COLLEGE OF EDUCATION
DEPARTMENT OF FOUNDATIONS, MANAGEMENT AND CURRICULUM STUDIES

EXPERIENCES OF FEMALE STUDENTS ON MENSTRUAL HYGIENE MANAGEMENT IN SECONDARY SCHOOL LIFE IN GAKENKE DISTRICT. A CASE OF ES NYARUTOVU AND GS MATABA

A Dissertation submitted to the School of Education in partial fulfillment of the requirements leading to the award of Master's degree of Educational Leadership and Management in University of Rwanda-College of Education.

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Kigali, September 2022

Declaration

I, Jean Pierre Niyoyita, to the best of my knowledge, hereby declare that this dissertation titled:" Experiences of female students on menstrual hygiene management in secondary school life in Rwanda: Gakenke District." is my own work and has not been presented in any other Institution of Higher Learning for the award of degree apart from University of Rwanda -College of Education.

Signature **Date 05/ 09/2022**

Jean Pierre Niyoyita

APPROVAL

I, Dr. Jean Leonard Buhigiro to the best of my knowledge, hereby confirm that this dissertation entitled: “Experiences of female students on menstrual hygiene management in secondary school life in Rwanda: Gakenke District.” Is the original work of Mr. Jean Pierre Niyoyita and was done under my supervision

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DEDICATION

To my beloved wife, Yvonne Mukandabuka,

My sons Ethan Muhirwa and Derloy Yvain Mutsinzi

My parents, Manasse Bidashoboka and Esther Ndimuto

ACKNOWLEDGEMENTS

I am very grateful to the Almighty God for having enabled through my studies. I cannot express enough thanks to my supervisors Dr. Jean Leonard Buhigiro and for their continued support and encouragement from the choice of the topic throughout the processes. I offer my sincere appreciation for the learning opportunities provided by University of Rwanda-College of Education with its respective lecturers in Master of Education.

My completion of this dissertation of master in education could not have been accomplished without the support of my family members especially my parents and brothers. Thank you for allowing me time away from you to study, research and write. Many thanks also go to Gakenke District's authorities for their support given to me during the data collection processes.

Finally, to caring, loving and supportive wife, my deepest gratitude. Your encouragement when the times got rough are much appreciated and duly noted. It was a great comfort and relief to know that you were willing to provide management of our household activities while I completed my work at University of Rwanda-College of Education. My heart felt happy.

ABSTRACT

Girls' menstrual hygiene is critical in the life of every education system in positioning girls to meet changing trends of globalization. This study analyses the way menstrual hygiene is managed in Secondary schools life in Rwanda: Gakenke District. The research methodology consisted of qualitative approach through using the interview and visual methods in data collection. The purposive sampling technique was used to get six participants among them three are from boarding schools while other three are from nonresidential secondary schools of Gakenke District in Rwanda. The findings revealed that some girls in secondary schools do not manage properly their menstruation at school. This is due to challenges related to culture such as taking menstruation as taboos, idea saying that women are impure, dirty and sinful while they menstruating, the lack of appropriate sanitary pads, poor sanitary infrastructures, limited knowledge about menstruation, school leadership influence and weak interaction between the teachers and menstruating girls needing assistance in managing their menstrual hygiene at school. It has however been revealed that most of the participants confirmed that menstrual hygiene management services are delivered poorly at school level. In their study, Sommer, Caruso, Sahim, Calderon, Cavill, and Mahon (2016)

revealed the same findings saying that most schools in developing counties, especially in rural areas, have inadequate facilities including water supply for girls to wash hands, external genitalia and soiled clothes and they do not have provisions for privacy like soap, sanitary pads and disposal of soiled sanitary pads. The study recommends all menstruating girls should be given appropriate support for their menstruation such as enough sanitary pads, girls' friendly infrastructure in order to study holistically.

KEY WORDS

Menstrual hygiene, Menstruation, Menarche, Infection, Taboos, Reproductive health, Health, Culture.

ACCRONYMS AND ABBREVIATIONS

EAC=East African Community

EALA= East African Legislative Assembly

ES= Ecole Secondaire

GS= Groupe Scolaire

MHM=Menstrual Hygiene Management

SHE= Sustainable Health Enterprises

UNICEF= The United Nations Children's Fund

UNFPA= United Nations Population Fund

VAT= Value Added Tax

WASH= Water Sanitation Health

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CHAPTER ONE: GENERAL INTRODUCTION

Globally about 52% of the female population is of reproductive age, meaning menstruation is part of their normal life and menstrual hygiene is therefore an essential part of basic hygienic practices (House, Mahon & Cavill, 2012). This chapter will deal with the main components of chapter one which are background of the problem, problem statement, objectives of the study, research questions, significance of the study, scope of the study, justification of the study, theoretical framework, conceptual framework and organization of the study.

1.1 Background to the Study

All over the world, school girls are experiencing different conditions regarding the management of their menses and hereunder I highlight a range of challenges, spanning from poor access to menstrual products, to a lack of supportive toilets for managing their periods, and insufficient menstrual health and hygiene education.

1.1.1 Impact of menstrual hygiene management on girls' life

Girls' health and education are essential to development and the gateway to full participation as women in political, economic, and cultural life of a country. Poor menstrual hygiene management is one of girls' health challenges. Girls' menstruation can be source of shame, anxiety, and embarrassment that contributes to absenteeism and poor performance at school (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6130156/).

Menstruation is part of the female reproductive cycle starting at puberty.

Good menstrual hygiene is crucial for both physical and mental health, education, and dignity of adolescent school girls (Mahon, & Fernandes 2010).

Poor menstrual hygiene has been associated with serious ill-health, including reproductive tract and urinary tract infections. Inadequate water and sanitation facilities are a major impediment to school attendance for girls during menstruation, compromising their ability to maintain proper hygiene and privacy (Mahon, & Fernandes 2010).

Menstruating girls feel ashamed and tend to exclude themselves from participation in class; avoid standing up to answer questions or going to the blackboard and sat in the back of the class due to lack of sanitary materials (Johnson, Calderon, Hilari, Long, & Vivas, 2016). Even so, girls are directly or indirectly affected by menstruation to varying degrees, depending on the specific context (Sahin, Tamiru, Mamo, Acidria, Mushi, Satya Ali, & Ndebele, 2015).

Coast, Lattof, and Strong in 2019 highlighted different challenges that schools girls are facing during their menses management among others lack of sanitary products, poor sanitary infrastructure and insufficient moral support during menstruation; all which can negatively impact girls' health and well-being. These issues are often exacerbated by menstrual stigma, as girls may feel anxious about potentially staining their clothing with blood or revealing odors; both which may reveal their menstruating status to others (Girod, Ellis, Andes, Freeman, & Caruso, 2017).

Different scholars reported that girls in Zambia stayed away from school

when they were menstruating for fear of having a menstrual accident that stained their uniform (Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo & Sharma, 2019).

Girls in Nepal missed only half a day of school per year due to menstruation and modern sanitation products did little to address this very small attendance gap (Oster & Thornton, 2011). A study in Bolivia has shown that menstruation resulted for girls in reduced school participation, distraction and stress, including concern that someone would know were menstruating; fear about bloodstaining accidents and being bullied by classmates (Johnson, Calderon, Hilari, Long and Vivas, 2016). Moreover, knowledge about menstruation was insufficient, creating fear, anxiety and misconceptions about fertility as well (Johnson, Calderon, Hilari, Long & Vivas, 2016).

According to Sarah (2012) girls experience stress, shame, embarrassment, confusion and fear due to lack of knowledge, an inability to manage menstrual flow or from being teased by peers. These challenges may negatively impact girls' learning experiences and result in absenteeism, distraction, decreased school participation and falling behind in course work.

Yet the onset of menstruation may be an indirect cause of school absenteeism: in many cultures, menstruation is considered a rite of passage from childhood into womanhood, signaling that girls are ready for marriage (Joshi, Buit & Gonzalez-Botero, 2015).

This may result in girls quitting school early: data from Tanzania and

South Sudan indicate that early marriage and pregnancy are the main causes of girls dropping out of school, not Menstrual Hygiene Management (MHM) issues per se (Sahin, Tamiru, Mamo, Acidria, Mushi, Satya Ali & Ndebele, 2015).

Different scholars talk about impacts, challenges and measures related to menstrual hygiene management for school girls, none of them talked about how school girls experience menstrual hygiene management services at their respective schools. This research was conducted in order to address this gap.

1.1.2 Menstrual hygiene management in East African Community

East African Community (EAC) states among which Rwanda is a member have been requested by East African Legislative Assembly (EALA) to improve access, quality and affordability of sanitary pads in schools by abolishing tax imposed on sanitary napkins and by investing in production of low cost sanitary pads (Nyiramirimo, 2013).

1.1.3 Menstrual hygiene management in Rwanda

According to Huggins and Randell (2007), many schools in Rwanda do not have adequate sanitary and dormitory facilities, and many do not have separate facilities for boys and girls. In addition, poverty prevents many families from purchasing sanitary napkins. Many adolescent young women therefore must stay home from school during their monthly periods, causing higher rates of absenteeism. This ultimately affects their achievement within the classroom, as well as their performance in

national examinations.

Menstrual hygiene management, on the other hand, is making a huge impact on the lives of girls in school. Education for all children is important; it promotes economic growth, social development and democracy. The education of girls yields extremely high economic and social returns. Female literacy and schooling have been linked to development gains in both agricultural production and maternal and child health (Girls' education policy, 2008).

However, for many girls in Rwanda, school is not always a positive experience regarding to services of menstrual hygiene management. Studies also show that girls endure difficulties related to menstrual hygiene management in school, including lack of sanitary products, poor sanitation facilities, and gender based discrimination, harassment and even violence (UNICEF, 2010).

The Government of Rwanda, through the Ministry of Education, created the budget line for menstrual hygiene management; they find out the number of girls for each school and then they provide money through the district for sanitary pads which are supplied and this was put in place to end absenteeism. The Rwandan Government removing the value-added tax on menstrual health products is a step in the right direction to girls' health. However, Rwandans need to be aware that, well as this will reduce the price of menstrual products; it does not guarantee affordability and accessibility especially by women and girls of low economic status (Kagire, 2019).

The Girl's Room initiative in schools, on the other hand, is making a huge impact on the lives of girls in school. The room offers a safe space for girls to address any menstruation related issue. It is equipped with sanitary pads, towels, pain killers, a bed, water, and soap, among other things (Mbabazi, 2018)

Even if much effort has made to resolve the problems encountered by school girls in term of hygiene and sanitation, experiences of female students on menstrual hygiene management is still unknown hence the rationale of the present study.

1.2 Problem Statement

Gender equality and women empowerment is a global agenda. Currently, Rwanda is ranked in high positions internationally for this global agenda, as it is indicated by the achievement of millennium development goals number two (universal primary education) and number three (gender equality and empower women) directly linked to MHM (Kaberuka, 2020). In addition, the government of Rwanda invested much effort in constructing girls' rooms and scrapping Value Added Tax (VAT) on sanitary pads to make them more affordable and among others, to ensure effective services of menstrual hygiene management delivered to girls at school level (Kagire, 2019; Mbabazi, 2018).

In order to maintain girls at schools and ensure their effective studies, they should be facilitated in different ways among others, provision of

sanitary materials like sanitary pads, adequate infrastructure and guidance on how to manage menses.

Despite the efforts made by the Government of Rwanda as cited above, there is little known about the efficiency of these efforts on female students' experiences of menstrual hygiene management, I would like to know if female students get appropriate services related to menstrual hygiene management at school level and how they manage challenges that they face during menstruation.

1.3 The objectives of the study

1.3.1 The general objectives

The general objective of the study is to analyze the experiences of female students on menstrual hygiene management in school setting in Rwanda.

1.3.2 The specific objectives

The study is guided by the following specific objectives:

1. To identify utensils used in menstrual hygiene management.
2. To explore how female students manage their menstrual hygiene in secondary schools of Gakenke District.
3. To analyze why female students manage their menses the way they do in secondary schools of Gakenke District.

1.4 Research questions

The research questions for this study are formulated as follows:

1. What do female students use in their menstrual hygiene management at school in Gakenke District?
2. How do female students manage their menstrual hygiene in secondary schools in Gakenke District?
3. Why do female students manage their menses in the way they do in secondary schools in Gakenke District?

1.5 Significance of the study

First of all this study leads to the award of a Master's Degree in Educational Leadership and Management for the researcher. Also, the information which addresses comprehensively the problem of menstrual hygiene management in schools is insufficient. Most of the present data on Rwandan case provide less explanation to the impact of menstrual hygiene management on school girls' regularity and welfare in broader perspective. The results of the study provided additional information on current knowledge on menstrual hygiene management in education to all stakeholders of education working for welfare of students.

The study findings highlighted more some of the pertinent issues in relation to the experiences of female students on menstrual hygiene

management in secondary schools of Gakenke District in Rwanda and are anticipated to facilitate in search for important approaches and policies to be taken into consideration in process of strengthening sanitation measures and restore the welfare of female students in schools. The findings of this study is significant to the Government of Rwanda through the Ministry of Education, Rwanda Basic Education Board, head teachers; since they enlighten experiences of girls on menstrual hygiene management at school level hence appropriate decisions will be taken to improve menstrual hygiene management services which will lead to the academic performance of girls.

Concerning academic purpose, the findings of the study will make some contribution by bringing invaluable information to the current literature for academicians and other potential and interested scholars for research related issues. The results of the study is therefore in addition to other similar conducted researches serve as source for further future researchers.

1.6 Scope of the study

This study was conducted in Gakenke District as one of the rural districts which have a high rate of students who dropped out of schools among them the female students are more than male students. In addition; financial constraint is limiting me to cover all Rwandan districts.

1.7. Organization of the study

The study is organized mainly into four chapters.

The first chapter presents the general introduction including background

to the study, statement of the problem, objectives of the study, research questions, significance of the study, scope of the study, justification of the study, as well as how the study is organized.

The second chapter addresses review of related literature portraying the level, magnitude and degree of how menstrual management impact school girls regularity and welfare on both national and international levels.

The third chapter presents the research methodology. Thus, the chapter presents the sample selection techniques, sample size as well as key participants that were purposively selected to provide relevant information about the phenomenon. It describes the tools used in data collection such as interview guide, questionnaire and observation. It also deals with data analysis.

The fourth chapter proclaims the presentations, discussions and interpretation of data collected. The fifth chapter contains conclusion, suggestion for further studies and recommendation to the study.

CHAPTER TWO: LITURITURE REVIEW

2.1 Introduction

Literature is a description of what others have published presented in the form of writings (Mudavanhu, 2017). However, a simple description of what others have published in the form of a set of writings is considered inadequate (Boote & Beile, 2005). A more complete review of related literature should take the form of a critical discussion, showing insight and

an awareness of differing arguments, theories, and approaches (Boote & Beile, 2005). It should be a synthesis and analysis of the relevant published work, linked at all times to own research purpose and rationale.

This chapter examines the literature related to the experiences of secondary day schools girls on the menstrual hygiene management during their menstruation. The review of literature for this study was drawn from books, journals, newspapers, government publications and documents, reports that have been written on the field of menstrual hygiene management, school girls' attendance and welfare. It discusses about the conceptualization of menstruation, culture and menstruation, menstruation in developing world, menstruation at school, menstruation and girls' education, menstruation in Rwanda and measures to cope with the shortfalls encountered by menstruating girls.

The consulted literature review will help me to relate the views of other researchers with my findings during data analysis.

2.2 Conceptualization of menstruation

2.2.1 Menstruation

Menstruation is a normal physiological process. It is also defined as the periodic discharge of blood and mucosal tissue from the uterus, occurring approximately monthly from puberty to menopause in non-pregnant women and females of other primate species (Anne, 1997). According to

Ali and Rizvi (2010), menstruation is defined as a normal physiological process that is managed differently according to various social and cultural understandings.

In other words, menstruation is a naturally occurring physiological phenomenon in adolescent girls and pre-menopausal women (Biran, Curtis, Gautam, Greenland, Islam & Schmidt, 2012). In short, menstruation is physiological phenomenon occurring in females since puberty till menopause and it is characterized by the leakage of blood monthly as meaning of that there is no fertilization of ovum.

2.2.2 Menstrual hygiene management

Menstrual hygiene management is defined as the articulation, awareness, information, facilities and confidence to manage menstruation with safety and dignity. Menstrual hygiene management requires safe hygienic, absorbent materials, adequate water supply, soaps and spaces for washing and bathing and disposal with privacy and dignity (Deo & Ghattargi, 2005).

Menstrual Hygiene Management is also defined as women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used

menstrual management materials (Budhathoki, Bhattachan, Castro-Sánchez, Sagtani, Rayamajhi & Sharma, 2018)

2.3 Culture and menstruation in developing world

Menstrual management, particularly in school-aged females, is recognized globally as an important public health issue (Hennegan, Dolan, Steinfield & Montgomery, 2017). The general consensus is that better menstrual management improves school-aged females' lives (Hennegan, and Montgomery, 2016).

Girls and boys are likely to be affected in different ways by inadequate water, sanitation and hygiene conditions in schools, and this may contribute to unequal learning opportunities. Sometimes, girls are more affected than boys because the lack of sanitary facilities means that they cannot attend school during menstruation (Adam, Bartram, Chartier & Sims, 2009).

In some societies, menstruation is viewed as bad thing. Even now in the 21st century, all over the world, menstruation is seen as something private and secretive. Though the extent to which this is experienced differs in different countries, cultures and religious beliefs, menstruation is largely seen as something that should not be talked about in a polite society (Mugambi & Georgas, 2016).

2.3.1 Menstruation in Asiatic culture

In Indian society, menstruation is regarded as something unclean or dirty

based on various myths, misconceptions and restrictions practiced during menstruation which lead to development of negative attitudes towards this natural physiological phenomenon among adolescent girls (Nemade, Anjenaya & Gujar, 2009).

In Asiatic society where menstruation is seen as dirty thing, most adolescent girls are often reluctant to discuss this topic with their parents and often hesitate to seek help regarding their menstrual problems (Nemade, Anjenaya & Gujar, 2009).

Menstruation and associated activities are surrounded by silence, shame and social taboos that are further manifested in social practices that restrict mobility, freedom and access to normal activities in India and Nepal. For instance, drinking milk, preparing food, interacting with people or refraining from performing religious rituals are restrictions found in many cultures (Bharadwaj & Patkar, 2004).

2.3.2 Menstruation in African culture

In African countries there are various myths associated with menstruation and mislead entire society what should know about the reality of the phenomenon. For example in Zambia, girls were told that when menstruating they should not add salt while cooking as this causes chronic cough in those who eat the food. Additionally, some girls believed that being physically active during menstruation makes a girl menstruate for longer period and that use of certain disposable sanitary pads cause cancer. Girls preferred to dispose used menstrual materials in the pit latrine and not waste bins at school for fear that witches and Satanists would use the menstrual blood to bewitch them and rob them of their

fertility (Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo, & Sharma, 2019).
In order to fight against these malpractices, rules and regulations governing the disposal of used materials should be in place at all schools.

Culturally, in Ghana the very event of menarche may signal to family and community that a girl is ready to be married and/or become sexually active, thus reducing her chances of staying in school and this tends to be coincident with the transition from primary to secondary education (Montgomery, Caitlin, Catherine, Sue and Linda, 2012).
In all countries surveyed, it was believed that having sex would end the pain associated with menstruation (Sahin et al. 2015).

As Mathema and Bista (2006) pointed out, “Girls are believed to be less able to learn mathematics and science, are less able to learn in general.” This belief is still in the minds of many Rwandan girls who believe that they are less able to learn and their role is to take care of children and husband. They therefore do not enroll or they drop out of school very early. Trying to explain some of the reasons associated with low enrolment and participation of girls, Huggins and Randell (2007) state that girls in Rwanda, particularly in rural areas, continue to be responsible for household tasks, such as fetching water and gathering firewood. They also care for younger siblings or aged and sick relatives, particularly those suffering from HIV/Aids. For them, these responsibilities may prevent girls from attending school, or may limit the time which they can devote to their studies.

2.4 Availability of menstrual products in developing countries

In the developing world, commercial menstrual products are less likely to be available and clothes and other absorbent household materials such as tissue, gauze, cotton or wool are often used for menstrual protection, particularly among rural or economically disadvantaged populations, where available, commercial products are also likely to be prohibitively expensive (Mazzacurati, 2013). Women and girls in low income settings have low awareness on hygienic practices and lack culturally appropriate materials for menstrual hygiene management practices (Sumpter, & Torondel, 2013).

Rural women, therefore, often choose easily accessible, inexpensive and reusable materials. In some areas (such as Sudan) families often have insufficient resources to even provide old cloths for protection. Other materials reported as menstrual absorbents used by the rural poor in developing countries include banana leaves, newspaper, sponges, jute sacks, papyrus, tissue paper, toilet paper rolls, sand and ashes (Van dewelle & Renne, 2001).

Moreover, most schools in developing counties, especially in rural areas, have inadequate facilities including water supply for girls to wash hands, external genitalia and soiled clothes and they do not have provisions for privacy like soap, sanitary pads and disposal of soiled sanitary pads (Sommer, Caruso, Sahim, Calderon, Cavill, and Mahon, 2016). In addition,

in Bolivian school toilets was a lack of privacy, cleanliness, water for hand washing, soap, toilet paper and absorbent materials (Johnson, Calderon, Hilari, Long, & Vivas, 2016).

Surveys conducted in several countries revealed that school girls can be involved in sexual activities with males during school to generate income for meeting their basic needs, including sanitary items. This further raised the girls' risks of unwanted early pregnancy, various health issues, and leaving school early (Sahin et al., 2015). The health impacts of menstruation can also affect girls indirectly: early marriages and pregnancies sometimes have a profound impact on the girls' health and that of their babies (Williamson, 2013).

In Rwanda, girls do not have access to materials when they need them or sufficient quantity of materials to last through the school day. Girls often avoid standing to answer questions in class or going to the board because others may see a stain on their skirt (Sarah, 2012). They sometimes wear pads longer than they should in order to maximize usage of the few pads they could access. Some schools did have pads, availability did not guarantee that all girls were able to access them even girls were not always aware that pads were available at the school (Sarah, 2012).

2.5 Menstruation at school level

During menstruation, the time becomes more difficult than other days at school for girls.

Attending school during menstruation can in more cases be challenging for them. Sarah, (2012) outlined challenges that girls face at school during menstruation as follow:

a) Difficulty managing menstrual flow
b) Risk of leaking menstrual fluid and staining uniforms
c) Risk of unintentionally revealing menstrual status
d) Modifying behavior, including altered participation in class or out-of -class activities and reduced social interaction in order to try to keep their menstruation a secret.
e) Feeling embarrassed and ashamed if a stain or leak is noticed or if teased, as well as afraid and fatigue in anticipation of teasing if they are not be able to manage their menstrual status.
f) Teasing from boy and girl peers if it is revealed that girls have their period, either by noticing leaks and stains or by noticing girls' changes in behavior.
g) Difficulty communicating with a parent, teacher or peer about feelings, questions or how to manage menstrual hygiene.
h) Pain and physical discomfort that is difficult to bear or is distraction from school-related activities.
i) Inadequate facilities in schools; water and sanitation hygiene facilities lack discreet, private, safe and clean spaces to change and dispose of pads, places to wash or access to water, resting facilities were inconsistently available and difficult to access.
j) Inadequate education where girls lack information prior to menarche, practical skills and knowledge to manage menstruation, adequate sources of knowledge at school and home and

appropriate learning materials.

k) Inadequate materials; girls lack an adequate supply of absorbent materials needed during a school day and they do not have easy and consistent access to materials.
l) Inadequate support; girls do not have sufficient support from teachers or boys at school and adults at home.

According to Burrows and Johnson (2005), in sub-Saharan Africa, the issue is compounded by high poverty levels that force millions of adolescent girls out of school, as a result of the fact that they cannot afford sanitary protection. School absence lowers girls' academic performance and self-esteem and widens gender disparities in educational achievements.

However, since 2012 up to now, new initiatives like girls' rooms, funds for menstrual hygiene, exoneration of taxes for menstrual products have been taken by the government of Rwanda to improve girls living conditions at schools especially on aspects related to menstrual hygiene but there is no evidence that the initiatives taken are yielding intended results for girls in secondary day schools. This research will address the gap mentioned above.

In Ghana, the research showed that providing sanitary pads to poor girls may offer a faster, more direct, and less expensive means of raising attendance and performance levels among girls, particularly in early adolescents years when dropout rates are high (Scott, Dopson,

Montgomery, Dolan & Ryus, 2009). Montgomery et al. (2012) said that provision of pads may be beneficial to improve attendance and the life chances of young women.

Referring to general findings of Sarah as mentioned above, I to some extent agree with her, whereby menstrual hygiene challenges are obvious while support for girls are still limited and this attracted my attention even though I will confirm whether they are true or false basing on the findings of this research.

2.6 Menstruation and girls' daily attendance at school

Many scholars argue that inadequate menstrual hygiene management at schools leads to irregular attendance of girls' students. In addition to the factors mentioned in 2.5, Sumpter & Torondel (2013) highlighted new factor that affects girls attendance which Social and cultural norms that lead to women and girls' exclusion during menstruation; these norms vary widely between and within countries, and may range from not being allowed to touch water and plants, cook, clean, socialize, or sleep in one's own bed while having their period.

School girls need adequate facilities, privacy and hygiene facilities to cope with their monthly periods (Sarah, 2012). Menstrual hygiene management requires availability of and access to clean and absorbent menstrual material, privacy, water and soap, and disposal facilities for used menstrual materials (Adam, et al. 2009).

In addition, menarche, or the onset of menstruation, is considered as a significant turning point in the life of a young girl.

The lack of adequate sanitary materials may be one barrier to school attendance. Commercially produced products may be unavailable in rural areas or prohibitively expensive for most families; for example, multiple studies in Nigeria found that less than one-third of urban adolescent girls used commercially produced sanitary materials (Adinma & Adinma, 2008).

Evidence from China suggests that, controlling for other measures of family socio-economic status; girls from households that have limited access to water are more likely to drop out of school post-menarche compared to girls from households with better access, due to difficulties remaining clean during menstrual periods (Yashong & Siebert 2009)

2.7. Traditional socio-cultural practices and beliefs on menstruation.

The Rwandan tradition it was believed that the most important wealth a woman can possess is a husband. The belief is not completely eradicated till today. This belief continues to influence young ladies to marry at early age.

Once married, it becomes very difficult to pursue her education since marriage is appertained with other responsibilities which are demanding in terms of time and finance (Benegusenga, Nzabalirwa, Gaparayi & Nshimiyimana, 2018).

A number of socially constructed barriers and entrenched social practices continue to prevent girls from accessing education and from performing equally in their national examinations. Identifying and remedying the sources of girls‟ continued inequality within this sector is imperative to

lifting the status of girls and women within Rwandan society, and to promoting equitable socio-economic development within the country (Huggins, & Randell, 2007).

Menstrual taboos are so deeply rooted in Rwandan culture that they can often restrict girls' social and economic mobility and access to menstrual health and hygiene information. Girls often cope by restricting their own physical mobility, concealing their bodies, or using common traditional materials such as animal skins and dung or mud and leaves. These are free and available, but they are unhealthy, ineffective, and uncomfortable. (https://togetherwomenrise.org/programfactsheets/sustainable-health-enterprises-she/)

The reasons why females are more likely than males to be out of school often relate to social power structures and socially-constructed norms that define the roles that boys/men and girls/women should play. For example, the sexual division of labor in the household, where women/girls are assumed to bear responsibility for raising children, cooking and cleaning, while boys/men are responsible for generating income and more 'masculine' household tasks, such as maintaining machinery or washing the car. These 'gendered' roles affect the rights, responsibilities, opportunities and capabilities of males and females, including their access to and treatment in school (Subrahmanyam, 2016).

2.8 Measures to cope with the shortfalls encountered by menstruating girls

To cope with the shortfalls encountered by menstruating girls in schools, some interventions, either through education or providing menstrual hygiene products are required to address the psycho-social impact of menstruation and improve attendance and performance in schools and health in general (Sumpter, & Torondel, 2013). Moreover, menstrual hygiene management requires availability of and access to clean and absorbent menstrual material, privacy, water and soap and disposal facilities for used menstrual materials (https://www.who.int/water_sanitation_health/monitoring/coverage/wash-post-2015-rev.pdf).

Even if there are difficulties encountered with menstruating girls in schools, there are numerous reasons that people need to invest in menstrual hygiene management. Barro, Robert and Jong (2013) said that girls' education is good investment all over the world for numerous reasons including increment of economic growth, improvement of women's wages and jobs; saving of the lives of children and mothers. Increasing levels of girls' education has been shown to dramatically reduce the incidence of infant and maternal mortality; it leads to smaller and more sustainable families (Barro, Robert & Jong 2013).

Capacity building of teachers is also critical to ensuring the sustainability

of such interventions. When done right, engaging with men and boys can contribute to changing cultural norms and breaking the taboos around menstruation (Mahon, Tripathy, & Singh 2015). However, engagement with boys and men in the context of MHM must remain cognizant of power and sexual dynamics—for instance, training male teachers to provide MHM advice to young girls may not always be appropriate due to culture (Joshi, Buit, and Gonzalez-Botero 2015).

2.9 Theoretical framework

The study is guided by Henri Fayol's Administrative management theory that attempts to find a rational way to design an organization as a whole (Dean & Bowen, 1994). Henri Fayol's management theory is a simple model of how management interacts with personnel (Boon, 2021). According to Pindur, Rogers, & Kim (1995), Fayol's management theory covers concepts in a broad way, so almost any business can apply his theory of management. Today the business community considers Fayol's

classical management theory as a relevant guide to productively managing staff.

Referring to Rodrigues (2001), the management theory of Henri Fayol includes 14 principles of management which are summarized as follows:

Division of Labor, Authority, Discipline, Unity of Command, Unity of Direction, Subordination of Individual Interest, Remuneration, Centralization, Line of Authority, Order, Equity, Stability of Tenure, Initiative, Esprit de Corps.

From these principles, Fayol concluded that management should interact with personnel in five basic ways in order to control and plan production (Rodrigues, 2001).

1. Planning: According to Fayol's theory, management must plan and schedule every part of industrial processes.
2. Organizing: Henri Fayol argued that in addition to planning a manufacturing process, management must also make certain all of the necessary resources (raw materials, personnel, etc.) came together at the appropriate time of production.
3. Commanding: Henri Fayol's management theory states that management must encourage and direct personnel activity.
4. Coordinating: According to the management theory of Henri Fayol, management must make certain that personnel work together in a cooperative fashion.

5. Controlling: The final management activity, according to Henri Fayol, is for the manager to evaluate and ensure that personnel follow management's commands.

Therefore, the researcher used this theory in order to investigate how a well-organized school where administrative staff, teachers and matrons have clear roles and responsibilities manage the sanitary materials in a way that facilitate female students and change their academic practices including school regularity, class participation, shamefulness, and shyness in the classroom.

2.10 Conclusion

As conclusion, this chapter has described key elements which guided the

researcher to come up with relevant findings. This chapter has described key terms on menstruation, menstrual hygiene management, culture and menstruation, availability of menstrual products, menstrual practices at school level, influence of menstruation on girls' attendance and strategies to cope with shortfalls caused by menstruation. It has also helped the researcher to get different views from different scholars on menstrual hygiene management aspects which were used during data collection and analysis processes. This literature review helped the researcher collect data and analyzes them by taking into consideration of what other scholars written on menstruation hence appropriate recommendations were given to relevant educational stakeholders to address the gaps.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

According to Cohen, Manion and Morrison (2007), research is best understood as a process of arriving at dependable solutions to problems through the systematic collection, analysis and interpretation of data. It requires appropriate methodology and methods. Methodology refers to the systematic, theoretical analysis of the methods applied to a field of a study (Chinelo, 2016).

In order to make this research more successful and to come up with accurate and concrete results, an interview guide method was used for data collection. This chapter therefore discusses the methodology that I used in the study. It tackles the research methods, the research design, the target population, sample size and sampling procedure, research instruments, trustworthiness, data collection procedure, data analysis techniques and ethical considerations.

3.2. Research design

Research design is the outline plan or framework used to seek an answer to a research question (Johnson & Christensen, 2000). It is also defined as the schemes, outlines or plans that are used to generate answers to research problems (Orodho, 2005).

The research design to be used in this study was explorative study design. The explorative study design has been seen as most suitable as it uses qualitative methods to document the phenomenon of menstrual hygiene

management in high schools of Gakenke District. The data were collected through different techniques including interview, observation and questionnaire.

In this study, *Experiences of female students on menstrual hygiene management in school setting in Rwanda* is the situation that described by collecting information from the menstruating school girls that leads to the improvement of menstrual hygiene in school setting which is my main objective.

3.3 Research approach

According to Devers and Frankel, (2000) qualitative research is best characterized as a family approaches whose goal is to understand the lived experience of persons, who share time, space and culture.

In the present study qualitative research approach was used because it intended to understand the lived experiences of female students in relation to their menstrual hygiene management in secondary schools of Gakenke district.

3.4 Target Population

Population is “a set of elements that the research focuses upon which the results obtained by testing the sample should be based on, to draw conclusions (Bless & Higson, 1995). In addition, the same authors defined a study population as “the group that a researcher has in mind from whom he or she can obtain information. Referring to the definitions mentioned above, a population can be said to be the group from which information

can be obtained and to which the results of the study are interested to apply. In the present study, population is the number of secondary school female students in GS Mataba which is one hundred and sixty nine and two hundred and twelve from ES Nyarutovu which are totalized to three hundred eighty one.

3.5 Sample size and procedures

A sample in a research study is the group on which information is obtained from (Fraenkel, Wallen, & Hyun, 2011). Unlike quantitative approaches which aim to establish statistical significance by sampling a predetermined number of subjects or elements, qualitative researchers do not usually begin a project with a predetermined sample size (Whitehead & Lopez, 2013). In qualitative research, there are no overall formal criteria for determining sample size and therefore, no rules to suggest when a sample size is small or large enough for the study. Essentially, the richness of data collected is far more important than the number of participants (Tuckett, 2004). Regarding the number of participants in qualitative studies, a common range is usually somewhere from eight to fifteen participants, but will vary widely both inside and outside this range (Whitehead & Lopez, 2013). However, different qualitative methodologists provide sample size guidelines for anyone who indulges in qualitative research designs. Creswell (2007) recommends three to five participants for a case study, ten for a phenomenological study and fifteen to twenty for grounded theory study, whereas Morse (1995) suggests a sample size

ranging from six participants for a phenomenological study and thirty to fifty for ethnographic study. Referring to Creswell recommendations and those of Whitehead and Lopez, this study sampled six girls, three from boarding school (ES Nyarutovu) and other three from nonresidential school (GS Mataba) who are aged beyond 18 years old and reached menarche in order to reach on all targeted girls who are secondary schools of Gakenke District. Only two schools were selected because I could not reach to all schools of Gakenke district due to limited time and financial resources. As I could not interview all female students, I purposively selected a small sample. Only three girls were selected from each school representative for each sampled school had responded for the questions prepared by the researcher through matron of each school who acted as intermediate because the girls could not be open to the masculine researcher and this could lead to unintended results. The sampled participants were from different Ubudehe categories (1, 2, and 3). Ubudehe categories were considered in order to have general perspective from different participants living in different conditions of lives.

To get six participants, I collaborated with schools head teachers to avail a female teacher who has to help me in identification of the participants of the study. Purposively the female teacher from each school selected three participants and I met them to explain the purpose of the study and request them to feel free and participate in the study. They participated voluntarily and showed their vivacity during the present study.

3.6 Research methods

This study adopted a phenomenological research method because it dealt

with phenomena/changes related to menstruation for secondary school girls. In simple terms, phenomenology can be defined as an approach to research that seeks to describe the essence of a phenomenon by exploring it from the perspective of those who have experienced it (Teherani, Martimianakis, Stenfors-Hayes, Wadhwa, & Varpio, 2015). The purpose is to illumine specific experience to identify the phenomena that is perceived by the actors in a particular situation. The emphasis is on subjectivity and personal knowledge in perceiving and interpreting the phenomena from the research participant point of view (Lester, 1999). The goal of phenomenology is to describe the meaning of this experience both in terms of what was experienced and how it was experienced (Teherani, A., et al. 2015). Phenomenological approaches are more effective in describing rather than explaining subjective realities, the insights, beliefs, motivation and actions and folk wisdom (Husserl, 1977).

To collect data from different categories of participants, the study used four main research techniques:

Firstly, in-depth interviews were used. In-depth interview is a qualitative technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program or situation. They provide much more detailed information than what is available through other data collection methods, such as surveys. They also may provide a more relaxed atmosphere in which to collect information people may feel more comfortable having a conversation with you about their program as opposed to filling out a survey (Boyce & Neale, 2006). In the case of this study, I interviewed six

girls from two different schools, three from GS Mataba a nonresidential school and other three from ES Nyarutovu a boarding school. Each participant was interviewed once during this study. On their debit side, responses from participants could be biased due to a number of reasons among others menstruation is taken as taboo that cannot be talked about in Rwandan culture (Akaliza, 2019).

Secondly, I used photo elicitation as menstruation is considered as taboo topic and sometimes shameful to talk about photo elicitation was chosen because it can provide a safe and private environment for girls to share personal experience on menstruation referring to what they are seeing. In fact, images evoke deeper elements of human consciousness that do words; exchanges based on words alone utilize less of the brain's capacity than do exchanges in which the brain is processing images as well as words. These may be some of the reasons the photo elicitation interview seems like not simply an interview process that elicits more information, but rather one that evokes a different kind of information (Harper, 2002).
Basing on different scholars talked about photo elicitation as an instrument used in qualitative research, this study used photo elicitation where participants were asked to silently observe the pictures of sanitary materials and describe what they were seeing. In this case photo elicitation helped shy participants who should not give their opinions fluently in verbal. In addition, it facilitated the conversation as it required for girls to observe and brainstorm whatever they want relating to their menstrual experiences at school.

Thirdly, I used observation sheet where I conducted a guided tour of schools to observe the conditions of water sanitation hygiene facilities including the latrines, girls' rooms, bathrooms, water points and sanitary waste managements. After interviewing all participants at each selected school, I used observation sheet to see the availability and functioning of sanitary infrastructures. Observation data provided to me a general overview of some challenges that voiced by participants during in-depth interview (IDI) in relation to the presence of sanitary infrastructures in sampled secondary schools in Gakenke District.

3.7. Trustworthiness of the research

The main purpose of trustworthiness is to demonstrate that a study is credible (Creswell & Miller, 2000). For quantitative studies, trustworthiness is referred to as validity and reliability. However, in qualitative studies, this concept is more obscure because it is put in different terms. Since qualitative researchers do not use instruments with established metrics about validity and reliability, it is pertinent to address how qualitative researchers establish that the research study's findings are credible, transferable, confirmable, and dependable (Solutions, 2017).

Trustworthiness is all about establishing these four elements, which are described in more details below.

According to Self and Roberts (2019) credibility is the how confident the qualitative researcher is in the truth of the research study's findings. This boils down to the question of "How do you know that your findings are true and accurate?" (Self and Roberts, 2019: p.21). In addition, Creswell and Miller delineate triangulation as "a validity procedure where researchers look for convergence among multiple and different sources of information to form themes or categories in a study" (Creswell & Miller, 2000:15p).

In a broad way triangulation is defined as the use of multiple methods mainly qualitative and quantitative methods in studying the same phenomenon (Jick, 1979) for the purpose of increasing study credibility. I used triangulation to make sure that the research study's findings are credible. In the present study, I used two different types of triangulation: the first type is the data source triangulation, in which I collected data from two schools and checked them with a view to similarity or difference (Creswell & Miller, 2000). The second type is the comparison of the data with relevant cases in literature (Malterud, 2001).

Regarding transferability, it is how the qualitative researcher demonstrates that the research study's findings are applicable to other contexts. In this case, "other contexts" can mean similar situations, similar populations, and similar phenomena. Qualitative researchers can use thick description to show that the research study's findings can be applicable to other

contexts, circumstances, and situations (Slevin & Sines, 1999).
In this research, participants are female students who are in secondary schools while selected schools are of two types; one of boarding and the other of nonresidential schools. As the schools of the same type live in similar conditions, the study findings were transferable to whole schools of Rwanda.

Concerning conformability, it is the degree of neutrality in the research study's findings. This means that my findings are based on participants' responses and not any potential bias or personal motivations from me as a researcher. This involves making sure that researcher biases does not skew the interpretation of what the research participants said to fit a certain narrative.
To establish conformability, I provided an audit trail, which highlighted every step of data analysis that was catered for, in order to provide a rationale for the decisions of participants. This helps to establish that the research study's findings accurately portray participants' responses (Hannes, 2011).

For dependability, it is the extent that the study could be repeated by other researchers and that the findings would be consistent. In other words, if a person wanted to replicate your study, they should have enough information from your research report to do so and obtain similar findings as your study did. A qualitative researcher can use inquiry audit in order to establish dependability, which requires an outside person to review and examine the research process and the data analysis in order to ensure

that the findings are consistent and could be repeated (Laprie, 1992).

3.8 Data collection

In this study the data was collected through interviews using a guide (see Appendix 1). Interview guide was composed of question related to menstrual hygiene and the photos of menstrual materials were used to generate ideas of shy students who may not speak fluently what were asked. The interview was conducted in English as instructional medium and in the local language (Kinyarwanda) with the matron as the moderator. With the help of matron, interviews were phone recorded. Notes were also taken during the interviews. Before data collection the matron was trained in the process of note taking, operating phone recorder, observing non-verbal communication and providing feedback to the researcher.

The researcher and the matron were fluent in speaking and writing Kinyarwanda. The recorded data was transcribed verbatim by the researcher after the interviews. Interviews were chosen data collection methods because it is the method that enabled the girls to describe the menstrual hygiene management issues that they face in their schooling life. In addition, observation was used in data collection whereby I used observation sheet (see appendix 2) to check the availability of sanitary infrastructure. This helped me to see the reality of problems raised by girls participating in the present study. Observation tour was done after the interviews of all participants of each selected school. Data was collected on 11st May, 2022. The duration of each interview varied between 15 and 30 minutes with an average of 20 minutes.

3.9 Data analysis

LeCompte and Schensul (1999) define analysis as the process a researcher uses to reduce data to a story and its interpretation thus data analysis is the process of reducing large amounts of collected data to make sense of them. Moreover, Patton (1987) indicates that three things occur during analysis: data are organized, data are reduced through summarization and categorization, and patterns and themes are identified and linked. In addition, qualitative data analysis is a “process of bringing order, structure and meaning to the mass of collected data” (Marshall & Rossman, 1990:111p).

Regardless of the type of instruments used, the data must be captured and put in a format amenable to analysis. In qualitative research, the raw data and data set primarily consist of words and images in the form of field notes, audio and videotapes and transcripts (Devers & Frankel, 2000).

In the present study a Thematic Content Analysis has been used to analyze data. Thematic Content Analysis is a process whereby the text is broken down and grouped into common themes and sub-themes referred to the research questions and objectives (Blanche, Durrheim & Painter, 2006). Data analysis was done in the same time with data collection. The recorded information from the interviews was transcribed to the needed extent; some information given in Kinyarwanda was translated in English, and organized as a thick description including both the manifest and the latent content. This was important as it helped me to formulate interpretations, as well as understand hidden meanings. Referring to Caulfield (2019) who proposed six steps that must be used during

thematic analysis namely familiarization, coding, generating themes, reviewing themes, defining and naming themes, and writing up, I closely examined the data to identify themes, ideas and patterns of meaning that come up repeatedly. This was done in order to bring meaning to the responses (Elo & Kyngas, 2008). Familiarization with the data needed going over the transcribed data and field notes repeatedly to give researcher a grip of the kinds of interpretations that the data will most likely support step-by-step (Blanche, Durrheim & Painter, 2006). In the present study, after familiarization with the data, it was possible to extract the key issues and the categories and sub-categories pertaining to menstrual hygiene management, and thereafter to group and arrange them as themes and sub-themes in accordance with the study objectives (Elo & Kyngas, 2008). For ethical issue, pseudonym was used and participants were given nicknames presented in form of letters as follow: XU, XV, XW, XX, XY and XZ.

3.10 Ethical considerations

Ethical considerations can be specified as one of the most important

parts of the research. According to Bryman and Bell (2007) the following ten points represent the most important principles related to ethical considerations in dissertations:

1. Research participants should not be subjected to harm in any ways whatsoever.
2. Respect for the dignity of research participants should be prioritized.
3. Full consent should be obtained from the participants prior to the study.
4. The protection of the privacy of research participants has to be ensured.
5. Adequate level of confidentiality of the research data should be ensured.
6. Anonymity of individuals and organizations participating in the research has to be ensured.
7. Any deception or exaggeration about the aims and objectives of the research must be avoided.
8. Affiliations in any forms, sources of funding, as well as any possible conflicts of interests have to be declared.
9. Any type of communication in relation to the research should be done with honesty and transparency.
10. Any type of misleading information, as well as representation of primary data findings in a biased way must be avoided.

The permission to conduct the research was obtained from the University of Rwanda College of education in Research and Innovation Directorate. After getting the permission of university of Rwanda to conduct this research, I request Gakenke District authorities to allow me to conduct a research in their District; the permission given by Gakenke District helped

me to go in schools by respecting ethical protocol. Confidentiality was catered for, whereby I used pseudonyms instead of the names, photos and any other characteristic of participants and schools during data collection. All interview material was coded accordingly to reduce the risk of having unauthorized readers being able to identify participants in the study. After getting an authorization to conduct the study, all participants aged 18 years agreed to participate by signing a consent form. All transcripts of interview and notes were given and collected by the matron who submitted them to the researcher in due time and pseudonym was used to ensure confidentiality of data. There was no incentive to participate in this study and it was made clear to participants before data collection.

3.11 Conclusion

This chapter describes the ways and techniques that the researcher went through from the beginning to the end in order to get data to be analyzed and the way ethics of the research was taken into consideration. It involves research design, data collection methods, trustworthiness of the research as well as instruments used in this research in order to get desired data. It shows the structure or the mirror of the research conducted. To this end, the data obtained by using the methods discussed in this chapter, will therefore be presented in the following chapter entitled presentation of results.

CHAPTER FOUR: PRESENTATION OF RESULTS

4.1 Introduction

In this chapter the findings and information that had emerged from the analysis of row data are presented and arranged as themes and sub-themes. Quotes are used frequently to illustrate the comments made by participants. The main themes that emerged from the analysis of the interviews were: knowledge, culture, girls' room, sanitary materials, inadequate facilities; Problems pertaining to health and ultimately school performance.

4.2 Knowledge of menstruation

Most of the girls participating in the interview revealed that they did not know the process of menstruation and reproductive health before they join secondary schools. Some participants had scanty information, but could not describe the process of menstruation in full. The following quotes reflect the standard of knowledge of school girls:

"I am aware of hygiene process but I do not know the process of menstruation" (XU said).

The other information, which came out strongly was that most of the girls participating in the interviews, revealed that prior to menarche they had lacked adequate information about what they soon were going to be faced with. As XV pointed out:

"Before I started menstruating I did not know about menstruation, this

issue is very secretive; it is not supposed to be discussed with young ones who have not yet started menstruating" (XV).

The quotes clearly show that when girls are inadequately informed about the menstrual process prior to menarche, this will to lead to confusion, anxiety and sheer terror. It must be stressed that this only can be avoided through adequate information about the process of menstruation in due time, meaning before menarche. The girls knew that the appropriate information should be given through curricula in all levels of secondary schools. One girl noted that:

"Reproductive system is a topic which is taught in subject of Biology in lower level and combination having that subject. So only those, who do Biology, can learn about it" (XW).

Referring to what participants said, menstruation in Gakenke district is still taken as taboos; a topic that cannot be discuss in public and the young girls may be misled by their peers to lack of information about it.

4.3 The cultural taboos of menstruation

Most interviewed girls reported that menstruation in their communities is considered a secretive process, and that speaking about it is breaking one of the taboos mentioned earlier. When the girls were asked why menstruation is kept so secret, they could not name a concrete reason. They just said that they were told by elders that it is a taboo to talk about it,

which shows how cultural norms impact negatively on the knowledge of the process of menstruation. Several girls reflected the following comment:

“Menstruation is secretive; it is a taboo to discuss menstruation with men or those who have not yet started menstruating” (XZ).
XY said: “It is a taboo for men to see menstrual blood and menstrual clothes are not supposed to be seen by men or children”.

Another taboo and at the same time myth identified during the interviews was that menstruating girls are forbidden to do certain things when preparing food, as doing so is believed to transmit a variety of diseases to men. Most seriously, and known to all girls participating in the interviews, is the belief that when menstruating females add salt to a dish, and when the dish is consequently consumed by a man, the latter might develop chest pains and/or pneumonia. Some participants mentioned:

“Yes, they say that when you are having your period you should not add salt to the relish. It causes chest pains in people,” said by XU.

However, and one has to add, fortunately, there were girls during interview, who did not believe these myths. They were skeptical, as shown in the following:

“But some of us we have noticed that it does not affect us much when we put salt in the relish because I have tried it before only to experiment if one

would cough in the family (laughter) and nothing happened" (XX).

Even if Rwandan government has done a lot of things to address the issues related to menstrual hygiene, schools girls are still facing shortfalls rooted in Rwandan culture in terms of menstrual hygiene management.

4.4 Girls' room

4.4.1 Availability of girls' room

All respondents confirmed that the girl's room is available at school and they are proud of it because they take it as safe room for them as reported by some of participants:

"Yes, here at school we have girls' room and it is like a safe room for us because when you get menses in class hours you go there and rest for some hours then you come back in class being in good condition". (XU)

"Girls' room helps us to maintain our menstrual hygiene because when you are menstruating at school you go there and find pads so that you continue your lessons without losing much time". (XZ)

Referring to girls students girls' room is appreciated by everyone at school as the safety room because when female students get menses at school they get sanitary pads to be used without upset to go outside the school to find such sanitary pads.

4.4.2 Importance of girls' room for school girls

It is evident from all participants that girls' room plays a paramount role in

their learning as they find sanitary materials that keep them at school while they could not remain at school when they did not get such materials as reported by some of the girls. For XX: “it increases girls’ confidence…when you are helped by girls’ room services you go with your peers without panic of being stained”. In addition to confidence, girls’ room has a psychological effect. In this regard, another girl reported:
“Girls’ room helps us to be clean; it also helps us to avoid mental stress because when you have abdominal pain during your periods, you sleep there on the bed inside the room until you feel better”. (XV)

Most of participants said that availability of girls’ room diminished the rate of absenteeism due to sanitary materials that are kept there in to support girls get menstruated at school. XY reported that “when menstruating during class hours you get pads and continue your lessons without going home and miss lessons”.

4.4.3 Inadequate infrastructure and scarcity of hygienic materials

The interviewers revealed that even if they have girls’ room but the room is inadequate due to lack of bathroom and it comes difficult to girls to maintain proper standards of menstrual hygiene. This is also stressful and inconveniencing as they have to think their bad smell caused by not washing their bodies. One of the girls reported that: “girls’ room do not have bathroom, “… Eish! when I take sanitary pads I arrange myself, I can use basin”. (XW)

Most of girls from boarding school claimed that sometimes they do not get basic sanitary materials in their girls' room like pads and soap hence the girls are forced to seek matron to give them the key for dormitories and walk long distances to dormitories to change their filled pads. This impedes girls to succeed in their lessons as they miss some subjects due to movements to and from the dormitories that cause them to lag behind in their academic performances:

"When one girl is getting her period, you have to go and seek matron and give you the key and you go and change at the dormitories because we come with pads from home." (XU).

This difficult access is coupled with long distance from classrooms to dormitories. For XY, "dormitories are not near … it is around 400 meters so you can take about 20 minutes to and from ….s we waste a lot of time when we are having our periods".
Furthermore the girls noted that due to insufficient hygienic materials like pads they use improper materials such as pieces of old clothes which can cause vaginal infection, especially when not properly washed and dried. Due to poverty the girls are unable to practice good hygiene during their menses. This happens mainly when they are at home. Some of them do not use appropriate material rather, they "use piece of old clothes because parents are unable to buy such expensive sanitary pads". (XV)

Even if female students appreciate the girls' room and sanitary services find therein, some participants claimed that sanitary pads are not always

available in the room as confirmed by XW from nonresidential school, “sometimes you go in the girls’ room and you miss the pads to use”. The same participant said that, “If I do not find pads in girls’ room, I immediately go home.”

The issue of inadequate infrastructure and scarcity of sanitary pads is becoming more exacerbated for nonresidential students than boarding students as explained themselves where if female students from nonresidential school do not find pads in girls’ room are forced to go home while their colleagues from boarding school in the same situation they use pads that they brought from their homes.

All those issues discussed above are impeding school girls’ life in one way or the other. Hereunder, participants show how these impediments are affecting their life.

4.4.4 Problems that pertain to health

Shortfalls related to sanitary hygiene at school may affect every corner of school life especially the life of academicians. In the following paragraphs I try to illustrate how poor sanitary hygiene impacts negatively the school girls’ health mainly mental and emotional stress, abdominal pains and vaginal rash and bad order.

About mental and emotional stress, all participants mentioned mental and emotional stress during menstruation when at school. The girls have difficulties concentrating on learning, as they concentrate on their

condition instead of paying attention to what is being taught. Due to the mental stress, they risk not performing well academically and failing their exams. As evidence, XX said that having period is so stressful that you do not pay much attention to what is being taught in class. You risk not doing well in your studies. In addition, “I am mentally disturbed during menstruation thinking about what can happen if I am stained.” Said XV.

In addition, during menstruation, girls are careful about moving around in the classroom, at times even reducing their mobility out of fear of staining their uniforms: “When you are in class and having your period, when you are about to stand up you must ask your neighbor to check if you did not stain your uniform”, Confirmed by XU.

Despite different emotions due to menstruation, these difficult times enhance collaboration between female students. This friendship is evidenced by the fact that when someone gets up for responding if “you are wet your friend will tell you and give you something to cover”, said by XZ.
This supportive attitude encourages the menstruating girls and it shows that all female students take the issue of menstruation as their concern.

For abdominal pains, most of participants also complained about frequent abdominal pains, vomiting and dizziness when having period. The dizziness might be due to anemia caused by the loss of blood, which the girls do not understand. One of them stated that “during period I have abdominal pains, mean that I am sick but among school leaders none care

about me" (XU). These discomforts prevent girls from participating in classes as the same participant affirmed and may lead to poor academic performances.

In addition to vagina pains, two participants (XW and XZ) pointed out other challenges related to health issues. In fact, they were knowledgeable about the negative consequences of the unhygienic practices applied to managing their menstruation, such as not changing sanitary pads, or not washing regularly, and using unhygienic sanitary materials. They knew that such practices can lead to rashes and bruises and bad order that may lead to being teased by peers. Furthermore most of female students noted that the use of materials such as rags torn from old textiles can cause vaginal germs that may cause vaginal itching, especially when not properly washed and dried. As clarified by XX, *"*if you do not wash and change your sanitary pads regularly you can have rashes and bruises. It is common to feel itching when you are using old rags or pieces of old clothes".

Apparently, female students' are aware of how they can well manage their menstruation. They know that using unclean utensils can provoke some diseases. Thus, poor management of menstruation is due to female students' poverty. These students are unable to practice good hygiene during menstruation. Their statements show also their schools are not giving enough support.

4.4.5 School performance problems

All participants expressed that the above menstruation and menstrual hygiene related problems contribute to girls' poor school performances and to their high failure rates, which again can lead to short and long term impacts on their educational achievements and hence their future.

Talking about school absenteeism and missing out on subjects, most participants revealed that absenteeism from school during menstruation was very common. As XY pointed out, "when you are dealing with abdominal pain, you cannot attend the class and the teacher will not stop teaching*".*

The menstruation periods, which can be very complicated and hard time, sometimes make girls miss their lessons. This absenteeism normally affects the girl's academic performances.

The various problems described above lead to the girls missing classes. They miss classes due to lack of proper menstrual sanitary materials, and fear of staining themselves. Sometimes they miss classes due to inadequate or lack of bathroom and washing for cleaning during menstruation at school. As earlier stated, changing sanitary materials at the dormitories also consumes a lot of time originally dedicated to studying.

Participants from boarding school reveled that they had to cover long distances to change pads while teachers were continuing teaching. The very fact that missing out on subjects and absenteeism affect the girls'

academic performance in a negative way is confirmed by the participants even if there was no evidence to associate such failure with menstrual hygiene problems as XW said, “menstruation tends to be so stressful that you do not care much about learning in the time learning is continuing as usual and this leads to the risks of not doing well when sitting for exams”.

4.5 Conclusion

During this study on Experiences of female students on menstrual hygiene management in secondary school life in Gakenke district based on interviewing secondary school girls where six girls among three were form boarding school and other three from nonresidential school, aged above 18 years, were interviewed. The study found out that the knowledge about menstruation of female students was quite inadequate especially those from lower level of study like senior one and two. It was also revealed that the girls had difficulties in maintaining proper standards of hygiene during menstruation due to scarcity of menstrual hygiene materials and inadequate sanitary facilities in the schools and home. Poverty of parents emerged as very crucial barriers to getting access to hygienic sanitary materials at home. These barriers were found to be stressful, inconveniencing and infringing on the girls’ right to privacy. All the above

mentioned issues were found to lead to poor menstrual hygiene and contribute to girls' poor school performance

CHAPTER FIVE: INTERPRETATION OF RESERCH FINDINGS

5.1 Introduction

This chapter discusses the findings of the study in relation to similar studies conducted in other developing countries in Africa, Asia and South America. This chapter also discusses the study's limitations. The research undertaken for this study established that the experiences of female students and consequently menstrual hygiene were greatly influenced by inadequate menstrual facilities, as well as by lacking hygienic materials. Another crucial problem influencing the girls' standard of menstrual hygiene is poverty of parents. All those issues were found to be major obstacles to participants adopting healthy menstrual hygiene practices.

As it will be shown in this chapter the different issues, each in its own right

and importantly in combination, pose a threat to girls' physical, mental and social wellbeing. They eventually compromise their academic performances and threaten their school careers. It shall also be mentioned that all the problems, although presented sequentially, were found to be interlinked, overlapping and cross-cutting with each other. The chapter will examine the problems by reflecting first on scarcity of menstrual hygiene materials and then inadequate hygienic facilities. The impact of these key influences will be explored in relation to the girls' physical health, their mental health, and their social wellbeing. These problematic experiences, together with the constraints resulting from the poverty on the part of the family, influence their ability to attend school.

Finally, and significantly, the detrimental impact of these compounding problems on the girls' futures is explored. In this chapter we shall discuss deeply scarcity of menstrual hygiene and inadequate facilities threaten to school girls' life especially to their physical health, mental health, social wellbeing, school attendance.

5.2 Scarcity of menstrual hygiene materials and inadequate facilities

The interviews undertaken in the present study at the two schools in Gakenke revealed that the hygienic materials are scarce especially those ones needed by female students during their periods. This pertained especially to the girls attending nonresidential schools, whilst girls in boarding schools, in comparison fared better due to hygienic materials are

among the requirements that a student must have in order to be hosted in boarding schools; so most of students come to school with key sanitary material among others sanitary pads, towels, soaps underwear. Scarcity of such materials pushes many girls out of school as indicated by different studies. The above findings comply with the findings of Pillitteri (2011) previously quoted study of menstrual hygiene and management of school going girls in Malawi. The study reported that poor menstrual hygiene and management in schools in Malawi contributes to girls' high rates of absenteeism and poor academic performance. This means that most girls were absent from school during menstruation (Pillitteri, 2011). Similar findings were reported by a survey in India in which 28% of the female students disclosed missing school while menstruating, due to lack of facilities for maintaining proper menstrual hygiene (Water Aid, 2009). According to Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo, Mutale, Chilengi and Sharma (2019), most girls do not have access to absorbent menstrual materials, they commonly use cloth with only a few being able to access cotton wool from shops or cotton fields or able to afford disposable sanitary pads and those who use cloth reported that it filled up too quickly and did not stay in place by sticking to underwear leading to telling stains on their uniforms.

Regarding facilities, the participants in this study revealed that girls' room as hygienic facility is not adequate to fullest to assist menstruating girls. Lack of bathroom is a complaint that is more serious especially to the girls attending day schools, whilst girls in boarding schools, in comparison, fared better due to boarding schools have public bathrooms.

Different scholars pointed out that inadequate hygienic facility hinders girls' opportunities to study effectively (Sumpter & Torondel (2013); Sommer, Caruso, Sahim, Calderon, Cavill and Mahon (2016); Johnson, Calderon, Hilari, Long & Vivas (2016)).

To enhance menstrual hygiene in schools, the Rwandan Government removed the value-added tax on menstrual health products is a step in the right direction and it is well appreciated. However, this did not reduce the price of menstrual products; it does not guarantee affordability and accessibility especially by women and girls of low economic status (Kagire, 2019).

5.3 Threats to physical health

Inadequate menstrual facilities, combined with scarcity of menstrual materials resulted to personal poverty were issues which in the interviews emerged as having great impact on girls' physical health. This shall be discussed in the following paragraphs. It became evident in this study that inadequate menstrual hygienic practices were poverty related. Poverty posed as an economic barrier to the accessibility of hygienic sanitary materials, threatening the menstrual hygiene of girls and making them

prone to contracting infections. As for the reported by majority of female students participating in this study, due to family poverty, they cannot afford to buy sanitary pads and hence they resorted to using pieces of old clothes as absorbent materials and this made them vulnerable to infections such as urinary truck infections. In their study conducted in West Bengal, Dasgupta and Sarkar (2008) revealed similar cases. Only a minority of 11%of the girls involved in their research could afford disposable sanitary pads. Adequate menstrual practices are important to girls' and women' health. It was known by the interviewed girls in this study, that lacking or poor menstrual hygiene, such as not washing, not regularly changing absorbent materials or using unhygienic sanitary materials can result in health problems such as infections, rashes, bruises and vaginal itching. These findings were substantiated by studies in other developing countries. Dasgupta and Sarkar (2008), Adnma and Adinma (2008), Dhingra et al. (2009), Mahon and Fernandes (2010), all reported that many girls, especially in rural areas, regularly used rags and toilet paper as absorbent materials. These may harbor infectious agents, and hence constitute a source for pelvic infections.

Shanbhag et al. (2012) as well as Oche, Umar, Gana & Ango (2012) and Kumar & rivastava (2011) reported similar findings and asserted that for maintenance of good menstrual hygiene standards, reusable menstrual cloth must be washed with soap and dried properly, as they can otherwise harbor micro-organism, which cause vaginal infections. This must be seen in relation to the research of House, Mahon and Cavill (2012) who affirm that during menstruation there is an increased risk of vaginal infections

due to the opening of the cervix, which creates a pathway for bacteria to enter the uterus and pelvic cavity. They also report that such infections are due to the pH in the vagina, which during menstruation turns less acidic than normal, thus creating a good environment for growth of yeast infections such as Candidiasis (House, Mahon & Cavill, 2012). Other health problems associated with adolescent girls' menstruation were relatively minor in relation to their health, but more importantly in relation to the girls feeling comfortable. They confirm with the findings of Pilliteri (2011) and included abdominal pains, vomiting and dizziness, the latter probably due to anemia caused by the loss of blood.

In addition, absence of appropriate sanitary materials to absorb menstrual flow does not only affect a female's reproductive health, but her acquisition of education. However, many women and girls cannot consistently afford the monthly cost of menstrual products and revert to less hygienic solutions and poor hygiene practices (Mbabazi, 2018).

5.4 Threats to mental health

Apart from the threat to the girls' health caused by the lack of, or improper menstrual hygiene, the research also showed that the girls experienced the variety of the threats to their mental health. The most salient ones were emotional stress. Again to this must be added poverty, in this case the poverty of their homes, which, as it becomes evident during interviews

and shall be shown below, greatly amplified the emotional and social stress they experienced during menstruation. The girls explained how during menstruation it is difficult to concentrate fully on their learning. They made it known that they were more inclined to concentrate on their conditions than the lessons. During menstruation they were also careful about their movements for fear of being teased by their peers once straining their uniforms. Other studies confirmed these findings. Among them is that of Adinma and Adinma (2008) undertaken in Nigeria, who argued that the stress the girls are exposed to during menstruation, in a worst case scenario, can result in depression. Also the frequently-cited Malawian study by Pillitteri (2012) highlighted the mental and emotional stress the girls suffer during menstruation. In this study it became evident that poverty of families posed as an economic barrier to the accessibility of hygienic sanitary materials, threatening the menstrual hygiene of the girls and stressing them emotionally. According to what was gained from interviews, poverty was real in Gakenke district as most girls could not afford to buy sanitary pads when menstruating at home and hence they resorted to using cloth torn into rags as noted above.

5.5 Threats to social wellbeing

Apart from the threats to the physical and mental wellbeing of the girls there is that could be called the threat to their social wellbeing. Compared to physical and mental wellbeing, which can be defined by using relatively

clear terms such as physical and mental health, or similar, social wellbeing is a rather diffused expression. It was used neither in the interviews nor in the literature reviewed for this study. However it became clear that the combination of lacking important facilities at school and home; of adverse socio-economic conditions; the frequent discrimination against the girls by bully-boys, who would tease and ridicule them then they detected their condition, very often resulted in the girls feeling of seclusion and exclusion, of aloneness and separation. In other terms, all this, and especially in combination, created a threat to the girls' social wellbeing, which is beyond physical and mental health. Kirk and Sommer (2006), in their study of sub-Saharan and Asian cases, describe similar fears of menstruating girls in South Sudan.

5.6 Threats to school attendance

Despite being overlapping and linked, the above described outcomes can be allocated to individual main issues. There is however one outcome which relate to all issues. It is of such importance that it is worthy of separate sub-section and heading. As indicated several times in the course of this study, it became evident during the interviews that the female students felt they might academically perform poorly and that they might even be forced to give up their school careers. The latter posed the ultimate threat to them.

They feared that could happen due to diseases, mental and social stress and problems and variety of other reasons. All of them caused either by bad menstrual hygiene. The danger of poor school performances due to ill

health of adolescent girls is amongst others substantiated by Adinma and Adinma (2008) in Nigeria and by Pilliteri (2012) in Malawi. Also Kirt and Sommer (2006), in their study from sub- Saharan Africa and Asia, low participation and poor performance of menstruating girls in the class as they worried about their condition. Inadequate menstrual hygienic practices reported by the respondents of this study were mainly caused by lack of, or inadequate menstrual materials or facilities in schools and homes. Too often the girls were forced to compromise on their menstrual hygiene, which caused stress and inconvenience. It also resulted in a waste of time, as the girls had to leave classes during learning hours to sanitary assistance. During the time the girls were out of class they missed lessons and this negatively affected their academic performance. These findings were in accordance with Water Aid (2009) study of Nepal, in which many girls reported that due to the lack of facilities in their schools, they missed classes on the days they had their periods, and this lead to poor academic performances. The study by Shanbhag et al.(2012), presents similar findings from India, where there was a case in which over a half of the girls were regularly absent from schools due improper conditions for their menstrual hygiene. Similar findings were reported from Malawi by Pillitteri (2011), who writes that girls lose 12 to 36 days of schooling annually for the same reasons. Another stressful and embarrassing issue for girls during menstruation also revealed during the interviews was the absence of bathroom, which forced the girls to walk a long distance to the dormitories in order to use the bathroom there or quit school to home especially girls from day schools.

Again this was found to be time-consuming, resulting in them missing out

on subjects and ultimately threatening their academic performances. The conditions found by Pillitteri (2011) in Malawi were similar. She concluded that mature girls lose about one to three days of school per month due to lack of proper sanitation facilities.

5.7 Summary of discussion

As established in this chapter, the problems impacting on the girls' menstrual hygiene relate to and threaten the girls' physical and mental health and their social wellbeing. The problems include: scarcity of menstrual materials, lacking sanitary facilities and services found at the two schools, as well as family poverty; to these must be added emotional stress and social wellbeing. Despite their sequential description, the problems highlighted in the preceding sections are interlinked, overlapping and cross-cutting and define the menstrual experiences of school girls. This pertains to the majority of cases of research into multi-faceted and complex subject matter as the one this study is dealing with.

Due to their families' poverty, the girls felt discouraged from attending class on their critical days, as they were unable to walk long distance without proper pads. At school, students do not get enough menstrual materials to handle their hard times. In addition, there is inadequate sanitary facility the example is lack of bathroom in girls' room and this impedes girls' life in every corner of school life.

Therefore, this study has shown that ignoring proper menstrual hygiene has a negative impact on the health and education of girls in Gakenke district. The same pertains to their setting, i.e. family and school, which do not provide proper conditions for them to maintain a good standard of menstrual hygiene, although this is found to be of great importance to their physical, mental, and social wellbeing.

However even if Government of Rwanda has made a lot of initiatives such as scrapping Tax Added Value on sanitary pads, allocation of budget to buy sanitary materials, girls' room to ensure that all female students are living in satisfactory conditions, female students of Gakenke district are still challenged by numerous problems including scarcity of sanitary pads, inadequate infrastructure, lack of knowledge on menstruation, and cultural taboos. These challenges push female students to manage their menses poorly by using pieces of clothes from old ones, using hot water and charcoal to relieve abdominal pain.

A main conclusion must be that improved knowledge and practices of menstrual hygiene, as well as a better environment in terms of facilities and services for its proper management will lead to decreased vulnerability to infections and other maladies, higher self-esteem and ultimately to better academic performances at school. The limitation of this study to the Gakenke district does not allow its results to be generalized, although many of the study's findings were confirmed by other studies in other developing countries. This highlights the need for more scientific research in the subject matter area of the present study, in

order to better understand the negative impacts associated with poor menstrual hygiene on the physical, mental and social wellbeing of girls.

5.8 Limitations of the study

This study had both strengths and limitations. It is an Explorative Qualitative Study, meaning that its results cannot be generalized to the whole populations. However, the schools were very different, and so were the students, enabling the researcher to work with the required heterogeneous samples in terms of participants in the interviews. Another limitation was possibility of language errors during interviews because all participants were not good at English; medium of instruction and some were mixed languages English and Kinyarwanda. This could have led to misunderstandings, but was minimized by matron's mother tongue capacity as Kinyarwanda in which they were allowed to respond.

A further limitation was the short time allocated to data collection. This might have influenced the information provided by the girls during interviews, for example by withholding relevant data pertaining to menstrual hygiene. There was also the danger of the researcher using his vast experiences and his values and opinions to bias the study results. This was however diminished through the rigor of researcher.

CHAPTER SIX: CONLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter offers conclusions and recommendations that respond the needs uncovered by the findings of this study.

6.2 Conclusions

This exploratory qualitative study was conducted at two secondary schools in Gakenke district of Rwanda. At the schools interviews with girls aged beyond 18 years old was carried out. Furthermore, the researcher undertook a comprehensive literature review. In the pursuit of the study the findings of the interviews were held against and compared to the findings of the literature, which dealt with other countries in developing world, mainly in sub-Saharan Africa and Asia. One of the main conclusions of this study was that girls are not treated with fairness when it comes to satisfy their needs in term of menstrual hygiene whether at school or at home. This study also shown the ways students are using to manage their menstruation including, sanitary pads, old pieces of clothes, hot water and charcoal in case of abdominal pain.

The study has shown that menstruating girls face many challenges. Managing their menstruation and maintaining a good standard of menstrual hygiene is difficult for adolescent girls because of the problems established in this study, such as inadequate sanitary facilities and services, poverty and scarcity of menstrual materials. In the present study, I did not scrutiny why school girls are facing many challenges while government of Rwanda put in place different initiatives so that further researches should deepen this topic. On the whole the findings of the study coincide with the results of the literature review.

Even if there are such challenges mentioned above, the research findings have also shown that school girls, who have been given menstrual hygiene equipment to manage their menstruation, change positively their academic practices including school regularity, class participation, shamefulness, and shyness in the classroom and this is in conformity with theoretical framework of the present study.

6.3 Recommendations

Recommendations

Despite its above described limitations, it can be derived from the study that Rwanda is in good way for providing proper menstrual care for all its schools going adolescent girls. Such care is needed for our girls to lead

health, safe, unmolested and dignified lives. In order to provide the necessary conditions for improving our girls' conditions, there is need for all stakeholders , including parents, teachers, children, government and the community, to act in unity, for the common good and a better future of our children, not the least our adolescent girls.

In order to satisfy the needs uncovered by this present study, there are the below specific recommendations. They can only be preliminary, the reason once again being the limitations of the study. The recommendations are allocated to the individual stakeholders who, through their mandate, are the girls' guardians and as such involved and ultimately responsible for the girls' health and wellbeing, including their reproductive health and hence also their menstrual hygiene.

Policy makers

- Ministry of health to incorporate menstrual hygiene and management into the National Sanitation and Hygiene Strategy.
- Ministry of Education to elaborate curricula for menstrual hygiene education at all levels of education.
- Ministry of Education together with Rwanda Housing Authority to design girls' room in schools which are user friendly for girls.
- Ministry of Education to collaborate with its partners to increase the budget allocated to menstrual sanitary services in schools.
- Ministry of Education optionally in combination with Ministry of Health, to capacitate teachers (male and female) better to cope with the needs of adolescent girls in schools, amongst others with a view to menstrual hygiene.

- Ministry of Education to mobilize NGOs to advocate that menstrual hygiene is included in school health programs.
- Ministry of Local Government through the local authorities to promote increased awareness of menstruation and menstrual hygiene in communities.

At District level

- To monitor utilization of budget allocated to sanitary services in schools.
- District Education Unit to monitor the operationalization of girls' room in different schools.
- To collaborate with faith based organizations to promote awareness of menstruation and menstrual hygiene issues in the communities.

At school and community levels

- To introduce menstrual hygiene in the health and hygiene clubs in schools.
- School authorities to provide relevant information to boys, and consequently elaborate rules of good behavior for them towards girls, and to enforce them.
- Schools' Parents Teacher Association to pressure schools leaders to rehabilitate girls' room in order to have bathroom and provide practical assistance if need be.

Recommendations for further researchers:

- Researchers are recommended to assess the impact of scrapping Tax Added Value on sanitary pads for girls' education.
- Researchers are recommended to investigate the practicability of sanitary

practices in primary schools.

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APPENDICES

Appendix1: Authorization letter to conduct research from UR College of education

UNIVERSITY of RWANDA

COLLEGE OF EDUCATION

RESEARCH AND INNOVATION UNIT

Rukara, 20th April 2022
Ref: 03/DRI-CE/055/EN/gi/2022

The Mayor
Gakenke District
Northern Province
Rwanda

Re: Research recommendation letter for Mr. Jean Pierre NIYOYITA

On behalf of the University of Rwanda-College of Education (UR-CE), I am pleased to introduce **Mr. Jean Pierre Niyoyita,** a post-graduate student at the School of Education of UR-CE. Mr. Niyoyita is writing his thesis on the: **"Experiences of female students on menstrual hygiene management in school life in Rwanda"** to complete his Master of Education in Educational Leadership and Management. Therefore, he is requesting permission to collect data from female students enrolled in some selected secondary schools in the Gakenke district.

Mr. Niyoyita's research project passed successfully through an internal collegial ethical process. Thus, the University of Rwanda-College of Education: Directorate of Research and Innovation confirms that this research adheres to ethical standards and principles. Therefore, we kindly request you to accord him your cooperation in this research.

We very much hope to get your usual cooperation.

Yours sincerely.

COLLEGE OF EDUCATION RESEARCH AND INNOVATION UNIT

Digitally signed by
UR (Rukara, Directorate of Research & Innovation)
Date: 2022.04.20
Time: 14:35:06 +2'00

Assoc. Prof. Eugene Ndabaga
Director of Research and Innovation
University of Rwanda-College of Education
E-mail: ndabagav@yahoo.ie
Mobile: +250788308862
Cc:
- Principal, UR-CE
- Postgraduate Program Coordinator, School of Education
- Dr. Jean Leonard Buhigiro

EMAIL: dri.ce@ur.ac.rw P.O. Box: 55 Rwamagana WEBSITE: www.ur.ac.rw

Appendix 2: Authorization letter to conduct research from Gakenke District

REPUBLIC OF RWANDA

Gakenke on,.....25/05/2022
N°...../07.04.02/DHRA/J.K
2036

NORTHERN PROVINCE
GAKENKE District
BP 152 RUHENGERI
E-mail : gakenkedistrict@gakenke.gov.rw

Mr Jean Pierre NIYOYITA
Student in UR-CE
Tel: 0788787344
Email: jeanpierre.niyoyita@yahoo.fr

Re: Your request for research authorisation

Referring to your letter date on 21st April 2022, pertaining to your application for research authorisation in Gakenke District to your academic research entitled "**Experiences of female students on menstrual hygiene management in Secondary schools in Gakenke District, Rwanda.**"

I am pleased to inform you that you are allowed to conduct your academic research entitled as indicated above. Your research will cover 15 days starting from 06th May 2022.

Yours Sincerely,

Aimé Francois NIYONSENGA
Vice Mayor in Charge of Economic Development

NIZEYIMANA Jean Marie Vianney
Mayor of Gakenke District

Appendix 3: **Interview guide**

SECTION: I. IDENTIFICATION OF RESPONDENT

1. School name ……..
2. Class of student…….
3. Age …….

2. Marital status: Married ☐ Sing ☐ Divorce ☐

SECTION II: ANSWER THE FOLLOWING QUESTIONS REFERRING TO PICTURES BELOW:

1. Observe the above photograph:

a) Describe the photograph? ……

b) Do you have a similar facility here at school? Yes….No…

c) Tell me what it means to you……..

2. a) Do you think it is adequate to have it at schools?

b) Explain your answer……

3. a. Do you have girls 'room at your school? Yes No

b. If yes, is it well equipped? Yes No

c. If yes, tell me about the available equipment……..

d. Do you find that material adequate? Explain.

e. Who is in charge of it?.....

f. How is it managed?.....

4. a. Do you use the girls' room? (if 3.a is yes)

b. Tell me about your experience about the use of that room.

- When do you go there?
- Describe what you have experienced while there
- How many persons do you find there?
- How do you interact with them?
- Do you help each other? (if yes, tell me about it)
- Which challenges do you face when you are there?
- How are they managed?

5.Observe the following photographs

a. Describe what you see on the above photographs……

b. What do these utensils mean to you?.....

c. Are they available here at school? Ye☐ No☐

d. What else can we add here?.....

e. If 4.c is no, where do female students find them?.....

6. What kind of utensils do girls here at school use in managing their menstruation?

7. Observe and choose those which fits to your experience.

Tell me how they are related to your experience.

8. Tell me about other challenges you face during your menstruation here at school.

9. How do you deal with those challenges?

*Appendix 4.*Obervation sheet

No	Items	Observation		Comments
		Yes	No	
1	Girls' room is available			

2	Bathrooms are available			
3	Toilet facility in the school			
4	Separate block of toilet for boys and girls			
5	Toilet and wash facilities have doors			
6	Adequate space in toilet			
7	Toilet facility is easily accessible			
8	Toilet facility is clean			
9	Mirror in the toilet			
10	Disposal facilities in the toilet			
11	Functioning hand washing facility			
12	Regular supply of water in the toilet facility			
13	Regular supply of soap in the girls' room facility			

Appendix 5: Informed consent form for students

Study Title	Experiences of female students on menstrual hygiene management in school life in Rwanda
Researcher	NIYOYITA Jean Pierre Tel: 0788787344

This Informed Consent Form has two parts:

- Information Sheet (to share information about the study with you)
- Certificate of Consent (for signatures if you choose to participate)

You will be given a copy of the full Informed Consent Form

Part I Information sheet

I am NIYOYITA Jean Pierre, a student at University of Rwanda-College of Education, pursuing a Master's degree in Education Leadership and Management. I am currently conducting a research entitled "Experiences of female students on menstrual hygiene management in school life in Rwanda" as part of the academic requirements for the award of Master of Education in Education Leadership and Management. This questionnaire is one the tools for data collection in this research.

This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have any other questions during this research, or do not fully understand the concepts, please feel free to ask about the research.

Voluntary Participation

Your participation in this research is entirely voluntary. If you choose not to participate, this has no consequences for you and nothing will change. Also note that if you agree to participate, you are always able to stop and leave at any point during the research.

What does your participation involve?

When you participate in this study, we will ask you to fill in a survey. The survey will take approximately 30 minutes to fill in. Please note that there are no right or wrong answers, you can fill in the survey to the best of your knowledge.

How will we protect your information and confidentiality?

The information you provide will be strictly confidential, will by no means be linked to any personal information and will be used solely for academic purposes. This consent form and any other personal identification data will be stored separately from the survey data to ensure no identifying information can be linked to individual responses. It's really important that those we speak to feel able to be totally honest about their experiences and perceptions. Please let me know if you have any questions on how your data will be used.

Can I refuse to participate or withdraw from the study?

You can refuse to participate or withdraw from the study at any time. You do not have to give a reason for your non-participation. Withdrawing or refusing to participate in this study will not involve any penalty or loss of benefits.

Compensation

No compensation is available for this study.
Do you have any questions at this time?

Part II: Certificate of consent

I have read the above information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked, have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print name of participant	
Signature of participant	
Date	

Statement by the researcher/person taking consent

I confirm that the participant will give an opportunity to ask questions

about the study, and all the questions asked by the participant will be answered correctly and to the best of my ability. I confirm that the individual will not be coerced into giving consent, and the consent will be given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent	NIYOYITA Jean Pierre
Signature of Researcher/person taking the consent	
Date	

Appendix 6: Timeframe for research

Time **Activity**	On 30th, January 2022	10st April -25th May 2022	26th May - 30th, July	1st-30th, August 2022	02nd September, 2022	12nd September , 2022
Research Proposal handed to the supervisor						
Data collection and analysis						
Draft thesis submitted to the supervisor						
Draft submitted to faculty						
Oral presentation						
Submission of corrected, edited and bound						