstruation to adolescent girls in an urban informal settlement. The main goal of this research was to understand the experience of menstruation, with a view of intervening to create a supportive environment for adolescent girls in the poor- resource settings.

3.2.2 Qualitative Research

The qualitative research is a means of exploring and understanding the meaning individuals or groups ascribe to a social or human problem (Creswell, 2009). Researchers refer to qualitative research using different names; for example, Creswell (2009) refers to it as a research design as well as qualitative research. Given (2008) calls it a qualitative research, while Ong'ondo (2009) and Denzin and Lincoln (2005) term it as qualitative approach. However, in this study, it is referred to as qualitative research.

In defining qualitative research, Denzin and Lincoln (2005) say that:

The word qualitative implies an emphasis on the qualities of entities, and on process and meanings that are not experimentally examined or measured (if measured at all) in terms of quantity, amount, intensity or frequency. Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between researcher and what is studied, and the situational constraints that shape inquiry. Such researchers seek answers to question on how social experiences is created and given meaning (p. 10).

Qualitative research, therefore, aims to help a researcher to gather an in-depth understanding of behaviour and the reasons that govern that behaviour (Denzin & Lincoln, 2005). Further, qualitative research places the most significance on the richness of detail and in-depth understanding of the phenomenon under study (Rensburg, Alpaslan, Plooy, Gelderblom, Eeden & Wigston, 2009). The qualitative inquiry is consistent with interpretivism as interpretive-constructivist-qualitative approach is “an approach to inquiry that emphasizes a naturalistic search for relativity in meaning, multiplicity of interpretations, particularly, detail and flexibility in studying a phenomenon or the aspect(s)” (Jwan & Ong’ondo, 2011, p. 3)

In this study, qualitative research enabled me conduct an in-depth inquiry into the experiences of menstruation, and the various meanings that pubescent female adolescents attached to the maturation process of menstruation. This was possible because qualitative research allowed the use of open-ended individual interviews to generate the subjective experiences of the schooling adolescent girls from an urban informal settlement.

Through qualitative research, I was also able to conduct the study with a smaller number of participants but in a more detailed way, because qualitative research requires the use of smaller samples to generate a deeper understanding. The study was conducted

in a natural setting (at school); this allowed for an open and relaxed environment where participants were able to discuss their private experiences with the researcher. Qualitative research also enabled the creation of a close relationship with the participants making them free and eager to disclose their private lived experiences of menstruation.

In this study, qualitative inquiry entailed the use of journaling, body mapping, FGDs and individual interviews, to elicit data on the lived experience of menstruation. Therefore, the qualitative inquiry was useful to the study because it eventually brought out the understanding and the meaning that adolescent girls ascribed to menstruation, how they communicated this, and how it affected their daily public and private lives, because of its possibilities to be flexible and rigorous.

3.3 Phenomenological Approach

Phenomenology centres its attention on the conscious experiences of individuals about phenomena as contextualized in their world. In phenomenology, reality can only be understood through the embodied experiences of the individual experiencing the phenomena. Therefore close scrutiny of these experiences have to be conducted by the researcher in order to achieve the truth (Stark & Trinidad, 2007; Little John & Foss, 2009).

During the generation of data, I suspended (bracketed) prior knowledge on menstruation; knowledge that I had acquired from reviewing literature on the phenomenon, experiential knowledge, being a woman, personal biases, feelings, opinions, ideas and perceptions. Next, I interacted with the participants, actively listening as they rendered the accounts of their experiences with the phenomenon – menstruation.

Using journals, body mapping, focus group discussions and individual interviews allowed the participants to disclose their menstrual experiences. At this point probing was important to dig deeper and achieve a clear essence of the experience. Research questions were therefore discovery oriented such that individual interview questions were only meant to be a guide, and that the questions were supposed to elicit the meaning of the experiences of the participants. The first research question was structured in a way that it elicited data on the meaning of menstruation to adolescent girls. The second, on communicative experiences of menstruation, and the third the social context influences on their experiences and last how they lived in such a context.

These daily practices in daily lives of individuals that were usually taken-for-granted, were of great interest to the study. Therefore, menstruation being an embodied experience among adolescent girls, yet usually taken for granted, was the centre of the study. In this study, the analysis units were experiences of individual girls and their collective experiences both at school and at home, living and schooling in an informal settlement.

I got back to the specific juncture as it were (true meaning of the juncture), the moments of the flows, bloated stomach, and the anxiety; this was elicited through the use of journals. In this study, the journals were significant in generating data from the adolescent girls who were the managers of their menstrual cycle. In addition, meanings were not only unveiled through the individual adolescent girls struggles in their life and social worlds, the meanings of menstruation to individuals as presented in in-depth individual interviews but also through sharing; this was elicited through focus discussion groups (FDGs).

The analysis of the data was guided by Colaizzi's (1978) method (described in data analysis section). In this study, the data generation and the analysis were consistent with the descriptive approach of phenomenology; however, the point of interpretation adopted the interpretive approach because it was important to understand the meanings of the phenomena as contextualized in an informal settlement. In this study, an understanding of the contextual features of the lived experience of menstruation was more meaningful when the understandings of the participants and the researcher were blended.

3.4 Sampling

The sampling process is a decision-making phase, where the researcher decides who to include in the study, the setting or research location, and the behaviour to be observed or studied (Blanche *et al.*, 2006). Through sampling, a researcher can access the people who will provide the information needed for their study (Mason, 2002). According to Mason (*ibid.*), sampling in qualitative research is guided by what the researcher's focal point and the practicality of the study. Mason acknowledges that "the conventions of sampling in qualitative research are less clear-cut or well established than for statistical and quantitative research" (p. 124). Mason (2002), therefore, urges researchers to sample strategically so that they can target the participants or the contexts which have the characteristics that suit the issue under investigation. In addition, Ong'ondo (2009) places emphasis on the need "to identify participants who are likely to give rich and in-depth information on the issue being studied so that we learn the most about it" (p. 99). In this study, I selected adolescent girls who had experienced menstruation longer, therefore had more experience to learn from.

3.4.1 Study Area and Population

This study was conducted in Kenya, Nairobi County which is one of the 47 counties in Kenya that also hosts the capital city of Kenya, Nairobi. Formed this year (2013) from the former Nairobi Province and inheriting its boundaries and an area of 694.85sq km, Nairobi County is home to 3,138,369 people, according to the Kenya National Bureau of Statistics (2010). Nairobi County has had immense pressure on its social amenities, space for business, housing and other public utilities, because of its large population (Sana & Okombo, 2012). This has been compounded further by the growth rate of the city, due to rural- urban migration. For example, the pressure on housing has led to the sprouting of slums which provide cheap housing for the poor citizens. In Nairobi County, there are ten major slums: Mathare, Kibera, Huruma, Kangemi, Kiambiu, Kawangware, Dandora, Soweto, Korogocho and Eastleigh. Kibera, for instance, is home to a population of over one million people (Sana & Okombo, 2012).

According to Serem, Boit and Wanyama (2013), a study's population is the "group of individuals sharing some common set of characteristics" (p. 36), while a target population is the people that the researcher intends to study. In this study, the study population was all adolescent girls in government secondary schools in Nairobi County. Nairobi County has a total of 62 public secondary schools: 15 boys' schools, 16 girls' schools, 6 mixed boarding and 25 mixed day secondary schools (MoE, 2013). The study's population was adolescent girls in day school and residing in and around an informal settlement in Nairobi County. Girls in a day school were targeted because the study intended to explore how they negotiated menstruation at home and school. To understand their communicative challenges in relation to menstruation, the study targeted older girls who had menstruated for a longer period, girls of 15 years and above. It is important to note here that majority of the adolescent girls start their first

menses at 13; however, at this stage menstruation is irregular because of the anovulatory menses which is common in the first to second year. Therefore, at 15 years, regular ovulation is established resulting in regular menses (Rembeck, Moller & Gunnarsson, 2006). The study therefore targeted participants from the district with the largest informal settlement in Kenya, Kibera in Lang'ata District.

Lang'ata District is an administrative area of the larger Nairobi County. The District constitutes two constituencies - Karen/Lang'ata and Kibra constituencies - which were until recently carved out of the former Lang'ata Constituency. Kenya's largest slum, Kibera, with a very dense population, is located in Lang'ata District as well as one of the most affluent suburbs, Karen and middle class neighbourhoods Lang'ata, South C, Dam, Onyonka, Ngei among others. There was only one constituency in Lang'ata District when this study was conducted, while the administrative unit has remained as Lang'ata District. Administratively, Lang'ata district consists of seven locations, Kibera, Makina, Karen Mugomoini, Nairobi West, Laini Saba, and Sarangombe (Kibich-Lang'ata CDF, 2008). The table below is important in locating the participants in the areas live in within the District. The biographies of the participants are attached as Appendix XIII.

Table 3.1**Lang'ata District**

Locations	Sub-Locations
Kibera	Kibera Makina Silanga Lindi
Lang'ata	Lang'ata Hardy
Karen	Karen Lenana
Mugumoini	Mugumoini Bomas
Nairobi West	Nairobi West South 'C'
Laini Saba	Laini Saba Nyayo Highrise
Sarangombe	Gatwikira Olympic

Source: Kibich-Lang'ata CDF, 2008

3.4.2 Sampling Procedure

In Lang'ata District, there are private, informal schools and government schools. This District has five government or public schools: Olympic, Raila Education Centre, Lang'ata, Karen 'C', and Lang'ata Barracks secondary all mixed day schools. Purposive sampling was used to select the school assigned the pseudo-name Elimu, from the five public secondary schools in the District. The school had toilet facilities, and was a catchment to both the urban poor and a few middle class students. Although the study was not interested in the challenges of accessing other facilities selecting a school that already catered for these needs meant that the study could find out how they communicated the need to use these facilities. The secondary school, being mixed (boys and girls) day school, offered possibilities of rich data as well because there were possibilities to understand how they communicated their menstrual related issues with members of the opposite gender. From prior research, the study had established that the girls in this school had access to sanitary provision from community based organizations, well wishers and a school emergency programme, with these

characteristics the school fitted into the criteria of the study. Although the sanitary towels provided were inadequate, the study focused on the communicative aspect of embodied experiences, not the access to sanitary towels making the school a good sample.

After purposively sampling the school, one class was purposively sampled from the form three classes in the four-streamed school, but I could not choose the exact class because the gate-keeper (head teacher) allocated the particular Form Three class. All the adolescent girls in the class 22 of them were recruited into the study, because purposively sampling only those who came from the Kibera informal settlement could lead to stigmatization of the participants. The sampling procedure was also determined by the willingness of the participants to take part in the study. Moreover, most participants in the sample came from Kibera, a few from the areas surrounding Kibera (information in the biographies summarized and attached as Appendix xiii).

Focusing on only 22 adolescent girls between 15 and 17, the findings from the study may not be generalizable to the whole population; but gave a strong ground for arguing about the communicative experiences of menstruation among adolescent girls. Although the study findings are not representative in the statistical sense, they are transferable to other similar contexts. Other authors, like Starks and Trinidad (2007) suggest, that an archetypal phenomenological study constitutes a sample size of between 1 to 10 people, while Creswell (2007) proposes a sample of between 5 to 25 people.

It is important to note that a qualitative research generally utilizes a small number of participants because of its interest in in-depth or detail and richness not the quantity of the data (Silverman, 2005). Mason (2002) further urges the researchers that “whether or not the sample is big enough to be statistically representative of a total population is not

your concern” (p. 134). The crucial issue in qualitative research is the accessibility to the right data using this sample, data that is sufficient and rich to generate a thick description to answer the research questions (Mason, 2002).

3.3.3 Negotiating of Access to Participants

The first step in negotiating access to the participants and research location was to seek for a research permit from the National Council of Science and Technology (NCST). Secondly, I sought authorization from the District Commissioner of the District where the research was conducted. Upon receiving a letter of authorization from the District Commissioner, I sought another authorization from the District Education Officer of the same District. I was provided with a letter from each officer directing the Chief in the location and the Head teachers of schools to allow me conduct research in their areas of jurisdiction (the letters are attached as appendixes). After informing the chief about the impending research in his location, I proceeded to the school to seek permission from the gate keeper, the head teacher of Elimu Mixed-Day Secondary School.

Through the Head teacher, I was assigned a class among the sixteen classes where the study could be conducted. I consulted the class teacher (although the Head teacher had already informed her) of the intended study. From the class register, she provided me with the names and ages of my participants, as well as introducing me to the girls.

After being introduced to the participants, I explained to them the purpose of the study, and sought their permission and that of their parents. The consent form was read out to the participants before they signed it giving me a written consent (the form is attached as an appendix). The parents’ consent was also important because I was dealing with a vulnerable group, students below 18 years; therefore I sought the consent of their

parents and guardians, by calling each one of them using the contacts provided by the school's administration.

3.4.4 Pilot Study

A pilot study is a highly recommended phase of the research process. Yin (2003) refers to it as the last preparation before data is generated while Ong'ondo (2010) views it as the point where a researcher refines the data generation process, the research questions, and even the tools of generating data which amount to improving the whole research design. In this study, both the FGDs and the in depth-interview guides were piloted. The pilot group for the FGD guide was a group of six girls from one of the form four classes in the same school. This group possessed the same characteristics with the study group, because they generally were about the same age, from the same school, neighbourhood and had all experienced menstruation. After the audio recorded discussion which lasted for forty-five minutes, data from the individual interview was transcribed and analyzed to find out if they answered the research questions. Upon analyzing, I realized that there was need to add other questions, and that some of the main questions in the earlier individual interview guide were actually probes. Some questions needed more probing. In consultation with my supervisors, I prepared a revised FGDs guide; the pilot FGD guide and the revised FGDs guide are attached as appendices. The changes made in the FGDs guide were mainly the main questions and the probes. I noted from the pilot FGD that I needed more probes to direct my participants into a discussion that would answer the research questions. When left to take their own direction, the participants tended to digress. Therefore, the actual FGDs guide had many probes that gave direction to the study without, inhibiting the participants' freedom.

The individual interview guide was piloted before beginning the individual interviews, with two girls from another form three classes, as the form four girls were inaccessible

since they had already started their Kenya Certificate Secondary Examination (KCSE). The piloting of this tool was also vital because it enabled me restructure the questions which were more sensitive putting them in a way that made the participants comfortable, and also changed the individual interview venue to a more private one.

With Individual interviews coming after the FGDs, a pilot interview enable me understand the dynamics of individual interviews as private, therefore needing a more private setting within the school, and the being a follow up of matters discussed in during the FGDs, but needed more insight because of the sensitivity of the research. To break through to the participants and have them disclose these matters needed questions that would lead them into disclosure. Therefore, the pilot study was important in enabling me restructure those questions, and frame them in a manner that elicited sensitive private information. I also noted from the pilot study that the duration of the individual interview had to be changed to between thirty and thirty five minutes since this was just a follow up and confirmation session.

3.4.5 Reflexivity

A researcher influences his or her study in one way or another. This influence should be continually monitored in every qualitative research because it plays a pivotal role especially in studies adopting the descriptive phenomenological approaches (Given, 2008). In this study, I recognized that I am a woman, with my own menstrual experiences thus there was a potential of my own views influencing data generation, interpretation and analysis. To curb this shortcoming at the point of generating the data, I bracketed my feelings, perceptions and experiences of the phenomenon in order to capture the experiences of the participants of the study.

3.5 Data Generation Process

This study employed the following data generation techniques: personal journals, body mapping focus discussion groups and individual interviews. The four data generation techniques were employed because every technique made a significant and unique contribution to the study. The different modes of data sources complemented each other by providing additional information on the significant themes that participants shared on their lived experiences. At the same time, multiple data generation methods served to confirm as well as generate more important information not generated by an earlier data generation instrument (Freeman & Mathison, 2009).

Freeman and Mathison, (2009) warn against data generation techniques that may duplicate each other. They argue that at times, some data generation methods may come up with few connecting themes or even contradicting ones from one or more participants in the study. However, the strengths of all the data generation techniques cannot be underestimated because they offer multiple meanings to the same phenomenon. However, these multiple modes of communicating meanings of experiences were both challenging and useful. Nevertheless, I employed them in the study, but tailored them to complement each other and avoided repetition and duplication. The process of generating data began from offering the journals to the participants, body mapping, FGDs, ending with the individual interviews.

3.5.1 Personal Journals

Data generation was a crucial part of research that needed to be rigorous, clear and precise. Diaries, log books, journals and lab books are termed as ‘external memory’, used by researchers to record daily observations in the field. Diaries, for example, are very popular with ethnographers (Somekh & Lewin, 2011). Qualitative researchers in the recent past have intensively used research diaries to record data generated from

participants during observations and those elicited from conversations with key informants (Somekh & Lewin, 2011).

Journals are the most effective instruments of data generation in qualitative research, because of their ability to mine rich in-depth data from personal experiences. They allow researchers to study sensitive topics that need self-disclosure while allowing the participants to be comfortable as they render their experiences (Given, 2008). Journals are records of first-hand account of a person's experience entered regularly and candidly. Jwan and Ong'ondo (2011) describe journals as notes that participants in research make on their lived experiences; which are different from logs or diaries. They argue that a useful journal of qualitative data analysis should capture all the "participants, personal experience, thoughts, feelings or comments on interactions, events and activities relevant to the study" (Jwan & Ong'ondo, 2011, p. 95). Therefore, the use of journals in generating qualitative data cannot be underestimated. Journal holders should be truthful and enter all the personal details in the journal even those considered shameful and personal (*ibid.*). At the same time, data analysis for journals should only be done at the end of the entry making period to avoid making premature interpretations.

Researchers should also be aware that journals are highly private documents and attract writing in a coded language. This language may be totally inaccessible to the researcher. To avoid this, researchers are advised to encourage their participants to make entries on the journals using a language understood by both the participants and the researcher (Jwan & Ong'ondo, 2011; Somekh & Lewin, 2011).

In this study, I offered the participants (adolescent girls) journals and asked them to volunteer to keep a personal journal for six months, making journal entries only on the

days when they experienced menses. Instructions on how to make entries on the personal journals were given to the adolescent girls. In these journals, the adolescent girls described their feelings, thoughts, their moods, perception, and how menstruation affected their private and public lives during those days of their menstrual cycle. I would regularly check if the students made entries on the journals, and kept reminding them as well.

However, the journaling exercise was faced by many challenges, among them was two journals were stolen, one student did not participate in the research totally, after the introductory meeting, and the journal being offered to her. In the course of the study, two girls transferred, while one girl dropped out of school, making the participants 18 in number. Other challenges that faced the journals included the privacy of the document which made it hard for the girls to bring them to school, hence, forgetting to make entries. At home things were not any better because they complained of the fear that their parents and siblings could come across the journals. Because of these challenges only 10 journals were returned back from the initial 22. A summary of journal entries is attached as appendix xii.

3.5.2 Body Mapping

Originally used as an HIV/AIDS education tool, body mapping technique has now been extended to other fields. Body mapping is a participatory research method, which is art-based is ideal for studying sensitive topics (Wienand, 2006). In the past, body mapping was used by medical anthropologists working with communities as ice-breaker.

Mostly used by therapists, body mapping, allows participants, "... to externalize somatic-emotional experience, to make meaning through the creative process of symbolization, and to develop a map that (re)connect different aspects of one's being"

(GTZ, 2012, p. 1). This therapeutic tool has not only been useful for expression of body experiences but also in dealing with diverse problems such as a weak self image, eating disorders, and youth programmes among others.

Khan, Khan and Hollerbach (2005) identify body mapping as a useful tool in portraying participant perception of their bodies, enabling the participants to name body parts and their functions especially, the reproductive system which participants are not too eager to mention. Through body mapping, a researcher can audit participant knowledge on a given phenomenon further identifying knowledge gaps and distortions (ibid.).

Body mapping has also been used in studying young people, where it had been credited for encouraging participation, interaction with others making them confident (Amsden & VanWynsberghe, 2005). Body mapping an artistic representation body experiences, allows the participants to work alongside the researcher in breaking the researcher-participant relationship, hence making them co-researchers. This makes the relationship comfortable, trusting and creates a secure environment where young people can discuss sensitive topics (Servaes, 1999).

This study employed body mapping to generate data on the lived experiences of menstruation a maturation process among adolescent girls. Body mapping is a creative medium of communication involved a drawing exercise where participants outlined their bodies on large surfaces, a large sheet of paper using coloured pens. This participatory approach also involved 'mapping' thoughts and feelings in words that represent participants' body experiences.

In preparation to generate data from body mapping, the researcher specified directions that guided the participants in the drawing exercise in form of questions and prompts. The body mapping exercised involved three steps. First, the topic of growing up as a

developmental stage was introduced by involving the participants in a discussion of the many developmental changes at this stage, one being menstruation. The second step was the body mapping exercise where I also provided the participants with Manila paper and they joined four pieces into a body size sheet. At this point, the exercise encouraged participation, where even the shy girls became actively involved in putting together the manila papers.

In pairs, the participants took turns tracing each other's body outline on the Manila paper, using felt pens. One of them would lie on the paper as the partner outlined both the front, and the back of the body. During this part of the activity, the girls felt free with each other and expressed themselves on the maps. During this session the shy girls became more confident, bonding with other girls. They then labelled the parts of the bodies that felt tense or pained during menstruation by writing on the paper. In the third step, I asked questions on menstruation based on the research questions, and labels on their body maps. These questions were meant to let the girls reflect and think deeper into the phenomenon and their experiences.

By the end of the body mapping activity that was done in three phases, the girls had established bonds, and commonalities about their menstrual experiences. At the same time trust had been built between the researcher and the girls. Gradually, the girls had allowed me into their world without that the perception of participant-researcher. In such an environment, they became relaxed and enjoyed the exercise. Chatting, and sharing their experiences, they enjoyed the snacks that I had brought along.

In this study, body mapping was not only a methodology for generating data, but also a participatory technique to stimulate dialogue among the participants based on deep

introspection and self reflection. Preceding the FGDs, body mapping was crucial in stimulating a discussion that was immediately carried into the FGDs.

3.5.3 Focus Group Discussion (FGDs)

A focus group discussion is formed when people with similar experiences form a forum to discuss their shared experiences (Blanche *et al.*, 2006). This research technique generates data by having its participants interact on a researcher-determined topic (Freeman & Mathison, 2009).

Focus group discussions entail elements of observation in individual interviews composed of between six to eight participants. Significant in the use of FGDs is the possibility of generating data on participants' perceptions and attitudes towards certain issues. Therefore, it is important to encourage the participants to be expressive and a researcher to make it known that individual perceptions, thoughts and opinions are important to the study (Kruger & Casey, 2000).

Focus group discussions can generate a wealth of data when conducted efficiently, generating data that may not be accessed through individual interviews or other types of data generating tools. Not only is the content crucial in FGDs, but also the expressions of the participants who lend the richness of group dynamics to the study (Jwan & Ong'ondo, 2011). Moreover, they are useful in an event where a researcher is interested in the views of a group about a particular issue, because they consist of participants with similar experiences (Bell, 2005). Therefore, participants in a focus group are recruited based on the characteristics they possess which are useful to the issue to be discussed in the focus discussion group. Morgan notes that "the hallmark of focus group is the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group" (as cited in Cronin, 2002, p. 166).

Kruger and Casey (2000) suggest a focus group of six to eight, while other scholars propose between six and ten or even twelve to fifteen, while and the focus group discussion session could last between one hour and a half or two hours but not longer (Cronin, 2002).

In the focus group discussion, my role as a researcher was crucial; as the facilitator and moderator, I led the respondents in a relatively free discussion on the topic of menstruation. The venue of the individual interview was also another important aspect. According to Cronin (2002), the venue should be a place where the participants feel comfortable. During the data generation, i chose a venue that my participants were familiar with because they would relate well on familiar ground. Therefore, the school setting was used. The FGDs were held in the class rooms at games time, or at the dining hall or one corner of the field.

After designing the FGD questions which were open-ended, the adolescent girls were grouped into three groups of between six and seven participants. I began the FGDs sessions by creating a relaxed environment that made the girls free with each other as well as the researcher to discuss the sensitive matters, before setting the rules and norms that guided the discussion. These included urging the adolescent girls to respect each others' views, taking turns in speaking, polite interruptions and giving a chance to all to speak, as well as seeking their permission to audio-record the individual interviews.

Following a semi-structured guide prepared earlier in the study, the sessions began from introductory questions meant to encourage conversation. These questions were about their bodies which were termed as 'body questions' meant to locate them into embodied experiences, before the sensitive menstrual questions were posed, leading to a gradual engagement. I asked transition questions to drive the study and link the introductory

questions with key questions, but gave the greatest attention and sufficient time to the discussion of the content questions. Lastly, an ending question to close the FGD and make participants reflect on their prior comments was posed (Kruger & Casey, 2000). These discussions lasted for an average of forty-five minutes.

The strength of the focus group discussion was its ability to give insight to the participants' inter-subjective experiences because of the heterogeneity of the focus groups purposively sampled. The FGDs also simulated real life social interactions making it easy for the researcher to generate invaluable data. It also brought group dynamics into plays, which were an observable data generating occurrences in the study by providing a forum for interaction and exchange of information among the participants.

In this study, three FGDs of six participants each were conducted. The FGDs were three in number, with each group being engaged twice making the FGDs six in total. The first four sessions was attended by all the six and lasted for forty-five to forty-seven minutes. Because of challenge of such students being sent home frequently for school fees, I needed multiple FGDs for each group to meet most of the participants. Since the FGDs were conducted on different days, I was able to conduct the FGDs with almost all the participants in attendance of at least one FGD out of the two. The most evident thing about the FGDs in this study was the self disclosure of the participants to share their experiences on menstruation, with other girls of their age and school in a favourable environment. During the FGD , as the moderator, I tried to make all the participants comfortable and always kept the FGD going by encouraging the participants to participate urging them on with probes; most of them opened up.

The FGDs questions at the beginning were general as they moved towards the specific ones. The beginning questions were meant to make the participants comfortable and to keep thinking. The crucial questions, which were more specific and focused, were posed towards the end yielding more data. The data from the pilot study was also incorporated into the study because most of it was rich contained useful and relevant information, making the FGDs seven in total. The table below illustrates the numbering of the FGDs.

Table 3.2

Focus Group Discussions

Abbreviations	Focus Group Discussion
PFGD	Pilot focus group discussion
FGD1	The first focus group discussion
FGD2	The second focus group discussion
FGD3	The third focus group discussion
FGD4	The second round of FGD1
FGD5	The second round of FGD2
FGD6	The second round of FGD3

Source: Researcher, 2013

3.5.4 Individual Interviews

An individual interview is a conversation between two people. This conversation is usually initiated by the interviewer with the purpose of achieving a specific task mostly to acquire important information on a crucial matter (Cohen *et al.*, 2007).Jwan and Ong’ondo (2011) posit that interviews provide invaluable data in qualitative research as it provides for the interrogation of human issues of social nature. It also allows human beings to reflect on their experiences and report these thoughts. In this way, data from individual interviews are considered very rich.

According to Rubin and Rubin (2005, p.12), “projects using qualitative interviews build on a naturalistic, interpretive philosophy”. Rubin and Rubin (2005) further point out the semblance between conversations and qualitative interviews and term interviews as extension of normal conversations. Blanche *et al.* (2006) recons the similarity between

interviews and human interaction, because it gives the chance to understand people well allowing the researcher to understand their feelings and thinking.

Rubin and Rubin (2005) further argued that the interviewees and the researcher should view each other as partners. They give three words that can be used to describe the participant or the person who responds to questions in an interview. A proposal of the terms interviewee, informant and conversational partner is made. However, they propose the term conversational partner as the most suitable emphasizing that it describes the active role played by the interviewee. A conversational partner shapes and guides the path that the research will take, working together with the researcher to achieve a common goal. At the same time the researcher acknowledges the interviewed as important in shaping and directing the interview (Rubin & Rubin, 2005).

Interviews, should be as natural as ordinary conversations; sometimes, the conversational partner (the interviewee), could even control the conversation leading to a change in the subject, and even the pace of the interview. Challenges in interviewing include animosity from the conversational partners, threats, some being uncomfortably friendly or out rightly flirting with the researcher (Rubin & Rubin, 2005).

Training how to listen, hear and understand meanings from interviewees is crucial in qualitative research; it takes a skilled listener to hear meaning from the participants. A researcher, therefore needs to train and hone skills to listen and make meaning out of interviews (Rubin & Rubin, 2005). To allow efficient generation of data from an interview, a researcher needs to cultivate a relationship between him/herself and the interviewee that is open and trusting to ease exchange of information.

In qualitative research, the researcher should seek for a thick description in data generated, which is rich, detailed and deep rooted in the interviewee's first-hand

experiences and from the material that researchers gather and synthesize. It is more crucial with the interpretive approaches where interviews serve as a means to an end. It serves to explore participant's feelings on certain experiences. This is why it is important to establish a trusting relationship between a researcher and his or her conversational partner (Blanche *et al.*, 2006). Semi-structured interviews should be used in data generation as Nunan (1992) explains because:

In a semi structured interview, the researcher has a general idea of where he or she wants to go, and what should come out of it, but does not enter the interview with a list of predetermined questions. Topics and issues rather than questions determine the course of the interview. In the most formal type, the researcher who works through a list or a set of questions in predetermined order (p. 149).

The semi-structured interviews were chosen because they generate data in qualitative research and facilitate rapport between the conversation partner and the researcher (Borg, 2006). Secondly, because of the conversational nature of the interview, the conversational partner does not feel intimidated by the interviewer, and with such a relationship a true interpretive research can be conducted.

Cohen *et al.* (2007) identifies this kind of interview as facilitating the researcher with the ability to interpret the participant's experiences. If constructed well, semi-structured interviews are flexible, and generate rich qualitative data compared to the closed ended questions. Flexibility of the research enables the researcher explore unexpected discovery or emergent issues. Lastly, a semi -structured interview allows the participant to be an active player, and the researcher to solicit for active sense making of the participants interpretation of their experiences (Borg, 2006).

Interviews are particularly useful when a researcher's intention is to understand a participant's thought, and attitude and his line of thought towards a particular issue or

phenomenon (Ong'ondo *et al.*, 2008). However, interviews have been criticized as generating biased information, this the researcher does unconsciously. To curb this, there is need to conduct more than one interview with the same participant (Jwan & Ong'ondo, 2011). It is important to note that interviewing children and the adolescent whether in groups or individually is not an easy task although rewarding if well conducted. Interviews for this kind of participants “reveal story fragments, narrative representations of social experiences, and the meanings they might have...” (Freeman & Mathison, 2009, p. 88). They advise the researcher to plan properly, and give attention to “details, flexibility of design, and the belief that children and adolescents are worth listening to” (p. 88). It is also important to take consideration that the interview may not follow the expected direction nevertheless, it gives invaluable data. They are therefore important because they provide “a personal space for children or adolescents to voice their thoughts on an issue, share an experience, or reflect on an event” (Freeman & Mathison, 2009, p. 88). Individual interviews allow the researcher to prioritize and give all the attention to each participant. This is important, especially when the researcher is exploring a sensitive topic, to allow the researcher to delve into the issue or experience (Freeman & Mathison, 2009).

Before the actual interview, a semi-structured interview schedule was prepared to allow deeper exploration of the issue at hand. According to Cohen *et al.* (2007), semi-structured interviews common with qualitative research allows probing and exploration of emerging issues that would easily have been ignored, yet useful in soliciting invaluable information. At the same time interviews in qualitative research allows for a researcher's flexibility, and a researcher to pursue leads that will generate useful data (Yin, 2003; Nunan, 1992). In this study, the unstructured interview schedule had general questions which were the body questions, while the second part had the menstrual

questions. Each question had probes, which were meant to elicit more information, although they were only used as guides in some cases. The probes were determined by the interviewee's responses.

In conducting interviews, it was important for me to gain the trust of the participants, to enable access to the girls' private feelings, thoughts, perceptions and the meaning they made of menstruation. Having established a good rapport with my respondents, I explained the purposes of the interview to them. I had earlier sought verbal consent from the head teacher of the school, class teacher and parents, and a written consent from the girls themselves.

The interviews took place in a small room in the school; this was a more private place than the venues used earlier for the FGDs. At the start of the actual interview, I explained the purpose of the individual interview and sought permission to audio-record the interview. I then started raising the questions starting with the general to the main questions which were more sensitive. Using a digital audio-recorder, pauses, laughter, giggles, expiration and emphasis from the participants were captured. These were later useful in understanding the meaning the participants attach to menstruation. Blanche *et al.* (2006) advise one to avoid a session that resembles a question and answer session, questions and responses, should be shaped by the direction of the conversation between the participant and the researcher (Somekh & Lewin, 2011). In this study, a total of sixteen interviews which lasted between thirty-five minutes and forty minutes were audio-recorded. The interviews served as a follow up to some of the issues raised during the FGDs therefore necessitating only sixteen participants. During the FGDs, I had noted the participants who mentioned some sensitive issues but were not comfortable to discuss them in the group setting, to probe further; I engaged them in individual

interviews where they were comfortable to give the details of those experiences in a private setting.

3.6 Data Analysis

Data analysis is the deduction of meaning from the data collected from the participants through the different data generation techniques. It is the gradual movement from raw data ending in interpretations based on the evidence from the data. Dornyei (2010) contends that qualitative data analysis “denote different activities from imaginative to artful speculation following well-defined analytical moves from deductive categorization to inductive pattern finding” (p. 242).

Data generated in this study was in various forms, the FGDs and individual interviews generated data in audio-recorded form, while the journals generated data in written form, and data from body maps discussions in field notes form. In this study, data analysis that entailed the reviewing of descriptive accounts of lived experiences, generated through the journals, body maps, FGDs and individual interviews. It was followed by the writing of formulated meanings, from the significant statements, clustering of the statements into themes and then writing an exhaustive description of the phenomenon to answer the research questions.

Analysis of data is not an easy task, neither does it end immediately. Sometimes it goes on throughout the research process (Richards, 2003). This makes the research process iterative (a back and forth process), and complex needing rigour. Data analysis began with the preparation and organization of data also termed as the pre-coding stage. This is the first stage of analysis where a researcher meaningfully meets the data. At this stage the researcher organizes all the data generated from the personal journals, individual interviews, the focus group discussions and the body maps.

3.6.1 Transcribing Data

The analysis of these data therefore began from transcribing the data from the FGDs and the individual interviews from audio-recorded to transcript form. Data from the audio-recorded interviews, both the FGDs and individual interviews were, therefore, transcribed and translated, while data from the journals already existed in a transcript form. Through transcribing the data myself I captured everything from the participants including the fillers, repetitions, pauses, and nonverbal cues.

The actual process of transcription began with the FGDs that were audio-recorded, typed and saved in a folder, which was clearly labelled. The files for the different groups included the date of FGD, and saved using assigned group number. At the point of transcribing the data, I suspended all the meanings that I had of the phenomenon and also avoided my interpretations of the phenomenon. Carefully listening to the audio recordings, I transcribed the data, without leaving out any non-verbal cues such as pauses, stutters, intonation, and emphases. After the transcription, I read through the transcript, while counterchecking and listening to the audio-recordings once more.

Once data from both the FGDs and the individual interviews were transcribed and translated from “*Sheng*”, a mixed code of Kiswahili to English. They were saved in folders using their FGDs numbers and the pseudo-names for the individual interviews, to protect the participants’ identity and observe ethical issues. All this were then saved in a larger folder labelled interviews.

3.6.2 Analyzing the Data

Phenomenology articulates the lived experiences of being fully present in the world. To achieve this, analysis in this phenomenological research was guided by Colaizzi’s (1978) method. The first step was the identification of the phenomena of interest in the study; menstruation was the lived experience in this study. As indicated earlier, the

descriptive accounts of the lived experience were collected through journals, body mapping, FGDs and individual interviews. Rigorous analysis of the data followed, as I continued bracketing my pre-suppositions, personal influences and biases. The descriptive accounts were read and reread to extract the significant statements pertaining to the phenomena. To achieve this, I read every word, phrase and sentence of the participants' accounts of their lived experience, paying attention to the non-verbal communication to elicit the general meaning of menstruation to the participants. Remaining true to the data, I tried to use the literal words of my participants to elicit the essence of the lived experience.

3.6.3.1 Open Coding

The first stage is referred to as the first phase coding/open coding, or the first cycle stage. In this study, the transcripts of all the FGDs, individual interviews and the journals were copied into new files, and saved as transcripts for first coding. In this stage, guided by Colaizzi's method, I formulated the general meanings of the phenomena from the journals, body maps, FGDs and the individual interviews while paying attention to the research questions. The first step was to eliminate the redundancies from the general meanings. If two significant statements from different participants carried the same meaning the one was removed. After removing the redundancies, the data was now ready to address the research questions.

Addressing the research questions, to the units of significant statements, it was possible to know the responses of the participants to the various research questions. This was done for every data generation tool. With the completion of the first coding, I copied the transcripts as a new file with the different units of significant statements placed below the various research questions.

3.6.3.2 Axial Coding

In the second phase of coding, the units of significant meanings generated in the first phase were organised by grouping similar statements into clusters upgrading others and downgrading some avoiding repetition. By the end of this phase, more redundancies had been removed; any overlapping units of significant meanings and clusters had been identified.

3.6.3.3 Selective Coding

The third phase coding referred to as selective coding is the final stage in analyzing qualitative data. At this stage, categories were grouped into themes (clusters of meaning), which at this point corresponded with the research questions. These themes formed the different sections of presentation of findings in this study. The remaining data that could not fit into the themes or codes were banked. This stage involved examining the themes formed by the clusters, to make sure that no central theme has been left out.

In the last stage of the analysis, I wrote a description of the phenomena-menstruation as presented in each journal, body maps, FGDs and individual interviews incorporating the themes extracted from the data. The descriptions were then returned to the girls for review and confirmation of the findings. A description of the phenomena – menstruation – as a lived experience in the adolescent girls was described as presented in the individual interviews, focus group discussions, personal journals and body mapping.

The figure below presents a summary of the research design.

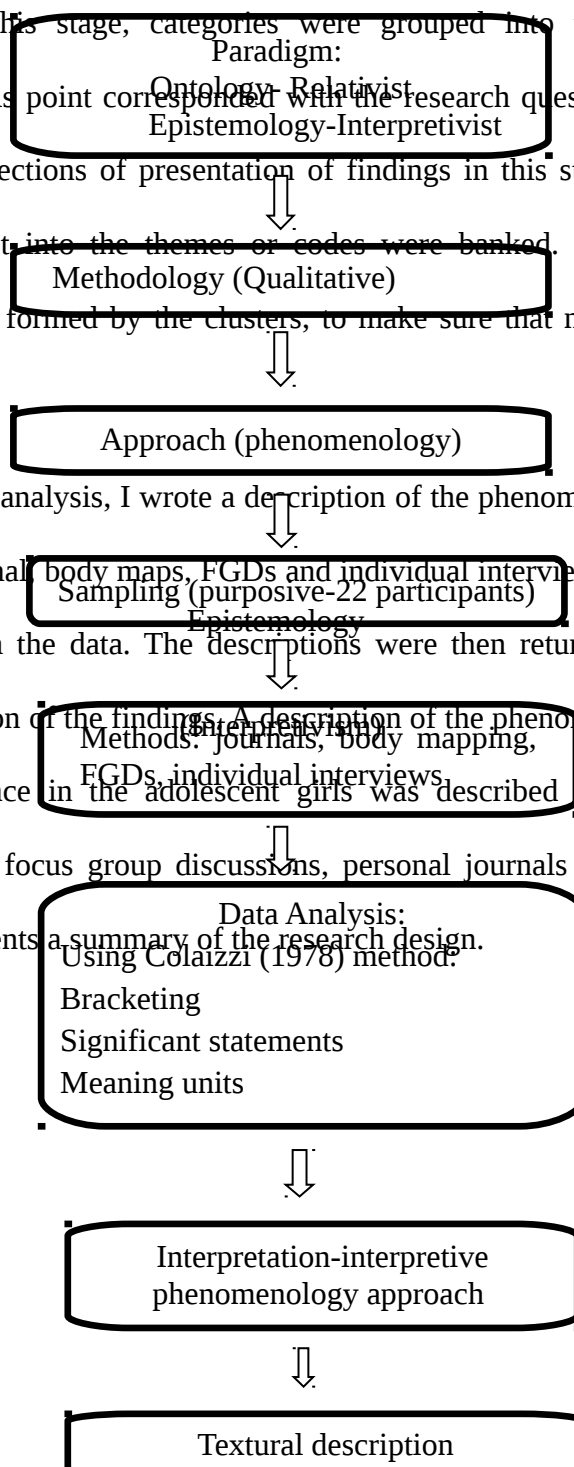


Figure 3.1: Research Design

Source: Author, 2013

3.7 Challenges

This study was with many challenges, first being the research topic itself, which focused on a taboo subject. Initially, it was not easy to discuss it in public forums. Colleagues made jokes on the topic calling it '*Our bodies*' derived from its initial title. Secondly, during the data generation, I did not receive all the journals because some were stolen by the boys in the school out of curiosity, while others feared their siblings and parents accessing them if left at home. Generally, the research process was not easy mainly

because of the sensitivity of the topic, until a close relationship was created between the researcher and the research participants.

The focus group discussions were not without challenges, ranging from the unavailability of rooms, fitting into the school programs, to noise in the school environment. Another challenge was participant fatigue, after the first round of FGDs, the participants who were earlier very eager to participate withdrew. Some of the second round discussions had four to five participants. Sensing some of the participants were fatigued, I gave them a two weeks break to rest. After the break, the second round of FGDs resumed. This stage was meant to probe further and confirm some of the responses elicited from the first round FGDs.

Another challenge was the national teachers' strike that took three weeks in the month of September, 2012. Being a day school, the some students would absent themselves from school when their teachers were on strike. The last challenge was the frequency at which the students were sent home for school fees; sometimes the girls would be home because of non-payment of fees, making it hard to access all the participants, at the same time.

3.8 Triangulation

This study used four data generation tools, which served to complement each other. The first data generation tool was the journals generated data on the phenomena under study, at the moments of the experience. This was followed by body mapping, which illuminated into the reflections of the participants and helped generate a discussion on the phenomena. The deep introspection as self-reflection made the participants ready for the focus group discussions. The next method was the FGDs, which provided a forum of group discussion, while the individual interviews, provided a chance for disclosure of the experiences related to the phenomena that could not be talked about in a group setting.

3.9 Trustworthiness in Research

In the past, the terms internal validity, external validity, reliability and objectivity were used by researchers to express the trustworthiness in research (Ong'ondo *et al.*, 2008). However, in the recent times, qualitative researchers have insisted on the change of these names to credibility, transferability, dependability, and conformability.

3.9.1 Credibility

Credibility refers to the extent to which research conclusions make sense, because credible researches give findings that are convincing (Blanche *et al.*, 2006). To address this, I asked my supervisors, to go through my proposal making suggestions about the research design, data generation tools and the entire research process. Their feedback was invaluable because they provided insight on issues that had not been considered.

Secondly, the data generation instruments as well as the theories were triangulated. This study used focus discussion groups, personal journals, body mapping, and individual interviews. The research design allowed for the building of a chain of evidence through body mapping; with the journals providing candid perceptions and thoughts about

menstruation; the focus group discussions employing group dynamics in generating data on social meanings about menstruation; individual interviews being a means of confirming and further probing the sensitive issues that would not be discussed in a group setting. Member checking involved taking the description of the phenomena to the adolescent girls to confirm whether or not they reflected what was rendered by the participants.

3.9.2 Dependability

Dependability refers to the extent to which the study findings are convincing to the reader, that the study was conducted as claimed by the researcher (Blanche *et al.*, 2006). To ensure dependability, a researcher should provide a detailed and clear description of the research process (Ong'ondo *et al.*, 2008). Providing frank statements of every step followed from the methods employed to generate data to the analysis of the data (Blanche *et al.*, 2006).

In this study, dependability has been ensured by the thick description of the research process. This is demonstrated by going to the field on my own to generate the data by offering journals to the participants, body mapping, conducting the FGDs, and individual interviews, then analysis the data and providing the steps followed.

3.9.3 Transferability

Transferability, also called qualitative generalization, is a term used in a restricted manner in qualitative research to mean the degree to which findings from a study may be applicable to similar contexts. The findings from this study may be transferable to similar contexts or participants. These findings may be applicable in other urban informal settlements in Kenya or even globally as long as the contexts share similar characteristics.

3.9.4 Confirmability

Confirmability involves the influence of the researcher on the research process and the degree to which the researcher influences the research findings (Ong'ondo *et al.*, 2008). In this study, I tried not to influence the findings of the study because I bracketed my feelings, pre-suppositions, biases and any other personal influences at the point of data generation and analysis. Bracketing was important, being a woman with experiential knowledge on the phenomenon, my presuppositions and experiences would have influenced the data generation and analysis. Although, it was not possible to totally suspend all knowledge, and experiences, I bracketed these biases and presumptions to a large extent.

3.10 Ethical Considerations

Ethical consideration is a key concept of research, especially concerning human participants. This section of the study explores the aspect of ethics in social science research. It then discusses the ethical considerations in this study. According to Freeman and Mathison (2009, p. 20), “the regulation of social science research to protect people’s dignity and rights is a fairly recent event”. Although its manifestation is recent, ethical concern can be traced back to the Greek physician Hippocrates (460-380 BC) with the development of the Hippocratic Oath. This was to protect patients from harm (Freeman & Mathison, 2009). In the contemporary world, institutional review boards (IRBs), also termed as “ethics committees, ethics review boards, consist of individuals within an organization designated to review and approve research proposals involving people” (Freeman & Mathison, 2009, p. 21). Currently, research institutions have a review board to assess research proposals for suitability to conduct research on human participants.

3.10.1 Democracy, Respect for Truth and Respect for Persons

When dealing with human participants in research, it is important to consider ethical concerns right from the beginning to the end of the research process. There are many ethical concerns in human research that may be applicable to studies in the social sciences. These concerns may all apply or not depending on the kind of study. In qualitative research, there are ethical issues that a researcher needs to focus on. The first aspect is democracy, respect for truth and respect for persons. On the respect for democracy, a researcher needs to give the participants, the freedom to give information, and also access the findings of the study while to respect truth is ensuring that the whole research process is devoid of deception (Bassey, 1999).

The respect of persons entails researching in a manner that “does not infringe upon the dignity and privacy of the participants” (Jwan & Ong’ondo, 2011, p. 149). In qualitative research, some information sought may be too sensitive and uncomfortable for the participant, especially in individual interviews; a participant must have the right to decline answering some questions or even totally decline the interview. Participants should therefore be informed at the beginning of the interview that they can withdraw at any time.

This study provided privacy and freedom to the participant as the researcher sought their consent before the start of the study and informed them that they were free to decline answering questions or withdraw from the study at any stage. In fact, one participant withdrew at the beginning of the study.

3.10.2 Private Space

In qualitative research, the researcher enters into a kind of contract with the participants. This is especially where human experiences are concerned; a researcher enters into the private sphere of a participant’s life. According to Jwan and Ong’ondo (2011) “social

researchers are guests in a private space” (p. 150). This entails invading private space. Therefore, it is critical that a researcher be of good conduct in the process of generating data (Jwan & Ong’ondo, 2011). I understood the nature of the study, as it delved into the private sphere of the adolescent girls, and thus was sensitive and therefore negotiated access to the participants and obtained their full consent to participate in this study. It is common knowledge that menstrual issues are sensitive and private. I therefore gave my participants the privacy they required to discuss such sensitive issues.

3.10.3 Informed Consent

Informed consent involves informing the participants fully about the research and giving them the freedom to choose to participate in the investigation or not. In relation to the consent, this study sought consent from the gate keepers who were the District Education Officer, District Commissioner, head teacher of the school and the class teacher. At the same time, both verbal and signed consent was sought from the participants themselves but being below 18 years, additional consent was sought from their parents. The signed consent form was designed with all the information from the purpose of the study, promise of anonymity and confidentiality to possible risks and benefits. The purpose of the study and the potential risks were disclosed and the participants allowed withdrawing at any stage. I sought the consent early to give the potential participants time to make decisions, and avoid perceived coercion into the study. The consent form has been annexed to the thesis.

3.10.4 Confidentiality and Anonymity

This research entailed accessing private and personal information which is always too sensitive and injurious if the source is revealed. Ethics therefore require that the identity of the individual(s) be kept anonymous. Anonymity “means that we do not name the person or research site involved but, in research, it is usually extended to mean that we

do not include information about any individual or research site to be identified by others” (Walford, 2008, p. 84).

In this study, I did not to disclose the site of research nor describe it in such a manner that readers would figure out the site but assigned participants pseudonyms that have not been revealed to ensure privacy. Furthermore, Jwan and Ong’ondo (2011) suggest that the anonymity of the research site and participants is also important for the purposes of generalizability. In addition, Walford (2008) encourages exclusion of names of participants, and sites arguing that this makes findings to be viewed by readers as applicable to other situations. At the same time, confidentiality allows a broadened application of findings to a wider audience and makes an all time study.

Most times, participants are fearful of sharing private and secret information with strangers. But with the promise of confidentiality and anonymity, participants loosened up and participated in the study. To ensure confidentiality and anonymity, a researcher should avoid using the names of institutions. This could be overcome by using codes as suggested by Jwan and Ong’ondo (2011). In this study, the name of the school was not mentioned but simply termed as an urban mixed day secondary school in an urban informal settlement, and given the pseudonym *Elimu*. This description is not sufficient to expose the school to the public yet sufficient enough to describe the kind of environment within which the study was conducted.

An explicit confidentiality agreement is also another important ethical issue. This means that a researcher needs to maintain total confidentiality and that anonymity is a promise that even the researcher will not be able to tell which response came from which respondent (Blanche *et al.*, 2006, p. 44). At the same time, the issues that concern

confidentiality of discussions in groups can be ensured by encouraging the adolescent girls on the importance of maintaining confidentiality before the research commences.

The data generated (body maps) in this study were kept locked in a secure place to avoid anyone else accessing them. The audio recorded data from participants were also saved on my laptop with a non-shared password and the raw data would be destroyed later when it will be no longer necessary to keep. Lastly, I explained to the participants that the information they gave may be published in a journal article or a book without disclosing their identities.

3.10.5 Protection from Harm

Researchers are of different nature and capacity. Social science researches, for example, may not cause grave physical harm to participants compared to scientific experiments in medical research. However, researchers no matter the kind of study should at all times ensure that the participants are fully informed about the possible harm that the study may have on them.

Harm is not limited to physical injury alone but includes emotional discomfort as well. Organizations and institutions could suffer irreparable image damage in case of unethical case studies. Participants are also at risk of damaged personal social standing especially when sensitive information is revealed. Family relations are also at risk when research is conducted in an unethical manner as well as a participant's image (Jwan & Ong'ondo, 2011).

In this study, to protect the participants from possible harm, the data generation tools were designed in a manner that ensured the participants were comfortable in the course of journaling, body mapping, FGDs and the individual interviews. Before the start of

data generation, I conducted the body mapping exercise to make them loosen up and engage in the study.

Data elicitation was ethical to protect them from distress and discomfort. The study empowered the respondents by giving them a forum of discourse and sharing of experiences with peers. Therefore, the risks that research pose to the participants and researcher was minimized. At the end of the consent form, information on whom to be contacted in the event that there were issues that I could not solve was given in the form of the names and contacts of Moi University and the researcher's.

3.10.6 Compensation

There was no payment to induce students to participate in this study. I only reasonably compensated them for their time and inconvenience caused, especially when I asked them to come to school on a Saturday, by reimbursing them bus fare. I also provided snacks during the individual interviews, FGDs and body mapping sessions. The last day of the study, which coincidentally was their last day at school that year, a party was held for the girls where they ate, laughed and enjoyed themselves. Lastly, to encourage the girls, I worked with the school administration and founded a club for the adolescent girls to have a forum to discuss their adolescent concerns and share their experiences.

3.11 Summary

This chapter has discussed the researcher design of the study by highlighting the philosophical paradigms, the approach the researcher took, the methodology and the data collection techniques, sampling procedure, data analysis, trustworthiness and lastly the ethical concerns. The next chapter discusses the themes that emerged from the data analyzed.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the analyses and the findings of the study on adolescent girls' communication about menstruation, a lived experience among post-menarche girls. The study set out to examine adolescent girls' meanings of menstruation, communication of their menstrual experiences to parents, teachers, peers, siblings and guardians both at school and at home. In addition, how the experiences of the phenomenon were grounded in their daily lives and lastly how the experiences of the phenomenon affected how they lived in their world. To answer the research questions, journals, body maps, FGDs, and individual interviews were used to generate data from 22 adolescent girls from a mixed day school in an urban informal settlement. Seven FGDs were conducted and sixteen individual interviews, body mapping, and journals were the source of the data.

4.2 Adolescent Girls' Meanings of Menstruation

The meaning of the phenomenon of menstruation differed from one adolescent girl to another. Multiple meanings existed about the lived experience; these meanings were specific to the individual girls and their contexts. Moreover, these meanings were attributed to the different environments that the participants lived in. Learning in a day school, the girls lived at home in the evenings, mornings, weekends and school holidays. These participants spent most of the day at school.

Meaning in phenomenology originates from lived experiences (Given, 2008), which was menstruation in this study. These experiences resulted from being in the world, which in this study were the school and home or community. Part of the objective of this study was to understand the meanings that adolescent girls bestowed on

menstruation. In this regard, study findings indicated the meanings of the phenomenon as: shame, leaking (wetness), loneliness, smell, embarrassment, sickness, disgust, feeling dirty and maturation as elaborated in the sections that follow.

4.2.1 Menstruation as a Shameful Experience

The findings from the study suggested that majority of the participants experienced discomfort during menstruation; this was occasioned by anxiety of leaking through clothes, dreaded by most participants. In a retrospective experience one participant narrated her experience at menarche:

I remember I was 14 yrs old in school I was in class then over a sudden I felt something wet on my skirt even on the seat. When I touched it like this, oh God it was blood. I sat there (tense) until everyone had left, it was so smelly and I was so embarrassed (PFGDR6, July 2012).

Purple diva's experience captured in her journal entry indicated leaking through her school uniform. This had been occasioned, by delaying to change her sanitary towel. Being an examinations' day she was restricted to the examination room until the end of the exam. Purple diva said:

My flow this day was heavy and leaked on my skirt. Being an exam day, I could not go to the toilet early to change (Purple diva, Journal, 19/6/12).

Odour was another meaning of the phenomenon, where the participants talked of menstrual odour that came with the experience. The study findings established that during menses girls complained of menstrual odour which could have resulted from poor hygiene and insufficient change of sanitary towels. In some instances, girls were reported to have been stigmatized because of the body odour. For example, during an individual I interview a participant said:

I do not feel secure, you understand there is this odour; I feel it can smell, especially if I have taken time before changing but I do change, so when I

stand up, there is that punch of odour of menstrual flow. That is why I sit the whole day in class only lunch time to change and then till home time (Precious, Individual interview, October 2012).

Lynn revealed another incident where two girls were reported by their classmates as stigmatized for having a repulsive body odour. She reported that:

They are my friends so it was easy to approach them. I just told them that people in their class were not happy that they didn't bathe; one said she was sick and smelt that way. That at menses, it being a disease, she smells but I advised her to begin bathing, and change frequently, I also told her to let me know in case she does not have sufficient menstrual supplies so that I could ask the school for some. You know it can be a problem if you have few pads so you over stay with it leading to the menstrual odour (Lynn, Individual interview, November 2012).

Closely linked to the experience of smell and wetness was the feeling of being dirty. The participants felt dirty at these moments, making the experiences a hygiene crisis. Majority of the participants had to observe hygiene practices at these moments to avoid the odour. Samantha made the following entry in her journal:

I felt dirty, when the bell rung I left hurriedly. I just wanted to get home, to bathe, but unfortunately there was no one at home (Samantha, Journal 1/7/12)

Menstrual hygiene practices such as bathing, using hygienic sanitary protection and the physical hygiene had to be strictly observed during menstruation to keep clean. Regarding this experience, participants revealed that at such moments, more caution was observed in relation to body hygiene compared to other times of the month.

It makes someone to maintain high standards of cleanliness because if you don't take a bath, no one will associate with you during menstruation (PFGDR 4, July 2012).

I carry myself with respect and even make sure I am cleaner than normally. I bathe twice a day (Robi, Individual interview, October 2012).

When you are not on *ps* bathing is a choice, you can skip bathing. But when menstruating, you have to bath at least twice a day (PFGDR 4, July 2012).

The experience is perceived by adolescent girls as a dirtying one, such that during menses, the mode of dressing changes to accommodate their menstrual status. Adolescent girls opted to wear dark coloured clothes that would not easily show the blood stain in case the sanitary towel leaked and soiled the clothes. The perception that menstruation is dirty is also demonstrated by the participants' reported sigh of relieve when the periods are over, as highlighted by the following journal entry:

Wow! Today, since morning I am happy, my periods are over and I am now 'clean'. I can wear any clothe, that I wish to wear, visit many places and friends. I do things that I have been yearning to do since the start of menses (Sweety, Journal, 23/6/2012).

The lived experience was cited as disgusting, mainly because of the menstrual blood. A participant termed the menstrual blood as: "Disgusting, blood! Blood!" (FGD3R5, July2012). Unlike blood from other parts of the human body, this blood was considered disgusting because of where it came from. Viewed as repulsive, it was different from any other blood. Another participant elaborated it below:

Menstrual blood is different, the blood from the cut is normal because they know but not the other one coming from your private part. So where it is coming from is the matter and they consider it dirty (Melony, Individual interview, November 2012).

The meanings of wetness, odour, hygiene crisis, dirt and disgust led to the participants viewing the phenomenon as a shameful experience. From the findings, majority of the participants cited menstruation as a source of embarrassment both at school and at

home, especially in circumstances where one soiled their clothes. For example, one participant said:

Yes in school it happened to me, I was right in class, I was in class then it started. It is like I had not placed the pad in the right way, so it leaked and soiled my skirt. I had to remove my skirt, remaining with my petticoat and washed the skirt. Thank God there was water I had to wait for the skirt to dry, then wore it, and went back to class. That was an embarrassment (Emmy, Individual interview, October 2012).

Moreover, menstrual shame was not limited to the physical soiling of clothes but also talking about issues relating to menses. Talking about menses was embarrassing to majority of the participants. It was thus regulated, especially with members of the opposite sex to avoid embarrassment. As noted earlier, the embarrassment was caused by relating the blood to where it came from not blood as it flowed in human body. In addition to being considered dirty, it was also shameful. For example:

They take that blood as dirty so when someone talks about menstrual blood as it is, they feel that it is an embarrassment (Melony, Individual interview, November 2012).

In mixed-sex schools, boys teased girls, because they considered menstruation dirty. The study's participants complained that boys teased them, in class. When a girl asked for permission to go out of the class during lessons, the boys made fun of her as having gone to change. In an individual interview, a participant narrated an incident of boys teasing a girl in the following responses:

A certain girl, although not in our class was going through that period, and her desk mate was a boy, when the girl took the pad from her bag and went to change, when she came back, everyone knew she was menstruating. It had even been written on the blackboard, that so and so is going through the bloody process. So she ignored it because she has not yet understood. At the end of the lessons the boys started pulling her skirt. She cried, I saw her, and

I kept thinking to myself that it was not fair what they were doing to her because it could even affect her emotions for her lifetime. She will never be free with men, never trust them nor love them because of the experience that they are making her to go through at this stage of life (Jenny, Individual interview, November 2012).

The boys would always accuse me of being on my ps even when I was not just because I was in a bad mood (Body mapping, June 2012).

Circumstances of humiliation as brought out in the above response, boys bullying the girls to such an extent, could even change a girl's future relationships with members of the opposite sex. This is an extreme case that amounted to stigma.

The study also established that to avoid embarrassment or body shame, menstrual issues were concealed from most members of the society. Adolescent girls guarded their menstrual identities only divulging it to trusted friends, and sensitive mothers while keeping their sanitary towels concealed from boys and men. Sanitary towels had to be concealed because they had the potential of causing embarrassment. In some instances, boys would ransack girls' school bags, upon finding their sanitary towels; they would display them to other students causing a great embarrassment to the girl concerned. Such incidents are presented in the responses below:

Yes, keep your pads safely always from boys because when they know they will go round saying that girl is menstruating (Melony, Individual interview, November 2012).

Because it is like you are exposing yourself that 'you are raining' and boys talk a lot (Purple Diva, Individual interview, October 2012).

No, because when they know what happens in girls they laugh at you (Samantha, Individual interview, October 2012).

Yeah, because if they know, they will start making fun of you even my cousin when I am moody, will ask me if it's the girls' problems (Robi, Individual interview, October 2012).

The experience of shame is generally a cultural perception borne out of relating the blood and its source. Generally the sex organs are considered a taboo area and inappropriate to mention. Anything coming from 'down there' is therefore dirty because of where it has come from.

4.2.2 Menstruation as a Secret

Closely related to embarrassment is the meaning of secrecy. Adolescent girls imbibe this menstrual expectation right from menarche when they are socialized to keep menstruation in secrecy and concealment. Being a shameful experience, the society expects them to hide the evidence by all means. The findings from the study indicated that adolescent girls generally employed various strategies to conceal these menstrual experiences. Menstrual supplies are not the only evidences that an adolescent girl was on her menses; symptomatic and physiological challenges abound during menstruation. Apart from dysmenorrhoea, there are also affective symptoms (to be discussed in the next section). These symptoms were controlled to avoid others guessing one's menstrual status.

Apart from soiling of clothes exposing the menstrual status of girls, menstrual discomforts and irritability are also dead giveaways. This study found out that adolescent girls learnt how to manage their menstrual issues and keep them a secret to avoid drawing attention to themselves and their menstrual status. Frequent visits to the toilet had to be avoided and kept as a secret as well, especially in the mixed-sex schools, to avoid being teased by boys. The following responses exhibited how they had learnt to avoid drawing attention to themselves:

You should be calm even when in pain; because they will obviously know that you are on your menses if you show that you are in pain (Melony, Individual interview, November 2012).

I manage I try very much to control my behaviour, my temper my anger. Even though sometimes it is hard I try to keep it personal because I do not want..., boys to know I do not want that attention (Jenny, Individual interview, November 2012).

Menstrual issues are private (FGD5R2, November 2012).

Like sometimes when in school at break time, I either go earlier or between lessons I don't go with my friends. People usually go with their friends to the toilet, I go alone. So no one can know I am menstruating (Pat, Individual interview, November 2012).

It was not easy to ask for permission because boys become suspicious and say "why she is going out now. It must be to change." And if it's a male teacher, especially when it is examination time, the teacher will tell you to wait until the end of the exam which could be two hours. So during exams you have to prepare well (Halle, Individual interview, October 2012).

Handling of sanitary towels which included packaging, carrying them to the toilet and their usage was also noted to be fundamental in concealing evidence of menstruation.

Sometimes you have a pad in the pocket and it might be seen when someone sees they can know you are raining, so you need to keep it in a safe place (Robi, Individual interview, October 2012).

Girls revealed the complexity of handling the sanitary towels especially in a mixed-sex school where the boys would scour through their desks and bags. This became even more embarrassing when these boys chanced on used sanitary towels.

Concealment was not only restricted to the carrying of sanitary ware, it extended to the accessing of these items. The findings of this study indicated that even though most

girls came from poor resource homes in Kibera, they hardly used unsanitary ware at school. However, some used rags and sponges at home as they preserved the few sanitary pads for school days. These sanitary towels have to be concealed, even when bought.

The study finding highlighted the importance of proper packaging of sanitary towels, to conceal their identity. There were many suggestions on how they could be packaged all indicating a tight, opaque and sealed way.

Wrapping is very important, because it could also come out so neat but someone can notice that it is a pad. It should not be too obvious (FGD4R2, September 2012).

There are people who grab, it wanting to know what you have bought if you are from the shop so it should be wrapped tightly. 'Bring what you have bought?' someone could snatch it from you (FGD4R3, September 2012).

The preference of a sealed or tight packaging of sanitary pads reveals the stigmatization of menstruation such as any item associated with menstruation should be concealed from the opposite sex.

4.2.3 The 'Girls' Sickness'

Majority of the participants in this study claimed that they experienced pain during their menses; these pains come before menses, premenstrual syndrome (PMS), dysmenorrhoea, pains during the moments of menstruation. PMS was cited as common among the girls, coming before menses, although it was not as severe as the menstrual pains, it caused discomfort to the girls who experienced. PMS was mainly characterized by pain in the breasts, and bloating of the bladder, because the body would retain water. The following are the experiences from the participants:

Before periods, my breasts swell, they become tender, I feel like I am full (bloating). Then I start periods it goes and I become normal (FGD1R2, July2012).

It changes life because when it nears the menstrual days, there are some changes. You can feel pain, and moods change, you could even beat people, cry easily (FGD3R1, July2012).

Sharing their experiences during the body mapping activity, the participants indicated on the body maps their experiences before menses. The following were some of the labels on the body maps: breast tenders, itching and paining, a burning sensation around the breasts just below the armpits and a feeling of bloating (Body mapping, June 2012).

During menses, majority of the participants revealed that they experienced menstrual pains, varying in severity from one participant to another. Menstrual pains were associated with cramping that occurred, especially when the flow was heavy. The pains in the stomach area and the back were cited to be a cause of discomfort. For some participants, the excruciating pain was accompanied by nausea, vomiting and loss of appetite. For example:

Yes, I have terrible backaches, even when I walk and I have back pains, I don't walk a lot I get bored when I do so. Stomach ache, especially the first day, until I vomit when I use medicine it becomes better (Samantha, Individual interview October2012).

Alicia's experiences were even worse, as captured from the journal entry:

Waking up was not easy because I had a severe abdominal pains, accompanied by nausea. I took my medicine immediately, although it took some time before it worked. I was alright after some time. I went to school, almost late. At school, I was in a very bad mood and didn't feel like chatting with anybody. The only thing I needed was to take a rest or sleep without any interruption but the situation did not allow, I had to attend lessons. My appetite was completely lost, everything tasted bitter, especially school

food. Back at home in the evening I was in low spirits, and avoided talking to people because of my bad mood (Alicia, Journal 11/10/12).

And my back and abdomen were painful. I also felt tired and bored, and lost my appetite (Halle, Journal 28/6/12)

I don't feel like bending because of back pain. When I stand I feel my back is breaking (FGD2R2, July 2012).

To alleviate this pain, the study found out that the participants used painkillers, which were different in potency ranging from moderate to strong ones. Further, the use of the painkillers was determined by the availability, some used herbs such as Lynn who used Maasai herbs. Other participants shared the following experiences:

Yes sometimes there are cramps, I buy diclofenac, mostly when I use this medicine the pain goes or at least lessens (Emmy, Individual interview, October 2012).

I use pain killers most of the time. The pain goes for sometime then it comes and you have to take them again (Sheila, November, 2012).

I would have to be on medication. For me my stomach pains are severe even now. One week before periods, I feel as if that my body is swollen, and then I have stomach pains the day before it starts until the end of the periods (Lynn, Individual interview, November 2012).

However, the painkillers were not available for some of the girls, in such cases they had to persevere. For example Flo, made an entry in her journal her experience of cramps, without medication:

It is a normal day, I am very happy but my stomach just kept on paining. I did not have money to buy medicine and pads. To make it worse I had a heavy flow. Went to school but came home and went to bed to sleep (Flo, Journal 10/9/12).

Some girls even used home remedies to lessen the pain associated with their menses, such as Pat who used a hot towel on her tummy to warm the stomach area; as a result the flow would be faster, reducing the pain. Pat said: “I have only those pains which I manage with the warm water” (Pat, Individual interview November 2012).

The pain of menses were not confined to the stomach and the back alone, some participants experienced severe headaches too. A participant said: “sometimes you have a headache and a stomach ache I take pain killers” (Melony, Individual interview November 2012). Some girls had migraines and dizziness (Body mapping, June 2012).

Another common experience among the girls was irritability and mood swings. This was characterized by girls being easy to get angry, affecting their relationship with peers and teachers at school. A participant who revealed her experience in an individual interview said:

I don't talk to people much because I am irritable and could talk back to them rudely. But it's not my fault, the hormonal changes causes this. I don't also like relating with boys or associating with boys. I however can control my tempers like I can't answer back teachers, because I know I can be punished or even suspended from school. But persistent bothering can make me really angry and could lose my cool, because I have menstrual problems (Precious, Individual Interview October, 2012).

Another participant said:

First you will be very harsh especially on boys. You become very irritable, easy to anger. That is my main problem (Emmy, Individual interview October 2012).

One participant's irritability and harshness would go overboard to an extent of being violent, as revealed in the following response:

People are usually different, for me when menstruating, I am usually very harsh and could even beat up people, I get so irritable (FGD1R5, September 2012).

Another experience during menstruation among adolescent girls is the frequent mood swings. In such circumstances, one would be happy, the next moment they are sad as reported by Halle in and Alicia in their journal:

My ps started in the evening after school and I was shocked because I didn't expect it today. I think it came two days before last month's date. I think that is why my moods suddenly changed and they keep on changing from happy to sad (Halle, Journal 28/6/12).

...At school, I was in a very bad mood and didn't feel like chatting with anybody...I was in low spirits, and avoided talking to people because of my bad mood (Alicia, Journal 11/10/12).

Such mood swings were not only a problem at school, but also at home. For example, a participant indicated that mood swings would be a problem, especially when one needed to work to earn money to buy food and sanitary ware. This was established from the following response:

The most stressing bit is that with the mood swings and discomfort of menstruation, yet you wanted to work for someone, e.g. washing. You know you cannot tell someone that you are unwell because you need the money you have to work to buy food and have money for personal use [pads]. When menstruating, it's hard (Halle, Individual interview, October 2012).

Body weakness and laziness accompanied the menstrual pains for some adolescent girl, according to study the participants. These girls felt tired and slept in class in some occasions. The effects of the pain and the discomfort associated with the experience made some girls uncomfortable walking to school and back as reported in the following responses:

Yes, you would rather sleep because one feels so weak to work (Flo, Individual interview, October 2012).

It pains until I can't walk, that time (FGD2R4, September 2012).

I become one person who is lazy; I wake up late (PFGDR1, July 2012).

Tiredness and body weakness, feeling some pain around the legs and not easy to walk, were common (Body mapping, June 2012).

Lastly, appetite loss was reported by majority of the participants, while some detested some food at these moments some generally had poor appetite. Being day scholars, these participants had their breakfast and supper at home, but tea, and lunch at school.

From individual interview responses a participant said:

Then you have no appetite for some nuts like groundnuts, *Omena* and you feeling like nauseated (Emmy, Individual interview October 2012).

From the discussions in the section above, the participants have indicated that some experiences related to the phenomenon such as, irritability, anger, and mood swings could cause loneliness. Such that some participants, revealed keeping to themselves during these moments to avoid possible exchanges of words with their siblings, peers, or teachers. As a control measure, the participants keep away from others. For example:

The particular time that I began it has been painful till today. I get stressed and want to be alone until the week is over (Jenny, Individual interview November 2012).

I didn't feel anything today. Although I was in a bad mood, and didn't want to talk to anyone not even my friends. I tried to isolate myself but they kept following me. I tried to conceal my moods because I would disappoint them yet they always minded me (Samantha, Journal 2/7/12).

Adolescent girls not only avoid talking to people, but also withdraw from others both at school and at home. For example:

Not all girls participate in school activities while *raining*, some will go to sleep on the grass or isolate themselves from others, quite (Purple diva, Individual interview October 2012).

Some became withdrawn because they are anxious that people could know what was happening in their bodies. In such cases the participants mentioned being withdrawn and anxious; because of possible spotting. In other cases they were in a bad mood. These made the moments lonely for the participants who kept away from their friends and family. Therefore, these indicated that such moments were not easy to go through because of the various experiences discussed. In the next section I discuss the meaning of transition as perceived by adolescent girls.

4.2.4 Menstruation as a Transition Process

This study focused on the meanings of menses at the moment, and retrospectively at the point of menarche or the debut of menstruation. The findings of the study indicated that the participants remembered the meanings of the phenomenon at menarche. At menarche, the phenomenon's meaning was varied depending on their preparation for the process. One positive meaning of the experience was that of womanhood.

Majority of the participants viewed menstruation as a sign of one attaining womanhood, a developmental transition point, which the participants celebrated upon attaining. The study findings indicated that the respondents' viewed menstruation as a transition from childhood to womanhood; a process received with joy and excitement by some participants and their sisters or mothers at menarche. Majority of the participants narrated the relevance of this transition as captured by phrases such as 'a big girl' and 'being a woman'. The sense of pride at being a woman, and being a 'real woman'

showed that menstruation was an important body change among the adolescent girls.

Participants received the onset of menses positively, for example:

I felt good that I am a true woman (FGD2R2, July 2012).

When I went home I told my mother that I had started periods, and she responded that was good because I had become a woman or a big girl (FGD2R6, July 2012).

I like it; I am happy; I am a real woman (FGD2R4, July 2012).

It is the pride of a woman (Jackie, Individual interview, October 2012).

Therefore, in this context it meant a transition from childhood to womanhood. Where womanhood is not synonymous to adulthood, it means a stage of female fertility. It was viewed as a transition period by some respondents. Majority of the participants also revealed that they acquired another status at menarche, while their mothers and sisters congratulated them and welcomed them to be part of them. For example:

Menstruation is what makes you to become a woman (FGD1R2, July 2012).

You tell them that when these changes occur you stop being a child so that when they realize that, they see the difference and the changes coming (FGD4R1, September 2012).

First it makes the person understand that now I am not a child (FGD1R5, July 2012).

There also seemed to be some sense of inclusion at this point where sisters also told their younger siblings that ‘...you are at my level’. This single point of maturation marked the attainment of a certain status or level of life.

My sister was the first and she really rejoiced that you are now a woman at least we do not have kids in this house; I can see you are at my level (PFGDR1, July 2012).

Another key finding showed the expectations of the community upon this transition. Some participants revealed that upon attaining menarche, they were advised by the older women (sisters, mothers and aunts) to keep away from boys. Some participants were instructed to avoid all members of the opposite sex. For example, one respondent shared the following recollection:

I think that when you are ten years old, you are playing with boys, but when you start menstruating, you are no more a kid and when you have a good parent or someone close, they can tell you, you should be careful you know. You can go to this extent and not, that is a change as well (PFGDR2, July 2012).

Closely connected to the meaning of womanhood is the meaning of motherhood, where the study findings indicated that it is critical to be fertile. It is in this context that menstruation is presented as a positive experience in the lives of the adolescent girls. The connectedness between menstruation and motherhood is portrayed in the individual interviews and FGDs. Therefore, menstruation is proof of fertility; and that a girl is ready to be a mother. Participants draw the connection between motherhood and menstruation in various ways:

Girls menstruate because they give birth. If you can't menstruate you cannot give birth (FGD1R4, July 2012).

We go through this to be able to have children (Precious, Individual interview, October 2012).

When you experience periods, it means you are a woman; you can bear a child (Jackie, July 2012).

The value of motherhood was a crucial period for majority of the participants, because the ability to have babies is cherished in this community.

I feel good about it, I feel like now I am a woman it is like without that your life is gone. Menstruation is like you are capable of having children, though

not at that time, you are sure of it (Melony, Individual interview November 2012).

The inability to menstruate is equated to bareness which is abhorred in the community.

I like it because it shows that I am not barren and can get pregnant at any time second of all that I am healthy and normal that my body is functioning well so I just appreciate that (Jenny, Individual interview, November 2012).

Within the same meaning of motherhood is the value of fertility; so that the messy, shameful and hygiene crisis of menstruation is not a problem because of its value. At this point the messiness of menstruation is valued for example, Precious had this to say:

Being dirty is none of their business. If us we were not menstruating where would the babies come from (Precious, Individual interview, October 2012).

However, the girls also understood that it was not the right time then to be mothers. They knew that motherhood was to come in the future, not then.

The meaning of normalcy was presented in majority of the responses in both group and individual interviews. This understanding is closely connected to the meaning of menstruation being natural to adolescent girls; that this process is natural and normal because one was created female. Majority of the participants said that at the onset of their menses, their mothers and teachers told them that it was normal to experience it. Messages at menarche from mothers at home and peers at school instructed girls that menstruation is a normal thing for adolescent girls.

Mother told me that it was normal for every girl (Sweety, Journal, June 2012).

My mother being a woman understood and told me that I should have shared it with her, being a normal thing for all women (Samantha, Journal, July 2012).

My loving mum was the first and she explained to me that it was normal and that the pains come and goes after some time, my best friend and said it was normal (PFGDR3, July 2012).

Majority of the participants said they got worried if they got to some age without menstruating because they would feel abnormal, and others would also view them in the same way. Participants in this study underscored the relevance of experiencing menstruation at a normal age.

I will tell them that menstruation is a normal thing, for every girl. For those who mature early from the age of 12 until even 16. If they go past 16 before they start, they should go to a doctor for a check-up, but for a normal girl she must experience, so they should take it as a normal thing (Linda, Individual interview, October 2012).

In addition to being normal, there was need to look (conceal the evidence of menstruation) and act normal when a girl is menstruating so that even with the discomforts of menstruation, one can perform their normal chores. Acting normal to conceal the evidence was important for example some of the participants indicated that:

You have to try to look normal, even grin instead of a smile, you laugh but a painful one but not of happiness (FGD2R5, July 2012).

If you have started menstruating, you have to behave normal and do all your duties the way you are expected (FGD6R1, July 2012).

I don't see it changing my life because at home I help out or work as usual (FGD3R4 July 2012).

On the other hand, two participants argued that being a normal process it needed to be received positively, and therefore it did not need to be concealed for example:

When you appreciate it and you know it is something valuable, you don't conceal, it is just normal (Sandy, Individual interview, November 2012).

Now I have learnt to appreciate it (Sheila, Individual interview, November 2012).

Worth noting was that with time adolescent girls changed their view towards menstruation and appreciated it as normal. This made them improve their self-esteem and become more confident. As the girls became experienced with the process, they became confident and even communicated to others about it.

Nowadays I feel more confident because I know there are many people who go through the experience, and it is normal for a girl (Jackie, Individual interview, October 2012).

In addition to the meaning of normalcy is the meaning of nature, where the process is perceived as natural to all healthy adolescent girls as indicated by the respondents below:

It is their nature (FGD1R4, FGD2R2, FGD3R4, July 2012).

I would tell them that menstruation is a natural thing that is experienced from the age of nine onwards and if you get to the age of sixteen and you have go for a medical check-up. If you get it do not feel that it is a strange thing .You should be proud of if it's there and should always carry a pad in case of an emergency (FGD6R2, September 2012).

I don't because I know it is something natural that has to happen to girls (Emmy, Individual interview, October 2012)

First, it tells me at least to be more confident, then to accept whom I am for that is natural (Jackie, Individual interview, October 2012).

The biological process of menstruation is what makes it normal and natural. The participants understood the biological process as:

Biologically, in the female organ, there is some process that occurs like, the ovum, comes from the ovary, when the ovum is not fertilized in the uterus, the uterine walls the uterine walls contract and relax, and produce some

hormones known as oxytocin, so when the uterine walls contract the blood, then flow out (FGD1R6, July 2012).

4.3 Adolescent Girls' Communicating Menstruation

The society is a social institution that determines communication restricting or regulating, prohibiting and allowing others (Agnew, 2012). In most societies in Africa, menstruation is treated with silence both at home and school because of societal restrictions placed on such a taboo topic (Chebii, 2012). In spite of this, adolescent girls have several menstrual related needs that should be communicated to parents, teachers, peers and friends, to find a solution. Some of these problems are the need for medicine to treat menstrual discomforts or pains, need for permission to step out of class to change, to access menstrual health information and services. For adolescent girls to go through their menstrual process successfully adolescent communication is crucial in meeting their needs. In this section of the study, adolescent communication with family members, teachers and their peers at home and at school is discussed.

4.3.1 Communicating with Parents about Menstruation

In ideal situations, adolescent girls acquire knowledge on menstruation and sexuality from different sources such as parents, schools, peers and the media (Allen, Kaestle & Goldberg, 2010). The family, with which the adolescent girls interact with on a daily basis, especially being day scholars, is important in educating them about sexuality and providing menstrual knowledge and information alongside the menstrual needs. Moreover, family contexts, especially where trusting relationships exist, provide meaningful scenarios for adolescent communication about sexuality and menstruation (Gracia-Moya, Rivera, Moreno, Lindstorm & Jimenez-Iglesias, 2012).

However, the participants of this study lived in Kibera; some living with parents, others with only fathers, or mothers, some with relatives, or siblings (see Appendix xiii). From

the adolescent girls' biographies, the participants lived with aunts, uncles or cousins. Majority of this study's participants came from Kibera, with only four coming from the middle class neighbourhoods. In the next sections I discuss adolescent girls' communication with parents, and guardians.

4.3.1.1 Engaging Fathers and Male Guardians in Menstrual Issues

The findings of this study revealed that adolescent girls did not discuss their menstrual related concerns with their fathers or their male guardians. When they needed sanitary towels and medication, even when their mothers were away, the girls came up with strategies to access money indirectly from their fathers to purchase these items. The strategies included faking a debt and giving excuses to justify why they needed the money. In such situations, their intentions were not to deceive their fathers or male guardians, but an indirect way to get money to purchase sanitary towels. Majority of the participants indicated that since fathers were of the opposite sex, this prohibited them from knowing the menstrual statuses of their daughters.

Father is of the opposite sex so I can only tell mum because we are of the same sex (FGD6R1, September 2012).

You can't [tell your father that you are in your periods]. There is no way. You could use another way of telling him. You just can't go straight to him and explain what is happening. Tell him indirectly (FGD6R3, September 2012).

I usually find it hard because he is a man and I will have difficulty explaining it to him (Pat, Individual interview, November 2012).

A participant conceded that there was no way she could talk to her father about menstrual issues even when there was no female around. Feigning debts was preferred than openly telling her father what the money was actually meant for:

Even when left alone with father in the house, and you need pads you ask for a hundred shillings feigning debt that you need to pay or say there is something you have seen and want to buy (FGD2R6, July 2012).

During the individual interview, Sheila shared an incident about a time when her mother was away and she needed a supply of sanitary towels, yet she felt ashamed and embarrassed because it was: “Something you can’t ask your father” (Sheila, Individual interview, November 2012).

Even male cousins were not privy to such matters. One participant narrated her experience while travelling with an older male cousin, where she accidentally soiled her clothes after experiencing her menses unexpectedly. When asked if she asked for money to purchase sanitary towels from her cousin she said: “Ah no! He was a man. I couldn’t” (FGD2R2, July 2012).

Just like fathers, brothers or male cousins were not easy to communicate with. A participant reported her difficulty in asking for money to buy sanitary towels from a brother. According to majority of the participants, it was unheard of for a girl to directly ask for sanitary towels from a brother especially an older one. A participant shared her experience while travelling with her brother as follows:

I was travelling in a *matatu* [public transport vehicle] the place had no stopover to buy pads and I was not with my mother nor anyone whom I could ask for pads or someone I knew. I was with my older brother; I just told him that I had a stomach ache; that I felt tired and was paining. I had to tilt while seated to avoid leaking. Luckily, the trouser I wore was black. When we stopped, I told my brother that I was alighting to buy medicine but bought pads (FGD2R5, July 2012).

When the researcher asked the participant why she did not tell her brother the truth, she said:

I couldn't tell him (giggling). I didn't have the guts, if your mother is sometimes hard to tell, then how about a brother? You can't! I asked him for a hundred shillings which he gave me but he didn't ask why? Maybe he understood (FGD2R5, July 2012).

Majority of the girls had never discussed menstruation related issues with their fathers, male guardians, cousins nor brothers because they felt that men lacked the experience of the menstrual process since they did not experience the process and were therefore lacking in knowledge and advice. Another reason was the taboo system of their society which prohibited discussing such matters with men. In various societies gender differences are learnt through social interactions, and how members are socialized. Members are socialized as male or female with the expectations of each gender inculcated early in life.

4.3.1.2 Engaging Mothers and Female Guardians in Menstrual Issues

Research has shown that a sustained parent-adolescent relationship is important for adolescents as they gradually become independent. Adolescents need their parents for guidance and support as they transit through puberty (Rembeck, 2008). More important for adolescent girls is a trusting relationship with their mothers who are crucial in giving information about pubertal changes such as menstruation.

Being of the same sex, it would be expected that the girls would find it a lot easier to discuss menstrual issues with their mothers or other female guardians than with their fathers or male guardians. However, the study findings indicate that this was not the case as it was noted that some adolescent girls still feared discussing menstrual issues with their mothers as well. This study established that mothers were different; some were harsh and inconsiderate. These mothers were feared by their daughters and would not discuss their menstrual related needs and problems with them. In such cases the

participant cited that her mother did not provide an environment that was conducive to share her menstrual issues with her. One of the respondents, Lynn, said:

If your mother is harsh, you will fear telling her, such things. Like my mother she told me she began at 18 and she is very harsh then I tell her I have began at 14, you can fear, you can be beaten that you have began early. So mothers make the environment not conducive to share because they are too harsh. When you find the friendly one you can share (Lynn, Individual interview, November 2012).

Another respondent, Jessica, added:

Eh! You know like my mum is so harsh and my dad is not harsh, most of the times we are on our father's side. So because my mother is so harsh, you can't just approach her because she will say you are wasting time for her (Jessica, Individual interview, October 2012).

In such circumstances, the girls suffered in silence, until the problem was so aggravated that they talked to them. The findings from this study revealed that some girls divulged these issues when the flow became heavier or when they had severe menstrual pains that needed their mothers' intervention for example:

It was painful especially the stomach. I didn't tell my mother the first day but when it became heavier the second day, I decided to tell my mother (FGD3R1, July 2012).

In other circumstances, the participants divulged to their mothers that they had already begun menstruating one year or more after the onset of their menses. This could be occasioned by a desperate need of sanitary towels. In such cases the girls could have borrowed sanitary towels from friends or the school's emergency sanitary towels programme for a long time. For example:

I told my mother when I was in class eight but I started when I was in class seven (FGD1R2, July 2012).

I stayed for a long time when I started menstruating without telling anyone and before my mother got to know (Lynn, Individual interview, November 2012).

Some girls lived with aunts in the informal settlement. Among these aunts one was reported to be harsh and inconsiderate, similar to the mothers discussed above. An example was Flo's aunt, whom she talked of being uneasy with, especially talking about her menstrual needs. She said:

I was not living with my mother it was my aunt and I couldn't tell her. If I tell my aunt, she will just think I am pretending I want to just sleep that you are just lazy (Flo, Individual interview, October 2012).

Flo said her aunt was insensitive to the extent of accusing her of pretence to avoid working. This had forced Flo not to share any menstrual issue with her. She wrote:

I felt no pain just very tired and uncomfortable. My periods were heavier than before I did not know why. I was in a very bad mood, irritable. I did not know who to share this with because my aunt could not hear any of these she thought I was lying to avoid work (Flo, Journal, 9/9/2012).

Furthermore, Flo's relationship with her aunt seemed quite strained to the extent that she would not ask for menstrual supplies and medication from her, even if she was helpless. Flo wrote in her journal:

Today it was hell I had severe cramps in the morning and yet I had exams. Because I didn't take pain killers, I decided to endure the pain. The pain subsided by 10 o'clock and life became normal although still quiet uncomfortable not like the first day, I felt like sleeping. I didn't share with anyone but just persevered (Flo, Journal, 20/6/2012).

Flo shared with other participants her difficulties in accessing sanitary towels as she always received many uncomfortable questions from her aunt. During one of the individual interviews, she reported about the aunt who always had a host of questions

once she asked her for pads. The aunt would want to know when the periods started or will start and when it would end for the sole purpose of making sure that she did not avoid working in the pretext of menses. In the focus group discussions she said:

If you ask for pads my aunt will ask you when it began, how long will take and why it is taking that long? If the days are over and you oversleep, she will ask you why you are not up and working yet periods are over (FGD2R1, July 2012).

The same participant shared with others in a group individual interview that she feared her aunt. She said:

...I asked my aunt where I could get pads she told me to board a *matatu* and go back home. I told her that I couldn't because it would leak. She quarrelled me instead (FGD2R1, July 2012).

The second kind of mothers was those who did not listen to their daughters. A few participants cited their mothers as being disinterested in their maturational processes. These mothers trivialized this body process terming such talks as wasting time, not realizing the importance they held in their daughters' lives. Such mothers were too busy eking out a living or could not just find time to discuss menstrual issues with their daughters. This was especially common for the girls from the poor neighbourhood where their mothers were always busy working to earn a living.

Among these mothers were those who expected their daughters to persevere just as they did themselves. Such a situation was told by a participant as follows:

If you tell her she says even you are a woman and I also persevere and work in spite of it so you need to persevere (FGD2R5, July 2012).

My mother she does not take such things seriously (Halle, Individual interview, October 2012).

Some mothers were not trusted because they had let down their daughters in the past, the third group. As discussed at the beginning of this section, daughters needed to gain their mother's trust to talk about their menstrual problems and needs. In this circumstance a participant disclosed an incident where she had been sexually molested in Class Three yet her mother did not believe her when she reported the matter. Narrating about the incident and the subsequent effects, the participant said:

One day when I was young, someone abused me and I told my mum. But she did not believe me, I even had the evidence, everything but she never believed me and from that day, even if someone beat me and broke my arm, I won't say. I will just persevere with the pain. Each time I remember what happened that day, and how my mum did not trust me it hurts because how I was abused was kind of painful since especially that I was in class three. I trusted my mum, I never told anybody not even my teachers not any other member of the family, went straight home and told her. She said it was a lie that I didn't know anything about those things since I was young. That is what made me not trust anyone especially my family (Jenny, Individual interview, November 2012).

However, there were supportive mothers who dedicated themselves to guiding their daughters through the turmoil of menarche and other menstrual experiences. The findings further indicated that where mothers were perceived to be supportive and dependable, girls found it easier to communicate to them their menstrual experiences as opposed to those perceived to be harsh and inconsiderate.

Some adolescent girls in the study praised their mothers for providing support to them. They spoke of being prepared for the maturation process early by the help they got from their mothers at menarche. One of them said:

I prefer to tell my mum because she has gone through it and can help you. When you experience and first you feel scared you want to know what could happen, you feel shy and even separate yourself from others but now if you

talk to your mom, since she has experienced it she is able to help you go through it compared to your dad who has not experienced it (FGD6R2, September 2012).

The participant cited her mothers' expertise, having experienced menstruation themselves, as a useful and rich source of menstrual information. For example, Sal in her journal wrote of the great support from the women in her family from the mother, aunt and even her grandmother. At menarche Sal's mother, aunt and grandmother taught her how to use a pad, reassuring her as well that the occurrence was normal.

Another participant boasted of her mother's pampering. According to her, she also loved the days when she was on her periods because she could relax the whole day. She said:

I like those days because I don't work my mum understands. When I tell her I have a stomach ache she will ask which stomach and I say periods or tell her that I am not feeling well. She keeps quiet, I just take a bed rest and she does all the work in the house until she cooks and serves the meal at the table to eat (FGD2R4, July 2012).

Alicia wrote in her journal:

I told my mother that I didn't want to cook since I wasn't feeling well, she accepted and cooked herself (Alicia, Journal, 8/7/2012).

Precious talked of the support from her mother and aunt as follows:

My mum or my aunt (we live with my aunt). She buys many packets of pads and keeps them in my room (Precious, Individual interview, October 2012).

Pat talked of her mother's advice on how to remedy menstrual pains:

She told me not to worry when I felt pain she told me to use warm water she is the one who gave me sanitary towels and she told me to use a calendar and when I see the dates nearing I ask her to buy for me pads (Pat, Individual interview, November 2012).

Some aunts were supportive to their nieces as revealed by this study's findings. One example was Precious's aunt who provided more than sufficient menstrual supplies. Another was Sal's aunt who alongside her mother and grandmother guided her through her menarche. From her narrative her first menstrual experience was pleasant. While Anonymous shared an experience, where she had visited her aunt but hurriedly left when she stained her clothes. In her journal she wrote:

It was on a Sunday afternoon, on a visit to my aunt's, while seated on a chair I felt some kind of discomfort. On confirming it I noticed that I was on my 'mashiro', [periods]. I went back home hurriedly even without saying goodbye to my aunt. I feared that if I told her, she would view me as a careless girl who does not know her menstrual cycle yet my periods are irregular. I felt ashamed and hated the 'ps' for interrupting my visit. However, my aunt followed me to find out why I left without bidding her. When she found me taking a bath she wondered why I did so at that time. Being a woman she understood and told me that I should have shared it with her, being a normal thing for all women. She wondered why I had feared to share with her (Anonymous, Journal 3/ 6/12).

4.3.2 Siblings and Peers on Menstrual Issues

As discussed earlier, some participants lived in the informal settlement or around the settlement with their families. These families were different in composition. For example, there were those who lived with their parents and siblings. Some with mothers only, fathers, aunts, cousins, or even guardians. In circumstances where they lived with their older siblings, or in a family, they interacted with their siblings at home, and peers in the neighbourhood as well as school. Some of the participants' peers at school and home were also their friends and confidants.

This study established that adolescent girls shared menstrual issues with their siblings at home, because most of the issues related to menses, needed intervention by people they

could trust and feel secure with among family members. Since adolescent girls do not find it easy to discuss their menstrual related needs with their parents, siblings become a source of support at home. Among family members, sisters and female cousins were preferred. Purple Diva spoke of being comfortable with a female cousin. She said:

I can tell my cousin sister whom we live with; she is the one who understands me. My mother can understand me a little, but since she is sick I cannot bother her. Obviously I cannot tell my father or my brothers, I can only tell my friend and my sister cousin (Purple Diva, Individual interview September 2012).

May be my sister as well, parents no! (Jackie, individual interview, October 2012)

The study findings also indicated that majority of the participants treated related menstrual issues with privacy, and could only be shared with close friends and peers who offered psychological support to the adolescent girls during the moments of discomfort, especially when they had menstrual pains. The adolescent girls indicated that they preferred friends as their confidants, source of menstrual information, psychological support and source of sanitary towels especially during emergencies. Some participants spoke of friends who offered psychological support; for example:

I share with my girl friends; they say what they are experiencing, the menstrual pain too, may be my sister as well but parents no!(Jackie, individual interview, October 2012).

I keep quiet and sort myself out, I share with my friend only (Flo, Individual interview, October 2012).

In my family, I don't tell anyone, but here at school I tell someone like Jackie, I tell her' "Jackie am in pain," at least when she tells me, "sorry," I feel better (Robi, Individual interview, October 2012).

Menstrual talk according to the study were not usually planned but emerged as a topic in girl talk. As a participant revealed:

We do not set out to talk about it; it can come up like a story, when somebody said what they have undergone, you will also be eager to share your experience (Melony, Individual interview, November 2012).

Trusted and secretive friends were useful during emergencies as captured below:

It came abruptly so I had to look for my friend who cannot give out a secret to give me a pad (FGD1R6, July2012).

However, not all siblings are easy to communicate with. For example, older siblings may have the required menstrual information and experience, but the adolescent girls may not be comfortable with them. Although some participants mentioned being comfortable with younger siblings, they lacked expertise and sufficient information about menstruation.

In particular, participants who were the youngest in their families were more disadvantaged, especially those with older sisters already married off. Findings from this study suggest that sisters and cousin sisters were the preferred confidants and providers of menstrual information.

4.3.3 Student-Teacher Communication on Menstrual Issues

Student-teacher communication is essential in the quest to understand adolescent girls' communication on menstrual issues. The participants in this study were sampled from a mixed day secondary school in an urban informal settlement. Part of the school community was teachers, both male and female, students (boys and girls) and the support staff. The girls interacted with these members of the community within the school setting.

Apart from the sanitary facilities in the schools, adolescent girls needed bathroom breaks to change. Sometimes these breaks did not coincide with the school structured ones. In such cases, the girls needed to step out during classes to change; otherwise, they could spoil their uniforms. In the school environment, girls negotiated menstruation by discussing their menstrual need with teachers. In the classroom, they communicated with teachers to be allowed out of class to manage their menstrual related needs, asking for sanitary towels during emergencies, to access medication when they had menstrual pains, or even to be permitted to go home when the pains were too much to bear, or needed a change of uniform after soiling. According to the participants, how they communicated to teachers in the school environment varied depending on the gender of the teacher involved.

4.3.3.1 Communicating with Male Teachers

At school, the girls interacted with both students and teachers (male and female), in the context of cross-gender communication between the adolescent girls and male teachers. However, as indicated by this study, sharing of menstrual related issues was difficult between girls and members of the opposite gender because of the society's taboo system which prohibited discussions on such matters between girls and men.

At school, adolescent girls expressed challenges communicating with their male teachers especially when seeking for permission to attend to menstrual issues. Cultural norms required that male teachers, like other males, do not know about a girl's menstrual status, making it hard for the girls to discuss menstrual related issues with them. The male teachers also understood their society's taboo system and therefore would not engage in such discussions. Jessica revealed her experience in the following response about male teachers: "... you know how men are; they do not want to intrude into girls' issues so much (Jessica, Individual interview, October 2012).

Further, the girls cited lack of knowledge on reproductive health issues, although topics on growing up formed part of the syllabus at primary school. According to the participants, Science, as a subject taught at Class Six, was supposed to introduce them to adolescent changes, where menstruation is usually featured as a change among adolescent girls. However, in some circumstances, when the subject was taught by a man, some avoided focussing on menstruation. At the same time, most girls were not free to ask questions when such topics were taught by male teachers. This posed a challenge to the girls who could not talk about menstruation with their family members nor acquire knowledge at school. Therefore, without learning from the curricula, they missed out from what would have been an important source of menstrual information. This was reported by the following participants:

The reason why I didn't know much about menstruation was that at class six I was taught Science by a male teacher and he did not go into the details of menstruation. He was just explaining what was in the syllabus. At class seven the same. I was taught by only male teachers at primary school (Jessica, Individual interview, October 2012).

At class six my science teacher was a man so you could not ask him questions on menstruation; it was hard (FGD5R1, September 2012).

At the same time, teaching the topic of menstruation from the scientific perspective was not sufficient because it only meant perceiving it as a hormonal change. Yet, the phenomenon does not exist in a vacuum; it exists in relationship to people and context. A participant from an urban informal settlement and that from an affluent neighbourhood experienced this phenomenon in a different way.

Another menstrual management need is the time and space to change sanitary ware. This need may not coincide with the school bathroom and health breaks. Sometimes a

girl needed to urgently change her sanitary ware, especially on the second and third day of her periods due to a heavy flow, but it became tricky when a male teacher was in the classroom. As one respondent explained:

For me I think the part of asking for permission is tricky when your teacher is male (PFGDR1, July2012).

Seeking for permission from male teachers became uncomfortable as explained by some respondents. Purple Diva had this to say about it:

How do you start it, I can't, it's awkward, I tell them I feel pain, am "raining", ah! No! That is not possible. It is not easy. I have never even talked to any teacher about menstruation (Purple Diva, Individual interview, September 2012).

At times, the teachers denied them permission to leave the classroom even after a candid explanation. This insensitivity would sometimes go to the extremes, where a girl would be punished for uttering such a tabooed issue that required regulated talk, especially when a girl became honest, and divulged that she needed permission to attend to her menstrual issues.

The findings from the study indicated that it was common for male teachers to deny girls permission unless it was the designated breaks on the school timetable. Furthermore, since most girls could not discuss menstrual issues with male teachers, it became hard to ask for toilet breaks that would allow them to change sufficiently; most of the times they waited for the timetabled breaks and sometimes the whole day – especially during examinations, some even waited until they returned home to change.

This experience was cited by the participants as follows:

Sometimes when you ask for permission to go out, the teachers refuse saying that you have to wait for break time... (FGD1R7, July 2012).

My flow this day was, still heavy and leaked on my skirt. Being an exam day, I could not go to the toilet early to change. Thank God it didn't show on the skirt (Purple Diva, Journal 19/6/12).

With the dilemma of a cultural taboo and a risk of embarrassment, the girls came up with strategies to overcome these challenges, such as asking other girls to ask for permission on their behalf. Although punishable, at times girls opted to walk out than risk the embarrassment and stigmatization that come with stained clothes. The following participants shared their experiences of asking for permission from male teachers:

There was a time when I was almost leaking. I sent another girl to ask for permission on my behalf. When the teacher agreed I just ran out to change (FGD3R5, July 2012).

In schools, students are required to ask for permission from a teacher, whenever they needed to go out, especially during lessons. When a teacher is not in class, they could ask for permission from the class prefect. It is unacceptable, for a student to walk out of a class. However, this study established that some teachers would refuse to allow adolescent girls out of class during their lessons. As a result some girls would walk out without seeking permission from the teachers because of the urgency to change. In such circumstances, such students would be perceived as being rude and often punished. However, even with the threat of a punishment, the participants preferred to avoid an embarrassment of not attending to their menstrual issues. This was captured in the following response:

If it's a female teacher, you can ask, that you need to go to the toilet, and that its urgent, but for males, no! I can just ask and if he refuses I will bolt. Walk out and wait for a punishment, instead of leaking (FGD2R4, July 2012).

However, not all male teachers were insensitive; some would allow girls out of class when they asked for permission to go to the bathroom, not because they understood the

need, but just because she was a girl. Some male teachers were approachable and sensitive to the girls needs. Melony revealed this in an individual interview:

A male teacher can see that this lady, and has asked for permission she wants to do something and he allows you to go (Melony, Individual interview, November 2012).

4.3.3.2 Communicating with Female Teachers

This section presents the study analyses on communication between adolescent girls and their female teachers at school about menstrual related issues. It examines communication in instances in which adolescent girls interacted with their female teachers at school. As discussed earlier girls experience this phenomenon both at school and at home. The instances that necessitate teachers-students' communication in relation to menstruation are: asking for permission to change or bathroom breaks, accessing medication to alleviate painful cramps, cleaning stains or even asking for permission to go home to change soiled uniform, and accessing sanitary towels. Sometimes, a girl could have missed school the previous day due to menstrual related issues and thus would need to explain to the class teacher the cause of her absenteeism or even seeking for menstrual information.

The findings of this study indicated that female teachers and the adolescent girls interacted when girls needed emergency sanitary towels at school. Girls who did not have regular menstrual cycles, those who did not keep a menstrual calendar and those who did not suffer from PMS were at times caught unawares and without sanitary towels. Beginning menstruation unexpectedly was common as indicated by the following participant's journal entry: "My periods started unexpectedly ..." (Purple Diva, Journal 16/6/12). Some participants like Sweetie received their menses earlier, as early as one week, than they had expected. She made the following journal entry:

I was expecting to receive my *ps* on the 19th of June but as a surprise I have started receiving them today morning at school. Imagine, I was not prepared... (Sweety, Journal, 10/6/2012).

Another finding indicated that apart from abrupt onset of menstruation, some girls had a heavy flow, requiring the use of more pads. In such instances, girls would have to ask for one or two sanitary towels from the school management, to add to their own. Majority of the participants confessed to having been in such a circumstance at one point or another. For example, Jessica wrote in her journal about a situation where she unexpectedly received her periods twice in one month forcing her to ask for sanitary towels from the school emergency programme run through the guiding and counselling department. In a similar situation, Samantha, narrated her experience in a journal entry as follows:

I woke up, took a bath and went to school carrying two pads. I had hoped that they would be enough but unfortunately I needed four. This forced me to ask for two more pads from the guidance and counselling department. This was the toughest thing to do. (Samantha, Journal, 4/6/12).

Sometimes the girls forgot to carry sanitary towels to school because they were in a hurry to get to school, especially that they were day scholars. In such circumstances, they would have to borrow sanitary towels from trusted friends. When they did not find them, the other alternative would be from the sanitary towels emergency programme. For example, one of the respondents narrated her experience in the following:

Here in school if I have forgotten to bring pads, and I am in school, yet it has come suddenly I go to the administration and we are given in the office (Jessica, Individual interview, October 2012).

In a similar incident, Sweety had forgotten her sanitary towels, and she entered the following in her journal:

Today, I went to school and being in a hurry not to get late for school, I forgot to carry pads. Getting to class I forgot again to borrow pads until the third lesson to break... Going to the guiding and counselling department... (Sweety, Journal 26/7/12).

The study established that the school administration not only provided sanitary towels, but also painkillers to treat the painful menstrual cramps. Jenny revealed that she accessed both medication and sanitary towels from the school's administration.

I would ask for sanitary towels from the administration and would be given a packet which took me through the whole month and even the next. Then I would be given the medicine from there ... (Jenny, Individual interview, November 2012).

The finding of the study suggested that negotiating access to sanitary towels during such moments from the school administration was not easy as well, one reason being that menstrual issues are private and likely to cause social embarrassment. The findings established that adolescent girls did not find it easy to discuss their menstrual issues with all female teachers. It was revealed that some female teachers were easy to talk to while others were harsh making it hard for the girls to access emergency sanitary supplies at school. However, the participants generally cited friendly female teachers, although they still feared them just because they were teachers. For example:

I walked out of the class very conscious of a leak and using my hand I felt my skirt but it had not leaked, I went to the guiding and counselling teachers. I told my teacher that I was not feeling well. She inquired where it was aching and I told her that I had a stomach ache. She asked which tummy and she said there were many kinds of stomach then I told her "you understand that I am a girl". Then she gave me pads, with pain killers (FGD2R4, July 2012).

In the response above, the participant seemed uneasy to talk of her menses and thus lied that she had a stomach ache. She also expected the teacher to understand the kind of

stomach ache she had being a girl, as she was uneasy to expressly talk of her menses. This indicates that adolescent girls become comfortable to discuss their menstrual related issues with teachers who are sensitive and understanding.

A participant narrated her experience at primary school, where she had an understanding and supportive female teacher who asked them to confide in her when they started their menses. At menarche such teachers became a source of menstrual information and support. This is revealed in the following response:

We had a good female teacher our class teacher, who asked us to confide in her, and we became free with her. She told us that she is also a lady and if one saw a new thing they should just tell her she said we shouldn't tell people "today I urinated blood and I am sick" that we just told her to tell her everything (FGD5R5, September 2012).

However, for adolescent girls to discuss their menstrual issues with them, female teachers have to be trusted. Study findings suggest that mature female teachers were preferred, especially female counsellors because they would not divulge the girls' menstrual problems to male teachers. The findings also indicate that some female class teachers were firm with the girls to avoid absenteeism among the girls during menstruation, by not entertaining all manners of excuses related to menstruation. From this study finding, adolescent girls conceded that most female teachers were sensitive to their need for permission to visit the bathroom or go home. Such female teachers were trusted by the girls who felt secure and told them their menstrual problems and needs. Precious talked of the mature female teachers as trusted at school in the following response:

There are mature counsellors in the school; pads are also provided in school if it's an emergency (Precious, Individual interview, October 2012).

Harsh and insensitive female teachers on the other hand were feared. In such instances, adolescent girls would rather persevere and risk leaking instead of approaching them for menstrual supplies. In such an incident Purple Diva reported that she feared her class teacher, she said:

In school, I had just started raining recently and you had to ask for pads here and I feared. I could not approach my class teacher because she talks to you badly so you fear. I wondered what to do, I had to suffer, at least for the first day the flow is light, so you decide to persevere until you get home (Purple Diva, Individual interview, October 2012).

Another participant had this to say about unsupportive female teachers:

There are some teachers whom you cannot share [your experiences] with even if they are female teachers (FGD5R1, September 2012).

The study also established that the school environment could also determine if adolescent girls could be free to share menstrual related problems with teachers or not. A participant in the individual interviews posited that government schools did not provide a helpful environment for girls to experience menstruation. In such institutions, girls feared teachers because they were strict even when one needed to change, they could not be allowed out of class because of the school rules, which do not allow movement after classes begin until the timetabled bathroom breaks. A participant shared the following:

...It's not easy, because when in class and you need to change, yet the teacher in class ...the policy here is that when classes begin, no one goes out. But I can pull a stand and tell them that I am not feeling well, to give me permission but I cannot tell them what I am going through. I could feign feeling nauseated, and then I go to change. But there are brave girls who can tell him that they want to change their pads. I admire them (Precious, Individual interview, October 2012).

Even with such rules, some girls were brave enough to seek for permission. This meant that the shy and timid ones suffered and risked soiling their uniforms. This act of defiance is shown when in an individual interview one participant argued that in such situations she would rather, bolt out and get punished later than risk soiling her uniform.

4.3.4 Metaphoric Communication on Menstruation

Discussions in the previous sections have indicated that adolescent girls have difficulties, communicating about their experiences in their environments. There are reasons that make the participants uncomfortable talking about their menstrual related needs openly. These barriers include being teased by boys, embarrassment and taboo. Therefore, to communicate about their menstrual related issues, the girls were forced to be creative and adopt a language that could not be understood by the members of the opposite sex. Challenges in communication for adolescent girls include instances where they are asking for sanitary towels or money to buy them and seeking for permission to attend to their menstrual issues.

The use of metaphorical communication was one of the strategies used by the girls. In this study, metaphorical language was used to obscure meaning from the other members of the society, and allowed only girls to make and share that meaning. Metaphorical language was used in reference to menstruation and sanitary towels. The metaphor alluded to how the participants perceived the phenomenon (menstruation), such that the various metaphors used were related to their social construction of the experience-menstruation and their social contexts.

One of the participants referred to menses as '*rangi*' loosely translated to mean colour, probably alluding to the colour red. The use the term was used in a derogative way, in reference to the menstrual blood being a stain. Alongside that, is the possibility the stain

to cover a large area, alluding to staining of the girls' uniform. Other metaphorical words alluded to by the respondents included 'mashiro' and 'kunysha', which mean to rain and compares the heavy flow of menses to rain. Others were 'am flowing' and 'rolling' which expressed the intensity of their menstrual flow and 'unavuja' directly translated meant leaking. Other metaphors used were as summarized in the table below.

Table 4.1

Metaphors used in Reference to Menstruation

Name	Probable Meanings
To moon/moon/yellow moon	Alluding to the moon and the menstrual cycle
Ps, menses	Abbreviation of periods
To rain/kunysha	Referring to rain
End month/on days	Alludes to the menstrual cycle.
Check check	From a sanitary towel advertisement
An in the house/being in the house	Alluding to isolation or confinement
Mr. Red running	Personification of periods reflecting leaking
A visitor in Jerusalem/a visitor	The transition to womanhood, probably womanhood is the Jerusalem.
Crossing the red sea	Going through the process of menstruation
Member of parliament/Raila and Kibaki	Alluding to politics
Safisha mwezi	Wash the month/moon

Source: Author, 2013

Another participant referred her menses as 'Mr. Red' thus personifying the phenomenon, so that when one mentioned 'Mr. Red running' could suggest a negative attitude towards the experience, probably insinuating leaking through the sanitary towel, and the heavy flow that girls sometimes experience.

In her journal she wrote:

The second day of Mr. Red, It was still a boring day, and I was moody, my moods change all the time, sometimes I am happy and times bored. I didn't fill happy sometime am bored. I didn't feel like talking to anyone but at

least I talked to my friend who cheered me up. It was also a cold day .that made Mr. Red to run very quickly and light (Purple Diva, Journal, 10/7/12).

The use of figurative language alluded to the adjusting of space. The use of figure of speech such ‘being in the house’ to depict seclusion, or staying indoors was common. Visitor or ‘...a visitor in Jerusalem’ meant being new to the phenomenon. Others referred the process to ‘crossing the red sea’ depicting the transition from childhood to womanhood as depicted in some of the respondents’ answers. These were presented in the following responses:

Yes that you have become a woman. They sing and dance, surrounding the hut when you are a visitor to the process (FGD4R3, September 2012).

I am raining, ‘niko mashiro’, [I am on my periods] it is a season we use things that boys cannot know that we are having our monthly periods (m.ps) (Sheila, Individual interview, November 2012).

The following were some of the metaphors used to refer to sanitary towels:

Table 4.2

Adolescent Girls’ Language in Reference to Sanitary Towels

Metaphor	Meaning
Mkate/Chapo/tasteless/women’s bread	Bread
Doll house	A doll’s house
Pads, daps	Reverse for pads
Pampers, free pampers, Umbrella	Pads in boys’ language

Source: Author, 2013

4.4 Social and Lifeworlds’ Interactions

Adolescent girls experience menstruation both at home and at school. In this study, the adolescent girls (participants) were presented in a context where interactions are governed by cultural taboos and social norms, also myths and misconceptions. In such circumstances, the social interactions of adolescent girls in everyday life are governed by the expectations of the society of post-menarche adolescent girls.

4.4.1 Taboos, Negative Norms, Myths and Superstitions

At the onset of menarche, many restrictions both at school and home govern the lives of adolescent girls. At home the participants talked of restrictions meted out against them and that it would portend a bad omen breaking those taboos. At home it was not easy to observe menstrual taboos especially in the congested houses that they lived in the informal settlements.

From the onset of menstruation, a girl was expected to adjust the space between her and the male members of the family. In some communities, the girls were restricted and not allowed to cook or dine with their fathers when menstruating. Moreover, menstrual taboos are central to the experiences of the adolescent girls especially in their public sphere of life. Even before menarche adolescent girls are socialized to adjust distances from the male members of the community. This study found out that social distance was adjusted between fathers and daughters at the onset of menarche.

You do not enter your parent's bedroom (FGD4R1, September 2012).

You do not sleep in your parents' bedroom nor even sit on their bed (Emmy, Individual interview, October 2012).

Other menstrual taboos required a menstruating girl to keep a distance from fathers and other older males in the community. For example:

While menstruating, you keep some distance from your father because you need to respect him and from older men close to your father's age (FGD4R3, September 2012).

When a man as old as your father greets you, you bow and let him touch your forehead... (FGD1R5, July 2012).

You don't sit so close to your father. You know he won't ask he will just wake up and leave feigning tiredness (FGD1R5, July 2012).

At school apart from teasing from boys, talking about menstrual related issue is a taboo. Findings from the focus group discussions revealed regulated talk with members of the opposite sex, especially male teachers.

when u tell a male teacher that you are menstruating a bad omen like when you are going home you might stumble and fall and hurt yourself. So if you are experiencing [menses] you do not tell them. Like me my mum told me that it must not be told to father because I am here and if not your sister is here and the myth behind it is too much (PFGDR1, July 2012).

These complexities are extended to the religious space; where restrictive religious taboos existed. The perception of menstruation as contaminating placed harsh restrictions on menstruating girls, requiring them to avoid religious space while menstruating. In the FGDs participants responded that attending religious activities was restricted.

In the private sphere, restrictions were placed on the body activities because the body was considered dirty and dangerous. In the FGDs, participants indicated the perception that menstrual blood was harmful, because of this, menstrual taboos extended to the tasks that a woman could not perform while menstruating for example:

You can't eat with your father and your brothers; you eat in the kitchen while your brothers eat in the living room with your brothers (FGD1R5, July 2012).

Among the Luos, when a girl is menstruating she does not sit close to her father (FGD6R6, September 2012).

Mythical beliefs exist in most African communities around the issues of menstrual blood (Kotoh, 2008). These myths serve to mystify and display blood as a possible cause of harm. In some communities, menstruating women are secluded to avoid evil

befalling the community. This study presented such myths as mainly evident in the private sphere of women's lives. Such a superstition was such as:

Not to sit at the fire place or a charcoal store, because the heat will cause the odour to spread in the house (FGD4R2, September 2012).

4.4.2 Managing Menstruation at School and at Home

This section of the study uncovers the social and personal spaces that adolescent girls negotiated during menstruation. In the public and private spaces, girls have needs that have to be met to ease their menstrual experience. At school and at home adolescent girls have to bear with the discomforts of their bodies. At school, for example, menstruating adolescent girls spent some of the days during the school terms trying to manage menstruation in one way or another. In the urban informal settlements, most schools are mixed-sex day schools sponsored by the government, whereas most residents are low-income earners, and the cost of day school is within their reach.

Most schools have inadequate facilities to manage menstruation such as latrines to change in private and water for washing due to the meagre resources. In such settings, adolescent girls lacked adequate sanitary supplies, sometimes relying on rags. Furthermore, in the school space, teachers are insensitive to their menstrual needs. It was further noted that this unfriendly environment prevented girls from asking for permission to change and seeking for advice or assistance to tackle menstrual-related problems, consequently soiling their clothes and getting embarrassed or staying away from school the whole period to avoid embarrassment. In some cases of emergency, when one needed to change, teachers did not allow one immediately to attend to it. For example:

There can be an emergency, your pad leaks and you just want to sit there until break time. Then a male teacher is in class, and then he calls you,

‘come and work out this sum’. If you don’t stand, you are rude you have refused to work out the sum (FGD6R5, October 2012).

When a girl refuses to get involved in class activities because she is conscious of probable soiling she is considered rude for example:

If you don’t stand, you are rude you have refused to work out the sum. You feign stomach ache (FGD6R5, September 2012).

In the urban informal settlements sharing of bathrooms is common; this did not offer privacy as cited by some respondents in the study. For example:

I never heard or saw anyone menstruating, when I would see my friends with the menstrual blood, while bathing (Halle, Individual interview, July 2012).

Working during menstruation even when faced with severe cramps was common as shown by the following response:

If you tell her [mother] she says, even you are a woman, and I also persevere and work in spite of it so you also need to preserve (FGD2R5, July 2012).

4.4.3 Challenges in Accessing Sanitary Ware

A school emergency menstrual supply is one way that adolescent girls in the urban informal settlement schools obtain menstrual supplies while at school. At home, some used rags they borrowed from peers or some purchase from kiosks in the informal settlements. Not all adolescent girls coming from Kibera used rags. Some girls accessed sanitary towels from Community Based Organizations, such as *Binti Moja*, *Carolina for Kibera*, and *Victory* a professional woman group. However, these were still inadequate. Regarding this, the study found out that there were mothers who provided their daughters with sanitary ware, even with their meager earnings.

Study findings indicated that adolescent girls in the informal settlement used unsanitary ware to contain their menstrual flow because of inadequate supply of sanitary towels. However, the use of these insanitary materials was mostly done at home, because they could stay indoors. Due to insufficient sanitary ware, some participants used pads only when going to school, while a few used rags throughout. A participant said, “I actually used rags for 2 years because I didn’t even know that pads existed” (Halle, Individual interview, October 2012), while another participant added “...girls find it hard to access modern pads, so they use blankets” (FGD4R3, September 2012). The use of old blankets, sheets or cotton wool was cited as common, with innovations such as “lining the pant with a polythene paper, and then place the blanket, then polythene (FGD5R1, September, 2012). Another participant said:

We use rags, mattress, someone told me she has ever used a sponge but that is risky because when you sit, it will squeeze. You sew the sponge on the pant or line with polythene (FGD5R1, September 2012).

The study also found out that in the informal settlements, the poor resources would mean that families had to buy food instead of pads. In such cases the girls would have to work over the weekends to earn money to purchase sanitary towels. Halle shared her experience in the following response:

I get [money] from working for people on Saturday and Sunday. I get money for my own use and for use at home. So I save some of it [sanitary towels] (Halle, Individual interview, October, 2012).

Linda’s experience was reflected in the following response: “Some parents [mothers] are harsh, so when you talk to them, they become so harsh and tell you do I use money to buy pads or food? (Linda, Individual interview, October, 2012). Lynn recounted her experience when she had to use rags to contain her flow. She reported: “Sometimes you don’t have pads and your mother does not have money, that time you have to use rags,

but after one hour you need to change and keep washing (Lynn, Individual interview, November, 2012). Using unsanitary towel was cited as tricky because it was likely to leak. To ensure that they could access sanitary ware the girls came up with collective strategies, such as borrowing from each other.

Even when one has money, purchasing sanitary towels from the shops was even trickier than accessing the money. Some participants used non-verbal codes when buying; for example, when girls were purchasing sanitary towels, the shopkeepers understood that when an adolescent girl handed them sixty five shillings, she needed sanitary towels and thus, they just wrapped it without question. This was explained by one of the respondents as indicated below:

No they know, when you give out sixty five shillings and tell him/her you wrap in a newspaper, they know it is pads. (FGD4R2, September 2012).

When purchasing sanitary ware, girls exhibited different behaviours; some were confident, others were shy. With many sanitary towel brands in the market, some girls would just ask by the brand name like '*Always*', '*Dream girl*', '*Sunnygirl*', '*Confidence*' and '*Kotex*', while some would fear to even mentioning the names.

For me I refer by name of the brand, like I can ask 'how much is Dreamgirl? If I had less five shillings, let's say it was sixty five shillings I only had sixty he will let me go and tease me that he will collect the balance form my father (Laughter). I just ask by name because I want to try all brands (FGD4R3, September 2012).

Another finding from the study indicated that there was a high preference for female shopkeepers, although it was not practical to have all shops sold by women. Some participants indicated that they would look for a shop with a female shopkeeper no matter the distance.

I am always comfortable with a female shopkeeper (Emmy, Individual interview, October 2012).

A lady because she experiences it then to her it is not something new. But if it is a man, if young, and you ask for a pad, they feel awkward and can even be ashamed to give you. But I prefer a lady (Sheila, Individual interview, November 2012).

However, with time the girls became confident buying pads from the male shopkeepers and even asking for sanitary towels by name without fearing other shoppers.

Earlier I would only buy pads in a woman's shop no matter how far, because I feared they would know. I am menstruating but now I just go to the shop and ask about the prices of 'Sunnygirl' and 'Always'. Even when it's a man I ask. There is a time I went to a shop and asked for pads and there was a girl standing. The older man was shocked and reported, 'eh, how do you ask just like that while this one is tongue tied'. I answered everyone is raised differently. I bought mine and left (FGD3R5, July 2012).

When I started menstruating, I would only buy pads in a woman's shop no matter how far, because I feared they would know that I am on my periods (FGD3R5, July 2012).

Preference for women-sold shops ranked at the top, but most of the girls also mentioned shops sold by older men being preferred to the ones sold by younger men because the older men were considered mature, probably fathers of adolescent girls.

This is indicated by the following participant's response:

I prefer a shop with an older man as the shopkeeper. The younger men will take advantage of you, to rape you and could get you pregnant but older men are mature (FGD4R2, November 2012)

I prefer buying from an old man's shop as they are mature (FGD3R1, July 2012).

The young men would even tell others when you meet along the road ‘that is the girl who buys pads from our shop’. You would rather go to an older man’s shop who also knows his own daughter goes through the same experience, they keep quiet (FGD4R3, November 2012).

Another finding was that purchasing sanitary towels was challenging to adolescent girls, especially from shops sold by members of the opposite sex; some, especially the male shopkeepers, were insensitive to the privacy of the girls, although some male shopkeepers knew how to put the girls at ease. Another finding was that the girls preferred buying sanitary towels from one place; probably because once they got used to the shopkeeper it became easier to purchase their sanitary ware.

In some shops, study findings indicated that some male attendants and some shopkeepers deliberately or accidentally embarrassed adolescent girls as they purchased sanitary towels. This was even worse for girls who were too shy to buy sanitary towels when other people were in the shops. Some participants would wait for everyone to leave the shop before asking for the item, while others would ask for pampers instead of sanitary towels.

Yeah, you go to the shop, if there are people, you wait for them till they go then you ask for the pads but with fear (Sheila, Individual interview November 2012).

‘How much is that one?’ just pointing and not mentioning it by name. The man would answer ‘pads’ and she would say ‘that one’ the older man just understood and gave her (FGD3R2, July 2012).

Another finding from this study suggested that adolescent girls excluded or isolated themselves from social events even when invited; opting to send apologies instead because they feared rigorous activities such as those that involved standing up or a lot of movements in the course of the event. If they attended these events, they preferred to

take a back seat and remain passive. Participants cited the following as causes of exclusion from private and public space:

I don't participate I will seat at the back and that is another reason why I don't like attending occasions when on periods (FGD2R3, July 2012).

You don't feel good, like some pads e.g. the maxi ones you can't sit because, it prevents you from many things you can't go anywhere, not even a party because you are always self-conscious. So you just stay (FGD5R2, September 2012).

4.5 Menstruation and Schooling

As discussed earlier, majority of the adolescent girls experienced either severe or mild dysmenorrhoea during their monthly periods. Sometimes a girl had to leave school to go home to attend to her menstrual pains or because she lacked the proper and adequate sanitary protection. At other times, in such cases the girls were hesitant to communicate these challenges to the teachers, friends and parents for their intervention. Even when teachers were insensitive to let them go home, a participant confessed that she would cry when the cramping was too much until she was granted permission to go home.

During the day I had a heavy flow and crying, I couldn't maintain to be in school, my uniform was all wet with blood. I was then taken to the senior teacher where I was given a letter to go home. It took a week; it was so heavy I didn't go to school the whole week (FGD1R4, July 2012).

Social embarrassment was also cited in the study as contributing to girls missing school. Some participants shared their embarrassing experiences when the menses occasionally leaked through their clothes. In one instance, a girl had to go home after soiling her school uniform because a dirty uniform could be embarrassing. Even when the girls went to school, they would go late making the teachers punish them.

Some girls confessed that they dragged themselves to school because of the menstrual discomfort. A participant mapped the following experience on the body maps:

Sometimes there is pain in the legs especially at the ankle, making walking difficult (Body mapping, June 2012).

Tiredness and body weakness (Body mapping, June 2012).

The strict school rules, concerning movement around school during lessons made some girls skip school, especially on the heavy flow days. For example:

My pad was full, yet the teacher would not allow anyone out when in class or if the teacher got into the class before you. I knew I could not be given permission, so I persevered even with chances of leaking until the teacher left and I ran out to the toilet (FGD3R2, July 2012).

Even when the girls went to school, they were forced to go back home because of the severe cramping, especially when they did not have medication to alleviate the pain. In such circumstances, the participants preferred to return home to rest. This was depicted by some participants in their journals:

It is a normal day, I am very happy but my stomach just kept on paining. I did not have money to buy medicine and pads. To make it worse I had a heavy flow. Went to school but came back home and went to bed to sleep (Flo, Journal, 10/9/12).

Apart from affecting the school attendance of adolescent girls, the study also established that menstruation affects the concentration of adolescent girls in the classroom. Owing to menstrual pains and self-consciousness, the participants complained of feeling bored, tired and irritable in the classroom when on their periods, hence becoming passive in the classroom during lessons. In this sense, menstruation becomes a barrier to communication in the school space.

The lack of desire to participate, alongside the lack of concentration in class as a common phenomenon during their menses, was common to some participants. With the presence of a teacher in class she slept, or remained quiet when asked a question yearning for the bell to ring to regain her freedom to attend to her menstrual needs. Participants explained the difficulties of concentrating in class during their periods in the following context:

Like a teacher our history teacher says (imitates their male teacher) “you are not concentrating!” (FGD2R4, July 2012).

When asked questions one participant conceded that “you say you don’t know, even when you know” the answer, because she was irritable, not interested in talking and instead looked at talking as a nuisance. The worst experience, according to a participant, was when one’s pad leaked, and a teacher ordered one to stand and work out a sum on the board.

When you are in class and a teacher asks you a question like “yes you” and yet you don’t even feel like talking. Then the teacher says you are not concentrating (FGD2R2, July 2012).

The findings of the study revealed that the lack of concentration during menstrual periods not only affected concentration during the lessons but also revision for examinations. Menstrual pains were cited as the one cause of discomfort at school. Participants unanimously agreed that during their menses; they could hardly concentrate in academic activities. The respondents asserted that they were in class physically but felt unwell and found it difficult to concentrate on most tasks. From the study findings, the menstrual-related discomforts during exams were caused by cramps, the anxiety of soiling their uniform, compounded by being tired and sleepy making it difficult to concentrate during examinations.

Managing menstruation was even worse during examinations because it was not easy to move in and out of the classroom owing to stringent examinations regulations. When a girl needed a change of sanitary towels she was only lucky when a sensitive teacher was invigilating the examination otherwise she had to wait until the end of the exam to change.

Majorly it is during exam times when you need to change and yet there is no break within the exam. You just tell the teacher that you have an emergency and if that teacher understands will just let you go. But others will tell you to wait until the end of the exam (Sandy, Individual interview, November, 2012).

If it is an exam, for example, you don't feel like doing it, you feel nervous, the stomach pains, you sleep you don't feel like doing the paper. If it is reading or writing notes you don't feel like and you sometimes abandon it (Flo, Individual interview, October 2012).

This study showed that adolescent girls did not participate fully in school activities when on menses due to the fear of a possible leakage during play. In the focus group discussions, a participant disclosed that she feared getting noticed when other students left the classroom to play in the field yet the possibility of a leakage would make her remain longer in the classroom. With insufficient menstrual supplies, some girls remained in class suspicious that they had spotted their uniforms. The respondents indicated that at times one had a heavy flow yet she was not able to change in time because of the strict time-table breaks.

I get noticed may be when people are going out like now they are going to play. Then they remain in class (PFGDR5, July 2012).

Lastly, the affective symptoms of menstruation contributed to inactivity during menstruation. A participant in the focus group discussions said she remained calm and

disinterested in activities when on her periods. The participants indicated some of the activities they avoided during menses:

Back at home in the evening I was in low spirits, and avoided talking to people because of my bad mood (Alicia, Journal, 11/10/12).

Sometimes you can see that people are busy doing something but sometimes you look at them calm and quiet (PFGDR4, July 2012).

However one participant said she was active even during menstruation:

When I am at home, I spend a lot of time just resting, I noticed that when menstruating you need to exercise a lot because it reduces the pain and you feel better but when you sleep you feel so sick, that is what I have noticed that when you don't do exercise, the stomach will ache more because the menstrual blood will clot. Even if it is running, by when you exercise, the menstrual bleeding will blow easily compared to sleeping, it even takes a shorter time, like three to four days when you do not (Emmy, Individual interview, October 2012).

4.6 Summary

This chapter has presented the analysis, interpretation and discussion of data relating to menstruation a lived experience among adolescent girls in an urban informal settlement in Nairobi, Kenya. It has also presented the communicative aspects of menstrual related issues with parents, teachers, peers and siblings in the lifeworlds of the adolescent girls, alongside the strategies employed to ease communication. The findings revealed the meanings attached to menstruation as including shame and secrecy, hygiene crisis, concealment and maturation. Other findings included the menstrual practices and societal taboos relating to menstruation that necessitated the exclusion of menstruating girls and women from public space both at home and school. Therefore, the study findings indicated that some menstruating girls isolated themselves from games and

sports, exclusion from religious activists, and social activities. The next chapter summarizes the key findings and makes discussions of them.

CHAPTER FIVE

SUMMARY AND DISCUSSION OF FINDINGS

5.1 Introduction

The previous chapter presented the analysis of data generated from the journals, focus group discussions, individual interviews and body mapping, conducted on 22 adolescent girls from a mixed day secondary school in Kibera, an urban informal settlement in Kenya. This chapter summarizes the key findings, and concentrates on the discussion of the key findings in light of the theories that guided the research. Subsequently, the interpretation provides the basis for understanding the meanings of menstruation to adolescent girls, thus generating new knowledge on the interventions to ease the plight of girls in relation to menstruation.

Further, it enhances the understanding on how adolescent girls communicate about menstruation with members of the society in their complex socio-economic environment. This will enable policy changes by the various stakeholders on issues concerning adolescent girls. The chapter begins with the summary of the key findings.

5.2 Summary of Findings

The next section summarizes the findings of this study; it is divided into four parts.

5.2.1 The Meanings of Secrecy, Shame and Hygiene Crisis

The first finding from this study indicated that menstruation was associated with meanings of shame and secrecy as central to the experience. Majority of the girls constructed menstruation as a shameful secret. In this case, menstrual shame was caused by menstrual odour, the feeling of being dirty and teasing by boys. To avoid the shame, adolescent girls concealed their sanitary ware from members of their society. Other sources of discomfort were irritability, mood swings, and menstrual pain. The study established that menstrual shame was not limited to girls soiling their clothes, but also talking about the experience, especially to members of the opposite sex. Therefore, concealment entailed both physical and verbal techniques, meant to avoid drawing attention to themselves.

The study further established that majority of the girls were faced with a hygiene crisis, mostly since strict menstrual practices needed to be observed. These practices include bathing twice a day, using hygienic sanitary towels, and changing regularly, to avoid menstrual odour, leaking and soiling of clothes, such hygiene practices had to be observed. However, this was challenging living in an urban informal settlement, where bathroom facilities and privacy were lacking or insufficient both at school and at home.

The third finding was the meaning attached to the menstrual blood which the study established as disgusting, unlike blood from other parts of the human body. It was stated that the blood was repulsive because of where it came from which the participants referred to as 'down there'.

The meaning of transition from childhood to womanhood was also associated to menstruation in this study. In this regard, menstruation was considered a biological body process normal and natural to a healthy adolescent girl. This was linked to fertility,

which majority of the participants cherished as a path to motherhood considered important in their communities. Besides appreciating their fertility, the girls understood that pregnancy was not a current expectation but a future prospect. Consequently, menstruation was a sign that a girl was not pregnant. Adolescent girls at this stage of life clearly knew the consequences of teenage pregnancy; some said they were happy when they menstruated because it as a sign they were not pregnant.

5.2.2 Communicating Menstruation

Discussing menstrual related concerns with fathers, brothers, cousins and uncles was not easy for adolescent girls because of the cultural norms that prohibited discussions on matters related to sexuality with men. For this reason, majority of the participants hardly asked for sanitary towels, medication or advice from them. To solve this communication problem, adolescent girls came up with strategies such as lying about a debt, or faking other needs to justify the need for money, which they diverted to buy sanitary protection.

The findings from this study also indicated that majority of the adolescent girls were hesitant to tell their mothers or aunts about menstrual related needs. This being a difficult period for all adolescents, mothers and aunts needed to guide, support, and provide them with menstrual related needs and menstrual knowledge. However, the study found out that although mothers and aunts possessed menstrual related information, the girls were not comfortable with most of them. It emerged that there are four groups of mothers and aunts: the harsh and insensitive, the indifferent, the busy mothers and the supportive mothers and aunts all of whom according to their category related with the girls.

Some mothers and aunts were reported to be harsh and inconsiderate, making the girls scared to even broach the subject. The indifferent ones trivialized the phenomenon, while the busy mothers had to provide for the family, hence too busy with the hardships of fending for their families. However, the supportive mothers and aunts dedicated themselves to preparing their daughters prior to the experience, guiding them through the turmoil of first menses and generally in growing up. They provided a favourable environment for talking, provided sanitary towels and encouraged them. They even shared their own experiences. Girls with supportive mothers developed positive attitudes towards menstruation and had a high self-esteem.

Siblings of the same sex were cited by the participants as their confidants because they could be trusted, especially those close to the same ages with the participants. However, majority of the participants were not comfortable with their older sisters who had experienced menstruation, yet they were comfortable with their younger siblings who did not possess knowledge on menstruation. The study revealed that adolescent girls were not free with their older sisters for example, a participant narrated about her menstrual experience which occurred while on a visit at her sister's home. Fearing her sister, the participant sent her niece with a note to her older sister asking for money to buy sanitary towels. On the other hand, brothers were not privy to their sister's experiences because they were of the opposite sex.

Peers (classmates and friends) both at home and school offered great support to the participants on menstrual related issues. At school, the participants' girlfriends provided sanitary towels to the participants during emergencies. Trusted friends also provided psychological support during painful menstrual cramps. The fact that they could share their experiences with other girls in informal conversations reassured them that

menstruation is natural and common to adolescent girls. At home, adolescent girls in informal settlements used collective strategies to access sanitary towels. In these cases, they borrowed from friends ensuring access to sanitary towels during emergencies.

A societal taboo system governing sexuality matters and cross-gender communication prevent girls from sharing their menstrual related problems with male teachers because of the perception that menses is as a woman's issue. In this study, the girls revealed that male teachers avoided discussing menstrual issues. When teaching the topic of reproduction in Science and Biology, they would avoid questions from the students. From the study findings, male teachers' lack in both experience and menstrual knowledge could lead to girls suffering silently during their menses, especially if they were their supposed source of knowledge. According to the participants, it was a taboo to tell a male teacher about one's menstrual status. Even in some instances where a girl became bold enough to say that she wanted permission to change (after intensive probing from the male teacher), she received some caning because it was rude to utter anything tabooed. With such experiences, it became difficult for the adolescent girls to communicate their menstrual related needs to male teachers.

At the school space, adolescent girls interacted with female teachers. The study established that adolescent girls preferred discussing menstrual issues with female teachers because the teachers are knowledgeable on the phenomena. Secondly, majority of the female teachers, according to the participants, were friendly encouraging adolescent girls to seek for their help. These supportive female teachers were the main source of menstrual information to girls through girl talk and the Science subject, taught in primary schools. However, in government schools, some female teachers were reported to be insensitive to the girls' menstrual needs.

Female teachers, especially those in the guiding and counselling department, ran the emergency sanitary towels programme which provided the neediest girls with sanitary towels and medication. In cases of emergencies, girls would access sanitary towels from the school management through this department. This programme helped retain girls in school during menses. In addition to medication and sanitary provision, these female teachers also guided the girls on hygienic practices, becoming a source of support, especially to girls whose mothers did not offer any support.

Government schools have structured time-tables that allow students to only leave the classroom to the wash rooms only during tea-breaks, lunch breaks and at the end of the day's lessons, to go for games or home. Although the time to change their sanitary towels could coincide with the school time-tabled breaks, girls sometimes needed time to change between lessons. This could be occasioned by emergencies, such as unexpected onset of menses or a heavy flow, especially on the second and third day. With the strict programmes at school, adolescent girls especially, faced an uneasy time seeking for permission to manage their menses.

Adolescent girls feigned sickness to be let out to the bathroom to change or seek for medication to lessen the menstrual pains. At times while in school, the respondents needed time out to access sanitary towels from the school emergency programme or from peers. Therefore, to be allowed out of class or school without much discomfort, adolescent girls preferred feigning other illnesses. Although a majority of the girls experienced painful cramps, they did not confess; they instead complained of stomach ache, back and headache. Intriguingly, these are characteristic of dysmenorrhoea. Sensitive teachers understood what they meant when they complained of such pains, but some harsh and inconsiderate ones did not.

Menstrual communication has been established as being an uneasy topic for discussion for adolescent girls with their parents, teachers and peers, because menstrual content in most cases is a communication taboo. To overcome these challenges, the study showed that adolescent girls used metaphorical language, specific to adolescent girls, to obscure meaning from other members of the community, especially from the boys and men. Other strategies were feigning sickness, and giving excuses.

The study also uncovered the use of metaphorical language in reference to the menstrual process and sanitary towels. When referring to menstruation, adolescent girls used several metaphors that alluded to the process itself such as the use of the terms: 'ps' and 'flow' meaning the heavy menstrual bleeding; 'rolling' which probably alludes to menstrual pains, where some girls with severe menstrual pains would be in so much pain that they could hardly walk; 'leaking' and 'raining' out of the heavy flow experienced by majority of the girls. Other terms used by the adolescent girls in reference to menstruation were derived from their vernacular languages such as *mashiro*, in an African language. A common metaphor, appearing in most cultures around the globe was the reference to the moon such as 'to moon'. However, some of the metaphors become common with time making it necessary for the girls to come up with new metaphors that were not understood by boys and men.

Besides metaphors, adolescent girls used figurative language in reference to the menstrual process. For example, the use of the phrase 'being in the house' alludes to being indoors which may mean staying at home or away from school and society. In some instances, a participant personified the process and even called it '*Mr. Red*' probably to allude to the colour of menstrual blood.

5.2.3 Societal Taboo System and Cultural Norms

This study established that adolescent girls' interaction with members of the society in their lifeworld was governed by the societal taboo system and social norms. From the onset of menarche or at the juncture of their first menstrual experience, a myriad of taboos restricted how girls interacted particularly with the male members of the society. The study findings indicated that the girls were advised to avoid the kitchen when on their periods, not to dine with their brothers and were prohibited from entering their fathers' bedrooms. It was also established that there were myths and superstitions in the African society that mystified menstrual blood as harmful, hence causing the stigma that is associated with the phenomenon.

At school, the taboo system and cultural norms affected their interaction of the girls with male teachers. Having been socialized into these social norms, adolescent girls did not discuss their menstrual related needs and problems with the male teachers. They also avoided divulging their menstrual status to boys because they risked stigmatization. In such an environment, the girls spent most time both at school and at home managing their menstrual issues as they bore the discomforts of their bodies.

Although the adolescent girls were supported by CBOs, and well-wishers, these sanitary towels were not sufficient. Some mothers struggled even with their meager earning to provide the much needed protection. However, most girls used unsanitary ware such as old blankets, mattresses, and rags, because their parents could not afford pads alongside food.

Since their parents could not afford these needs, some girls did menial jobs such as washing during the weekend to earn money for sanitary towels as well as help their parents to fend for the family. The difficulties of accessing sanitary towels did not end

there; when the girls had money to buy pads it was still not easy for them. For the girls, it was difficult to buy pads from shops sold by male shopkeepers, because it would expose ones menstrual status. Therefore, the girls preferred the shops sold by female-shopkeepers.

It was further established that some girls avoided social events when menstruating. Majority revealed that they preferred to be passive and thus the need for active participation in these events deterred them from attending. Events that involved standing, dancing and much movement were avoided due to the risks of leaking and staining. Majority preferred to stay at home, although some attended these social activities while armed with sanitary protection. Some girls avoided attending events in places where there were no private and clean toilet facilities for changing and disposing used sanitary towels.

5.2.4 Menstruation in the School Space

The findings of this study point to the linkages between school attendance and menstruation. Some of the girls revealed having missed school at one point or another due to menstrual related issues. The common cause of absenteeism according to the girls was partially caused by unsupportive school environment, such as the lack of adequate time to change and menstrual pains. Another common cause of absenteeism was the anxiety caused by fear of chances of leaking, due to strict school rules coupled with inconsiderate teachers.

The study also established that some adolescent girls missed school on the days when the flow was heavy, while others could stay away from school the whole period. When girls knew teachers would not give them permission to visit the washrooms to change, they preferred to stay at home instead of embarrassing themselves with soiled clothes.

Contrary to the common belief that insufficient access to sanitary towels is the only cause of absenteeism among schooling adolescent girls, the study findings confirmed that the issue of menstruation in relation to education was complicated and multifaceted.

The study also found out that, even when the girls attend school during menstruation, the study indicates that a majority did not concentrate in class. Generally, menstrual discomforts such as painful cramps, lower back pains and headaches made concentration difficult for the girls; dysmenorrhoea being common at this stage of adolescence, majority of the girls reported painful periods. However, a few used medication to alleviate these pains, medicines such as *diclofenac*, *panadol*, *ponstan forte*, *maramoja* and even herbs were common, although some used home remedies, with a majority persevering. These pains not only affect concentration in class during lessons but also during revision for examinations, and the actual exams. The participants reported that during examinations, they became anxious if they were on their periods because unlike normal school days, examinations had no breaks in between, lacking sufficient time to change. Consequently, the anxiety of leaking and spotting resulted in reduced concentration, leading to poor academic performance.

Alongside the core-curricula, students are expected to participate in extra-curricular activities at school such as sports, which sometimes require some body exertion. In such cases, some adolescent girls avoided these activities because of the menstrual discomforts such as cramping, while others feared leaking and soiling their clothes in the cause of these activities as a result of insufficient sanitary ware. Although some of the girls avoided sporting activities during menses, one said she exercised to reduce cramping and allow the smooth flow of menstrual blood. This participant cited

cramping as a result of being in a sedentary position for a long time, revealing that she participated in many activities as long as she had sufficient sanitary towels.

5.3 Discussion of Findings

This section discusses the key findings of the study, linking them to theory and the reviewed literature. By discussing the findings in the light of theory and past studies, I intended to highlight the specific contributions of the current study to the general knowledge in the area under study.

5.3.1 The Meanings of Menstruation

The study sought to understand the meaning of menstruation from the point of view of those experiencing it; the secondary schooling adolescent girls from an urban informal settlement. With regards to this question, the study established body shame, feeling dirty and body odour as some of the meanings associated with menstruation. These experiences led to the participants concealing menstrual related issues from the society to avoid embarrassment. The secrecy and privacy that menstruation is treated with result from the perception of menstrual blood as being repulsive.

Phenomenology a philosophy and approach that is central to interpretive research, was important this study because it shed light into the taken-for-granted experiences of menstruation. This theory guided the quest to find meaning in these experiences. Therefore, the meanings were subjective, because they were the based on the experiences of each participant, their perceptions and feelings towards the phenomenon. Descriptive phenomenology served as a lens to bring out the clear meaning of menstruation; the meanings of the phenomenon as perceived by each participant. Moreover, researching the participants who had experienced the phenomenon made it possible to bring out different meanings of menstruation, especially using the different methods.

Another significance of the phenomenological theory was cognizance of the body and the centrality of lived experiences. The understanding that adolescent girl's bodies are important, being that which experiences the phenomenon, the site of experience. The theory further suggests that experiencing the human body is similar to experiencing physical objects (Crossley, 2005) because human body is in the flesh or embodied. Therefore, being alive and in the flesh, "our body is the site of these experiences, as the subject of them" (Crossley, 2005 p. 17). This means that the body is the one that experiences the phenomenon, and is the one that is researched. As a result, it is through the body that human beings are situated in the world, and through the relationship between the world and human beings that they perceive their experiences (Crossley, 2005).

Even though, the female body is central to her existence, ignorance on reproductive health, and women's bodies has lead to menstruation being stigmatized (Chrisler, 2013). Previous literature argued that the woman's body is problematic and needed management. Being a symbol of dirt and pollution, cultural views and social meanings of menstrual blood were constructed as a stain on femininity (Agnew, 2012). Yet the management of feminine bodies, especially in poor neighbourhoods, such as informal settlements, arid and poor-resource rural areas is not easy (McMahon *et al.*, 2011, Kirk & Sommer, 2006), resulting from lack of water, medication, disposal facilities, inadequate sanitary towels, cultural norms and insufficient knowledge and information on the phenomena. Even with these problems, a woman's social identity is determined by how she manages her body; especially in front of the men (Chrisler, 2013). Stigma was not only extended to the process, but also sanitary ware. In cases where boys found sanitary towels in girls' back bags or desks they would tease and announce to others.

This stigma was mostly common in mixed, gendered day schools where girls have no dormitories to store their sanitary towels compared to boarding schools.

Furthermore, boys taunted girls at school, especially when they knew about their menstrual status; this teasing sometimes degenerated into assault, especially in mixed-sex schools. In such circumstances, the boys who possess little or no knowledge on menstruation tend to tease girls when they went out from class, imagining that they have gone to change. Similar to other studies (Kirk & Sommer, 2006, Raut & Tandon, 2011) knowledge on menstruation is lacking mostly among the male members of the society who do not understand the concept of menstruation.

Related to the body is the perception of illness, where girls view that menses as a form of sickness. Similar to earlier studies, dysmenorrhoea was also found to be a cause of discomfort and stress to most post-menarche girls. Dysmenorrhoea is characterised by the loss of appetite, vomiting, nausea, back pains, headaches, fatigue, dizziness, and in some extreme cases diarrhoea (Saha *et al.*, 2008; Kirk & Sommer, 2006). However, none of these studies established that the participants made the meaning of illness from these symptoms. For example, this study's findings demonstrated the girls' meanings of menstruation phenomenon as a sickness.

In addition to experiences, culture influences communication of menstruation. Fingerson (2006) argues that societal expectations and norms require adolescent girls and women to hide menstruation because it is an unhygienic secret. Compounding this is the value that adolescence place on acceptance by peers; therefore, they endeavour to be like others, by hiding the evidence of menstruation which differentiates boys from girls. Moreover, menstruation as an embodied experience presents the bodies of adolescent girls as different from the boys. To hide this difference is to conceal the

'secret' menstruation and avoid teasing by boys; with no difference there is no base power for the boys to tease the girls (ibid). In this study, teasing and bullying of girls was common especially from the male students mainly because they did not possess knowledge, and unlike in the American/European contexts, girls do not easily hide the symptoms of the experience because they lacked medicine to ease the pain, had nowhere except their desks and bags to keep their sanitary towels. These made them easy targets for teasing by boys because they had to either go out with the bag to the toilet or remove the pad from their desks and put it in their pockets as the boys looked.

Another important theoretical concept was multiple subjectivities. The participants provided different perspectives of the meaning of their menses. With their own views and beliefs on the phenomenon, each understood it in their own way hence the various meanings of the phenomenon. Therefore, the multiple realities of the participants brought out as the different meanings of the phenomenon.

The social constructivist theory a theory of understanding drew light into how the adolescent girl's construction of their experiences was a result of their social world- the informal settlement. In this study, the various meanings of menstruation were the result of the social constructions of the adolescent girls. These meanings were shaped by their socio-cultural space, living in a multicultural context in an informal settlement. The shared meanings of menstruation such as the meanings of shame, hygiene crisis and concealment were social construct not given by nature, but resulting from the members of the community institutionalizing them, maintaining them persistently until they became the norm.

How the various meanings of the phenomenon formed were interplay between experiences, the social context and interaction. Their inter-subjectivities were reflected

by the nature of the various meanings; for example, the participants with negative views towards the phenomenon formed negative meanings and assigned negative metaphors such as '*kuvuja*', 'Mr. Red' to their periods. Those with positive views used metaphors such as 'a pony' and 'dollhouse'.

Related to individual meanings, were the collective meanings of the phenomenon, where the girls refer to themselves as 'us' rather than 'me' in reference to their collective experiences. This indicated a sense of collectivity in perceptions, indicating that the group was the dominant frame of reference among the adolescent girls. Their reference to 'we' was evident during the FGDs, and body mapping about their body experiences. It is in female friendships that girls receive emotional support and experiential information about menstruation. This shows that, individuals do not always function alone, that their actions are shaped by the norms and expectations of the society. This solidarity extended to the management of their experiences, where they had a collective strategy of accessing sanitary towels, borrowing from each other.

The above assertion means that individuals reflect their society, such that their identities are a reflection of the picture of the society. This is drawn from the social construction theory of reality which argues that individuals construct their identities through their interaction with other members of their society (Berger & Luckmann, 1996). Therefore, when participants realize the commonality of their experiences, as established by the dialogues (interpersonal communication) and the group communication during the FGDs, they knew that they were not alone.

Menstruation an everyday reality of the adolescent girls, presented itself to the girls as shared with other girls in the informal settlements. These inter-subjectivities created commonalities in the experience of menstruation (Given, 2008). In this sense,

establishing commonalities was important among the girls, because through that they understood that their experiences were natural and normal for every healthy adolescent girl. They also learnt from the experiences of the other girls, and found collective strategies to deal with their menstrual related challenges.

Studies (McMahon *et al.*, 2011; Rembeck, 2006; Kotoh, 2008) on menstruation have been conducted from many perspectives as it was indicated in chapter two, but no study has delved into the meanings of menstruation, from the perspective of the adolescent girls. Similar to other studies on menstruation, this study found out that the feeling of shame was common in studies on menstruation (Agnew, 2012; McMahon *et al.*, 2011). However, in the current study the meaning of menstruation was as a sign of fertility, a guarantee of motherhood. Moreover, different from other girls' studies is the meaning that menstruation was sign that a girl was not pregnant. This showed that the adolescent had been sexually active. During the study, some participants indicated that they had an urge to have sex before menstruation; another one said that boys should be taught about the menstrual cycle to avoid getting their girlfriends expectant. The awareness of sexuality was lacking among the adolescent girls, since their parents, and guardians feared that talk about sexuality could hurry the girls into trying out sex. However, the lack of knowledge on sexuality was evident in their experiences such as feeling like having sex before menstruation. Lacking in basic information about their menstrual cycle, they did not know that the experience of menstruation is continuous.

5.3.2 Communicating about Menstruation

The second question sought to understand the communication of adolescent girls in their social and life worlds. An examination of the communication revealed the communication between members of different genders. For example, at school the girls interacted with male teachers, and boys while at home their fathers, brothers, uncles and

male cousins. Study findings indicated that adolescent girls found it difficult to communicate about their menstrual related issues with the male members of the society. Further, the study established that cultural norms and expectations governed the cross-gender communication. The study indicated that this communication was restricted between men and women.

According to Gamble and Gamble (2003), societal communication is structured depicting communication expectations of each gender. At the same time, society tries to convince its members that those views are the norms of how men and women are supposed to communicate. Moreover, in families, parents socialize their children to adopt certain behaviour in speech that conforms to the societal expectations of its members. This behaviour is further endorsed socially by institutions in the society such as school and family. These institutions come up with these gendered cultural norms, endorse and spread them, becoming established in the society as the norm (Gamble & Gamble, 2003).

In relation to this study's findings, the society has expectations on communication between men and women. For example, girls are expected not to talk about their menstrual related issues with their fathers, uncles, male cousins and brothers. At school, talk on this subject was unacceptable with male teachers and boys because of the gender difference; menstrual communication becomes a communication taboo.

The findings of this study are similar to Fingerson's (2006) suggestion that gender is both a social institution and social construction that emerges when members of the society interact. She explains further that gender appropriate behaviours are constructions of society and individuals in the society interpret other members' actions based on their gender and the behaviour that they feel is appropriate for the given

gender. This construction of gender being a societal construct is also propagated by the members of the society. According to Kotoh (2008), traditional menstrual practices flourish through culture that reinforces what it terms as 'culture appropriate' or what the culture perceives as a wrong or right as known by the society's members.

At school, where knowledge of menstrual issues would be imparted, teachers, especially the male teachers, were hesitant to teach taboo topics. Study findings suggested that teachers in general were hesitant to teach the topic, while the male teachers would hurriedly go over it leading to inadequate knowledge among adolescents. This finding is similar to what Christler's (2013) study found out that teaching a taboo topic such as menstruation and menopause is uncomfortable for the instructors. In addition, the topic becomes limited in coverage because the students are uncomfortable too (Christler, 2013).

Communication about menstrual related issues between parents and children has been established as a crucial need for adolescent girls to go through the process successful. Other studies have been conducted on the attitudes of adolescent girls towards the experience. However, no study has investigated the communication of adolescent girls with their parents, teachers, siblings nor peers. In the informal settlement, no study has focused on mother-daughter communication, aunt-niece, and sister-sister/brother in Kenyan urban informal settlements.

In reference to language, human beings express meanings in varied ways; it could be a code, symbol or using language, although language is fundamental to communication (Given, 2005). Interpretive phenomenology highlights the significance of interpretation and understanding, because human beings understand the world through language. Moreover, Ricoeur and Gadamer, underscore, the importance of language in

understanding, accentuating that meaning is carried from one person to another through language (Mulwo, 2008).

In addition, hermeneutics also emphasizes the significance of language to interpretation. The significance of language in communicating experiences was advanced by Gadamer who argued that “language (and other symbolic meaning systems) mediates people’s experiences of the world” (Given, 2008, p. 388). Language use in its varied forms whether symbolic or verbal is determined by the social contexts of the individuals. The participants’ culture, content and experiences determine the language used to communicate their experiences.

With this regard, language was significant in adolescent girls’ communication of their experience. However, the language used with such a taboo topic was not the common language used for other communications. The use of metaphor, personification and figurative language was crucial in the process of constructing the social reality of menstruation.

As a result of the discomfort with menstrual talk, the girls used metaphorical language in reference to the phenomenon of menstruation and their sanitary towels. In this study, communication involved the use of metaphors to communicate information that would otherwise be challenging to communicate directly.

Given (2008) posits that a “metaphor consists in giving the thing a name that belongs to something else” (p. 12). To communicate taboo topics, meanings have to be obscured by giving it another name. According to Given (2008), concealed metaphors exist in everyday discourse. However, it is the task of the communicators to decipher the meaning of the metaphors. Collins (2012) defines a metaphor as:

A group of linked symbols which function as a particular way of understanding and perhaps communicating our experience. They define the metaphorical mode as one which describes an experience in terms of other experience, using familiar symbols that have a particular meaning only as they come together in the metaphor (p. 339).

Conceived as an 'art form', metaphors are useful in communicating what would otherwise be difficult to express. Its use of figurative language presents an acceptable approach to "saying one thing and meaning another" allowing communicators to share a reality without the glare of the truth. More crucial is the mystery of metaphors with their creativity; the meaning making process invites the speaker to use metaphors in a manner that is safe and respectful while allowing for interpretation (Collins, 2012). In this study, adolescent girls used metaphors in a creative way with some aspects of play, such as the use of the word 'pony' and 'dollhouse' which are a girl's toys and the use of 'rolling' or 'flowing' to signify menstruation. Through play, they still maintained their secrecy as they communicated, without the discomfort associated with taboo topics.

The use of metaphors in everyday conversation conveys the way people ordinarily look at experiences in their lifeworld. Although metaphors are loaded with meaning and are used purposively by speakers, some are often encoded in conversations or communicative contexts without much thought, thus appearing as normal components of everyday conversation. Such metaphors are referred to as 'dead' metaphors, like 'legs' of a table and 'eye' of a needle (Given, 2008). George Lakoff and Mark Johnson are among the authors who have extensively engaged with the applications of metaphor in qualitative research. They assert that "all thought is metaphorical" (Given, 2008, p. 509). In addition, Habermas extends that the lifeworld of every individual constitute linguistic means of phenomena that are sediments of their culture and social factors

(Habermas, 1996). Therefore, language carries meaning encoded in a metaphor that can be interpreted by people who share the same context.

In this study, the use of metaphors resulted from the participants' perception of menstruation within the contexts of an urban informal settlement. For example, the participants who viewed menstruation as disgusting, repulsive or a hygiene crisis used negative metaphors in reference to menses such as such as 'leaking', 'raining', 'Mr. Red', 'crossing the red sea' among others. Metaphors such as 'pony', 'dollhouse' and 'charisma gift' were used by girls who had supportive mothers such that at the onset of menstruation they had a pleasant experience. Alongside the use of metaphors was the use of euphemisms such as 'periods' and '*ps*' which served to encode the message, hence observing menstrual etiquette.

Communicating with parents, teachers or members of the family and even peers about menstruation was not easy for adolescent girls because menstruation is considered a taboo topic. This, therefore, called for the use of a coded language by adolescent girls amongst themselves, which could exclude others from menstrual related conversations. Ensuring adherence to social rules; that the message was passed to the recipient effectively especially with parents and teachers, without making the social interaction discomforting.

5.3.3 Social-Cultural Contexts and Communicating Menstruation

Culture being part of the lifeworld of adolescent girls prescribes how they communicate about their menstrual experiences and needs. Lopez and Willis (2004) argue that "humans are embedded in their world to such an extent that subjective experiences are intractably linked with social, cultural and political contexts" (p. 729). Adolescent girls do not live in a vacuum; they live in a society that is cultured, that has norms, a system

of taboos in relation to behaviour and communication. Therefore, these gendered norms regulate cross-gender communication on matters related to sexuality, making talking about menstruation to men both at school and at home taboo.

In their lifeworld, adolescent girls are part of a society that is governed by societal norms, a taboo system and culture. These influence how they make and communicate the meanings of menstruation. Therefore, meaning is influenced by the social context of the participants. The term social context means “the specific setting in which social interaction takes place” (Given, 2008, p. 820). The social context, the world of interaction, is significant in how adolescent girls make meaning and communicate their experiences.

Phenomenology theory emphasizes that “the world of relational and subjective interactions constitutes an important and valid ground for examination” (Ladkin, 2005, p. 113). This is the world where people interact carrying along their perceptions, experiences and opinions (subjectivity) as they make and share meanings. However, the subjectivity of members of a society is influenced by their social contexts. For example, the meanings that the adolescent girls made of menstruation were influenced by their setting. This study established varied meanings of the experience. To the girls from the informal settlement, the experience was embarrassing, dirty, disgusting and messy.

The metaphorical constructions of menstruation as used by the participants in reference to their menses and sanitary ware were also reflective of their social contexts. In this case, the metaphors were a result of the social construction of the members of an African context. For example, the use of the word ‘*mashiro*’ and ‘*kuvuja*’ originating from African languages reflects the influence of the social context to meaning making

within a society. This is congruent to Habermas, argument that meaning originates from the culture and society of the individuals (Stanford Encyclopaedia of Philosophy, 2009).

As noted by Makokha (2013), adolescent girls are at a higher risk of reproductive health related issues because of their social contexts. Adolescent girls living in the rural and urban informal settlements lack sufficient knowledge and sanitary towels to go through their menstrual process comfortably. For families living in congested houses in the informal settlements with meager earnings, sanitary towels and privacy to change was lacking. The informal settlements also lacked sufficient water supply, yet bathing twice a day is a crucial hygiene practice, especially for menstruating girls.

The social context of the informal settlement not only determined the access to sanitary towels and privacy but it also affected communication between the adolescent girls and their parents. The study revealed that mothers were too busy eking out a living, neglecting their roles in preparing their daughters for menarche. In majority of the instances, the adolescent girls reported that their mothers were too busy fending for their families. In the struggle to make ends meet, the mothers of these girls cited imparting knowledge on such 'trivial' issues not a priority, but as time wasters. In most cultures, such knowledge should be disseminated by the female members of the family. Cultural expectations require that mothers prepare their adolescent girls before the onset of menstruation. However, the study found out that majority of the adolescent girls did not receive menstrual knowledge from their mothers, because of the social-economic challenges of the informal settlement.

In some instances, the girls lived with brothers, sisters, guardians or even fathers alone. Yet, mother-daughter relationship is important for information and support at the onset and through adolescence (Rembeck, 2008). In such cases, girls living with inconsiderate

relatives ended up suffering in silence, lacking support, menstrual supplies and information on the menstrual process.

5.3.4 Linking Menstruation to Schooling

One of the tenets of interpretive phenomenology is the concept of ‘being-in-the world’, which implies that human beings are part of the world. This world is termed called the lifeworld. Originating from the father of phenomenology Edmund Husserl, it represents “...the world as it is given to human beings in their most basic and fundamental experiences” (Crossley, 2005, p. 182). In this study, the lifeworld of the adolescent girls is their world of their experiences. The world in this sense is the “world as we experience it, a world constituted within our experience by means of habitual schemas, for-knowledge and know-how that we bring to bear upon it” (Crossley, 2005, p. 184).

In the lifeworld of menstrual experience, adolescent girls are faced with many challenges which have a bearing on their management of menses. One is the lack of privacy. Living in a congested house makes the task of concealing the experience of menstruation difficult, yet rendering menstruation invisible in public space is a responsibility of every girl/woman. Obscurity at home entails keeping ones sanitary ware private, showing no signs of the process such as irritability, and menstrual discomfort. It is not always possible to keep menstrual issues private because of the menstrual pains which may require bed rests, especially with those who have severe pains yet they cannot access medication. This bed rest, sleeping at school during lessons, renders the experience visible to teachers and other students. Menstrual management is essentially part of menstrual obscurity from the public sphere at school. Adolescent girls therefore put a lot of effort to concealing menstrual supplies, hiding their menstrual protection when going to the wash rooms, slipping out to change unnoticed by others, wearing dull clothes that do not show menstruation stains in case

of leakage, seeking for permission from teachers to change, changing regularly and even skipping school when on menses.

Moreover, coming from a poor resource setting, the girls may not have adequate sanitary ware. This makes them isolate themselves from others by adjusting their distance when they are communicating. Woods (2007) posits that the use of space also termed as proxemics is a way that cultures depict their values and the expected patterns of interaction. Therefore, by adjusting their distance from the men, and holy spaces, the girls were acting as expected by their culture. The study findings indicated that some girls used unsanitary towels while at home because they could keep indoors saving the scarce sanitary towels for school going days.

In the social sphere, findings from this study indicated that menstrual evidence should be concealed, to avoid social embarrassment. The study findings were echoed by results from Agnew's (2012) study that posit that adolescent girls maintained social space by distancing their bodies from others because they have constructed menstruation as a shameful secret that should be concealed. As a hygiene crisis, some adolescent girls stayed away from social places fearing embarrassment. Another finding that was consistent with this study's findings is from a research conducted by Raut and Tandon (2011) which indicated that adolescent girls stayed away from the community and school at these times because they lacked sufficient protection and also wanted to observe the community's menstrual practices.

However, this study interrogated further and found out that it was not only the lack or insufficient sanitary towels that affected school attendance during menstruation. With provision of sanitary towels by well-wishers, CBOs and school emergency programme, the girls had a way of accessing some sanitary protection, even though it was not

sufficient. However, how to voice their needs was lacking. Fearing to communicate these needs to the teachers, parents and guardians was discovered to have some bearing on absenteeism, seclusion and exclusion of adolescent girls from activities in the school space.

The study revealed that because girls feared to ask for permission from teachers when they needed a change of sanitary towels at school, they risked leaking and soiled their uniforms. This led to self-consciousness and anxiety; consequently, when others went out to participate in extra-curricular activities; some menstruating girls remain in class to check if they had soiled their clothes. This also applied to participation in classroom activities where they feared waking up from their seats to work out mathematical sums on the board or participate in activities that required movement, within the classroom.

The perception that menstrual blood is impure and could contaminate religious spaces led to adjusting of distances to maintain the holiness of such spaces, such as the mosque. Consistent with an Indian study, religious space ought to remain pure; therefore, it is the task of women and teenagers to avoid this space when menstruating (Narasimhan, 2011). Everything a menstruating woman touched was considered unclean therefore they could not touch the Koran as well, not even visit the temple (Raut & Tandon, 2011). This study also found out that adolescent girls excluded themselves from religious space during menstruation; both the Muslim and a few of the Christian adolescent girls. However, there were no extreme cases of banishment reported to have occurred unlike in the Nepali case in the study by Raut and Tandon (2011).

5.4 Summary

This chapter has presented a summary of the findings that answered the four research questions. The first research question explored the meanings of menstruation to

secondary schooling adolescent girls, which the study revealed as body shame, feeling dirty, embarrassment, and feeling ill. Further, the study established that the menstrual experiences required hygiene practices, and concealment to avoid the embarrassment.

The second research question sought to understand how the girls communicated their menstrual needs and experiences to their parents, teachers, siblings and peers both at home and school. The findings of the study established that talk on taboo topics was discomfoting because of the expectations of cross-gender communication. Therefore, the girls used metaphors and figurative language, to communicate hence achieving obscurity and menstrual etiquette.

Research question three sought to understand how adolescent girls communicated with their parents, teachers, siblings and peers in the context of an informal settlement. In this case, the study established that there were cultural norms and taboo systems of the society. The study also established challenges that the girls faced, in a poor neighbourhood, where parents struggled to eke a living, housing was congested, and some girls lived with fathers alone, with their mothers living on the countryside.

The fourth question sought to find out the effects of schooling in an informal settlement to the schooling of the girls. The study established that girls adjusted space during menstruation, resulting in some missing school and some being passive in the classroom

This section also discussed the key findings linking them to theory and related literature. The study established that interpretive phenomenology was significant in the understanding of menstruation as an embodied experience in the social life-word of the adolescent girls. The theory also illuminated into the place of language in understanding and interpretation of lived experiences, especially language as used by the research

participants. Language as shaped by the participants, prior experiences, social and cultural contexts.

The next chapter presents the conclusion, the contributions of this study to knowledge, recommendations and suggestions for further research.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the overall conclusion of this thesis, beginning with the overview of the whole study, followed by the conclusions drawn from the study, then the contributions of the study to knowledge, recommendations and lastly, suggestions for further research.

6.2 Overview of the Study

The aim of this study was to understand the meanings and the communicative experiences of menstruation, to secondary schooling adolescent girls from Kibera, an urban informal settlement. The study involved purposively sampling one school among the five government schools in Lang'ata District, in Nairobi County. A sample of 22 participants was drawn from one of the form three classes, in the four streamed mixed day secondary school.

Guided by descriptive phenomenological approach, data was generated from the participants using journals, body mapping, FGDs and individual interviews. The data was analyzed using the Colaizzi's (1978) method, where the researcher bracketed her presumptions and experiences, listened to the meanings of the participants, extracted the units of meanings on the phenomenon as relevant to the research questions, clustered the units to arrive at the central theme. This was then followed by a description of the meanings in writing, which was returned to the participants for validation. Once the data was analyzed, findings were presented in chapter four, while chapter five presented the summary and discussions of the findings.

The findings of the study established the meanings of shame, feeling dirty, embarrassment, and odour in relation to menstruation. These meanings were constructed with the influence of the social context of the participants. The positive meanings related to menses, being a sign of fertility with the prospects of future motherhood. Furthermore, indicated that a girl was normal.

This study also established that the adolescent girls found it difficult to communicate to their parents, teachers and siblings about their experiences. In a society where such talk was considered a communication taboo, girls did not talk to fathers, male guardians and brothers about their menstrual need. At school, they also found it difficult to communicate their needs to male teachers.

Mothers, aunts and female teachers being of the same sex with the girls were easier to talk to, however; there was no environment that would encourage such discussions. For example, at home, some mothers were busy fending for their families, some disinterested, while a few were supportive. On the other hand, the considerate female

teachers presented an opportunity of learning through organized girl-talk sessions, and offered emergency sanitary towels through the school's administration.

The social-economic context of Kibera and schooling in a mixed-gendered day school presented more challenges for adolescent girls. This study established that the girls had a supply of sanitary towels from well-wishers CBOs and sometimes the school. However, these were not enough resulting in girls using unsanitary materials, borrowing from each other or doing menial jobs such as washing clothes to earn money to buy sanitary towels. Although some parents tried to supply these needs, some could not because of their insufficient income that only catered for food and other needs. Girls living with fathers alone, or brothers had challenges communicating these need to the men, since it is a communication taboo.

Therefore, menstrual management affected schooling for adolescent girls in the informal settlement, leading to absenteeism, lack of concentration while in the classroom, withdrawal from others due to anxiety, and even isolation girls or excluding themselves from sports and games at school.

6.3 Conclusions

Based on the study findings the researcher concluded that various meanings of menstruation resulted from individual subjectivities and the societal constructions of the experience. Consequently, the meanings of shame, secrecy, disgust, feeling dirty and concealment were as result of interplay between socialization, cultural norms and the experience itself. Meaning is therefore made according to the social context of individuals, such that the meanings constructed were influenced by the menstrual taboos and norms of their community. Therefore, to understand adolescent girls' meanings of

menstruation, there is need to understand their social context, and realize that meaning is specific to each girl, because of their different subjectivities.

In relation to menstrual communication, it was concluded that parents did not present a favourable environment for their adolescent girls to share their menstrual related issues with them. Mothers who were harsh and insensitive were never approached by their daughters, while fathers were prohibited by the taboos and cultural norms to engage in discussions bordering matters of sexuality with their daughters. This study also concluded that trust between an adolescent girl and the mother was crucial for mother-adolescent girl relationship. Girls who trusted their mothers consulted them at the onset of menstruation where such a mother provided the needed information and support to her daughter making it a pleasant experience. However, mothers who had already lost the trust of the daughters were not consulted leading to the daughter suffering in silence for a long time. Uncaring mothers, who were either too busy or trivialized menstruation, were also not privy to their daughters' experiences. Therefore, a close relationship between a mother and a daughter is built on trust over time.

The experiences of children with their parents from an early age determined if they will have a close and trusting relationship later in life or not. Girls who had supportive mothers perceived the onset of menstruation as pleasant, and also had a high self-esteem compared to those who suffered in silence through early adolescence. In this case, the study established the importance of parent-adolescent child relationship, especially mother-daughter relationship. In addition, menstrual preparation of the adolescent girls was lacking at home.

At school, teachers' sensitivity to the menstrual needs of adolescent girls is crucial. This study concluded that it was only the sensitive and considerate teachers that adolescent

girls felt safe to share their menstrual problems and needs with. These teachers also provided menstrual education. However, harsh teachers were feared because they were unresponsive to the needs of the girls such as for time out of class to change or the need for medication in the cases of menstrual pains.

Another conclusion drawn from this study is the stigmatizing nature of anything related to menstruation. In this study, boys and men teased girls when they knew about their menstrual statuses or even when seen carrying sanitary towels leading to the concealment of an evidence of menstruation to avoid humiliation and being perceived as careless. Yet, their social economic context, of living in an informal settlement and schooling in a mixed- sex day school compounded their problems of managing their menstrual experiences. At school, some girls were taunted, bullied, and some stigmatized as result of menstrual related problems. Girls who had menstrual odour, because they did not change frequently were stigmatized. Some were teased by the boys in class when their menstrual status was known. This could happen when the boys found their sanitary ware in their desks or bags. Without private place to keep their sanitary ware, boys could always chance on them.

Discussions bordering sexuality matters are tabooed for members of the opposite sex. This study draws this conclusion from the fact that fathers were prohibited from engaging in any talk about menstruation with their daughters. In such circumstances, the taboo system of the society had to be respected because breaking it was punishable. Even when purchasing sanitary towels from shops, adolescent girls preferred female shops than the male shopkeepers because with female shopkeepers they were free to communicate their intentions of purchasing sanitary towels

The adolescent girls were creative in their language use, in reference to their menstrual experiences and needs. This study concluded that the use of metaphorical language and figurative speech helped obscure meanings, to avoid embarrassment, during their communication. The use of metaphor served to maintain menstrual etiquette in taboo communication.

Majority of the girls in this study came from the Kibera, where some of their parents did not prioritise sanitary towels. In such circumstances, the girls had to use unsanitary materials or work over the weekends to earn money for such needs, in such circumstances they risked being sexually harassed if washing clothes and cleaning for men. In cases where girls used unsanitary materials, they risked leaking and soiling their uniforms. Yet, the school time tables had structured breaks, in such a dilemma the girls became anxious and distressed.

A significant conclusion from this study is the entrenchment of menstruation into the daily lives of the adolescent girls. This study concluded that the taboo system affected to a large extent how the girls lived their lives. Since body shame, low self-esteem and the idea of being dirty were embedded in the subjectivities of adolescent girls, they excluded themselves from public and social space. The feeling that they were visible made girls prefer to keep away from the public by staying at home, or remaining in class when others left to play in the field. In class, girls avoided participating in activities that required movement such as waking up from their desks and attempting a sum on the board lest they had spotted their uniforms. During social events at home, they remained passive preferring to sit at the back. The fact that they were not sure about their backside being clean made them prefer sitting at the back so that they could be the last to leave the room after checking to ensure they had not soiled their clothes.

Girls, therefore, excluded themselves from activities during menstruation to avoid embarrassing themselves in case of any accidental spotting. Regarding the girls, the study concludes that they had imbibed the taboos; retrogressive believes that made them marginalize themselves. These girls were therefore disempowered by their menstrual experiences.

It can therefore be concluded that the menstrual experience among adolescence girls is a complex issue, contrary to most discussions that have only linked school absenteeism to lack of sanitary towels. The cultural views of menstruation, which made the adolescent girls, internalize the societal messages of shame, hygiene crisis and secrecy was more detrimental to them just like the insufficient sanitary towels. The study concludes that provision of sanitary towels may be one way of reducing adolescent girls' absenteeism from school, but it does not solve the problem in totality. Further, it concludes that poor parental communication at home, and student-teachers communication at school contributed largely to the problems adolescent girls face at the onset of menses and also throughout their adolescent lives. The study further showed that when girls are stigmatized at school; they lost their self-esteem. The difficulty of sexual maturation and the taboo topic of menstruation in close family communication make it difficult for them to access accurate information about their bodies. Further the limitations on taboo topics in the public environment, made social interactions difficult for the girls during menstruation. Thus menstruation became a source of disempowerment to girls living and schooling in poor neighbourhoods.

Finally, there is need to pay attention to the interconnectedness of cultural, social and individual personality in the understanding and interpretation of menstruation. This link between society, culture and personality needed to be interrogated in a bid to initiate

transformation in the lifeworld of the adolescent girls. Therefore to achieve change in the society, in matters related to menstruation, there is need to transform communication spaces; because it is only through communicative action that societal change will flourish.

6.4 Contributions of the Study to Knowledge

In the past, there have been indications in campaigns by the ministry of education, non-governmental organizations and policy makers that absenteeism among adolescent girls is a result of lack sanitary towels among girls in poor neighbourhood (Muvea, 2011; McMahon *et al.*, 2011). Consequently, there has been an increase in campaign on the provision of sanitary towels to adolescent girls in arid areas, and some informal settlements. Policies have been created and implemented by governments, such as the free sanitary provision programme by the Kenyan government. In Kenya, the programme has attracted budget allocation, to reduce absenteeism as occasioned by menstrual management.

However, the centrality of adolescent girls' bodies especially in relation to their menstrual cycle, and its linkage to schooling has not been explored in previous studies. Moreover, the communication of adolescent girls' their menstrual experience in close family communication has not featured in previous girl studies, in the context of an informal settlement. Therefore, the uniqueness of this study is premised on its focus on menstruation as a communication concern in an urban informal settlement. With regards to how adolescent girls make meaning, and communicate these experiences; this study has demonstrated that meaning making is both subjective and collective as based in the social contexts of the adolescent girls, and their interactions at school and at home.

Another uniqueness of this study is the phenomenological approach to the understanding of embodied experiences within the communication scholarship. As a communication concern menstruation is new; it has always been majorly a health concern. In addition, previous studies on girls had adopted feminist methodologies in seeking to understand women experiences. However, phenomenology as a lens provided a clearer picture of the essence of menstruation. There is the 'truth' in the meanings of those who have experienced it. Generating knowledge, though the conscious experiences of those who have experienced, was significant in gaining an understanding of the phenomenon.

Privileging the voice of adolescent girls from an informal settlement to contribute to knowledge is significant. In this context, their unique way of using language to communicate a taboo topic was creative. For instance, the use of metaphorical communication, to break the barrier of communication taboo was unique. Metaphor framed in African languages such as *Sheng* Kiswahili and indigenous language is new, although, previous studies had indicated the use of scientific and medical metaphors.

Lastly, the methods of studying adolescents on taboo topics were a significant contribution to knowledge. This study has illustrated that in studying adolescents there is need for flexible methods that encourage participation. For instance, the use of participatory approach such as body mapping could be more fruitful in addressing such complex issues. This method ensures active participation, and dialogue between participants. It appeals to their sight, hearing, writing, thought and speech, making them self-reflect in the quest of understanding the meanings of their experiences. Such methods also encourage bonding among participants who also share their experiences,

establishing commonalities. Therefore, as brought out by this study, the use of journals, body mapping and FGDs are important in generating knowledge from adolescent girls.

6.5 Implications of the Study

Studying adolescent girls needs a participatory approach that allows the girls to participate in activities such as song, dance, poetry, role play and drawing. These encourage participation, making them free to express themselves, when done in an environment where the girls feel safe and relaxed. Using art methods such as body mapping, the adolescent girls creatively identify their problems and solutions. This not only increases their confidence, but also their self-esteem.

Using journals, the adolescent girls self-reflect by sharing their thoughts, emotions and experiences in the journal entries, liberating themselves in the process from the challenges of their experiences. On the other hand, body mapping and FGDs, create a forum of interaction. The body maps acting as a non-verbal way of communicating aided by the discussions which unpacked the thoughts and experiences mapped on the body maps.

Moreover, dialogue in the FGDs encouraged interaction between the girls establishing strong bonds between classmates. In the discussions that followed, commonalities in menstrual experiences were established. This translated to collective responsibilities in problem solving strategies in relation to their menstrual problems.

Therefore, to study adolescent girls especially from informal settlements, a researcher needs to gain their trust, which is build overtime. Trust ensures a genuine participation of the participants in the study. To access the world of the adolescent girls, a researcher needs to create a relationship of co-generators of knowledge, not the researcher-participant relationship.

6.6 Recommendations

From the conclusions of the study, the following recommendations were put forward:

Adolescent girls should understand their bodies, and become comfortable with them. They should view their menstrual experiences as a marker of maturity that is natural and normal to any healthy adolescent girl. Further, they should refuse to be silenced by the taboos and negative cultural views that control them. On the contrary, concentrate on the positive aspects of the process as a marker of womanhood and femininity.

There is need to sensitize parents to create a strong relationship with their daughter even before the onset of puberty to create an enabling environment to share issues on pubertal changes. Parents should understand that it is the responsibility of both fathers and mothers to provide a healthy development for their adolescent children. Parents should therefore acquire factual knowledge on reproductive health and adolescent development to avoid passing on information, in form of negative cultural views that may be harmful to the adolescent girls.

Fathers and male guardians should cultivate a close relationship with their daughters even before menarche so that they are free with them such that the girls could even share their menstrual experiences with them. Awareness needs to be created among women living with adolescent girls about their responsibility to the wellbeing of adolescent girls. Female guardians should be sensitive to adolescent girls' needs at all times. They should also create opportunities to discuss sexuality related matters with them. At home, siblings especially brothers should be sensitized about menstruation to avoid teasing their sisters and even help them through providing sanitary towels and giving them emotional support.

In schools, workshops should be conducted to sensitize school managements and teachers at all levels on menstrual issues and open dialogues on the matter, in the quest for solutions to these problems. Adolescent girls interact with teachers and other students at school and this is where cross gender interactions occur especially in mixed gender schools, boys and male teachers should be taught about menstruation as shrouding it in secrecy makes the boys curious and insensitive to girls. School health clubs should be used to sensitize the boys on menstrual issues. Male teachers should be educated on adolescent development and more specifically about menstruation because when they appear to possess limited knowledge or tend to avoid discussing such matters with their students.

Furthermore, school managements should create favourable environment at school as well as all-girls forums where girls can discuss and share their menstrual issues with female teachers and their peers. These could be in form of menstrual clubs where girls can be empowered, by inculcating positive attitudes towards menstruation. Through these clubs, girls should be taught the basic facts of the menstrual cycle, and that it can be a source of power and not shame and powerlessness by pointing at the positive aspects of menstruation. This would help girls to view their bodies in a positive manner in social interactions.

School curricula should provide for adequate social and emotional issues of adolescence development not just the technical aspects of reproductive health as taught in Biology and Science taught in secondary and primary schools respectively. In schools, teachers should provide literature in form of pamphlets, or booklets or even books that provide opportunities for adolescent students to further learn about pubertal changes and reproductive health.

Generally, policy makers should prioritize including menstrual education alongside the provision of sanitary towels to schooling adolescent girls. The Kenyan government has already rolled out the programme to some schools in the urban informal settlements and some rural schools although covering mostly the primary schools. Therefore, the government needs to allocate more finances to cover girls at all levels of education across the country. This financial year, 2013/2014, the governments allocation has dropped by Ksh 90 million, meaning that what was considered crucial may be losing its importance. Therefore, there is need for the government to revise its allocation in the next financial year, including allocations for workshops and curriculum developments that incorporate meaningful discussions on menstruation in school curricula.

Campaigns to demystify menstruation should be rolled out in the urban informal settlements to sensitize the communities. Through advocacy and these campaigns, the silence on menstruation and sexual maturation will be broken allowing such matters to enter into societal dominant discourses. If reality is constructed in the thoughts and actions of members of the society, and also maintained, then the same society can change their social constructions of menstruation. Therefore it would be important for policy makers to engage the society in a process of socially reconstructing the process of menstruation as a normal body process.

6.7 Suggestions for Further Research

Further research should be carried on the adolescent girls' communication about their menstrual related issues, especially in the arid and rural areas. This was not within my scope, although in related literature, the girls seemed to face challenges similar to those of informal settlements coming from similarly poor neighbour hoods.

Further research should also be conducted in those areas that have received free sanitary towels from the government, to evaluate the sufficiency of the provision. This study indicated that menstrual issues among adolescent girls are multifaceted, therefore there is need to interrogate the issue to help implement programmes that help girls achieve their full potential.

Further research should be carried on the societal perception of menstruation. Although, this was beyond the scope of the study, there were indicators that the societal systems in terms of cultural taboos and gendered expectations had a bearing on how adolescent girls negotiated the menstrual process. Therefore, there is need to understand the societal systems, in a bid to break the silence on menstruation, demystify menstruation, and place it in the public dominant discourse.

Further research should be carried out on the role of mass media as a voice to articulate adolescent girls concerns. The study has highlighted the need for a platform that can place menstrual discourse into the public domain. However, the discussion was not within its scope. Such a study would be important because it would give a voice to the adolescent girls.

Research should also be carried out using other methodologies such as the African feminist approach which could bring more understanding to the plight of adolescent girls in relation to menstruation in the African context.

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APPENDICES

APPENDIX I: LETTER OF AUTHORIZATION FROM THE NATIONAL COUNCIL OF SCIENCE AND TECHNOLOGY

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123.
Fax: 254-020-2213215, 318245, 318249
When replying please quote

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RRI/12/1/SS-011/1362/4** Date: **5th October, 2011**

Stella Jerop Chebii
Moi University
P. O. Box 3900
ELDORET

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Our bodies, our lives: A communication concern of adolescent girls in Kenya*" I am pleased to inform you that you have been authorized to undertake research in **Langata District** for a period ending **31st July 2012**.

You are advised to report to **the District Commissioner & the District Education Officer, Langata District** before embarking on the research project.

On completion of the research, you are expected to submit **one hard copy and one soft copy** of the research report/thesis to our office.


P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:
The District Commissioner
Langata District

The District Education Officer
Langata District

**APPENDIX II: LETTER OF AUTHORIZATION FROM THE DISTRICT
COMMISSIONER**



**OFFICE OF THE PRESIDENT
PROVINCIAL ADMINISTRATION AND INTERNAL SECURITY**

Telegrams:
Telephone: 020-2044802
When replying please quote

DISTRICT COMMISSIONER
LANGATA DISTRICT
P.O. Box 30124 – 00100
NAIROBI.

Ref. No. LGT/ED/10/9/ (138)
and date

11th May, 2012, 20.....

The Chief,
Mugumo-ini Location

RE: RESEARCH AUTHORIZATION – STELLA JEROP CHEBII

The above named student is a student at Moi University. She is authorized to carry out a research on *“Our bodies, our lives: A communication concern of adolescent girls in Kenya”*.

Kindly accord him the necessary assistance.

V.M MUTHISO
FOR: DISTRICT COMMISSIONER

✓ CC. Stella Jerop Chebii

APPENDIX III: RESEARCH PERMIT FROM THE NATIONAL COUNCIL OF TECHNOLOGY

PAGE 3

Research Permit No. NCST/RR1/12/SS-011/1362
Date of issue 5th October 2011
Fee received

PAGE 2


THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss/Institution
Stella Jerop Chebii
of (Address) Moi University
P.O BOX 3900, Eldoret
has been permitted to conduct research in

Location	District
Langata	Nairobi
District	Province

on the topic: Our bodies, our lives: A communication concern of adolescent girls in Kenya.

for a period ending 31st July, 2012

Shelley **Plummer**
Applicant's Signature **Secretary**
National Council for Science and Technology



**APPENDIX IV: AUTHORIZATION LETTER FROM THE DISTRICT
EDUCATION OFFICER**

Telegram: "schooling."

Telephone: 341666
NAIROBI

REF: NP/LGT/08/123



DISTRICT EDUCATION OFFICER
LANGATA DISTRICT
P O BOX 18409-00100
NAIROBI


Date: 11th May, 2012

**TO ALL PRINCIPALS/HEADTEACHERS
SECONDARY SCHOOLS
LANGATA DISTRICT**

RE: RESEARCH AUTHORIZATION

Reference is made to the research authorization granted to Ms. Stella Jerop Chebii of Moi University by the Ministry of Education Headquarters vide the letter ref. NCST/RRI/12/1/SS-011/1362/4 dated 5th October, 2011.

You are therefore asked to give him the necessary cooperation to enable her carry out the said research on "our bodies our lives: A communication concern of adolescent girls in Kenya" for a period ending 31st July 2012

P.P. 
SHIUNDU A.A (MRS)
DISTRICT EDUCATION OFFICER
LANGATA DISTRICT

CC: THE PROVINCIAL DIRECTOR OF EDUCATION
NAIROBI PROVINCE

✓ CC: MS. STELLA JEROP CHEBII
MOI UNIVERSITY
P.O BOX 3900
ELDORET

APPENDIX V: PARTICIPANT INFORMED CONSENT FORM

I am Stella Chebii from Moi University. I am undertaking a research entitled *Adolescent Girls' Communicative experiences in Negotiating Issues relating to Menstruation at an Informal Settlement in Nairobi, Kenya*. You are among the 22 participants who have been selected to participate in this study because I feel that your menstrual experience will be useful to the study in generating an understanding adolescent girls' view of menstruation. During the course of study, you may be asked to participate either in the individual interview, focus group discussion, writing journals and body mapping.

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. You reserve the right to decline to participate or withdraw at any stage of this study and this will not, in any way, have any negative consequences on you as you will not be victimized.

All study information will be used only for the purpose of this study. You will not be required to write your name anywhere at the course of this study ensuring that your identity is concealed. You will be identified only by individual participant pseudonym that will be kept confidential.

Kindly note that the information you give will help the study generate recommendations that can help alleviate the problems young girls face navigating adolescence. Kindly sign in the space provided below if you chose to participate in this study.

If you have any questions or concerns about the research, you may contact the researcher:

.....
Signature

.....
Date

Stella Jerop Chebii
Department of Communication Studies,
Moi University,
P.O Box 3900-30100,
Eldoret, Kenya.
Cell: 0723 509 297
Email: stellachebii@yahoo.com

APPENDIX VI: BODY MAPPING INSTRUCTIONS

This is the body mapping session where we will draw an outline of our bodies on a large piece of paper then mark the different parts of our bodies that are affected by menstruation. This is an exercise that entails lying on large sheets of paper and outlining your bodies.

INSTRUCTIONS

With me are the materials that we need for the exercise. Kindly work in pairs, pick four manila papers, two coloured pens, and cello tape. Next, join the manila papers into one large sheet of paper. Working in pairs let one person lie on the Manila paper and the other to draw the front and back outline of the body. Next, using the pen note the parts of the body that are affected by menstruation and how they are affected.

Once you are ready pin the body maps on the walls ready for discussion.

The questions:

- i. Which part of your body do you like most?
- ii. What do you call menstruation among your peers?
- iii. How does menstruation affect your body?
- iv. How does a menstruation affect your public and private life?
- v. Whom do you tell that you are menstruating and your challenges at this moment

APPENDIX VII: FOCUS DISCUSSION GROUP GUIDE

Instructions

During this discussion I will be asking you questions about menstruation. The data from this discussion is confidential and will be treated with total anonymity. Your name will not appear anywhere. The session will be tape recorded to capture all the issues that we will discuss.

Group:

Month:

Menstrual Communication Questions

1. Please tell me about your first menstrual experience. What was it like?

Probe: did you share this experience with anyone?

Probe: how did she/he respond?

2. Have you talked to your parents about menstruation?

Probe for experience, how did s/he respond?)

Probe: How challenging is it to talk to others about menstruation, (parents, friends, family, and teachers)

3. Have you ever experienced menstruation at school?

Probe: tell me if you have ever had a situation at school where you needed permission to sort out menstrual issues?

Probe: How did you communicate this to the teacher?

Probe: how challenging is it to share with others about menstruation?

How Adolescent Girls Interpret Menstruation

3. What do you think menstruation is?

Probe: why do girls menstruate?

Probe: can you tell when a girl is menstruating? How?

Probe: how do you feel about menstruation?

How adolescent girl's experiences are grounded in their daily lives.

4. How does menstruation affect your daily life?

Probe: does living in an informal settlement affect how you experience menstruation?

How it Shapes and Affects the Lives of Adolescent Girls

5. How does menstruation affect your daily life?

Probe: body, schooling, daily activities etc.

6. Please explain to me if menstruation affects how adolescent girls behave or relate with people in public places.

Probe: at school, religious places etc?

APPENDIX VIII: INDIVIDUAL INTERVIEW GUIDE

Instructions

This is the individual interview session where I will be asking questions about menstruation and others on the body concerns of adolescent girls. As you introduce yourself use the pseudonym that you had earlier assigned yourself.

Pseudonym:

Age:

General Questions

Tell me about yourself?

Body questions

How do you feel about your body?

Probes:

Are you happy about your body?

Is there any part that you like most and if there was a chance to change anything what would you have wanted to change?

Do you think you know enough about your body?

Menstrual questions

1. At the point of your first periods what did you know about menstruation?

Probes:

From whom did you learn from about menstruation?

What did you feel about menstruation then?

2. How do you manage your menstruation?

Probes:

What sanitary ware do you use?

Who provides the sanitary ware and how do you ask for them?

When buying from a shop how do you ask for sanitary ware?

3. Do you conceal signs of menstruation? Probes, How?

When you need a bathroom break at school how do you communicate this to the teacher?

Are school activities structured in a manner that you are comfortable in managing your menstruation?

Do you have any complications that come with menstruation?

How do you share menstrual experiences with peers, family, and school mates?

Are you comfortable sharing with them?

4. Would it be necessary for men and boys to know about menstruation?

Probe: how do you think boys and men view menstruation?

5. What have you read or heard from the media about menstruation?

Probe: what message do you get from the media (TV, newspapers, magazines, radio etc.)

6. Given a chance would you share about menstruation to younger girls?

Probe: what and how would you share with them?

7. Whose responsibility is it to educate girls about menstruation?

Probe: how does environment (at home or school) determine the sharing about menstruation?

APPENDIX IX: PERSONAL JOURNAL GUIDE

Personal journal instructions

Make entries on your diary on the four to five days of menstruation. Include the date month and year.

In the entries candidly express what you think and feel at these moments.

Write in any language that you understand e.g. Kiswahili, English or simple *Sheng*.

Do not write names use a pseudonym that you have assigned yourself.

Questions

Introduce yourself, and give a brief history about when you received your first menstruation.

What did you feel?

Did you know about menstruation then?

Did you talk to someone about it?

Whom did you talk to (relations) parent etc?

What was their response?

How did you dispose the sanitary provisions?

APPENDIX X: FIELD WORK TIME FRAME (2012)

MONTH	ACTIVITY
October 2012	Research permit Preparation of research instruments
March 2012	Negotiation of access Pilot study Adjusting of Instruments
May 2012	Launching of Journals (to run for six months)
June 2012	Body mapping
July –August 2012	FGDs
September 2012	FGDs
October 2012	Individual interviews
November 2012	Individual interviews
December 2012	Transcription of FGDS
January 2013	Transcription of Individual-interviews

APPENDIX XI: SUMMARY OF JOURNAL ENTRIES

Girls' Name		May,2012	June ,2012	July ,2012	August ,2012	September,2012	October, 2012
Melony	Day 1		6/6/12	20/7/12	12/8/12	26/9/12	15/10/12
	Day 2		7/6/12	21/7/12	13/8/12	27/9/12	16/10/12
	Day 3		8/6/12	22/7/2012	14/8/12	28/9/12	17/10/12
	Day 4						
Alicia	Day 1	3/5/12	28/6/12	20/7/2012	19/8/12	13/9/12	11/10/12
	Day 2	4/5/12	29/6/12	21/7/12	20/8/12	14/9/12	
	Day 3	5/5/12	30/6/12	22/7/12	21/8/12		
	Day 4	19/5/12			22/8/12		
Sweety	Day 1	20/5/12	10/6/12	25/7/12	18/8/12		
	Day 2	21/5/12	11/6/12	26/7/12	19/8/12		
	Day 3	23/5/12	12/6/12	27/7/12	20/8/12		
	Day 4			28/7/12			
	Day 5			29/7/12			
Halle	Day 1	30/5/12	27/6/12	25/7/12	21/8/12	27/9/12	16/10/12
	Day 2	31/5/12	28/6/12	26/7/12	22/8/12	28/9/12	17/10/12
	Day 3	1/6/12	29/6/12	27/7/12	22/8/12	29/9/12	18/10/12
	Day 4			28/7/12	23/8/12		
	Day 5				24/8/12		
Purple diva	Day 1		16/6/12	9/7/12	1/8/12	26/9/12	
	Day 2		17/6/12	10/7/12	2/8/12	27/9/12	
	Day 3		18/6/12	11/7/12	3/8/12		
	Day 4		19/6/12	12/7/12	4/8/12		
Jessica	Day 1		7/6/12	4/7/12	18/8/12	23/9/12	
	Day 2			24/7/12			
	Day 3						
	Day 4						
Flo	Day 1		19/6/12	14/7/12		8/9/12	8/10/12
	Day 2		20/6/12	15/7/12		9/9/12	9/10/12
	Day 3		21/6/12	16/7/12		10/9/12	10/10/12
	Day 4		22/6/12				
	Day 5		23/6/12				
Samantha	Day 1		4/6/12	7/7/12	4/8/12	2/9/12	1/10/12
	Day 2		5/6/12	8/7/12	5/8/12	3/9/12	2/10/12
	Day 3		6/6/12	9/7/12	6/8/12	4/9/12	3/10/12
	Day 4		7/6/12		7/8/12	-	
Anonymous	Day 1		3/6/12	1/7/12			
	Day 2		4/6/12	2/7/12			
	Day 3		5/6/12	3/7/12			
	Day 4		6/6/12				
	Day 5		7/6/12				
Sal	Day 1		6/6/12				

APPENDIX XII: A SAMPLE FGD (IST FDG)

INTERVIEWER: We had the drawings, diaries, by the way are you still making entries?

Ok, please tell me about your first menstrual experience? How was it like, the very first time?

FGD1R1 : I was very shy just the first day, I was in the house, I didn't get out but when my mother told me it's not something that can make you look very sick or that you have to look normal by using always and do your things as normal, so the next day I did my things the way I used to.

INTERVIEWER: how old were you then?

FGD1R1: fourteen

INTERVIEWER: in class?

FGD1R1: I was in form one.

INTERVIEWER: we have heard from her; let us hear from someone else.

FGD1R2: for me I thought it was like a wound but I did not tell anyone. I was in class 7, I know now to use pads because we had been taught in school. So I went up to the first year so I told my mother when I was in class eight, but I started when I was in class seven.

INTERVIEWER: so you kept I quiet for some time?

FGD1R3: i started in class four. I was in school then, all of a sudden I felt moodless when I went to the toilet, I saw a drop of blood. I didn't tell anyone except my mother. I told her I have a wound in my stomach then she told me, now you have to be careful, now you are a grown up, I didn't know what she means when she says you are a grown up.

INTERVIEWER: That was interesting.

FGD1R4 : mine started when I was in standard five, I was twelve years, woke up in the morning, I was in a pink skirt my mum asked what was wrong with my skirt, when I looked it was all red in the morning when I was preparing to go to school and she gave me some pads. I went to school. During the day I had a heavy flow, crying and I couldn't maintain to be in school, my uniform was wet all blood was taken to the senior teacher; I was given a letter to go home. It took a week; it was so heavy I didn't go to school the whole week.

FGD1R5: I was in class eight in 2007, I never thought of women or ladies going through menstruation. So my first day, when it came I asked myself, am I miscarrying? But how? So I feel shy, there was a very good friend of mine, I asked her and she explained to me. Then after that I couldn't even look at my friends because I was feeling everybody knows everything what was happening and even that they were

telling, the lower class pupils. So I went to the teacher and lied to him, he was male, that I was sick. He gave me permission to go home. I went directly home to my mother's bed and slept. When my mum came she asked me why I was sleeping. I told her I was sick. I told her it was like an STI. Then she asked which none then I mentioned all those STI diseases then she asked what I was feeling , then I explained she explained to me that I had reached the age of starting to menstruate , she advised me on how to use always.

INTERVIEWER: how did you feel when your mother told you that it was not an STI that you should not to worry?

FGD1R5: at first, I never thought of those things what I mean is like I felt relieved.

FGD1R6: apparently, I started knowing menses when I was in form1. Yeah I woke up went to the toilet, saw something reddish, I didn't know I just knew it was a '**cat underneath the under**', I came, my mother asked me, we what is that on your trouser? they were pink, I told her that I had a cut on my bottoms, she asked me to go over , with my aunt, than they told me that I had reached that age of menstruating then that was it.

FGD1R7: mine started when I was in class eight, it was during December holidays, and when It started, I went to the toilet and found something red on my pant, and I told my mother about it and she told me how to go about it.

INTERVIEWER: Have you ever menstruated in school, but on this occasion it was not the normal because you were not prepared, in a public place which is not home, probably in a function, a social place at the mosque in the church etc. any public place

FGD1R3: me I was not in school. One day i was going for madras then I didn't know that my menses had began on the way I saw a pad then suddenly I started to menstruate even without expecting anything, that day I did not have pads, I had not planned so I used my handkerchief just to hold, I did not continue, with my programme that day.

INTERVIEWER: so did you continue with your madras?

FGD1R3: No. I went back home

INTERVIEWER: What would have happened if you went on? Do you attend madras when you are menstruating?

FGD1R3: no

INTERVIEWER: why?

FGD1R3: if I attend madras there are thing I don't do. Like preach, pray, reading of the Koran and entering the mosque.

INTERVIEWER: you didn't enter the mosque?

FGD1R3: you don't enter the mosque.

FGD1R3: it was much that you just had to go home?

INTERVIEWER: anyone one with a similar experience.

FGD1R5: we were in the church; we were still sitting as those youth who dance in the church. Then it was now time to go to dance, after the priest was done I with what he was doing. when I stood up , I looked at my dancing skirt it had changed its colour because it was white then our at church matron came and removed me from the line and went with me outside the church and covered me with a shawl she told me to go home and take a shower.

INTERVIEWER: Another experience?

FGD1R6: it was here in school. I had gotten menstruation for one week. It was like on Monday then on Friday it came abruptly like, so I had to look for my friend who cannot give out a secret, I went to ask her for a pad, and I didn't get. I thought I could get it from the best friend. So I thought of it going to look from another class. i looked for it but I could not find ,I went to another class. You know we are not social with the other class, but I had to then I found it and used it.

INTERVIEWER: any other experience?

FGD1R2: when I am very angry or when I am stressed, I just start menstruating suddenly, I don't know why even if I finished my periods today and tomorrow am very angry or stressed I will just start.

INTERVIEWER: so do you carry a pad every time?

FGD1R2: not always because I can get them from the guiding and counseling teachers.

INTERVIEWER: what about a situation where you need permission to go home or have you had an experience where you needed permission to go home? How did you deal with such a situation?

FGD1R2: when I was in class eight, when menstruating I used to have stomach aches and would have to go back home to take traditional herbs, for the pain to subside.

INTERVIEWER: So how would you explain to a teacher that you need to go home?

FGD1R2: I would tell him that I am in too much pain to attend classes. And ask for permission to go home. Because I would cry he would allow me to go home.

INTERVIEWER: how did the teacher respond?

FGD1R2: I asked for permission to go home. At least she was a female teacher.

INTERVIEWER: what if he was male would you have asked for permission?

FGD1R2: no, for a male teacher, I can't ask for permission and I have never tried. One day in school I didn't have sanitary towels, so I approached a male teacher, but I had to feign sickness. I was sweating profusely and even told him that I had a splitting headache and stomach ache. When the teacher saw how seriously ill, he even asked my friends to escort me home?

INTERVIEWER: what about a situation where you need you need to use the washrooms, to probably change? and a teacher is in class, how do you ask for permission to go out?

FGD1R6: you say excuse me teacher i want to go to the washroom

FGD1R2: But some will not give you permission even if you asked to use the bathroom. For example, when I was in class eight there was this male teacher, who would inquire about what you wanted to do in the toilet. One day I bluntly told him that I wanted to change, but instead of giving me permission he beat me.

FGD1R7: sometimes when you ask for permission to go out, the teachers refuse, saying that you have to wait for break time, in such a case you might have to say the truth.

FGD1R6: it depends on where you are schooling, because you see here it is a government school and they abide by the rules, so if you are in a private school and you say you want to go to the washrooms , they can't deny you, because may be you have problems. You may have problems down there, (gestulating). so they do not need to ask you questions just to give you permission and you go out so for me it depends with the school you are in . In public schools the teachers are harsh, but when you are a private, even you, you can be harsh because your mother is paying for that fee, so

INTERVIEWER: what about walking out?

A: Yeah you can walk out if it is a private school , if the teacher said you can't go, you tell him off, you just say me I can't stay, I have something here to do and walk away because your mother will come and yeah (laughter).

INTERVIEWER: why do girls menstruate?(RQ2)

FGD1R5: biologically, I can explain it biologically ok, that process that makes the ladies to menstruate, ok now in the females, in the female organ, there is some process that occurs like, the ovum, comes from the ovary, when the ovum is not fertilized in the uterus, the uterine walls the uterine walls contract and relax, and produce some hormones know as oxytocin, so when the uterine walls contract the blood, then it will flow out.

FGD1R4: girls menstruate because they give birth. If you can't menstruate you cannot give birth.

FGD1R6: i think it's their nature

INTERVIEWER: can you tell when someone is menstruating? RQ2

FGD1R5: you can tell but not for all, like me when I am on menstruation I become quite harsh, then my eyes turn red, like someone who has been crying. I then have a bad mood and go quiet. I could even answer you back rudely sometimes.

FGD1R6: People may say that, but those are myths and misconceptions. How can you explain that hormones make someone moodless? I am trying to understand that, how can the hormones make you moody and how can they make you mad?

FGD1R3: according to me i understand that the menses can make you moody because the hormones and different people, certain people can say, she is receiving the menses, she has abdominal pain which make her moodless even if you come with your sweet talks she does not care about them, that makes her so moody and there are others that are normal like me.

FGD1R6: that is extremes like abdominal pains right but if you are not having any pain can you be moody?

FGD1R5: yes, coz you know there are some reactions, there are some mechanical things inside there, and it's like when you are sick and you get an headache.

FGD1R6: which mechanical? Like an headache and whatever?

FGD1R3: we can say a woman can be moody because she was planning to do this or that but due to the menses; one cannot do all she wanted to nor wear the clothes she had planned to. You know there are girls with a heavy flow leading to blood lose.

FGD1R6: you have you wear dark clothes, instead of wearing white

FGD1R5: There are girls who experience menses but they are not moody while there are those who become very moody during menstruation. I can group them into the moody ones and the non-moody ones.

INTERVIEWER: from your own experience, what happens during that time?

FGD1R6: apparently, I am not moody, I am actually happy, because when I know I can't menstruate there is something very wrong.(laughter) yeah

INTERVIEWER: why are you happy?

FGD1R6: I know, how people are moody, how they... how those hormones make them feel they want to beat someone, when they are aroused (sheepishly).

FGD1R5: people are usually different, for me when menstruating, I am usually very harsh and could even beat up people, I get so irritable.

FGD1R6: that is why I have categorized that there are those people, who are usually moody and those who are not, the happy going ones.

INTERVIEWER: why category does you fall in?

FGD1R6: sometimes I am moody, it's not the same every day sometimes you are just happy (laughter).

FGD1R5: you can be crazy

INTERVIEWER: Apart from the moods, what else can tell a girl is menstruating?

FGD1R3 appetite, sometimes they eat a lot, some lose appetite.

FGD1R2: I heard from primary that menstruating girls fart a lot (a loud laughter)

FGD1R5: it's true

FGD1R6: sometimes even in bass and the pad is there thank God it helps reduce the noise.

FGD1R5: it can be true

FGD1R6: they say there is a way a girl farts and you will know she is on periods (amidst laughter)

INTERVIEWER: a part from that?

FGD1R5: I like me am a footballer at that time i can't play

FGD1R6: like I love running but the more you run the more the heavy flows.

FGD1R6: even when you laugh, the more laughter, the more the flow (demonstrates the measured laughter).

FGD1R4: sometimes, there are pimples or your face becomes rough

FGD1R3: even before menstruating

FGD1R4: yes! One has not even a spot before menstruating

FGD1R2: before periods, my breasts swell, they become tender, I feel like I am full (bloating). Then I start periods it goes and I become normal.

FGD1R3: before periods you feel like having sex is it normal?

INTERVIEWER: what do you think about menstruation?

FGD1R4: it's the only thing that makes the difference between boys and girls.

FGD1R3: it makes us different from a young child.

FGD1R2: menstruation is what makes you to become a woman. Because, when you don't menstruate, you cannot give birth.

FGD1R5: there are some barren women who menstruate but cannot have children.

FGD1R6: even men have problems and they say women are barren yet they have not been checked. So menstruating is just a God given gift

FGD1R5: the barren women do not mean they don't menstruate; they could have a problem in their uterus,

**INTERVIEWER: How does menstruation change the lives of adolescent girls?
RQ4**

FGD1R5: first it makes the person understand that now I am not a child.

FGD1R2: you know that you are now an adult.

FGD1R2: menstruation makes you careful with your life coz you know when you make a stupid error you can be pregnant.

FGD1R3: as a big girl you know that when you have money you just don't spend it but save even to buy yourself sanitary towels.

FGD1R5: menstruation also helps girls coz you know I am a big girl, you know there are girls who don't like wearing pants (laughter) You know there are different types of pants and what they are made of. When menstruating you need to wear full pants.

FGD1R4: there was a girl walking in a mini-skirt without a pant and in high heels with an unfortunate fall she was embarrassed because people saw her nudity.

INTERVIEWER: are there things you cannot do when you are menstruating?

FGD1R5: as woman when menstruating, you do not have sex, because the blood is dirty, and when the men add the dirt, they could cause cervical cancer.

FGD1R3: sometimes there are ladies who depend on sex trade, yet they cannot have sex at this time.

FGD1R2: when menstruating, according to the Muslims, you are not; you are not supposed to touch the Koran nor enter the mosque, and not to have sex as well.

FGD1R3: when you are not on ps bathing is a choice, you can skip bathing. But when menstruating you have to bath at least twice a day.

FGD1R6: you cannot do "Aringa ringa roses" because the legs are supposed to be compacted, you cannot run because the pad can fall. I cannot swim because I will disperse blood (laughter).

INTERVIEWER: what about at home. Are there things you cannot do while menstruating at home?

FGD1R3: can someone shave while menstruating (a question posed by the participants)

INTERVIEWER: (threw the question back to the participants) what do you think about that?

FGD1R2: you can but not with a razor blade coz it will be itchy all over the area.

FGD1R5: at home after meals we play drafts you know we are two girls and 3 boys my father sits between me and my sister but during menstruation I feel uncomfortable because what happens if I fart by bad luck? Then there is the odour that goes with the pads, and even the scented pads, so you don't sit so close to your father. You know he won't ask he will just wake up and leave feigning tiredness.

FGD1R3: another thing I can't do when menstruating is a lot of house chores like washing clothes and work in the house coz you are in pain you only do light work.

INTERVIEWER: how do you explain to your mother that you are not helping with the house work?

FGD1R3: we normally say I will do it tomorrow when it comes you postpone it again, giving excuse s until you are done.

INTERVIEWER: at home are you comfortable with your brothers.

FGD1R5: here we are in the city, there live no orders, but in shags, when a man as old as your father greets you, you bow and let him touch your forehead, you can't eat with your father and your brothers, you eat in the kitchen while your brothers eat in the living room with your brothers.

FGD1R2: when menstruating, you are not supposed to braid anyone coz their hair will cut.

INTERVIEWER: now if you were a hair dress how would you tell someone I can't braid your hair coz, she is on ps.

FGD1R2: she doesn't tell you but your hair will cut.

FGD1R6: Is that really true? (Surprised)

INTERVIEWER: who has been braided by someone on ps?

FGD1R2: my sister, and her hair all cut round the head.

(Laughter)

INTERVIEWINDIVIDUAL INTERVIEWER: So one needs to ask the hair dresser before being braided?

FGD1R2: its better but they won't tell you (loud laughter)

INTERVIEWER: Any other person with a similar experience?

FGD1R5: when you are menstruating you are not supposed to enter your father's bedroom or you have no access to all bedrooms especially your parents or even to sit on your parent's bed like we have some unfortunate situations where the less fortunate girls could wear their father's under wear that is deemed to mean that a girl has had sex with her father.

FGD1R6: no but physically no!

INTERVIEWER: But can you wear a sweater

FGD1R5: yes, just not to have contact with the inner wear.

FGD1R3: The rock bottom is you haven't slept with that dude!

INTERVIEWER: Does menstruation affect your body?

FGD1R2: Before menstruation, my breasts swell, the after that they go back to normal

FGD1R5: Some people menstruate for a week and even two and loose appetite making them weak.

FGD1R4: blood loose makes one weak and lose weight

FGD1R3: Some lose appetite

FGD1R6: I get a better appetite but i can't laugh because if I do the blood flows

INTERVIEWER: so we don't see you laughing so much at that time?

FGD1R6: around that time, laughing is minimized.

INTERVIEWER: so you can tell that.

FGD1R6: even crying when stressed, like when people offend you, coz you are not flexible. Yet if you cry aloud you can overflow your pad.

FGD1R3: I don't take salt and sugar, juice at this time coz of the flow, it brings a heavy flow.

INTERVIEWER: No sugar, no juice! Those were interesting observations. We have come to the end of our session, it was very interesting.

Thanks a lot

APPENDIX XIII: SUMMARY OF PARTICIPANTS' BIOGRAPHIES

S/N	Name	Age	Place of Residence	Person living with	Siblings in birth order	Number of siblings	Ethnic community	Religion
1	Melony	15	Gatwekera	Only father	5	7	Kisii	Christian
2	Melissa Dorsila	15	Lang'ata	Guardian	1	5	Luo(withdrew from the study)	
3	Linda	17	Gatwekera	Mother	3	6	Luo	Christian
4	Sheila	16	Lang'ata	Mother	1	2	Giriama	Christian
5	Schnider	17	Gatwekera	Sister	5	6	Luo(transferred)	
6	Lynn	17	Lang'ata	Mother	3	4	Luhya	Christian
7	Robi	16	Laini Saba	Guardian	2	7	Kuria	Christian
8	Sal	16	Lang'ata	Mother and aunt	1	2	Luhya	Christian
9	Samantha	17	Southlands	Both parents	5	8	Taita	Christian
10	Sweetey	16	Laini saba	Both parents	2	3	Kamba	Christian
11	Purple Diva	16	Makina	Father and brothers	7	7	Nubian	Muslim
12	Halle	17	Silanga	Both parents	1	6	Luhya	Muslim
13	Pat	16	Lang'ata	Both parents	3	4	Luo	Christian
14	Alicia	16	Jamhuri	Both parents	4	4	Luo	Christian
15	Jessica	16	Kisumu ndogo	Both parents	3	4	Luo	Christian
16	Rosie	17	Kisumu ndogo	Only father	3	9	Luo(dropped out of school)	Christian
17	Emmy	16	Gatwekera	Only father	2	5	Luo	Christian
18	Anonymous	17	Gatwekera	Brother	5	10	Luo(transferred, in July)	Anglican
19	Jenny	16	Kibra	Both parents	3	9	Kikuyu	Christian
20	Sandy	16	Laini Saba	Sister	8	8	Nandi	Catholic
21	Flo	17	Otiende	Guardian(Aunt)	3	6	Luhya	Christian
22	Precious	16	Rongai	Guardian(Aunt)	1	6	Kisii	Christian

APPENDIX XIV: BODY MAP

