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Legitimising Adolescent Girls' Voices: Menstrual Cup as the Mediator
of Menstrual Hygiene Management in Urban Informal Settlements in
Kenya

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Sheila Makena Miriti

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Members of the Examining Committee:

DR. Kristen Cheney

DR. Auma Okwany

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Disclaimer:

This document represents part of the author's study programme while at the Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Inquiries:

Postal address:

Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

Telephone: +31 70 426 0460
Fax: +31 70 426 0799

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List of Acronyms

ASRH   Adolescent Sexual and Reproductive Health

SRHR   Sexual and Reproductive Health Rights

SRH   Sexual and Reproductive Health

MHM   Menstrual Hygiene Management

WASH   Water Sanitation and Hygiene

ICPD   International Conference on Population and Development

LMICs   Low and Middle-Income Countries

SDGs   Sustainable and Development Goals

NYS   National Youth Service

AMREF   African Medical Research Foundations

MSF   Médecins Sans Frontières

RTIs   Reproductive Tract Infections

STI   Sexual Transmitted Infections

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Abstract

Adolescent sexual and reproductive health, particularly for adolescent girls' in Low and Middle-Income Countries has emerged as a fundamental policy issue in the post-International Conference on Population and Development era. Despite the post ICPD progress, access to adolescent sexual and reproductive health has been incommensurable for adolescent girls in LMICs. Extensive literature document that poor, disenfranchised and marginalized adolescent girls in the urban informal settlements bear the highest burden, especially as pertaining to menstrual hygiene management. In Kenya these girls face unique infrastructural challenges associated with high population densities, dilapidated housing structures, abject poverty, limited access to WASH facilities, and high insecurity and crime incidences. Compounding this further, is the material poverty, social norms, taboos and gendered power relations in which their menstrual experiences are embedded. For such girls, menstrual hygiene management has emerged as a fundamental human right and gender equality issue that necessitate multi-level and multi-sectorial policy interventions.

In social policies, menstrual hygiene management is approached from a technocentric perspective. However, menstruation is theorized as neither purely biological nor purely sociocultural. Its technical and sociocultural approaches are thus, essential to the way it is understood, experienced and intervened in. In the recent past, menstrual hygiene management discourses has subtly shifted to the most cost effective and culturally appropriate hygiene products. The menstrual cup has been conceptualized as the most appropriate for girls in urban informal settlements. With this in mind, this research was an attempt to bring to the fore the menstrual experiences of adolescent girls in Kibera, the biggest slum in Kenya. First, it explored whether the menstrual cup could be framed as a mediator of the menstrual hygiene management challenges these girls face. Second, it aimed to deconstruct the dominant technocentric way menstrual hygiene management is approached.

The research findings point to the need for a nexus to be created between the technocentric and sociocultural approaches to menstrual hygiene management. Further, they point towards the potential of menstrual cup as the mediator of menstrual hygiene management in urban poor locales. Finally, they illuminate the girl's resilience and potential to transform the dominant vulnerability discourses in adolescent-centred social policies. Rather than vulnerable, the girls are social actors that could transform their social worlds. However, for them to realize sexual and reproductive health rights and menstrual hygiene management, policy actors should address the material and discursive situations in which their menstrual experiences are embedded.

Relevance to Development Studies

Adolescent sexual and reproductive health and menstrual hygiene management play a critical role in influencing the current health, community status, future health, education attainments, employment potential and economic wellbeing of adolescent girls. They are essential for attaining the wider development goals of girls' and women empowerment. This research therefore contributes to this wider development goals by bringing to the fore the need to effectively address the adolescent sexual and reproductive health and menstrual hygiene management challenges adolescent girls face in urban informal settlements.

Keywords

Adolescent sexual and reproductive health, menstruation, menstrual hygiene management, urban informal settlements, adolescent girls, vulnerability, social actors, social policies,

Chapter 1 Situating the menstrual cup in adolescent sexual and reproductive health rights

1.1 Adolescent sexual and reproductive health rights and menstrual hygiene management

Adolescent Sexual and Reproductive Health (ASRH), particularly for adolescent girls' in Low and Middle-Income Countries (LMICs) has emerged as a fundamental policy issue in the post-International Conference on Population and Development (ICPD) era. ICPD defined ASRH as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes." (Denno, Hoopes and Venkatraman 2015: S23). In this regard, ASRH plays a critical role in influencing girls' current and future health, as well as, community status, education attainments, employment potential and economic wellbeing. The United Nations estimates that there are 580 million adolescent girls in the world, with 88% living in the LMICs (Santhya and Jejeebhoy 2015:189). For these girls, adolescence denotes an important life phase in which they experience extensive social, psychological and biological changes that necessitate adequate ASHR (Crichton et al 2013:892). Menstruation is one such fundamental change that socially marks their transition into puberty and womanhood. For heterosexual societies, it delineates a sociocultural inscription of female identity, sexual maturity and reproduction capability (Sommer 2009). Building on this, a reciprocal relationship can be propounded between menstruation and ASRH. One the one hand, menstruation is a key reproductive system function that is critical for ASRH. On the other hand, the achievement of adequate menstrual health necessitates sufficient access to ASRH.

Despite the post ICPD progress, access to ASHR has been incommensurable for adolescent girls in LMICs. Extensive literature document that poor, disenfranchised and marginalized adolescent girls in the urban informal settlements bear the highest burden of inadequate ASHR, especially as pertaining to Menstrual Hygiene Management (MHM) (Jewitt and Ryley 2014; Mason et al 2015; McMahon et al 2011; Joshi, Buit and Gonzalez-Botero 2015). By this term, I refer to the capability to manage menstruation with sufficient access to WASH (Water, Sanitation and Hygiene) facilities[1], hygiene products[2], disposal mechanisms and adequate menstrual knowledge. Hitherto understood, inadequate MHM is often exacerbated for adolescent girls whose menstrual experiences are situated in specific spatial, material and sociocultural contexts. As documented, 50% of girls in urban informal settlements and rural

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[1] Clean and private toilets for changing, water at the proximity of the toilets for washing hands or cleaning reusable hygiene products and soiled outer wear, as well as, disposal mechanisms for disposable hygiene products and places to dry reusable hygiene products.

[2] Commercial (disposable and reusable pads, tampons and menstrual cups) and traditional (newspapers, cotton wool, tissue paper, socks, sponges, pieces of cloth, rags, cow dung, exercise book pages) hygiene products

areas in LMICs still contend with the perversity of MHM (Sommer 2010a; Sommer and Sahin 2013; Hennegan and Montgomery 2010:1; Alexander et al 2014). This is the case in the Kenyan context. Adolescent girls living in urban informal settlements in Kenya face unique infrastructural challenges associated with high population densities, dilapidated housing structures in close spatial proximity, abject poverty, limited access to WASH facilities, and high insecurity and crime incidences. Further, their menstruation experiences are compounded by menstrual poverty; a combination of material[3] and psychosocial[4] deprivations, as well as, the contextual factors[5] in which these deprivations are situated. For such girls, MHM has thus emerged as a fundamental human right and gender equality issue that necessitate multi-level and multi-sectorial policy interventions (Chikulo 2015:1972).

In academia, international development and social policies, the MHM discourse has been framed and approached from a technocentric perspective. Particularly, the focus has been on a juxtaposition of the hardware (WASH facilities, hygiene products and disposal mechanism) and software (menstrual hygiene knowledge) interventions. Despite this, MHM still subsist as a marginalized issue in the dominant development agenda "that tend to prioritize technical (hardware) over sociocultural (software) considerations" (Greed 2014 as quoted in Jewitt and Ryley 2014:139). By adopting technocentric interventions, the approach "poorly accommodates the natural biological process of menstruation within the gamut of existing social cultural practices" (Lahiri-Dutt 2015:1158). Notably, menstruation is conceptualized as "a socially mediated biological process" situated in disparate sociocultural, material and discursive contexts (ibid:1165). Correspondingly, Lee (1994: 345) notes that menstruation shouldn't be viewed as a purely biological phenomenon requiring 'technical fixes'. Girls and women often experience it within a social context. I therefore, argue that subsuming it only necessitates technocentric interventions is thus problematic.

Drawing on menstrual cycle's material aspects, feminist scholarship has drawn attention to the interaction between biology and sociocultural environments, and the dynamic way they shape each other (Hasson 2016:959; Johnston-Robledo and Chrisler 2011). As a gendered body emblem, menstruation is theorized as neither purely biological nor purely sociocultural, hence it ruptures the boundaries between the two (Hasson 2016:962). The technical and sociocultural approaches to menstruation are thus essential to the way it is understood, experienced and intervened in (Lahiri-Dutt 2015; Patterson, 2014). Its management should be approached from both the technical/biological side and the sociocultural side.

Compounding this are the taboos and social norms that govern its management. Though disregarded, they engender negative psychosocial implications. Inherently, the technocentric approach has overlooked the

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[3]Inadequate access to WASH facilities, lack of privacy and inability to afford hygiene products
[4] Lack of menstrual knowledge pre-and post-menarche
[5] Taboos around menstruation and its public discussions, social norms, gender-discriminatory environments and cultural restrictions

gendered power relations embedded in the social and contextual realities in which girls experience their menstruation. The objective of this research is thus to deconstruct the dominant way MHM is approached by making visible the menstrual experiences of girls in an urban informal settlement in Kenya. Analysed against the backdrop of menstrual cup use, the research brings to the fore the tensions the girls contend with as they navigate through taboos, social norms and gendered power relations within the school, household and community in their quest to realize MHM and ASRH.

1.2 Menstrual cup and Menstrual Hygiene Management: Exploring the connection

Previously, the technocentric MHM discourse centred on "understanding girls' experiences of the onset of menstruation and the subsequent WASH challenges they face managing their menstruation in school," the household and community (Sommer et al 2016:2). Subtly, the discourse shifted to the categorization of the most cost-efficient, environmentally and culturally appropriate hygiene products (Hennegan and Montgomery 2016:6). Of particular importance was the most efficient among the commercially produced disposable and reusable pads, tampons and menstrual cup (McMahon et al 2011). Initially, tampons and disposable pads were the preferred hygiene products. Mainstreaming of environmental protection into the dominant development agenda however, shifted the preferences to menstrual cups and reusable pads (Phillips-Howard et al 2016). Out of the two, the menstrual cup[6] has been conceptualized by a growing body of literature as the most effective for menstruating girls in urban informal settlements and rural areas (Beksinska et al 2015:151; Phillips-Howard et al 2016; Juma et al 2017; Mason et al 2015:16). Often, this is justified by its social, education, economic, health and environmental benefits. Since the 1950's, studies have documented its acceptability and use in the Global North (North and Oldham 2011; Stewart et al 2010). Consequently, its popularity has grown in the Global South, with studies documenting its use in Nepal, Kenya, Uganda, South Africa, Malawi and Zimbabwe.

In the Kenyan context, the scarcity of social services and state safety nets in the urban informal settlements has attracted an influx of external funding from NGOs, which has been invested on free menstrual cups for girls and women in these locales. Notably, the issue of these menstrual cups is often preceded by training on menstrual cup use, SRH and human rights (The Cup Foundation 2017; Ruby Cup 2017). By embedding this menstrual management knowledge, the menstrual cup ruptures the boundary between the technocentric and sociocultural approaches. It unpacks the limits of the dominant technocentric approach to MHM through a nuanced understanding of the overlooked social and contextual factors. Accordingly, studies recount that the previously identified menstrual cup benefits are often attained within

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[6]"It is a nonabsorbent reusable barrier cup that collects menstrual blood" (Beksinska et al 2015:15). It is produced with medical grade silicone and can be easily inserted into the vagina, removed, emptied, rinsed and reinserted.

the backdrop of social norms, taboos and gendered power relations (Juma et al 2017; Mason et al 2015). In some cases, the menstrual cup subverts these norms, taboos and gendered power relations, while in other cases, it either circumvents or subscribes them (Phillips-Howard et al 2016). In addition, other studies have illuminated the need to explore a few sociocultural factors that could affect the menstrual cup's uptake. In their findings Mason et al (2015:23) and Oster and Thornton (2012) call for a context-specific exploration of menstrual cup acceptance. They go further to stipulate the need to explore peer pressure effect on menstrual cup adoption. As per their findings, Mason et al (2013) recommends for an in-depth analysis on the capability to share the menstrual cup.

Building on the above, I had a dual objective in this study. First, I explored whether the menstrual cup could be framed as a mediator of the MHM challenges adolescent girls in the urban informal settlements in Kenya face. Second, I aimed to deconstruct the dominant technocentric way MHM is approached by illuminating the factors embedded in the social and contextual realities in which adolescent girls using the menstrual cup in Kibera, the biggest slum in Kenya, experienced their menstruation. To achieve this, I followed Sommer (2010b:527) proposal of the imperativeness of "capturing girl's lived perspectives on contextual factors impacting on their lives." The girls should be positioned as owners of knowledge on their menstrual experiences. Drawing on the feminist standpoint methodologies, I privileged their perspectives and voices by putting them at the centre of my research. This study casted the conceptual tools of the social construction of menstruation, gendered power relations, the household and agency. Evidently, taboos and social norms governing menstruation and its management are anchored on the social construction of menstruation. While, the gendered power relations govern the resources allocation within the household, the adolescent girls can alternatively be deemed as social actors that employ practical and discursive strategies to circumvent the challenges imbued in their menstruating experiences.

1.4 Research objectives and Questions

This research aimed to achieve the above identified dual objectives and in so doing contribute to existing literature on the technocentric approach to MHM, specifically by proposing the alternative approach premised on a nexus between the sociocultural and technocentric approaches. Further, by situating the menstrual cup as a mediator of MHM challenges facing adolescent girls in urban informal settlements, this research highlighted their menstruating experiences that pose an alternative knowledge source for informing MHM policies and programmes. To do this, this research posed two main research questions and three related sub research questions.

Research question:
- How does the sociocultural dimensions of MHM impact on menstrual hygiene management for adolescent girls in urban informal settlements?

- What are the lived experience of adolescent girls with the menstrual cup as a mediator of menstrual hygiene management in the urban informal settlements?

Sub-research questions:
- What infrastructural and MHM-related challenges do girls in urban informal settlements face in menstrual hygiene management in the household, school and community?
- What is the role of the menstrual cup in enabling the girls to navigate these challenges?
- Are these experiences a possible alternative source of knowledge in re-thinking menstrual hygiene management policies and programmes?

1.5 Why it is important

Dominant social policies are shaped by "adult prejudices and assumptions about children's capabilities" (Cheney and Auma 2017:4). They therefore propose a shift to social justice since "it provides a fuller rationale for a policy focus on social equity and inclusion" Cheney and Auma (2017:6). Social justice in this case transcends resource redistribution and addressing structural disadvantage, to focus on a context-specific integrative policy approach that ensures inclusions of the voices in these contexts (ibid). It is this social justice approach that is premised for this research. In the recent past, the Kenyan government has formulated a draft Kenya National Menstrual Hygiene Management Policy that is still under review. The menstruating girls' category in this policy has been categorized as a homogenous group with common menstrual interests and shared menstrual challenges. This decontextualization overlooks the social and contextual realities in which they experience their menstruation. From a social justice perspective, a deconstruction of this category and all that it encompasses in this policy is imperative for the girls to achieve ASRH and MHM. In addition, my research findings highlighted actions by the said victims that shifted the discursive terrain from their vulnerabilities to their resilience and competency. For that matter, this research has the potential of providing deconstructed knowledge on which the MHM policy could draw upon.

In Kenya, urban and rural areas have been deemed as crosscutting heterogeneous environments. Though commonalities exist in the menstrual hygiene management issues girls face in both locales, some issues are comparatively unique in the urban areas (Chant et al 2017:13). Jones and Villar (2008:38) note that a child-sensitive lens that views children as a heterogenous group inhabiting diverse socioeconomic conditions, is imperative for formulating socially inclusive policies. Drawing on this, the Kenyan MHM policy can only be integrative when it incorporates knowledge from both environments. Essentially, menstruation is governed by disparate gendered power relations, social norms and taboos in both locales. While a plethora of studies have extensively researched on such issues from the Kenyan rural perspective, there is a paucity in studies that has analyzed the same from the slums context (Crichton et al 2013:892). This research attempted to bridge this knowledge gap by analyzing the menstrual experiences of girls both before and after the issue of the menstrual cup in Kibera.

The choice of this topic was also driven by a personal motivation. Drawing from my experience as an ASRH advocate, I observed the way girls in the slums strained to manage their menstruation. Though the Kenyan government rolled out a free sanitary pad project for girls in poor-resource areas in 2011, the gendered schools environment predominated by male teachers inhibited the girls' access to the pads. Additionally, due to budgetary constraints, the available pads were for emergency cases only. I therefore, felt compelled to research on ways in which these MHM-related challenges could be addressed. This research is an attempt to foreground their experiences, therefore highlighting potential ways in which the challenges they face could be addressed in MHM policy.

1.5 Structure of the paper

In chapter two, I present the research questions and methodological approach that guided this research. Chapter 3 outlines the conceptual tools casted to investigate and analyze the presented problem. In Chapter 4 the girls' menstruating experiences within the household, school and community prior to the menstrual cup issue are explored. This is aimed at highlighting the infrastructural and MHM-challenges embedded in urban informal settlements. In chapter 5, their menstrual experiences with the menstrual cup are explored. This chapter is divided into the cup's benefits and the unexplored social cultural factors that could impinge on its uptake. In this chapter, an alternative way of viewing the girls as social actors rather than passive victims is presented. Lastly, in chapter 6, I interweave my arguments into concluding remarks and suggest that the adolescent girls' menstrual cup experiences are an alternative source of knowledge in rethinking MHM policies and programmes.

Chapter 2 Setting the scene: Methodological journey

2.1 Situating research: The research site

This study was conducted in Kibera, the biggest slum in Kenya between July and August 2017. Occupying 6% of government owned land, its 2.5 million dwellers, represents 60% of Nairobi county's population (Corburn and Karanja 2014:259). It is typified by dilapidated housing structures in close spatial proximity. The main ethnic groups (Nubian, Kikuyu, Luhya, Luo and Kamba) inhabiting the slum are typified by patriarchy and social hierarchies. The slum has a high rate of poverty, with approximately 33% to 55% of residents living below the poverty line (ibid). The main livelihood source is unskilled jobs in the industrial area, with a high unemployment rate of 50% of the employable population (Onyango and Tostensen 2015:2). Cases of rape and domestic violence are common place (ibid). There is high shortage of public schools, spurring a mushrooming of private schools (ibid).

Figure 1: Map of Kibera

From Sommer (2010:269) perspective, the private and public-school environments are girl-unfriendly with insufficient latrines, inadequate water in the close proximity of the toilets and inadequate hygiene products' disposal mechanisms. Initially encumbered by water scarcity, the slum is currently provided with water by the World Bank and Municipal Council at a cost of $0.03 per 20 litres (Onyango and Tostensen 2015:5). The government through the NYS (National Youth Service) has constructed public toilet and wash blocks to address the WASH facilities problem. The $0.05 charge per use is an economic barrier for poorer slum dwellers. Disappointingly, health facilities are provided by such NGOs as African Medical Research Foundations (AMREF) and Médecins Sans Frontières (MSF), rather than the government (Onyango and Tostensen 2015:3). Social protection projects spearheaded by NGOs are common place, with some like UNICEF focusing on WASH facilities, while The Cup Foundation and Ruby Cup provides menstrual cups. This sets the backdrop for analysing the menstrual experiences of adolescent girls using the menstrual cup in the slum perspective.

2.3 Sampling method, data collection and analysis

The sample

Purposive sampling was applied to choose the high school from which the study participants for this research were drawn. This was with the help of a social worker that was knowledgeable on menstrual cup projects in Kibera. The sampling process was premised on an intersection of The Cup Foundation and Ruby Cup operations. They both issue free menstrual cups to girls in Kibera. Both have adopted different tailor-made training, issuing and follow-up methodologies. While they work in different schools, their operations intersect when a girl from a school patronized by one organization transfers to a school patronized by the other organization. Sampling was followed by an introduction to the head teacher to build initial rapport and seek permission to carry out the research. Punch (2002:329) notes that building rapport between the researcher and the gatekeeper, in this case the head teacher, is key to stimulating a relationship of trust during the research process. With the help of the head teacher and other teachers, 30 study participants were purposively selected. They were selected based on age (15-18 years) and owning a menstrual cup from either of the two organizations. Their varied menstrual cup experiences were expected to enrich the quality of collected data. Age was an important factor for two main reasons. First, 15 to 18-year olds had experience with menstrual cups and other hygiene products. Secondly, they were well versed in Kiswahili and English, thus they could clearly articulate their ideas in the FGDs, interviews and essays criteria. Six peer educators[7], three from each organization were also selected to explore whether their perspectives converged or diverged from those of the girls.

2.4 Data source and methods

Data collection for this research was framed within the feminist standpoint methodologies. In this field of inquiry, knowledge is socially situated (Harding 2005:56). As thus, the starting point of any research should be the study subjects. From this standpoint, starting research from the adolescent girls lived and menstrual experiences would generate less distorted knowledge about them (Harding 2005:56). Anchored on this, primary data was collected through Focus Group Discussions (FGD), semi-structured interviews and essays. A total of 1 FGD, 30 semi-structured interviews, 30 essays and 6 key informant interviews were carried out. The FGD comprised 30 girls in total, majority of which were in the age group 16-18. They were distributed across each class as illustrated in the table below. It was carried out in a classroom.

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[7] The peer educators are employed to conduct trainings on menstrual cup use, sexual and reproductive health and human rights prior to the issuance of the cups. Part of their work involves follow ups with the beneficiaries three months after issuance. Based on their prior interactions with the girls, the cultivated trust and the information gathered during the follow ups, they were at a better position to provide informed views on some of the question that were left unanswered by the girls.

Class Level/ AGE	15 Years	16 Years	17 Year	18Years	Total Number of Participants
Form 1	2				2
Form 2	2	3			5
Form 3		5	3		8
Form 4			9	6	15
Total	4	8	11	6	30

Table 1: Total Number of FGD participants by age and class level

Initially, I expected to carry out 15 semi-structured interviews but after the FGD, all the study participants agreed to take part in the interviews. Given the type of information expected to be solicited in this research, the FGD was selected as a starting point for identifying key emergent themes that could be explored further in the interviews and essays. It was carried out in a classroom. Though semi structured, I designed standard interview questions from the emergent themes in the FGD to define the study boundaries, while prompting the girls to narrate their experiences. The interviews were selected since they emphasize on "an equalizing and dynamic exchange between researcher and participants" to "gather sensitive information while simultaneously empowering girls" (Sommer 2009:387). Both the interviews and FGD were recorded with the consent of the 30 study participants. The interviews' research setting was a field adjacent to the school. This was a children space where the girls could exert more control and power in the research, as opposed to the classroom, an adult space, controlled by adult teachers (Punch 2002:328). As a sensitive and emotionally laden topic, some questions were left unanswered both in the FGD and interviews. I therefore applied the essays method, whose confidential nature allowed the girls to freely express themselves and address difficult questions. Anonymity was key during the essay writing process. The key informant interviews were carried out in the respective offices of the two organizations. A profile of all study participants can be found in Appendix I. The data collected was enriched by a wide array of literature on MHM, the menstrual cup and its implications.

2.5 Research with Adolescents: Reflexivity, ethical dilemmas and challenges

Once in the field, I had to manage my time effectively due to the election fever that had gripped the country in anticipation of the august elections. Most schools were preparing to close when I arrived, since Kibera is deemed a volatile location during elections. I had to conduct my interviews in the evenings after the students finished their exams. Some days, I couldn't access the girls due to security issues, while other days, I was forced to hurry through the interviews. Having been introduced as students studying abroad, the study participants started asking for gifts. I however confirmed to them that I was just a sponsored student and could not afford to give them gifts. To some

extent, this affected the initial morale they had exhibited. I therefore decided to buy notebooks and pens to appease them.

Additionally, I was aware of the power asymmetries between me as the researcher and my study participants. Morrow (2008:52) notes that in school-based research, access to children is often mediated through adult gatekeepers. In such spaces "children are used to having much of their lives dominated by adults, they tend to expect adults' power over them" (Punch 2002:323). As such, the power interplay between the young participants and the adult gatekeeper could tilt the power to the researcher. Based on this, I deduced that some study participants felt compelled to participate in the study, since our introduction had been facilitated by the headteacher. Further, I felt that by carrying out the FGD in the classroom setting with me standing at the position where the teacher stands in class, tilted the power scale in my favour. To some extent this rendered the girls powerless and more conformist during the research process.

While entering this generational terrain, I was also aware of what Mayall (2000:121) contends as the need to confront generational issues when adult researchers are conducting research with adolescents. To achieve this, I exercised reflexivity by unlearning my adult gaze to prevent the re-inscription of the normative way adolescents are conceptualized. This was attained through allowing the girls to freely express their views. I adopted the tendency to listen to their views after posing the questions. Additionally, I allowed them to make any clarifications beyond the questions asked. By so doing, I privileged their knowledge therefore deconstructing the notion of adult knowledge being superior over that of adolescents (Alderson and Goody 1996 cited in Punch 2002: 325). As indicated earlier, the girls were unwilling to respond to some questions both in the FGD and interviews. Rather than press for answers, I respected their wishes in agreement with Holland and Ramazanoglu (1994:13) stipulation that study participants wield control in the information they choose to disclose, despite the researcher's control over the questions posed. I however customized some of these questions for the essays. During the interviews, some information by the peer educators diverged from that provided by the girls. Particularly, the peer educators were sure that the girls did not share the cup, but the girls confirmed that they did share regardless of the cautionary warning received from the peer educators. Drawing from the feminist standpoint methodologies[8], I decided to privilege the girls' voices over those of the peer educators.

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[8]The starting point of research should be the subjects that possess knowledge about their lives and experiences. See Harding (2005:56)

Chapter 3 Conceptualizing the menstrual cup and menstrual hygiene management

3.1 Introduction

In this chapter, I present the analytical concepts that served as a lens for analysing the sociocultural factors embedded in the menstrual experiences of the adolescent girls using the menstrual cup in Kibera. My first point of departure is a constructivist perspective on menstruation as a socially mediated phenomenon. This affords a nuanced understanding of how taboos and social norms governing menstruation are socially perpetuated. In relation to this, I discuss gendered power relations that mediate these social norms and taboos and govern household bargaining process. I then present the household as a site of resources allocation towards menstrual needs. I then embark on peer norms that elucidate how the girls are socialized. Finally, I introduce the concept of agency through which the girls contest the social norms, gendered power relations and taboos that govern their menstrual experiences.

3.2 Menstruation as a silenced and tabooed subject: The social construction of menstruation

For this study, a constructivist perspective on menstruation premised on Erving Goffman, and Michael Foucault, Simone de Beauvoir and Karl Marx' theoretical underpinnings is imperative. Of importance is Goffman's stigma theory, Foucault's theory on power and discourses, de Beauvoir's work on women's otherness and Karl Marx's theory on capitalism. These demonstrate how social norms and taboos that govern menstruation are perpetuated. Referencing Goffman (1963) stigma theory, menstruation in is casted as a stigma symbol. Those possessing this stigmatic mark are ascribed a discredited or discreditable status, forcing others to avoid them or socially distance themselves (Goffman 1963:43). For a discredited individual, stigma is openly visible to others, while for a discreditable individual, their invisible stigma can be publicly revealed. The girls' menstrual experiences will be analysed using these statuses[9]. Goffman (1963:4) categorizes stigma into three distinct categories; "abominations of the body," "blemishes of individual character," and "tribal stigmas." Menstruation resonates with these stigma categories. First, menstrual blood is considered a disgusting, repugnant and polluting bodily fluid. As a taboo, it generates discourses of girls' bodies as filthy (Johnston-Robledo and Chrisler 2011; Goffman 1963). Furthermore, it actuates a need for policing open menstruation discussions (Lee 1994:345). Second, it mirrors blemishes through body odour and leakage that convey a visible stain on a girl's character. Menstrual hygiene products are thus

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[9] As discredited individuals, they face immediate vilification by teachers, boys and their peers due to menstrual leaks and body odour. As discreditable individuals they practise a high degree of hypervigilance, self-consciousness and self-policing as espoused by Foucault (1989 quoted in Jewitt and Ryley 2014), to conceal their menstrual status.

supposed to be invisible, but effective enough to absorb odours and menstrual blood. Lastly, it is a sociocultural inscription of female identity often embedded in gendered power relations. At menarche, menstruation marks a girl's femininity identity and sexual maturity. For societies that uphold heterosexuality, it marks their reproduction capability (Johnston-Robledo and Chrisler 2011). Adolescent girls often experience sexual objectification because of the male gaze on this burgeoning sexuality (Lee 1994). In turn, this attracts social restrictions and parental control on their mobility (Johnston-Robledo and Chrisler 2011:15).

In a Foucauldian vein, stigma can also be perpetuated through discourses. As observed, discourses entail a subtle form of social surveillance often internalized and applied by the subjugated to police themselves (Foucault 1975). From the same discourses social normality and abnormality are legitimized. In my study, the normality is the invisibility of menstrual blood, with leaking and body odour as the abnormality. From Foucault's view, a society often operates under the disciplinary gaze perpetuated by normative behavioural standards (ibid). When one deviates from the prescribed standards, they potentially create a socially sanctionable public spectacle. Girls in Kibera internalize discourse on menstrual blood as polluting and apply it to police their menstruating experiences. As observed by Patterson (2014:96) "girls are socialized into proper menstrual etiquette which bolster the importance of secrecy and concealment, of hiding their stigma from the surveillance of the male gaze." When they deviate from the same, they experience such social sanctions as bullying and teasing. Karl Marx and de Beauvior extend the stigma discourse to menstruation commodification. According to de Beauvior (1952 quoted in Patterson 2014:103) hygiene products ads incorporate concealment ideas that could instigate stigma. As Karl Marx warned, capitalism has invaded the menstruation discourse such that women and girls no longer correlate menstruation with fertility, but with hygiene (Patterson 2014:104). However, this capitalism discourse has introduced the popularized menstrual cup. To the third wave feminist, it empowers by undermining dominant medical and heteronormative institutions' control over menstruating bodies (Patterson 2014: 105).

3.3 Gendered power relations

The social norms that govern girls' access to, allocation and uptake of menstrual hygiene products within the household, community and school are mediated through gender relations. Further, the notions of masculinity and femininity embedded in gender relations often account for the high sexual violence rates in Kibera (Ampofo 2001). I will therefore draw on gender relations for my analysis in this study. Gender relations denote the socially constructed interactions between men and women (Kandiyoti 1998:136). They are fluid, meaning they evolve over time and are context specific. This fluidity shapes the nature of interactions between men and women within the public and private spheres (Agarwal 1997:1). In likeness to other social relations, they "embody both the material and the ideological" (Agarwal 1997:1). Clearly, these are embedded in gendered division of resources and roles, as well as,

representations and ideas that ascribe differential capabilities, desires, behavioural patterns, attitudes and personality traits to women and men (ibid).

From a household perspective, Agarwal (1997:1-3) notes that the gendered power relations' material and ideological dimensions socially tilts bargaining power towards men and boys, at the expense of the women and girls. Drawing on feminist literature, gender exerts influence on "power over" and "power to" (Rajagopal and Mathur 2017:304). "Power to" denotes the capability to act, while "power over" signifies the ability to assert goals and wishes, regardless of the opposition encountered. In gender relations, it renders one partner the ability to control the other partner's actions, dominate decision-making and act independently. This power is reinforced by masculinity and femininity notions that govern appropriate female and male sexual socialization in a society (Ampofo 2001:198). Men are socialized to be assertive, dominant and rational decision makers, while women are socialized to be submissive, innocent, passive and refrain from all forms of decision making (Kar, Choudhury and Singh 2015). In patriarchal societies such as that in Kibera, gender-based power is thus premised on the imbalance between the power wielded by men and women in a household (Agarwal (1997:1-3). From this, a distinct causal link can be drawn between gendered power relations and sex violence in Kibera. This is often associated with the disempowering effect that violence has on the power asymmetries within gender relationships (Rajagopal and Mathur 2017:304). Therefore, men's attitudes and behaviour in Kibera result from economic, social and gender dynamics that are deeply rooted in social norms, family systems and social institutions. Their perpetration and normalization of gender-based sexual violence against women and girls can be customarily deemed a compelling demonstration of violent masculinities.

3.4 Household: Site of competing interests

Research on menstruation management within Kibera cannot be diverged from resource allocation within the household. Often, resource allocation to menstrual needs in this locale is dependent on the household bargaining process. Historically, the household was theorized as a unitary entity; a site of identical production and consumption preferences. To maximize utility, pooled resources were altruistically allocated by a benevolent dictator (Haddad et al 1997:3). Anchored on the bargaining theory, this discursive framing was reconceptualised by collective approaches (Agarwal 1997:4-5). The household was conceptualized as a site of bargaining, negotiation and even conflict (Moore 1994 cited in Kandiyoti 1998: 135). This is due to the complexity of family-decision making that allows "for individual differences in preferences, in budget constraints and in control over resource use" (Agarwal 1997:2). As thus, resource allocation is governed by bargaining power rules that might not always produce efficient outcomes, nor protect extremely vulnerable members (Haddad et al 1997:7). More importantly, the emergent bargaining outcomes are dependent on "the relative bargaining power of the household members" (Agarwal 1997:4). This power is determined by the strength of the fall-back position or threat point (better outside options) obtained from extra-household bargaining (in community, state and market) (Agarwal 1997:4).

The household thus constitutes complex social relationships defined by intra-household power and inequality relations (Haddad et al 1997:10). Often these are governed by norms and rules that confer authority on the breadwinner, thus embedding allocative resource distribution within authoritative resource distribution (Gidden 1979 as quoted in Kabeer 1999). Kibera households are characterized by gendered power asymmetries and what Agarwal (1997:3) terms as "gender inequalities in the distribution of household resources and tasks." In this society, women's and girls' bargaining power is subordinated by undervaluing their household contributions (Sen 1990:6). This is reinforced by the invisibility of their unwaged home-based work and the gendered power relations within the household, thereby appropriating a normative and marginalized view towards their needs (Wolf 1997:119). For this study, these constitute menstrual needs. By systematically undervaluing women's and girls' needs and contributions, gender-related deprivations of menstrual hygiene materials are reinforced and normalized in what Sen (1990:20) denotes as 'perceived contribution response' and 'perceived need response.' Perceived contribution response delineates perceptions of women's contribution in the bargaining process and perceived need response denotes the gendered perception that women need less. Ideologically, the gendered social norms at play within such households not only construct them as dependents with the men being the breadwinners, but also justify the gendered unequal bargaining power in household negotiations (Agarwal 1997:16).

3.5 Three-fold conceptualization of peer norms: Descriptive, injunctive and active peer pressure

To postulate a nuanced understanding of the relationship between menstrual cup adoption and peer influence, this study adopted the three social norms pathways of descriptive, injunctive and active peer pressure. From Kibera perspective, the social norm pathways intersect with other social norms.

Social norm theory illuminates how social norms can be applied to regulate adolescents' behavioural decisions (White et al 2009: 136). Notably, individuals adapt their personal behaviours to the normative, accepted and prevalent social norms (van de Bongardt et al 2014:204). This theory delineates three social norm pathways. The first pathway; descriptive norms, conceptualizes perceived or actual behaviours amongst social referents (Borsari and Carey 2003:334). Often new behaviours are promoted by observing and imitating behaviour modelled by such social referents as peers within the social environment (Borsari and Carey 2003). In essence, "from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action" (Bandura 1977:63). Through observational learning, adolescents are inclined towards adopting, imitating and replicating positive and desired outcomes (van de Bongardt et al 2014:204). Injunctive norms, the second pathway conceptualizes the perceived or actual attitudes that an individual hold towards engaging in certain behaviours (Cialdini and Trost 1998). The adolescent can only conform to certain

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behaviour or norms depending on the how well they support his or her personal values.

While role modelling explains conformism to descriptive peer norms, conformity to injunctive norms is dependent on the quality of support the norms provide to an individual's attitude towards particular conduct. The final pathway stipulates active peer pressure is related to how adolescents conform to explicit social pressure that elicits social gains (van de Bongardt et al 2014:204). Therefore, feelings, behaviour and thoughts that conform to the socially rewarding, but dominant social norms are most likely taken on or embraced (ibid). The opposite is adaptable for sanctionable behaviour that contravenes the set normative discourses. This type of social learning occurs within the directive context of such socializing agents as educational institutions, cultural practises, families and peers that reinforce certain experiences and behaviours, while foreclosing or dissuading others (Cialdini and Trost 1998). Susceptibility to group pressure in adolescence is often experienced between 13 and 18 years due to increased peer interactions and "growing reliance on peer feedback in identity formation and self-evaluation" (Borsari and Carey 2003:332). Notably, their behaviour is conformist, as well as, avoidant of critique and rejection by peers (Cialdini and Trost 1998). In any case, peer conformity induces increased pressure for adolescents to assume the norms and expectations of their peers. Injunctive and descriptive norms pose an indirect influence on adolescent behaviour, while active peer pressure elicits direct conformity (White et al 2009: 136).

3.6 Agency, social construction of children/ adolescence and generational power relations

For this study, the term child will be viewed as synonymous to adolescent. As pioneered by Leena Alanen, the social construction of child focuses on their ability to self-determine, control and act consciously; the ideology that they are social agents and actors in their own right (Cregan and Cuthbert 2014:12). In agreement, new childhood studies have shifted the childhood discourse to children 'being and becoming' rather than viewing them either in the state of 'becoming' social agents or of 'being' worth of study (Uprichard 2008; James and James 2008). In this case, children hold the discursive reality in their childhood moment, which is a "valid site of agency" and are still "aware of and can articulate" their varied experiences "as a site of progression" to their future self (Cregan and Cuthbert 2014:13). This affords the backdrop for the adolescent girl's agency articulated in this study. Agency has been disparately conceptualized by an array of researchers. James and James (2008:11) deem it a function of children/ adolescents' independent role as social actors. Therein, it foregrounds children's subjectivities and their capacity as independent social actors despite economic, political, moral and social societal constraints (ibid). They can apply their ingenuity and skills "to cope with challenging circumstances" (Kendrick and Kakuru 2012:399). Therefore, they are active contributors in shaping the society and their social worlds (Esser et al 2016:1).

As espoused by James and Prout (1990:8) "children are active in the construction and determination of their own social lives, the lives of those

around them and of societies in which they live." This forecloses the view of children as passive subjects of social processes and structures in the normative adult society (James, Jenks and Prout 1998). Kabeer (1999:438) defines agency as the "ability to define one's goals and act towards it". It could encompass power within or the purpose, meaning and motivation embedded in an individual's activity (ibid). It could adopt a "bargaining and negotiation, deception and manipulation, subversion and resistance" forms (ibid). The social systemic exclusion perspective embeds the subordinated structural position of adolescent as a minority group (Mayall 2000). By viewing "childhood as an apolitical social space", children subjectivities are ignored, thereby reproducing relative powerlessness that propagates social exclusion in the political processes, policy and practise (ibid; Cheney 2007:13). However, children/ adolescents can exercise their agency to renegotiate and resists their subordinated positioning. In so doing, they also renegotiate notions about childhood. From a feminist perspective, children interpret all situations and their specific actions based on their individual perspectives. Okwany (2008:6) refers to this as situated agency, since the processes and place in which subjects are situated often constitute their agency. Place refers to the "social, spatial, economic and discursive markers of" adolescent girls (Okwany 2008:7). By distinguishing the girls in Kibera from girls in other locales, place influences their agency and the process of enacting it (ibid).

Chapter 4 The story before: Menstruating experiences within the household, school and community

4.1 Introduction

In this chapter, I set the backdrop for analysing the girls' menstrual cup experiences by reviewing the menstruation and infrastructural challenges in which their menstrual experiences are embedded. Though this analysis centres on their experiences prior to the issue of the menstrual cup, it offers insights on how the approach to MHM cannot be diverged from the social norms, taboos and gendered power relations embedded in their social and contextual realities. Further, it illuminates the need to explore other alternative methods for managing menstruation. Particular emphasis is paid to their experiences within the household, gendered school environments and the community.

4.2 Household factors: Navigating infrastructural and menstrual challenges at the household

Privacy

The context in which the material and psychosocial deprivations are situated is imperative for analysing the menstrual experiences of girl's in slums (Crichton et al 2013:893). For the girls in my study, the high populations densities and spatial proximity of slum dwellings forced most to live in one-roomed houses that served as the living, cooking and sleeping areas. The girls stated in the FGD:

> lack of privacy in these rooms constrains our capability to change pads and dry reusable hygiene products.

> Inadequate access to toilets and wash areas exacerbates the problem further because we cannot privately change our pads, or bathe in privacy during our period.

To them this was also compounded by the social norms and taboos governing menstruation.

> In Kibera menstruation is viewed as a disgusting fluid that should be privately managed. I cannot manage it secretly with minimal no privacy (BA).

> Though menstrual taboos prevent me from drying my reusable pads under the sun, I could not also dry or iron them openly in the house due to lack of privacy. I dried them under my mattress (EB).

The girls noted that social stigma also forced them to store their hygiene products in hidden and unhygienic places. Referencing Rajagopal and Mathur (2017:306), "notions of shame and impurity combined" to shape their menstrual experiences. Essentially, the peer educators linked this to the high self-reported Reproductive Tract Infections (RTIs) prior to menstrual cup use. This resonates with Sumpter and Torondel (2013:2) assertion that reuse of

non-sanitized materials during menstruation could introduce vaginal imbalances that attract RTIs.

Poverty and gendered bargaining process

At the household level, resource allocation to menstrual needs was governed by poverty and the gendered bargaining process. Surprisingly, though Kenya abolished value-added tax on hygiene products, they are still exceedingly expensive for slum dwellers (Corburn and Karanja 2014:262). To the girls, poverty made them even more inaccessible. In the interviews they recounted that pooled household capital was insufficient to meet their menstrual needs. As two girls noted:

> Though my mother's income from her vegetable stall supplements my father's income from the industrial area, we must forgo buying the expensive pads (CM).

> Both incomes go to rent, fees and education so there is no money left for buying pads (EM)

14 other girls whose fathers' incomes were supplemented by mother's income earned through various socioeconomic activities reported similar stories. However, this was exacerbated for girls in unitary income households. One girl asserted:

> With my father's income, my family cannot meet basic needs. How then can we afford to buy pads for the five women in my family? (JM).

Similar stories were reported by 12 other girls. This resulted in material deprivations in both households. As two girls stated

> Though there were cheap pads and shopkeepers also sold them in pieces, I couldn't afford to buy the necessary two packets for my period (SN)

> With her small income, my mother couldn't buy me pads and underwear. Fixing the pad with no underwear was complicated and disheartening (SC)

Consequently, in the FGD and interviews, a few girls cited decision-making on resource allocation in the household as another contributor to menstrual material deprivation. To them, menstrual needs were rated the lowest in the hierarchy of family needs. Some stated that as the breadwinners, their fathers governed resource allocation based on their own preferred choices. This led them to question why their mothers were subordinated in this decision making. This resonates with Kabeer (1994:437) account that norms and rules confer authority to determine distribution and exchange of resources on certain actors over others. In Agarwal (1997) words this could be attributed to the "gender inequalities in the distribution of household resources." Therefore, this subordinated their mothers' bargaining power, resulting in a fragmented bargaining process (Haddad et al 1997:7) that inhibited access to money for buying hygiene products. The resultant material deprivations exposed the girls to social stigma, health risks and sex risk behaviour. In the FGD the girls recounted:

> Lack of money for pads forced some of us to use cotton wool, tissue paper, socks, sponges, and pieces of cloth. These were uncomfortable, leaked and caused odor, thus exposing us to ridicule.

> Our peers avoided us due to the bad smell from using one pad for a long time.

> With no money we had to use at least 3-4 pads for the whole period leading to burning sensations, irritation, itchiness and sores in our genital areas.

This was reiterated by some peer educators that had taken some girls for RTI treatments at the MSF clinic. As Phillips-Howards et al (2016:2) state, inadequate access to hygiene products correlates with bacterial vaginosis and RTIs for girls in resource-poor locales.

The sex risk behaviour identified in the essays was transactional sex. Jewitt and Ryley (2013:138) contend that girls in Sub-Saharan Africa (SSA) are susceptible to transactional sex to obtain money for purchasing sanitary products. In turn, this exposes them to HIV/ AIDS, Sexually Transmitted Infections (STIs) and early pregnancy (Oruko et al 2015:4). It was shocking to read 16 of the 30 essays in which the girls described exchanging sex for money. While some did so with their boyfriends, other implicated neighbours and teachers. This is presented in three essay excerpts:

> I started playing sex with my boyfriend in exchange for money to buy pads in form two. My mum couldn't afford to buy the same (anonymous).

> I agreed to have sex with my neighbour in exchange for material rewards because the traditional hygiene products my mother advised me to use were insufficient for my heavy period (anonymous).

> In my former school, I was secretly having sex with one married teacher in exchange for money. I have also started to do with one teacher here but it's a secret (anonymous).

This was reiterated by one peer educator:

> Once trust was cultivated, some girls confirmed having 'boy lovers' for buying pads in exchange for sex. We however, educated them on its dangers and cautioned them against it (SM).

In the FGD, there were subtle comments on gossiped incidences of girls becoming pregnant or contracting STIs or HIV due to sex for money. This inferred the prevalence of transactional sex in the neighbourhood. It was evident that though transactional sex was a product of the gendered bargaining process, it also subverted it. To the girls, it was an exercise of their situated agency. As Kabeer (1994:438) states agency could take the form of the purpose, meaning and motivation embedded in an individual's action. As thus transactional sex in this case entailed what Agarwal (1997:6) terms as a 'fall back position' often attained from extra-household bargaining with the community. In engaging in it, the girls exerting their situated agency to acquire a strong fall-back position when the gendered intra-household bargaining process failed to meet their menstrual needs (Haddad et al 1997:7). Conversely, it reinforced gendered power relations through sexual subordination. Anchoring on the masculinity and femininity notions, the girls subscribed the discourses of men as providers and as the dominant decision-makers in sexual relationships (Ampofo 2001).

Tabooed menstrual knowledge

Transcending the material deprivations was the psychosocial deprivations. According to Kirk and Sommer (2016:11) hardware MHM interventions are insufficient to empower girls lacking biological information on their bodies. As inferred in the FGD, the girls had to contend with inadequate access to menstrual and sexuality information, ASRH knowledge and limited guidance, pre-menarche. To the girls, menstrual information received from family, peers and teachers was vague, fragmented and admonitory. In some cases, seeking such information was constrained by embarrassment. As they stated:

> Most of the information on puberty and menstruation imparted to us focused on restricting our movements and modifying our behaviour

> To my mother menarche indicated sexual maturity and ability to reproduce, thus she was more concerned with controlling my mobility, rather than providing menstrual information (ME)

> Some of us lacked information on menstruation before we started menstruating because we felt embarrassed to ask.

This knowledge poverty was compounded by the social norms and taboos governing menstruation (Lahiri-Dutt 2017:1167). In the interviews, 17 girls reported feelings of confusion, anxiety, emotional distress, embarrassment, powerlessness, fear, negative self-image, low self-esteem, lack of confidence, menstrual shame, worry and negative body image at menarche. According to the peer educators, the key contributing factor was the role played by social norms in inhibiting open menstruation discussions in Kibera households. To them, culturally and religiously embedded norms and taboos were casted to prevent sexuality and menstruation discussions in the family. The girls stated:

> The information available to us before menarche was tainted by misconceptions, leaving us with minimal understanding of menstruation biology, menstrual management and proper sanitary products disposal (FGD).

These silences were also transmitted into educational institutions in which the teachers were reluctant to discuss this socially tabooed topic. This forced the g girls to internalize menstruation as a shameful occurrence (Johnston-Robledo and Chrisler 2011). Important to note, the gendered allocation of resources to menstrual needs was also dependent on the menstrual knowledge and awareness that the key decision makers had. The girls felt that lack of menstrual knowledge impaired the fathers' decisions to allocate resources to menstrual needs. They stated that increasing male positive perception of MHM would likely enrich the household bargaining process.

4.3 Forbidden images: Menstruating girls within the gendered school environment

Though education is a right enshrined in international and regional treaties ratified by Kenya, girls are still plagued by grave educational barriers (Okwany 2016). In academia, this inequity in schooling could be premised on menarche and MHM (Sommer et al 2016:2). This is exacerbated for girls in Kibera, whose schooling experiences are situated in debilitating spatial, material and sociocultural contexts. From the FGD and interviews their menstrual

experiences in school were characterized by absenteeism, lack of concentration, impaired participation, grade retention, eventual dropout and pregnancy risk. These were related to the gendered school environments, social stigma, and the normative school curriculum.

Gendered school environment

To the girls, the school environment:

> Was predominated by the male school administrator and teachers with very few female teachers (JW).

> Lacks safe toilets, water, soap and a disposal mechanism for our pads (MK)

> Though available, most of us were reluctant to ask for the emergency sanitary pads from the male teachers (HH).

> During our period, we are perturbed by how to navigate the unclean and unsafe school toilets. Some opt to use the NYS toilets despite the charge. Others that cannot afford prefer to stay at home (CK).

> Some of us have been exposed to sexual harassment by boys and teachers due to our perceived sexual maturity (MW).

From these comments, I inferred that this gendered school environment subordinated their menstrual needs. As Sommer (2010a:522) reiterates, such environments reinforce gendered norms that privileged boys' and men's needs over the girls' needs. By inhibiting their menstrual management capability and subordinating their needs, this environment engendered school absenteeism for some girls for 3-6 days every month. In turn, some could not catch up with the school workload, leading to grade retention and repetition. Inherently, sexual harassment especially around the school toilets exposed the girls to pregnancy risks. Further, this risk was reinforced through cases of transactional sex initiated by some male teachers. Such occurrences were recounted in the essays. In so doing, the school facilitated aggressive masculinities.

Stigmatized bodies

Social stigma was a predominant theme in the essays, FGD and interviews. To the girls, it resulted in absenteeism, lack of concentration, impaired participation, grade retention and eventual dropout. However, it was an arena for exercising their situated agency. To the girls, social stigma arose from the way menstruation is socially constructed, with blood being viewed as polluting and menstruation as a sign of impurity (Lee 1994:345). From this conceptualization, leaking and body odour during menstruation were casted as "stigma symbol" (Goffman 1963). They occasioned fear, shame and embarrassment. In the interviews girls stated:

> I experienced low self-esteem, acute embarrassment and shame when the teacher sent me home to change after leaking. I only went back after my period (MK).

> With one school uniform, staining it definitely exposes me to ridicule and teasing (VO).

> When they see blood on our uniform the boys really laugh at us, making us feel ashamed and sad (BM)

> When on my period, my main worry is smelling and staining my uniform because the teachers quarrel us and send us home (EK)

In this case, the stains and body odour foregrounded the private menstruation experience into the public-school domain. In so doing, it ascribed a discredited status on the girls (Goffmann 1963:43) leading to stigmatization. However, the stains and body odour were an act of agency because they contravened the dominant menstruation norms that expect menstruation to be a private occurrence. As Kabeer (1999:438) states agency could take the form of "subversion and resistance."

Most of the girls noted that the leaking and odour emanated from hygiene material deprivation that forced some to use traditional hygiene materials or 3-4 pads for the whole period. This was compounded by the long school days in Kenya that heightened instances of leaking and body odour. These had far-reaching implications for them. They noted:

> My fear of leaking and smelling and the resultant shame impaired my concentration in class (JA)

> I couldn't participate in class as needed because fear of leaking prevented me from standing to answer the questions (WA)

> Some girls prefer staying away from school during their period because boys and teachers laugh at them (FGD)

To the girls, these resulted in poor grades or eventual dropout.

In addition, fear of stigma and teasing by their male counterparts constrained their ability to carry and change their sanitary pads. This led to more leaking and body odor. Notably, this emphasizes how the social construction of menstruation has permeated the school context. Viewing menstruation as polluting, ensured that leakage and odour conveyed a visible stain to their character. This conceptualized their bodies as figures of shame (Patterson 2014:103). Attributing leakage to uncontrollable bleeding bodies, embodies the explicit norms on the preferred normative menstrual concealing behaviour. As thus, leaking and odour subvert the normative and should be controlled.

Inherently, the different ways the girls managed menstruation was deemed an exercise of agency. Avoiding school during menstruation was key, while to others, going home to bathe and change when they leaked was another subtle way. Bathing and changing to avoid stigma was an ability to define a goal and act on it (Kabeer 1999:437). Staying away from school to avoid stigma tallied with Kabeer (1999:438) assertion that agency could encompass power within or the purpose a girl attaches to her actions.

Normative School Curriculum

To the girls, the normative school curriculum adopted a gendered perspective towards puberty and menstruation topics. It occluded the creation of safe spaces for menstrual health discussion by both boys and girls. Further it failed

to address existing taboos and misconceptions on menstruation. In so doing, it alienated the girls from a clear understanding of their maturing and changing bodies. Additionally, it failed to dispel the menstruation misconceptions the male teachers and boy had. This is one reason why the girls were often teased at school. Inherently, the male teacher's capability to teach menstrual-related topics was constrained by cultural taboos that police sexuality and menstruation discussions. One girl stated:

> The male teachers are inhibited and unwilling to openly discuss the topic (AA).

As McMahon et al (2011:2) notes it is unsurprising that these constraints force many Kenyan girls to perceive "menstruation as the most significant social stressor and barrier to schooling." Evidently, schools in Kibera are institutions that reproduce and maintain gendered ideologies (Okwany 2016:13), consequently excluding girls from full participation in education (Kirk and Sommer 2006:7).

4.4 Community factors

The way a community deals with menstruation illuminates their value of women and girls (Laws 1990 quoted in Lahiri-Dutt 2015:1166). The girls in my study recounted very debilitating menstrual experiences within the community. These were coalesced into WASH facilities and disposal mechanisms, social stigma and other emerging factors.

Social stigma

To them, Kibera context resonated with Kissling (2006 quoted in Hasson 2016:964) assertion that "culture depictions have furthered ideas of menstruation as a source of shame and embarrassment, requiring vigilant self-surveillance to hide all signs of bleeding." One girl asserted:

> Though it is a normal bodily function, menstruation is deemed as severely contaminating. It is considered embarrassing and shameful.

From their statement, I inferred that this pollution and impurity discourse engendered myths and taboos. For the girls, these resulted in practises of a high level of hypervigilance, self-monitoring and self-policing. They noted:

> We are forced to practice such private hygiene procedures as bathing three times a day and using either sanitary pads or traditional hygiene products depending on availability (FGD).

It is not surprising that their menstrual experiences were characterized by notions of impurity and shame. As stated:

> To us, menarche and menstruation were synonymous with secrecy and stigma (FGD)

> Our first menstrual experiences were rife with neighbourhood gossip especially when we leaked (FGD)

> We cannot dry our menstrual cloths or reusable pads in the open due to stigma (FGD)

Additionally, these notions inhibited their participation in community activities necessitating extreme physical activity. They were often cautioned from engaging in such activities because they would make their menstruating status public. As Rajagopal and Mathur (2017:309) notes "taboos and myths associated with menstruation are pervasive and continue to restrict women's and girls' participation in private and public sphere." The girls ended the FGD by stating:

> Effective MHM in the community would be a site of resistance, pride and agency.

WASH facilities

The inadequate provision of WASH facilities in Kibera disproportionately affects menstruating adolescent girls. In the FGD, the girls recounted:

> The close spatial proximity of house and high population densities inhibits the provision of adequate toilets and water for every household.

To alleviate this problem, the government commissioned NYS (National Youth Service) to construct toilet blocks. The girls asserted:

> Though these toilet blocks have eased privacy and WASH related challenges, user charges deter some girls from using them (FGD)

Further, the girls deemed them fearscapes particularly after dark. Drawing on lack of privacy at the household, girls opted to use these toilet blocks to change their pads. However, this posed a sexual violence risk at night. According to the peer educators, these were social arenas for idle Kibera youth and men to exert their masculinity. Having denigrated their breadwinner roles, they could only exert their masculinity through violence on the subordinated girls.

In the essays, the girls reported being routinely followed by boys and grown men as they walked to and from the toilets at night. Surprisingly, 21 girls recounted personal experience with intimidation, physical and sexual assault around the toilets. To curtail this, two girls wrote:

> I always ask a male relative to accompany them to the toilets (WA)

> After complaining the toilets were now fitted with security lights and strong doors to ward away potential attackers (MM).

Disposal mechanism

One MHM prerequisite is adequate disposal mechanism for hygiene products (Sommer 2010b). In Kibera, menstrual waste ended up in dumping sites or landfills. According to the peer educators, the landfill problem in Kibera was exacerbated by a weak sanitation infrastructure. Often, the girls were forced to dispose of their menstrual waste in landfills or dumping sites as illustrated below.

Figure 2: Dumpsite in Kibera (Source author)

In the interviews, 10 girls recounted that lack of disposal mechanisms prompted them to burn their waste and dump the remains in the dumping sites. This released toxic gases into the air. One girl noted that:

> I just put my pads in a paper bag and dump them in the landfill (SM).

This was recounted by 11 other girls. The remaining 8 girls dumped their used sanitary towels in latrines, which compromised the already week sanitation infrastructure. These also contaminated the nearby water sources

> It is easier to dump the pad in the pit latrine (AK)

> Some pads find their way into the Nairobi river. This is environmental pollution (LN)

 If each girl uses two packets of eight pads per month, the annual non-biodegradable waste produced would be very high.

Other emerging factors

The girls identified a few exogenous factors. First, their burgeoning sexual maturity post-menarche attracted negative attention from the neighborhood men. As they noted:

> The heightened sexual abuse rates prompted our parents to exert control over our mobility (FGD).

> Predatory attention inhibited our participation in group discussions and study support, further deteriorating our school performance (FGD).

> Due to poverty, some men tried to initiate sex in exchange for money to meet menstrual needs (RM).

One surprising factor was the position of witchcraft in the society. The girls asserted:

> Menstruation was an arena for some jealous neighbors to practice witchcraft (VA)
> If you dump your pad, the neighbors will use it for witchcraft (GM)

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4.5 Conclusion

It is evident that the social norms, taboos and gendered power relations are embedded in the girls' menstrual experiences. Material deprivations, and inadequate access to WASH facilities and disposal mechanisms constrain menstrual hygiene management. However, their negative implications are exacerbated by the sociocultural factors. Gendered power relations are embedded in the inadequate access to WASH facilities at school. Hygiene products deprivations are subject to gendered power relations and social norms governing access to menstrual knowledge. The girl's schooling and community experiences are governed by menstruation norms and taboos. The question I explore in the next chapter is whether the menstrual cup is an alternative technology for subverting the dominant notions and challenges that emerged in this chapter.

Chapter 5 Sociocultural menstruation context: Menstrual cup as an alternative

5.1 Introduction

In this chapter, I explore the girls' menstrual experiences with the menstrual cup. The presented findings demonstrate that the menstrual cup could be conceptualized as a mediator of menstrual hygiene management in urban informal settlements. First, I explore the menstrual cup's educational, social, health, economic and environmental benefits. In so doing, I illuminate the girls' situated agency and how it subverts the social norms, social constructions, discourses and gendered power relations embedded in their menstrual experiences. Further, it explores the unexplored menstrual cup factors. These highlight how peer norms, social and religious discourses control menstrual cup adoption, with such control also spilling over to the unintended implication of sexual violence. Finally, the chapter displays how the menstrual cup has been applied to deflect from the structural issues embedded in gendered power relations within the patriarchal society.

5.2 The perceived menstrual cup benefits

5.2.1 Future investment: Educational Benefits

In the previous chapter, material deprivation-induced absenteeism had been reported. This had stemmed from the gendered household bargaining process that constrained the girls' access to efficient hygiene products. A reciprocal relationship between material deprivation and stigma was later introduced. According to the girls, the challenges could be addressed through the menstrual cup's educational benefits. To them:

> Menstrual cup is an effective solution to absenteeism, lack of concentration, impaired participation, grade retention and eventual dropout (FGD).

It challenged the stigma discourse (Patterson 2014). By containing menstruation within the private sphere, it prevented leakage and body odour. This protected the girls from assuming a discredited status (Goffmann 1963:43). As such, it subscribed to the explicit norms on the preferred normative menstrual concealing behaviour. In so doing, it engendered a few positive implications:

> With the menstrual cup, I can now concentrate in class without the fear of being ostracised (MK).
>
> I can now participate in class and even comfortably stand to answer the questions (AA)
>
> Girls with the menstrual cup no longer appear in my list of absent students (CK).
> We can now participate in physical education (FGD).

> The menstrual cup is not visible like pads; thus, we never get harassed by the boys on our way to empty it (FGD).

> Boys and teachers no longer tease us (FGD).

> We don't stay home during our period (FGD).

To some girls, it was an answer to the disposal mechanism problem they previously faced in school.

> The menstrual cup does not necessitate any disposal mechanism (JW).

> You only need to empty, rinse and reinsert it (MK).

To girls that could not afford the NYS toilets, the menstrual cup was liberating.

> With no leaks, I don't have to go back home to bathe due to lack of water in school (HH).

> I only need to carry a bottle of water to rinse the cup and wash my hands before and after emptying (MW).

> I don't need to struggle to rinse off my uniform because of leaks in an environmental lacking water (VO).

It is clear that the menstrual cup is empowering by subverting the conceptualization of bleeding bodies as figures of shame (Patterson 2014:103). In addition, the girls claimed that the menstrual cup subverted the normative school curriculum. Prior to its issue, the girls were trained on its use, SRH and human rights. These trainings offered a space for discussing and asking questions on health issues, reproductive system, sex education and even family planning. In so doing, it resisted the social norms that policed menstruation and sexuality discussions.

5.2.3 Menstrual cup's social benefits

To the girls, the menstrual cup negotiated their access to public spaces they previously avoided. The girls stated

> With no fear of leaking and odour, we can participate in physical community activities (FGD).

Leaking prevention in this case could be correlated with subversion of the gendered power relations embedded in the household bargaining process. Material deprivations emanating from the above process had initially constrained their access to the said public spaces. These material deprivations often resulted in leaking and body odour. This constrained, the girls' mobility within the community and forced them to adopt stringent self-monitoring actions. The menstrual cup therefore, resisted the need for this high level of hypervigilance, self-monitoring and self-policing. In so doing, it challenged notions of impurity and shame (Johnston-Robledo and Chrisler 2011), often internalized by menstruating girls within the community. However, its benefits could be contradictory. On the one hand, it circumscribes to the dominant conceptualization of menstruation as a private occurrence. While one the hand,

it empowers girls by resisting their stigmatization and the construction of their bodies as uncontrollable (Patterson 2014:103).

One outstanding benefit reported in the FGD and interviews was menstrual cup's capability to alleviate witchcraft instances. To the girls, witchcraft was premised on the social construction of menstruation as a polluting fluid (Lahiri-Dutt 2017:1167). Thus, by using menstrual blood, jealous neighbours could cast polluting spells on their victims (APHRC 2010). The girls had initially reported:

> Menstruation was an arena for some jealous neighbors to practice witchcraft (VA)

> If you dump your pad, the neighbors will use it for witchcraft (GM)

> Most neighbors are averse to progress thus they would rather cast a spell to constrain this progress (EK)

Their story however changed with the menstrual cup.

> The neighbours can no longer access pads to perpetrate witchcraft

> Once the cup is rinsed, any access to the menstrual blood therein is eliminated(JA)

> Some jealous neighbours have been trying to dissuade us from using the menstrual cup because They can no longer access our pads for witchcraft purposes (FGD)

I inferred that it could be seen as a tool for resisting social ills in the society.

Finally, the girls reported that:

> The menstrual cup normalized menstruation (SM).

> It necessitates extensive knowledge of the female reproductive system (AK).

> The constant menstrual blood touching during menstrual cup use alleviates the construction of blood as disgusting and polluting (FGD).

> We could now view it as an empowering occurrence (FGD).

Though it contravened the dominant menstruation norms, to them it marked their fertility and femininity identity. This was actualized through the dominant frame noted by Sommer (2009) that menarche and menstruation should be celebrated as markers of cultural and femininity identity.

5.2.4 Deconstructing the gendered bargaining process: Economic benefits

Though menstrual cup has gained popularity in Kenya, its retailers in the country are very few. Ruby Cup is supplied to Femme International, Golden Girls Foundation and WoMena (Ruby Cup 2016A). Lunette supplies to The Cup Foundation (The Cup Foundation 2017a). On average one menstrual cup costs \$35. With a shelf life of 10 years, it will only cost \$140 for 40[10]

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[10]See Sumpter and Torondel (2013:1) "The age of menarche varies by geographical region, race, ethnicity and other characteristics but 'normally' occurs in low income

menstruating years. Menstrual cup use thus represents "considerable cost savings over time" (Beksinska et al 2015:152). The girls in my study did not incur any cost for their menstrual cups. According to the peer educators:

> At the Cup Foundation we train and issue the menstrual cups to the girls for free (LC)

> At Ruby Cup, our 'buy one get one free'[11] strategy ensures that girls in Kibera are issued with a free menstrual cup (AW).

For the girls, this was a relief. Having used the menstrual cup for six months, all 30 participants reported its comparable economic benefits. They felt:

> With a lifespan of 10 years, the menstrual cup is definitely cost effective (FGD)

> I don't need to ask for pad money for the next 10 years (CW)

> My mother can now channel the money she used for buying me pads back into her business (JS)

> We can even safely use the cup without investing on underwear (FGD)

> I don't have to work over the weekends as a maid to earn money for buying pads (EM)

The menstrual cup is not only economically beneficial, but also subverts gendered power asymmetries typifying the household bargaining process. The girls no longer rely on the gendered bargaining process to allocate resources to meet their menstrual needs. The menstrual cup is what Agarwal (1997:5) terms as an internal threat point. It allows the girls to withdraw their menstrual needs from the bargaining process. In addition, it resists the discourse of girls as dependent on the male breadwinner. The breadwinner can no longer exert control over their menstrual needs.

5.2.5 Menstrual Cup the 'Social Vaccine': Health Benefits

According to Juma et al (2017:1), the menstrual cup has been associated with a reduction in girls' and women's susceptibility to urogenital and reproductive tract infections. According to their findings, the menstrual cup's non-absorptive nature had no disruptive effect on vaginal epithelium. Though not with these explicit terms, my study participants confirmed the menstrual cup's health benefits. In the FGD, of the 30 girls, only two reported persistent itchiness and burning sensations. Three of the 28 asserted:

> Using the menstrual cup has reduced our susceptibility to RTI's (FGD).

> I have not experienced itchiness down there since I started using the menstrual cup (TA).

> We now believe the health benefits stated by the peer educators (FGD).

Such stories were recounted by 25 other girls. On further probing, most confirmed a strict adherence to proper personal hygiene. Conversely, the two

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settings between the ages of 8 and 16 with a median of around 13. Consequently, "the median age of menopause is estimated at around 50 years" (ibid). Using these figures, an estimate of approximately 40 years can be arrived at

[11] see Ruby Cup (2016b)

girls reported no improvement in their situation, even after menstrual cup use. On further probing they confirmed:

> Maybe my recurrent RTI is because rather than boiling my cup, I usually dip it in hot water (SN).

> There is no privacy at home. How then can I boil the cup? (SC).

Clearly their negative experiences correlated with absconding the personal hygiene training received prior to menstrual cup issue. As Phillips-Howard et al (2016:7) point out non-adherence to proper menstrual cup sanitization could encourage *E. coli* bacteria's growth on the menstrual cup, therefore accounting for RTI's.

Another health benefit reported in the essays, was a reduction in susceptibility to STI's that stem from transactional sex. The girls wrote:

> The cup allowed me to break up with my boy lover. I no longer needed his money (anonymous).

> I picked a fight with my neighbour so that he can break up with me. I don't want his money anymore (anonymous).

> The cup liberated me from my abusive boylover (anonymous).

It was surprising to read similar stories in 10 other essays. It is evident that the menstrual cup subverted the sexual subordination engendered by transactional sex. While initially, transactional sex was viewed as a strong fall-back position in this case, it was viewed as a tool of subordination. For that matter, the menstrual cup was a positive fall-back position (Agarwal 1997:5) that subverted the gendered power relations in the household bargaining process, while still challenging the discourses of men as providers and as the dominant decision-makers in sexual relationships. Though transactional sex had initially impaired their subjectivity, the menstrual cup vested them with positive agency. This enabled them to set and achieve the goals of ending subordinating sexual relationships (Kabeer 1999:438). From this, I inferred that the menstrual cup was a social vaccine to transactional sex.

5.2.6 Environmental Benefits

As Beksinska et al (2015:151) noted "the environmental impact of menstrual waste on sewage systems is considerable." This is particularly devastating in an area characterized by a weak sanitation infrastructure and landfill problem as Kibera. Therefore, they proposed menstrual cups as the most environmental friendly hygiene product (Beksinska et al 2015:152). This was confirmed in my study. According to two peer educators:

> The menstrual cup positively impacts on women's and girls' eco-footprint (JA).

> If the lifespan of one menstrual cup is 10 years, a girl will only need to use and dispose of 4 menstrual cups in her 40 menstruating years (VM).

> Our cups are packaged in pouches rather than boxes, thus generating no waste (JA).

> It is the best option for girls in Kibera especially due to the landfill and sewage problems (VM).

This was reiterated in by the girls in the FGD:

The menstrual cup does not generate any menstrual waste since you only need to rinse it.

It is good for the environment since we no longer dump used pads into the dumpsites

It helps to prevent air pollution emanating from burning used pads

There is no need for disposal mechanisms since the cup is reusable.

Additionally, research shows that the menstrual cup is free of dioxin, elastomer, and polyethylene; chemicals in insecticides, plastic, latex, colours and dyes used in tampons and pads (Juma Et al 2017; Phillips-Howard 2016).

5.3 The unexplored contextual factors: sociocultural factors affecting the menstrual cup

5.3.1 Sharing with female family members: Agency and deconstructing menstruating girls' subordinated position

Sharing pads with family members has been extensively documented in MHM literature. However, few studies have explored menstrual cup sharing. In their study, Mason et al (2015:22) documented sharing in their pads cohort, while the same was unobserved in their menstrual cup cohort. This stemmed from the cautionary training on infections and hygiene received by the menstrual cup cohort. Nevertheless, they cautioned that "if programmes roll out donations of menstrual cups, this hygiene issue will need to be considered" (Mason et al 2015:22). It is under this cautionary note, that I set to explore the phenomenon in my research. In the field, the peer educators acknowledged strictly warning the girls against sharing. One claimed:

> Having trained them on the dangers of infections, I am confident none shares (LM)

In the FGD the girls unanimously claimed that they did not share. On further probing, this response was recanted in the interviews and essays. In the interviews three girls affirmed:

> The peer educators need not know this. I have been sharing my cup with my sister, since our mother cannot afford to buy her pads (GM)

> My cousin sister sometimes uses my cup so long as she boils it as needed (RA).

> Sharing with my sister is more important than the fear of infections (CA)

As the interviews progressed, this was echoed by 5 other girls. Some expressed their indifferences towards their sisters' use of force when obtaining the cup, provided that it was properly sanitized. Others claimed:

> It is safe to share, since the cup does not absorb blood (BA)

> Sharing with my sister is okay, since she is a virgin and has no infections (EB)

> Why should I let my cousin suffer when I can share my cup with her? (CM)

> My father refuses to buy us pads, so we share the cup with my sister ((JM)

It was shocking to read similar stories in 14 essays. While some shared by choice, other were coerced by their mothers. The girls wrote:

> I was afraid of sharing, but my mother forced me to share with my sister due to lack of money to buy pads (EM).

> My mother implored me to share so that she could channel the pad money into her business (TA)

> I felt sorry for my mother and decided to share with my sister so that she could buy herself pads (SN)

I interpreted this as an exercise of what Okwany (2008:7) avers as situational agency. As Kabeer (1999:3) argues, marginalized groups could consolidate power by adopting behaviours vetoed by dominant groups. In this case, the girls shared, despite the peer educators' cautionary warnings. I inferred that this was a subversion of the gendered power relations governing household provisioning. In Kibera, resource allocation to menstrual needs is governed by the 'intra-household' and 'extra-household' bargaining processes (Agarwal 1999:4). Strikingly, menstruating girls and women are subordinated in these processes. The social hierarchies and notions of masculinity and femininity confer men with unequal bargaining power over the women (Agarwal 1999:7). In the pooled resources households introduced in the previous chapter, women's economic contribution was deemed dismal, thus conferring them with low bargaining power. This was exacerbated in the unitary income households where unwaged home-based work in the care economy (Wolf 1997:119) subordinated the women's position. Additionally, their impoverished nature impeded access to any fall-back positions (Agarwal 1997:7) in the extra-household bargaining process typified by scarce state safety nets. In Haddad et al (1997:7) words, the bargaining process marginalized their menstrual needs, resulting in inefficient outcomes for the female family members. As the girls stated:

> Budget constraints force our fathers to allocate resources to food, education and rent (FGD).

> We are left with no money to buy pads. To cope, we share what we have (MK)

> My mother hides money for pads, but when my father finds out he takes it leaving us with nothing (AA)

By sharing the cup, the girls could no longer be viewed as "only objects but as respondents and participants" Cheney (2007:2) in the intra-household bargaining process. In so doing, they momentarily tipped the gender power balance towards the female family members' side. Substantially, this ruptured the discourse of men as breadwinners and the preferred resource allocators in the household. Through sharing, the female family members had no reason to bargain or negotiate for menstrual resources in the fragmented intra-household bargaining process. Through "subversion and resistance" (Kabeer 1999:438) of the unequal gendered power relations, the girls acted as social agents (Cregan and Cuthbert 2014:12) that changed the other female family members' lives,

despite challenging circumstances. In turn, this deconstructed their socially constructed position as vulnerable, dependent and passive adolescents lacking power. They could no longer be deemed apolitical and subordinated victims. In Cheney (2007:15) words the girls "need to be taken seriously as social actors with some level of competence." Amid the socioeconomic constraints deterring female family members from meeting their menstrual needs, the girls' subjectivity actively shaped their social world (James and James 2008:11; Esser et al 2016:1)

5.3.2 The perceived act of socialization: Peer pressure influence

Peers may pose normative implications on the adoption of a new technology that can potentially improve an individual's quality of life. Writing on the Nepal context, Oster and Thornton (2012:1263) documented positive peer effects on menstrual cup adoption. By the end of their study, they recorded a dramatic adoption rate of roughly 60%, for girls whose friends had also been issued with the menstrual cup (ibid). In their study in rural western Kenya, Mason et al (2015) documented peer support as a prerequisite for menstrual cup adoption. Building on these two studies, I embarked on an exploration of the same within the slum setting in Kenya. To the peer educators, peer encouragement had eased their work in this school that had been initially resistant to the menstrual cup introduction. From my study participants' perspectives, peer pressure exerted both positive and negative effects on menstrual cup adoption. In the FGD a few girls recounted:

> The shock we experienced on seeing the menstrual cup's size dissipated when our friends expressed an interest in using it.

> At first, I couldn't imagine inserting that in my vagina. We however, decided to try with my friend (CK)

> I only agreed to try because others were willing to try it (SM)

As expected, insertion deterred initial use. The girls reported that the pain experienced at initial insertion invalidated their initial buy-in. As a solution, the peer educators initiated peer discussions on the same, but these had disparate outcomes. On one hand, they resulted in a reduction of the girls willing to use the cup.

> Why should I use, and my friends said it was painful to insert? (JW)

> My friends told me I shouldn't try it because it couldn't go in (MK)

> Inserting that thing was very painful, so I encouraged my friends not to use it (HH)

These girls exhibited conformist behavior by assuming non-usage as per the peer's expectations (White, Hogg and Terry 2002). Active peer pressure was at play. To some extent, the girl's non-usage behavior was anchored on such social gains as respect and acceptance by their friends. Others were more afraid of social rejection, thus they conformed. In retrospect, increased pressure to conform (van de Bongardt et al 2014:204) depended on their friends' disapproval of menstrual cup use. Conversely, the peer discussions encouraged persistent use.

> We encouraged each other to continue trying. The peer educators had said it would be hard at first, but easier with time (FGD)

> My friend kept on encouraging me to use despite the pain. I am glad I listened to her (MW)

> I decided to continue using when I overheard some girls saying that it got easier and less painful (VO)

From a descriptive norms perspective, the girls' decision to continue using the menstrual cup was dependent on their friends' adoption behaviors (Cialdini and Trost 1998). When their friends decided to keep using despite the pain, then the felt more encouraged to adopt the same behavior. In addition, their behavior could be referenced to van de Bongardt et al (2014:204) claim that peers offer substantial emotional and social support (injunctive norms). Were it not for the emotional support they got from their friends, they would have probably stopped using the cup as their counterparts had done. Some reported that pain was due to improper insertion and the social support they got engendered proper insertion behaviour. As thus, they replicated their friends' desired outcomes (Bandura 1977:63) leading to positive benefits in the end. Further, some girls using the Cup Foundation's menstrual cup stated:

> The additional instructions offered by a Ruby Cup girl that had transferred to our school encouraged us to continue using (FGD)

> Having used the cup for a longer period, she explained its value, therefore persuading us to continue trying (FGD)

This resonates with "imitation, learning about the cup value and learning how to use" (Oster and Thornton 2012:1266); the three mechanisms that govern adoption. To some, the additional training was invaluable, since it illuminated the proper insertion and usage methods. Mimicking these methods resulted in a reduction in the pain experienced and increased ease of use. Others recounted:

> We believed the menstrual cup value averred by the transferee as opposed to that stated by the peer educators (FGD)

They were more inclined to believe someone like them, rather than a person in a position of authority. To others, peer pressure was premised on social norms surrounding menstrual cup use. One girl affirmed:

> The negative menstrual cup discourses and misconceptions adopted by my neighbors swayed my decision to continue using. They cautioned me from using it because it would either travel up her body or get stuck. It took a peer educator's intervention for me to continue using the cup (BM)

However, the effect dissipated over time as peer effects on ownership and usage were no longer significant. It is evident that agency also played a role in their conformist or non-conformist behavior. As Kabeer (1999:438) states, agency could constitute what motivates an individual to act in a certain way.

5.3.3 Discourses of control: Social and religious control of the menstruating adolescent body

Some cultures celebrate puberty and menarche as the transition to womanhood and adult female sexualisation. In others, this sexuality is seen as dangerous (Sommer 2009:383). By reporting heighted sexual objectification post-

menarche, most adolescent girls often attract considerable anxiety over their sexuality (Johnston-Robledo and Chrisler 2011:15). This is exacerbated in slums typified by high sexual violence rates reported by girls within the household, schools and communities. In turn, it leads to increased restrictions on their mobility, with girls reporting severe social restrictions and parental control (Rajagopal and Mathur 2017:309). In some cases, girls are withdrawn from school to strictly monitor their sexuality at home (Okwany 2008). According to one peer educator:

> Such control might extend to technologies that contravene socially and religiously situated norms (CN).

In Kibera, this control was exerted on menstrual cup use. The peer educators decried this as a factor that impeded their work, and the girls' proclivity to adopt and use the menstrual cup. Consequently, my study participants reported:

> Adopting and using the menstrual was subject to religiously propagated purity discourses (FGD).

In the interviews, it was evident that girls affiliated to Islam experienced stricter control over menstrual cup use. This stemmed from fear that it would compromise their virginity.

One girl affirmed:

> My family's Islamic background bars me from anything inserted into the vagina (AA).

This was echoed by two other girls. To them, menstrual cup adoption was sanctioned behavior. For that matter:

> I must hide my cup. If my mother finds out she will throw it away (AK).

> Hiding my cup is difficult especially during the boiling process. If my father found out, he would be very disappointed. I therefore boil my cup at my friend's place (HH).

This was resonated by the Christians who felt that the menstrual cup contravened the esteemed purity that all unmarried girls should embrace.

> As an unmarried catholic, I am expected to avoid anything that could compromise my purity (EK)

> We had a girls' meeting in church denouncing menstrual cup use because of its effects on virginity (JA)

> I am a saved Christian. So, I am not expected to use anything in my vagina (WA)

By using the cup, the girls resisted the dominant purity discourses governed by religion. Control was also anchored on discourses of dangerous sexuality.

Two girls stated:

> Our mothers were concerned vaginal touching during menstrual cup use would awaken our sexual awareness and encourage us to engage in risky sexual behaviour (MM and SM).

Parental concern in this case was two-fold. First,

> They thought we would willingly engage in risky sexual behaviour exposing them to such sexual and reproductive health risks as pregnancy, HIV and STIs (FGD).

Second,

This perceived dangerous sexuality would exacerbate our vulnerability to sexual coercion and exploitation in the private and public spheres (FGD).

For the other three girls, their parents were concerned that:

This touching could eventually force us into lesbianism (RM, VA AND GM).

These misconceptions stemmed from inadequate SRH, puberty and menstruation knowledge. While the girls were knowledgeable given the initial training received prior to menstrual cup issue, the same was not extended to some of their peers and the whole community. Using the cup was thus an act of agency by subverting the dominant dangerous sexuality discourse.

5.3.4 Slums as fearscapes: The unintended implication of sexual violence

This relates to what (author terms as- find some literature to fit in here)) whereby interpretations fail to problematize the social and institutional inequalities and power differentials that exists in Kibera.

One unintended implication stood out in this research. Though a very sensitive issue, heightened sexual violence was reported in 23 essays. This was resonated by some peer educators. To the peer educators:

The contributing factors were poverty, discourses on menarche and menstrual cup and gendered power relations (LM and MM).

This resonated with Okwany (2008:9) statement that "slums were fearscapes" in which "sexual abuse and harassment perpetrated by male relatives, neighbours and boys were reported as routine and a daily hazard for the girls." Two girls wrote:

The proximity of our houses and the cramped living spaces often expose us to sexual exploitation and abuse (RM).

Poverty prevents us from moving into better housing (VA).

In a setting characterized by inadequate state safety nets, this was exacerbated by insufficient sanitation facilities. Many houses were forced to use a single toilet. As introduced in the previous chapter, the preferable NYS toilets were arenas for perpetrating sexual violence, especially after dark. It was shocking to read 21 essays that recounted such varied instances of sexual assault as intimidation, groping, being propositioned and even in some cases outright rape. This was intensified when girls sought protection from their male counterparts. As one girls wrote

As a safety precaution, we ask male relatives or neighbours to accompany them, only for some of us to experience the same from our expected protectors (GM).

Kibera is typified by differing discourses on menarche, girlhood and the menstrual cup. As a heterosexist society, "menarche simultaneously signifies both emerging sexual ability and reproductive potential" (Lee 1994:344). The accompany bodily changes, such as growing breasts and hips heightens girls' vulnerability to sexual violence. According to the peer educators:

This was compounded by the sexuality discourse adopted towards the menstrual cup (AW).

Many people lacked knowledge about the menstrual cup, leading to different menstrual cup discourses.

To the girls:

> The predominant gossip in Kibera is that the menstrual cup necessitates intensive knowledge of the genital area and its daily use involves touching the genital area (RA).

> People equate this touching to masturbation (CK).

> This purported sexual awareness makes others think that we will be more willing to engage in sex (BA).

To some parents, this encouraged increased control of their daughters' mobility. To some men, this offered the arena for perpetrating sexual violence. One girl wrote:

> Some men think that the menstrual cup compromises our virginity, therefore priming us for an active sexual life. These men don't understand that the menstrual cup is ineffective on the hymen (ES).

While the above factors could counteract the menstrual cup benefits, they illuminate the existing social norms, discourses and gendered power relations embedded in Kibera. Ascribing the heightened sexual violence cases to the menstrual cup-imposed sexual maturity, justifies explicit norms on dominant masculinities and femininity and how both genders are sexually socialized. Such socialization "is borne out of cultural definitions of sex appropriate behaviour" (Ampofo 2001:198). This gender socialization is actualized in a context rife with gender inequalities and the society's tendency to reinforce the dominant group's (invariably male) position. While men and boys are socialized to be dominant in sexual relationships, women and girls are socialized to be subservient, submissive and to acquiescence to sexual decisions. This impairs girls' subjectivity in decisions to engage or not engage in sexual conduct. In so doing, it deflects from the power asymmetries that subordinate girls and cast them as submissive in sexual decision making. This relates to what Jewitt and Ryley (2014:143) termed as "'widespread cultural tolerance' of the sexual exploitation of adolescent girls and women in patriarchal societies." To some girls the menstrual cup was an excuse for reinforcing violent masculinities. Three girls stated:

> The menstrual cup engenders a discursive space for idle Kibera youth and men to exert their masculinity (TA).

> Most cannot meet their breadwinner roles thus they can only exert their maleness through violence on girls (SN).

> The menstrual cup gives them an excuse to do whatever they want with the girls (SC)

The men relied on the menstrual cup to exercise dominant power in Foucault's sense. Further, it acted as an agent through which they could control and patrol adolescent girls' sexuality. As such, the menstrual cup was a tool for deflecting from the norms and unequal gendered power relations in Kibera. This is consistent with Okwany (2016:22) claim that adults are more likely to maintain discriminatory norms, while males are more likely to participate "in maintaining norms that may favour them." Once the girls reported such cases, their mothers heighted parental control. Though this was protective, the mothers didn't effectively question the gendered power relations at play. In

controlling the girl's mobility, they constrained their agency and reinforced gender and generational subordination (Okwany forthcoming).

5.4 Conclusion

It is evident that the menstrual cup could be indeed framed as a mediator of menstrual hygiene management for adolescent girls in urban informal settlements. It is not only associated with social, economic, health, environmental and educational benefits, but also it illuminates agency on the part of the girls. From the findings it can be deduced that the menstrual cup's benefits could be contradictory. On the one hand, it circumscribes to the dominant conceptualization of menstruation as a private occurrence. While one the hand, it empowers girls by resisting their stigmatization and the construction of their bodies as uncontrollable Consequently, on one hand it subverts the social norms, on the other hand, it circumscribes to them through the by engendering the sexual maturation and purity discourses that could inhibit its adoption. While an effective MHM solution, the identified unexplored factors should be considered.

Chapter 6 In conclusion: Re-imagining menstrual hygiene management

6.1 Introduction

A dual objective guided this study. The first aim was to explore the sociocultural factors embedded in the menstrual experiences of adolescent girls living in an urban informal settlement in Kenya. This was with the perspective of deconstructing the dominant technocentric way MHM is approached. Second, it aimed at exploring whether the menstrual cup could be framed as a mediator of the MHM-related and infrastructural challenges these girls faced in menstrual management. This dual objective was premised on providing insights into how menstrual hygiene management could be approached in social policies. The chapter therefore brings together the key issues that emerged in the study from the research questions perspective. It closes by proposing an alternative way for understanding and designing MHM policies.

6.2 Deconstructing the technocentric approach to menstrual hygiene management

In the global MHM agenda, menstrual hygiene management has been approached from a technocentric perspective. However, menstruation is conceptualized as "a socially mediated biological process" situated in disparate sociocultural, material and discursive contexts (Lahiri-Dutt 2015:1165). This study's findings highlighted the effect of social norms, taboos and gendered power relations on MHM. Though providing adequate WASH facilities was imperative, these spaces could reinforce dangerous masculinities in the community and schools. In school, girls were sexually harassed around toilets by the boys. In the community, some girls experienced differing sexual violence forms in the NYS toilets when changing pads or emptying menstrual cups at night.

This study also demonstrated how social norms and taboos governing menstruation, menarche and the menstrual cup constrained the girls' menstrual experiences. By policing menstruation and sexuality discussions, the menstruation-related social norms and taboos led to inadequate menstruation, puberty and SRH knowledge. This had a three-fold implication. First, girls were forced to experience menarche with confusion and anxiety, thereby inhibiting their management capability. Second, lack of information impinged on the fathers' proclivity to allocate resources to menstrual needs. Third, they engendered dangerous sexuality discourse that inhibited menstrual cup adoption and initiated sexual violence. Additionally, the social construction of menstruation as a repugnant bodily function induced stigma in the community and school. This occurred when girls leaked and had body odor. By foregrounding the private menstrual status in the public spaces, leaking and odor violated dominant menstruation norms. Such sanctioned behavior was reprimanded through stigmatization of the menstruating bodies.

According to the study findings, social norms and taboos had a dual effect on the menstrual cup. First, they reinforced its identity as the most ideal alternative. As revealed, it inhibited stigma by containing menstruation within the preferred private sphere. Further, through sharing with female family members, it subverted and challenged discourses of men as the breadwinners and allocators of resources. Conversely, the socially and religiously mediated discourses of purity and dangerous sexuality constrained its uptake. Compounding this problem further were the peer norms. As discerned, purity, dangerous sexuality and sexual maturity discourses reportedly heightened sexual violence. These however, deflected from the ingrained issues of gendered power relations and sexual socialization. As understood, these subordinated women's and girls' position in sexual decision making and the household bargaining process. In so doing, they constrained their agency and subjectivity. This reflected Okwany (2016:22) assertion that males are more likely to participate "in maintaining norms that may favour them."

The findings also established that poverty related issues (lack of privacy, material deprivations, WASH facilities and transactional sex) intersected with gendered power relations in the household bargaining process and sexual violence to impinge on the girls' menstrual experiences. The key theme in this study was that the dominant MHM agenda should take into account the social norms, taboos and gendered power relations embedded in adolescent girls' menstrual experiences. This will ensure that the policies, programmes or solutions designed ultimately heighten their achievement of MHM and ASRH.

6.3 Menstrual cup the answer?

This study reaffirmed menstrual cup's conceptualized as the most ideal hygiene product for girls in LMICS. It challenged gendered power relations and discourses of men as breadwinners. Its cost effectiveness and sharing capability deconstructed the women's and girls' subordinated positions in the household bargaining process. Female family members no longer had to rely on this process for their menstrual needs. Second, it subverted the gendered school environment. By preventing leaking and odour, it contained menstruation within the private sphere, thereby inhibiting stigma. It reduced absenteeism during menstruation, and allowed the girls to participate and concentrate in class without leakage or odour fears. It also encouraged them to participate in such other activities as physical education.

Conversely, by concealing the girls' menstruating status, it reinforced the dominant menstruation norms that sanctioned foregrounding of menstrual status in the public sphere. In addition, it resisted the normative school curriculum through the training on menstrual cup usage, SHR and human rights offered prior to its issue. In the community, it was associated with increased sexual violence rates. In this case however, it only acted as a tool for deflecting from structural issues that subordinated girls and women. Outstandingly, it alleviated the witchcraft problem, since jealous neighbors could no longer access discarded pads for perpetrating witchcraft. The dominant theme was that indeed, the girls in the slums can use the menstrual

cup to navigate the infrastructural and MHM-related challenges that typify their menstrual experiences.

6.4 Foregrounding the 'insiders' voices: Re-thinking menstrual hygiene management policies

A few policy implications emerged in this study. First, menstruating girls cannot be framed as a homogenous group. The findings resonated with Chant et al (2017:13) claim that though commonalities exist in menstrual hygiene management issues girls face in rural and urban areas, some issues are comparatively unique in the urban informal settlements. The girls in slums had to navigated through sexual violence at the available WASH facilities, gendered school environments, lack of privacy in the household and a gendered household bargaining process. As thus, MHM policies should be context specific rather than universal. Policy makers should aim at disaggregating girls' MHM needs in the Kenya MHM policy, depending on the girls' or women's context.

Secondly, in policy children and in extension adolescents are social constructed as vulnerable, dependent, passive, apolitical and subordinated victims. This study findings reframed this dominant policy assumption by revealing the girl's agentive and resilient capabilities. Their situational agency was apparent in their acts of sharing the menstrual cup, choosing to use the cup despite the embedded religious and social sanctions and menstrual management choices within the schools. In so doing they subverted and challenged the dominant menstruation discourses, norms, taboos and gendered power relations. The current Kenyan MHM policy should therefore focus on a discursive shift from the girls' vulnerability to their resilience. As Okwany (2008:) states "it is essential to shift attention from girls' vulnerability and victimization to their competence, resilience and skills." This necessitates an adolescent-sensitive policy framework that incorporates all adolescent girls' voices.

Third, policy makers ought to first address the social norms, taboos and gendered power relations embedded in the girls' menstrual experiences. As revealed in this study, these sociocultural factors impaired the girls' subjectivity and agency, engendered violent masculinities, subordinated their menstrual needs in the household bargaining process, constrained their access to WASH facilities, exposed them to menstruation related stigma, and inhibited menstrual cup adoption. Taking a technocentric approach without addressing these sociocultural factors will impinge on the girls' attainment of MHM and SRH. The MHM policy should be anchored on a nexus between the technocentric and sociocultural approaches.

6.5 Concluding reflections

This study has offered a glimpse of the menstrual experiences of adolescent girls in an urban informal settlement in Kenya. Through their narratives, the

menstrual cup has been framed as an ideal alternative for negotiating infrastructural and MHM-related challenges in this locale. However, the same narratives point to the need for creating a nexus between the technocentric and sociocultural approaches to MHM for the girls to realize their sexual and reproductive health. Further, menstrual hygiene management policies should disaggregate adolescent girls' menstruating needs, since they cannot be framed as a homogenous group. The findings reveal that for MHM policies to be transformative, they should address the adolescent girls' discursive and material situations.

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Appendices

Appendix 1: Profile of this research's study participants

Name	Background	Date of Interview
BA	15 years, Form 1	July 17, 2017
EB	15 years, Form 1	July 17, 2017
CM	15 years, Form 2	July 17, 2017
JM	15 years, Form 2	July 17, 2017
EM	16 years, Form 2	July 18, 2017
TA	16 years, Form 2	July 18, 2017
SN	16 years, Form 2	July 18, 2017
CK	16 years, Form 3	July 19, 2017
SC	16 years, Form 3	July 19, 2017
MK	16 years, Form 3	July 19, 2017
AA	16 years, Form 3	July 19, 2017
KC	16 years, Form 3	July 20, 2017
SM	17 years, Form 3	July 20, 2017
JW	17 years, Form 3	July 20, 2017
MK	17 years, Form 3	July 20, 2017
HH	17 years, Form 4	July 24, 2017
MW	17 years, Form 4	July 24, 2017
VO	17 years, Form 4	July 24, 2017
BM	17 years, Form 4	July 25, 2017
EM	17 years, Form 4	July 25, 2017
JA	17 years, Form 4	July 25, 2017
WA	17 years, Form 4	July 25, 2017

MM	17 years, Form 4	July 26, 2017
SM	17 years, Form 4	July 26, 2017
AK	18 years, Form 4	July 26, 2017
LN	18 years, Form 4	July 26, 2017
RM	18years, Form 4	July 28, 2017
VA	18 years, Form 4	July 28, 2017
GM	18 years, Form 4	July 28, 2017
RA	18 years, Form 4	July 28, 2017
LM	Peer Educator	July 17, 2017
AW	Peer Educator	July 17, 2017
CN	Peer Educator	July 17, 2017
MM	Peer Educator	July 18, 2017
JA	Peer Educator	July 18, 2017
VM	Peer Educator	July 18, 2017

Appendix II: FGD and Interview Guideline

1. Who do you live with?
2. How is the living situation at home?
3. Did you tell your parents/relatives/ guardians when you started your period?
4. Was it easy discuss your period with your parents/relatives/guardians?
5. What problems did you experience managing your menstruation before you started using the menstrual cup (school, home and community)?
6. What did you use before the menstrual cup?
7. If pads, who bought you the pads?
8. Were you trained before being issued with the menstrual cup?
9. What did you learn from the training?
10. What was your parents/relatives/ guardians first reactions to the menstrual cup?
11. Did they give consent for the menstrual cup?
12. Were you afraid to use the menstrual cup initially? Why?
13. Did you friends influence you to use or not use the cup?
14. Do you use the NYS toilets or the toilets in school? Why?
15. How has the menstrual cup changed your lives (social, education, health, economic and environment?
16. Do the peer educators come for follow-ups?
17. Anything else you would like to add?
18. Do you have questions for me?