

**INFLUENCE OF GOVERNMENT'S SANITARY TOWELS INITIATIVE ON
ACCESS AND PARTICIPATION IN EDUCATION AMONG SECONDARY
SCHOOL GIRLS IN NAKURU COUNTY, KENYA**

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DECLARATION

I declare that this thesis is my original work and has not been presented in any other university/ institution for consideration. This thesis has been complimented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited using the current APA system and in accordance with anti-plagiarism regulations.

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DEDICATION

This study is dedicated to my parents Mr. and Mrs. Sang, my siblings Ken, Kevin, Dorine and Debra for their support and love. May God bless you!

ACKNOWLEDGEMENT

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ABBREVIATIONS AND ACRONYMS

AU	African Union
CESA	Continental Education Strategy for Africa
CIA	Central Intelligence Agency
EFA	Education For All
FDSE	Free Day Secondary Education
FPE	Free Primary Education
GOK	Government of Kenya
GSTI	Government's Sanitary Towels Initiative
MHM	Menstrual Hygiene Management
MOE	Ministry Of Education
MOH	Ministry Of Health
NGO	Non-Governmental Organization
SDGs	Sustainable Development Goals
SDPF	Sanitary Dignity Policy Framework
SPSS	Statistical Package for Social Sciences
UN	United Nations
UNDP	United Nations Development Program
UNESCO	United Nations Educational Scientific and Cultural Organization
UPE	Universal Primary Education
USE	Universal Secondary Education

ABSTRACT

Education all over the world has been prioritized as an important means for achievement of global SDGs, national development and individual's social mobility. Educating girls is important to a nation's development, attainment of SDGs and Kenya's Vision 2030 considering that women and girls comprise over half the global population. Girls' education has been hindered by several socio-cultural factors such as household chores, early marriages, teenage pregnancies and poverty which adversely affect access to basic amenities such as sanitary towels. These challenges bring about gender disparities in education. The government of Kenya is committed to end this disparity by ensuring equity of access and participation of all girls and boys in education. This is evidenced through education policies in place such as the Free Primary Education, Free Day Secondary Education, Affirmative Action and Government's Sanitary Towels Initiative (GSTI) whose aim is to minimize barriers to education for girls and put them at par with the boys. This study's motive was to explore the influence of GSTI on educational access and participation of secondary school girls in Kuresoi South Sub-County, Nakuru County. This study pursued trends in the provision of sanitary towels, the implications of such provision on school girls' access and participation in education and the strategies for the sustainability of such provision in improving education. Liberal feminism theory guided this study and illuminates on how equality of opportunity is important for a person's wellbeing thus making progressive social change possible. This theory holds that barriers to girls' education should be eradicated so that they can receive equal educational opportunities as the boys. The study employed a descriptive survey research design; stratified random sampling and purposive sampling was useful in selecting schools and principals respectively. Simple random sampling was useful to draw class teachers and secondary school girls from the target population. Piloting was done in one school with similar characteristics as the target population. Questionnaires for students, interview schedules for principals and class teachers and document analysis are the research instruments that were useful in gathering data. Analysis of data was done both qualitatively and quantitatively. Findings revealed that GSTI is not providing adequate sanitary towels to schools despite existing policies. Further, sanitary towels provision has a positive impact on girls' access and participation in education. This study established that the following strategies if implemented would ensure the sustainability of this initiative. There is need for adequate funding, clearer policies, constant supply through the year and increase in quality of the sanitary towels. Access to information on menstrual health and management is also very important. These findings are envisioned to be beneficial to all education stakeholders not only in Kenya but also internationally, as an eye-opener on the need of interventions to ensure equity of educational access and participation for both boys and girls.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.0 Introduction

This chapter highlights the background to the study on Governments Sanitary Towels initiative (GSTI) and provision of sanitary towels to schools. This was followed by the development of the: statement of the problem, purpose of the study, research objectives, research questions, limitations and delimitations of the study. It also explains the assumptions of the study, significance of the study, theoretical and conceptual frameworks and lastly the operational definition of key terms.

1.1 Background to the study

Globally, education is regarded an important instrument for a nation's overall development, social mobility and as a basic human right (UNESCO, 2015). Countries all over the world are prioritizing education through ensuring access, retention and participation of all boys and girls. The United Nations estimate the world's population by 2017 to be 7.6 billion. There is almost gender parity in terms of the population with 50.4% being men and 49.6% being women (UN, 2017). However, in matters education, only 66% of the countries globally had achieved gender parity at primary level, 45% and 25% in lower and upper secondary respectively by the year 2018 (UNESCO, 2018). These disparities differ according to regions with girls occupying 54% of the out of school population recorded in Sub-Saharan Africa, Arab States, Yemen, South and West Asia. A nation cannot develop fully when some part of the population is left out in education. As a result, education for females has been advocated as the world's greatest gainful investment. Sperling and

Winthrop, (2015) noted that improving girls' attainment of education yields increased productivity and economic growth. More benefits of educating girls and women include health for women and their children, reduced rates of early marriages and self-reliance.

In the year 2015, the General Assembly adopted the Agenda for Sustainable Development that includes Sustainable Development Goals (SDGs). This Agenda is built on the tenet of Leaving No One Behind especially in education. Girls' educational access and participation is enshrined in Goal four and five on Quality Education and Gender Equality respectively. The SDG number four aims to provide young people of every gender complete free, equitable and quality basic education by the year 2030. It also seeks to do away with gender inequalities in education, construct and update child, disability and gender-sensitive education. The SDG 5 calls for the abolition of all kinds of stigma against all women and girls. It also aims to guarantee that everyone has universal access to sexual and reproductive health. The girl child access and participation in education is essential in the achievement of the SDGs, which is why their needs have been incorporated in the global agenda. The SDGs emphasize on everyone achieving their full potential without any hindrances.

Apart from this global agenda, there is the Continental Education Strategy for Africa (CESA) which is Africa's channel towards a better future. In order to realize this, Africa has put a lot of emphasis on education and training, creating an African citizen who will be on the forefront on pushing towards the sustainable development of Africa visualized by the African Union (AU) and the Agenda 2063. The Agenda is driven by aspirations, which aim at Africa being a prosperous continent by the year 2063 centered on inclusive

growth and long-term development. It aspires for the development of Africa to be people-driven hence utilizing the African people's full potential and in particular youth and women. The goal of this agenda is to eliminate all types of discrimination against all females by the year 2063. It also seeks to end various hindrances to better wellbeing and education for women and girls (AU, 2015). Some factors that have hindered girls' access and participation in education in the world have been identified as culture, household chores, early marriages, teenage pregnancies and poverty which leads to lack of basic amenities (UNESCO, 2015).

Menstruation has been identified as a gender-specific hindrance to adolescent girls' education. It is one of the major changes that adolescent girls undergo and is supposed to be celebrated as a girl transits from childhood to adulthood. Unfortunately, it is not celebrated in many parts of the world but rather seen as an increase of problems for most girls. Menstrual related issues include unaffordable sanitary protection, menstrual symptoms as well as social, cultural taboos and myths associated with menstruation. Proper management of menstruation is therefore an important issue in a girl's life especially when at school. Such management will ensure preservation of the girl's dignity, improved confidence and concentration. The fear of staining one's clothing and being teased hinders girls from fully participating in education. In poorer girls' context, menstrual management denotes a significant barrier to their wellbeing, comfort and participation in school (Chandra, Sommer and Sutherland, 2015).

Menstruation related issues especially the lack of sanitary towels affects girls globally. According to Plan International UK (2017) research one in every ten females (10%) in the

UK cannot afford sanitary towels; 15% and 14% have struggled to afford it and borrowed from friends. Many girls miss an entire day of school in the UK and have to make up an excuse for the same because they are embarrassed by their menstruation and cannot discuss it comfortably with anyone (Plan International UK, 2017). In India, there are cultural taboos surrounding menstruation with restrictions in terms of religion and free mingling with others (Anand and Garg, 2015). This further complicates the negativity towards menstruation thereby burdening girls psychologically. A study that sought to examine menstrual management among school girls in India in the year 2015 showed that going through pain during menstruation and common concentration issues were mostly caused by fear of soiling their clothes. Girls with access to sanitary towels were reported to be attending school during menstruation more than those who did not use them. Those without sanitary towels resorted to other means such as use of rags. Because of all these, the Government of India acknowledged the impact access to sanitary protection has on educational achievements and general development of girls. Several programs in schools have therefore been developed in order to mitigate the question of access and participation of girls in education due to menstrual related issues. Such programs include: manufacture and selling of affordable sanitary towels, government subsidized towels and improving gender separate toilet facilities. These programs are meant to improve knowledge, on proper menstrual hygiene management in schools with help from other organizations (Muralidharan et al, 2015).

The 21st century society still views menstruation as being private and just a women's issue. This issue is exacerbated in Sub-Saharan Africa by high rates of poverty, which keep millions of teenage females out of school. Due to poverty, many girls in Sub-Saharan

Africa cannot afford the basic needs including sanitary protection, sanitary facilities and adequate clean water for use during menstrual period. This adds to the reasons for the widening difference between girls and boys in terms of accessing, participation and achievement in education. The Universal Primary Education (UPE) in many African nations has resulted in a rise in enrollment rates. In Uganda, UPE was introduced in 1997 and later Universal Secondary Education (USE) introduced in 2007. The two schemes targeted to make education more affordable for more Ugandans. Unfortunately, there are gender disparities in retention and completion rates in Uganda with boys higher at 53% and girls at 43% as of the year 2015 (UNDP, 2015). One of the contributing factors to this difference is menstrual related issues with an approximated one out of every ten adolescent girls absenting themselves from school for 4-5 days every menstrual cycle which translates to 2 weeks of learning lost every term and 8 weeks every year (Mpyangu et al., 2014). A quantitative study done in 2016 among 4715 adolescent girls by the Ugandan MOE and partners showed many girls engaging in transactional sex because of the low socioeconomic status and as a means of seeking to afford such items as sanitary towels (MOH Uganda, 2016). A packet of sanitary pads in Uganda costs almost US\$ 1.35 which is way above everyday earnings of parents. Uganda was ranked fifth highest in terms of fertility which means that the population is growing rapidly (CIA, 2016). This implies that a larger percentage of Ugandan females would not be able to afford sanitary towels, which in turn hinders their education. This calls for interventions to ensure that menstruation is no longer a hindrance to girls' education. Thus the Menstrual Hygiene Charter of 2015 responsible for Menstrual Hygiene Management policies and programs and general support of girls' and women's needs.

Kenya is among the African countries with high rates of poverty which explains why education is prioritized as one of the tools to eradicate it. Menstruation in Kenya has become a policy concern as it threatens the country's efforts to ensure everyone attains education. Kenya is a signatory of the Jomtien Agreement (1990) and Dakar Framework Action (2000) which means that there is a commitment to achieve Education For All (EFA) and the Sustainable Development Goals (SDGs). These international treaties protect the right to education and have been incorporated into the Kenyan law. Articles 53, 55 and 56 of the Kenyan Constitution (2010), state that each child has a right to an education that is both free and obligatory and that the state shall employ measures such as affirmative action programs to ensure everyone accesses education and that minorities and marginalized groups should have special opportunities in education. This is evidenced in efforts made towards achieving the National Goal and Sustainable Development Goals of ensuring Quality Education and eliminating Gender Disparity in education. The findings of a study conducted in rural Kenya by Oruko et al, (2015), indicate that school girls often take part in transactional sex so that they can afford menstrual products and that it has led to the rise of HIV, teenage pregnancies and drop outs. Many girls who are not able to purchase sanitary towels often use other means like rags, leaves, feathers which are a risk to their health. These unhygienic materials may result in leakage, psychological discomfort, stigmatization, embarrassment, anxiety and shame. This has also been the cause of some suicide cases among school girls. It is on this note therefore that the Basic Amendment Act of 2016 which makes the government responsible for providing free sanitary towels to girls in all public basic institutions in Kenya was passed into law. The Government's Sanitary Towels Initiative's (GSTI) objective is to increase access of sanitary products to school

going adolescent girls which in turn would increase retention, moving to higher levels and improve their academic achievement. It also seeks to minimize cases of absenteeism and improve participation in education which will hopefully place them at par with the boys. The Social Pillar of Medium Term Plan III Kenya (2018-2022) also emphasizes on the need to enhance girls' retention in schools by scaling up this Government provision of sanitary towels. This provision targets girls at the risk of being excluded in educational participation. Since 2018, the GSTI has been of benefit to more than 3.5 million girls. There is need therefore, to establish the influence of this policy on girls' educational access and participation.

1.2 Statement of the problem

The United Nation's declaration that no one should be left behind in educational opportunities underscores the right of every learner to education. The issue of access and participation has been of great concern in the Kenyan context where gender inequalities are apparent in education with girls being hindered by several barriers such as poverty, early marriages; one of the barriers that is unspoken of due to cultural/societal stereotype is menstrual related issues; lack of sanitary towels. Poor access to sanitary pads in Kenya has been the cause for absenteeism, non-participation in school activities, poor health, lack of dignity and confidence thereby affecting education greatly. Education is an important instrument for a nation's development. This is why the GOK has put in effort to eliminate any barriers to equal access to education through interventions such as the Affirmative Action, Free Primary (FPE) and Day Secondary Education (FDSE) and the Government Sanitary Towels Initiative (GSTI). The GSTI is an intervention committed to eliminate menstrual related barriers. This is yet to be realized as evidenced by the continued

inequality in educational access and participation. There is need therefore to appraise the efficacy of this program in meeting the needs of adolescent girls during menstruation so that they can be able to access and participate in education up to completion levels. This study sought to address issues related to the trends of providing such sanitary towels, implications of such provisions on school girls' access and participation in Kuresoi South Sub-County, Nakuru County, Kenya.

1.3 Purpose of the study

The purpose of this study was to investigate the relationship between the Government's Sanitary Towels Initiative and educational access and participation of secondary school girls. This study sought to examine the influence of the Kenyan government's provision of sanitary towels on girls' educational access and participation.

1.3.1 Research Objectives

This study sought to:

1. Examine the trends of girls' access and participation in education prior to the Government's Sanitary Towels Initiative in Kuresoi South Sub-County, Kenya.
2. Analyze the trends in the provision of Government's sanitary towels to girls' secondary schools in Kuresoi South Sub-County, Kenya.
3. Evaluate the implications of the Government's Sanitary Towels Initiative on girls' educational access and participation in secondary schools in Kuresoi South Sub-County, Kenya.

4. Suggest strategies that can be employed to ensure the sustainability of Government's Sanitary Towels Initiative in enhancing girls' educational access and participation in secondary schools.

1.3.2 Research Questions

The study was guided by the following research questions:

1. What were the trends of secondary school girls' access and participation in education prior to the Government's Sanitary Towels Initiative in Kuresoi South Sub-County?
2. What are the trends in the provision of Government sanitary towels to girls' secondary schools in Kuresoi South Sub-County?
3. To what extent is the impact of Government's Sanitary Towels Initiative on girls' educational access and participation in secondary schools in Kuresoi South Sub-County?
4. Which strategies could be employed to ensure the sustainability of Government's Sanitary Towels Initiative in enhancing girls' educational access and participation in secondary schools?

1.4 Significance of the study

The findings of this research will add to the expansion of knowledge in the area of menstruation issues and education and can be used by other researchers as material for reference. Provision of sanitary towels to secondary schools by the Government of Kenya is a recent venture therefore this study may help the Government in discovering its efficiency on educational access and participation of girls.

The findings may also be beneficial to policy makers as it will provide a basis upon which effective policy on continuous supply of sanitary towels to all school girls in Kenya will be created. The research may also serve as an eye-opener to the community, parents and teachers on the implications of lack of access to sanitary towels on girls' access to and participation in education. It is on this note that they would likely support the Government's Initiative of providing the sanitary towels. The study will also help schools have empirical data in which they can come up with relevant policies to ascertain that the school environment eliminates menstruation issues as one of the barriers to the girl-child's full participation in education.

1.5 Limitations of the study

The study was limited to studying the efficacy of GSTI on girls' educational access and participation in public secondary schools and therefore the situation at private and primary schools was not captured. Girls have many challenges affecting their education such as: teenage pregnancies, drop out, performance but the study was limited to the issue of provision of sanitary towels and participation. This study was done in Kuresoi South Sub-County and not other counties in Kenya and therefore the findings may not be generalizable to the whole country because the characteristics of the study locale may differ to those of other areas in the country.

1.6 Delimitations of the study

There are many factors that affect access and participation of the girl child in education. However, this study only concerned itself with the GSTI in relation to girls' access and participation in education. It sought information from the following categories of

respondents: the county education officer, girls, teachers and principals in public secondary schools who have been the direct beneficiaries of the GSTI. This study used questionnaires, interviews and document analysis as instruments for data collection and not any other.

1.7 Assumptions of the study

The study was based on the following assumptions:

- a) That all the public secondary schools in Kuresoi South Sub-County had been receiving the sanitary towels provided by the government as it is a government initiative signed into the Basic Education Amendment Act of 2016.
- b) That the teachers in Kuresoi South Sub-County had been keeping attendance registers and hence the researcher will be able to find data regarding girls' attendance rates to school in relation to the Sanitary Towels Initiative.

1.8 Theoretical Framework

Liberal Feminist theory guided this research. This theory provided an explanation for the need to provide equal opportunities in education for both boys and girls. Jaggar (1983) is one of the proponents of Liberal Feminism and holds that this theory focuses on equality issues in the workplace, in education and in politics. This theory emphasizes on equality of all sexes. Equality of opportunity and freedom of choice are seen as important aspects of a person's wellbeing, which thus makes it possible for a progressive social change (Acker, 1987; Stromquist, 1990). Women should have equal rights because all people, regardless of gender or class, are born equal. Liberal feminism's major tenets stem from three key points which are: equal opportunities, socialization and sexual stereotyping and sexual discrimination (Acker, 1987). It is based on the idea that schooling is good and

therefore, it should be committed to equal opportunities in education for all learners irrespective of their gender. Liberal feminist solution is to eradicate barriers to women and girls' equal participation; whenever inequalities are detected in education, they should be done away with.

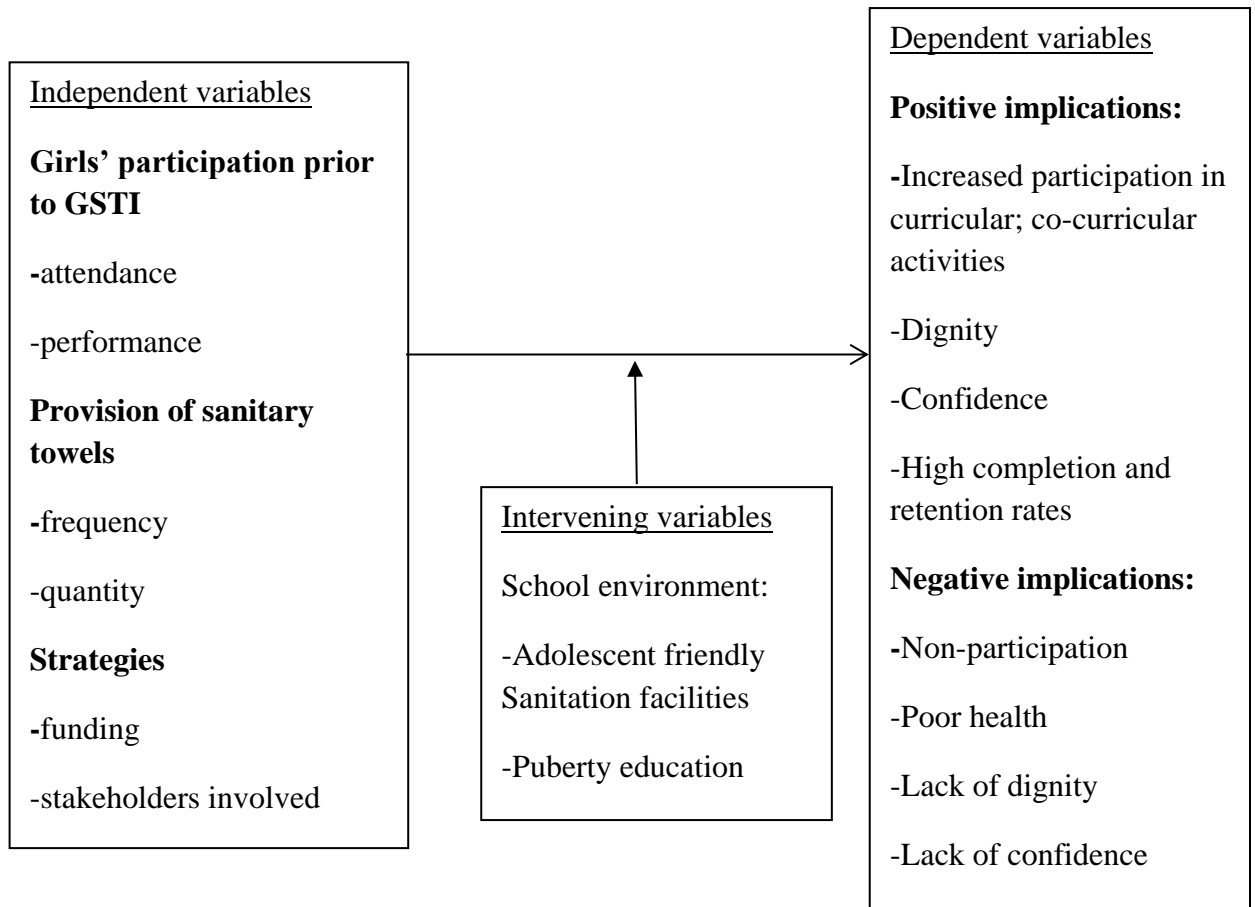
All the needs of both boys and girls should be taken as of equal importance because if these needs are not taken care of, education will be interrupted. Menstruation is a gender specific barrier and access to sanitary towels is a girl's need that if not taken care of, she cannot have the same educational experience as her counterparts. Liberal feminism seeks to change the society from within and therefore, provision of sanitary towels will ensure equal participation of girls in education just like the boys. Gender disparities in educational opportunities occur through failure to pay attention to girls' needs and this can be resolved by re-socializing society. Liberal feminists believe educating women, who make up more than half of the human population, will benefit society greatly.

Liberal Feminism was appropriate to this study as it gave explanations on what perpetuates gender disparity in education. It emphasizes on equality of educational opportunities for both boys and girls through interventions. Since lack of sanitary towels is a gender-specific hindrance, the government intervention of providing these sanitary towels affords girls the chance at a better education as the boys. Therefore, there was need to study this intervention to understand its efficacy in doing away with gender disparity in education.

1.8.1 Conceptual Framework

This framework was the conceptualization of the relationship existing between the Government's interventions, as it sought to do away with educational inequalities and Educational Access and Participation derived from the above theory of Liberal Feminism. Figure 1.1 depicts the relationships between the variables; the independent variables which are: girls' participation prior to GSTI, provision of sanitary towels, access and participation in curricular and co-curricular activities and strategies to improve GSTI. The dependent variable was the educational access and participation. The provision of sanitary towels by the government implied increased attendance rates, participation in co-curricular and academic activities by the girls. It was also conceptualized that the provision of sanitary towels means increased concentration hence active engagement in class activities. There were implications on the dignity and confidence of the girls through this provision thus making a difference in the co-curricular participation of secondary school girls. Lack of sanitary towels could also have a negative implication of non-participation, poor health, lack of dignity and confidence. The presence of all these factors impacted on girls' access and participation in education. There were intervening variables that might affect the outcome that is the school environment whose indicators are adolescent friendly sanitation facilities and puberty education.

Figure 1.1 Conceptual Framework



Source: Researcher, (2021)

1.9 Operational Definition of Terms

Access: refers to the process which entails the opportunities available for secondary school girls to enter and complete the education process.

Efficacy: it refers to the ability of an intervention, the provision of sanitary towels, to produce an intended result.

Sanitary Towels: refers to a disposable absorbent material that the government has provided to girls in basic institutions for use during their menstruation.

Government's Sanitary Towel Initiative: this refers to the Kenyan Government's program of providing sanitary towels to all girls in public primary and secondary schools.

Participation: refers to the process pertaining enrollment, retention and completion of secondary school girls and taking part in all activities pertaining to learning in school.

Menstrual health: it refers to a state of being fully physically, mentally and socially well in all matters relating to the menstrual process.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents literature review on the influence of provision of sanitary towels on access and participation of secondary school girls in education. The literature was reviewed thematically on the provision of sanitary towels to schools by various governments, girls' school access, co-curricular participation and academic participation in relation to the provision of sanitary towels. This chapter also presents the summary of the literature reviewed and identification of study gaps.

2.2 Provision of sanitary towels by governments to schools.

The UN's Commission on the Status of Women in its sitting of 2018 came up with some Agreed Conclusions. These included the recommendations to governments, inter-governmental bodies and NGOs to put in place measures of promoting educational and health practices to build a culture in which menstruation is seen as healthy and normal, and girls are not stigmatized as a result of this (UNESOC, 2018). This official recognition of menstruation as a global concern is a significant step forward. Several governments have taken measures to eliminate menstruation related barriers. For instance, Yeginsu (2018) notes that Scotland has become among the first Governments to issue free sanitary towels to students at schools, colleges and universities.

In South Africa, the national government took a significant step towards Menstrual Hygiene Management in 2017 through the publication of the Sanitary Dignity Policy Framework (SDPF) meant to be a framework on the provision of sanitary products to indigent people. The main goal of this policy is to provide all girls and women the

opportunity to manage menstruation in a dignified manner (SDPF, 2017). The constitutional court of South Africa recognizes the right to dignity and the right to life as the essential human rights therefore the capacity to regulate menstruation with dignity is critical to the human rights of girls and women. Preservation of a woman's dignity during menstruation is linked to access to adequate sanitary products. Lack of access to such products has been known to be the cause of absenteeism from schools and poor health. The South African province of KwaZulu also initiated providing free sanitary towels to school girls (Dawkins 2018). The above study though featuring a country with differing characteristics to Kenya was relevant to this current study as it outlined the South African government's provision of sanitary towels to girls and women.

Ameade and Majeed (2015) conducted a survey to find out what female university students thought on the Ghanaian government's provision of free sanitary pads to secondary school girls. Majority of the respondents (53.2%) supported this policy outlining the main reason for their support as the unaffordability of sanitary products due to their high cost. The Ghana Statistical Service (2014) estimates a quarter of Ghana citizens are poor with an annual earning of less than 1.314 Ghanaian Cedi thus for these poor families, it is a big challenge to spend at least 54 Ghanaian Cedi annually to cater for each menstruating female in the family. Ameade and Majeed (2015) also found out that 36.9% of the students had their schooling negatively affected by menstruation with their greatest worry being soiling their uniforms and discomfort leading to not concentrating in class, absenteeism, restrained physical activity and self-consciousness. Whereas Ameade and Majeed's study was carried out among university students in Ghana, the current research was done among high school learners in Kenya. This current study benefited from Ameade and Majeed's study on the

Ghanaian government's policy on provision of sanitary towels. The current study however, sought to examine the current situation of secondary school girls in Kuresoi South Sub-County Kenya.

The government of Kenya, through the Basic Education Amendment Act of 2016 has been tasked with the obligation of supplying sanitary towels to all girls in public primary and secondary schools. This initiative is under the Ministry of Public Service, Youth and Gender Affairs in partnership with Ministry of Education which states that the total number of beneficiaries is 3,703,451 girls who collectively receive 14,813,813 packets of sanitary towels. The total budget allocated for this is 470 million Kenyan shillings. The Government's Sanitary Towels Initiative's objective is increasing access of adolescent girls to sanitary products which in turn would increase retention, transition to higher levels and improve their academic achievement. It also seeks to minimize absenteeism cases, improve participation in education which will place them at par with the boys.

An assessment of secondary school pupils' attitude regarding menstruation in Kenya, presented findings that 56.25% of the respondents had used other items to replace sanitary towels during menstruation such as cloth, piece of mattress and cotton wool because they could not afford to purchase sanitary towels (Malusu and Zani, 2014). Wang'anya (2018), in a research in primary schools in Matung'u sub-county Kenya, found out from all the schools studied that they had received sanitary towels from the government and it had a positive impact on girls' education. Wang'anya's study was beneficial to the current study as the researcher also sought to look into the Kenyan government provision of sanitary towels to school girls. However, Wang'anya's (2018) research only stated that the

government's provision of sanitary towels had a positive impact on girls' education creating a gap on the efficacy of this provision which the current research sought to fill.

2.3 Girls' educational access and participation in relation to provision of sanitary towels

Proper menstrual management is crucial in an educational setting this entails: sanitary material for managing menstruation, safe latrines and toilets, adequate water and disposal mechanism that should be provided. All these are beneficial to all members of the school community and when they are not met girls are at risk of not gaining quality educational experience (UNESCO, 2014). The school experiences of girls are impacted negatively when they are not able to participate, uncomfortable or distracted due to anxiety over menstrual incidents (Mason et al, 2013). Educational access and participation encompass both the academic or curricular and co-curricular aspects.

2.3.1 Academic access and participation

Lack of sanitary towels has been an issue for girls and young women in not only the developing countries but also the developed ones. A research on period poverty by Plan International UK (2017) revealed that in the UK, one in ten girls (10%) could not afford sanitary wear, while 15% and 14% had to struggle and borrow from friends. The research comprised of 1000 girls where 49% of the girls admitted to missing a school day as a result of menstruation and lack of sanitary towels to manage it (Plan International UK, 2017). A study conducted by the School of Oriental and African Studies (SOAS), University of London in Uganda reveals that providing free sanitary towels and puberty education has an impact on girls' school attendance. This was conducted across eight schools at Kamuli district in Uganda. This research aimed at finding out if there was an improvement in school

attendance when there was provision of sanitary towels. The findings showed that access to sanitary care and puberty education for school girls improved attendance. On average, increase in attendance rates was by 17% which is equal to 3.4 learning days in every 20 days (Dolan & Tofaris, 2018).

A quasi-randomized study of 435 primary school girls across eight schools in rural Uganda investigated the impact of poor Menstrual Hygiene Management (MHM) on girls' education (Montgomery et al, 2016). The study desired to discover the psychosocial and education outcomes of their menstrual hygiene practices. The consequences of poor MHM were reported as negative health, psychosocial and education outcomes. Over half of the girls stated they couldn't stand in class to answer questions and that it was difficult to concentrate in class during menstruation. The common reasons for difficulty in concentration were fear of leakage and discomfort. Those who could afford to change menstrual absorbents three or more times a day reported higher attendance and concentration in school.

The UN report of 2016 estimates 1 in 10 girls in Sub-Saharan Africa miss school during their menstruation period (UN, 2016). Studies done in Kenya have demonstrated an association between absenteeism and lack of sanitary towels during menstruation. Wang'anya (2018) in a study in Kakamega, Kenya, present 44% of the participants stating that they absented themselves from school during menstruation due to lack of sanitary towels and 32% of them reporting that they could not concentrate on their studies because of the same. School attendance is crucial to academic achievement (Korir, Bett, Charo & Thinguri, 2014). Wang'anya's (2018) research was a case study of primary school girls

and how their performance is impacted by the provision of sanitary towels. The same study had a total of 108 respondents consisting of classes 5,6,7,8 girls. This current study had a larger sample size of 327 respondents comprising of secondary school girls unlike the earlier study of primary school girls.

Availability of sanitary towels influences attendance of class by girls as evidenced by a study by Muthaa and Njue (2015) in Garissa County primary schools with the majority (71.4%) of respondents indicating that the girls' attendance in class was impacted more by availability of sanitary towels. Majority of the girls 60% could not fully participate in school during menstruation because of fear of being laughed at if they messed up their clothes. The girls were polled to see if they thought the availability of sanitary pads influenced their concentration in class, 72.4% were of the opinion that it influenced concentration to a greater extent. The majority were also of the perception that the availability of sanitary towels had a significant impact on the performance of female students in class (Muthaa & Njue, 2015). Muthaa and Njue (2015) solely focused on girl-child participation influenced by the availability of sanitary facilities. The current study benefited from their research on the aspect of educational participation, but added on the aspect of educational access of girls as influenced by the availability of sanitary towels. These researchers also used descriptive survey design; questionnaires and interview schedules in data collection which are similar to what the current study employed in the data collection process.

Wambui (2019) in a research of primary school girls' performance in Njoro, Kenya also found out most of the girls reporting that they did not find it easy to participate in class

throughout their periods. Wambui's study differs from this current study in that the former's study key respondents were primary school girls whilst the latter's were secondary school girls. The reviewed literature also shows studies done in other areas for instance, Njoro, Kenya (Wambui, 2019). Little has been done concerning sanitary towels provision and educational participation of girls in Kuresoi South Sub-County, Kenya therefore this study intended to fill this gap by conducting the research there.

2.3.2 Co-curricular access and participation

Education is wide and encompasses learning that takes place in and even beyond the classroom. Education should contribute to the overall development of an individual. It comprises of curricular and co-curricular activities. Curricular means education taking place is outlined in a curriculum showing the subjects to be taught and the content. This differs according to a country's system of education. Co-curricular activities on the other hand complement the academic aspect and they pertain to activities that take place outside the classroom. They are not graded but they provide complementary learning of some form. These activities include but not limited to taking part in sports, clubs and societies.

Ampofo and Orodho (2014) point out that the skills that learners obtain from co-curricular activities prepare them for the future especially since it makes students learn to work in teams; they also get to exercise their bodies, take initiatives and recreate. Participation in competitive sports has a substantial relationship with school connectedness (Kisango, 2016). A study by Kisango (2016) in Kenya, on participation of students in co-curricular activities, showed that there are several factors influencing students' participation in these

activities. Such factors include school funding, infrastructure, teachers and parental motivation.

Research done by Betty For Schools (2017) on 2000 female respondents from across the UK showed many young women not taking part in sports during menstruation due to a number of reasons; 46% said that they had refrained from participating in sports and games while in school with 39% attributing this to fear of leaking and soiling their clothes. Another 63% of the young women said that they actually dreaded taking part in co-curricular activities especially the physical ones like sport during their menstruation; while 74% were of the opinion that period shame was among the main hindrances to girls participating in sport (Betty For Schools, 2017).

Participating in co-curricular activities require free movements and total interactions with each other. In a study done in Zambia, most girls disclosed that they isolated themselves and restricted themselves from movements as much as possible, playing and even social interaction; they are not comfortable to the point that they do not participate in most activities. This is because most of them lack sanitary towels and they fear their makeshift pads may drop or leak if they involve themselves in co-curricular activities during this period (Chinyama, Chipungu, Rudd et al., 2019). Lack of proper menstrual management affects girls' confidence and ability to perform physical activities (Mason et al., 2013). These studies have majored on the physical aspects of co-curricular activities particularly sports and games providing a gap on other forms of co-curricular activities such as clubs and societies. This study focused on all aspects of co-curricular activities. Locally, little has been done concerning lack of sanitary towels and co-curricular participation. Most

studies on these are from other places such as: the UK (Betty For Schools, 2017) and Zambia (Chinyama, Chipungu, Rudd et al., 2019). This research therefore sought to investigate this aspect in Kuresoi South Sub-County, Kenya.

2.4 Strategies for sustainability of provision of sanitary towels in enhancing girls' educational access and participation

The current support system for females who start their period while still in basic institutions globally is insufficient (Sommer, Sutherland and Chandra, 2015). According to Dolan and Tofaris (2018), national and local regulations on sanitary towel distribution and disposal in educational settings, including primary schools, should be in place. The policies at each institution should be reviewed frequently. Sanitary towels should be easily accessible so that a girl does not have to ask a staff member for them, and there should be disposal containers within cubicles so that waste can be disposed of quickly and discretely. Every primary school ought to teach about menstruation. Although girls between the ages of 10 and 11 often first get to discuss the topic in class, for some girls this will be too late. It is harder to deal with menstruation at school than it is at home.

Schools should offer sensitive and helpful guidance to assist young girls in handling the problem discretely. School health personnel, in particular school nurses, might actively encourage schools to address the existing lack of provision in addition to assisting schools in developing such advice as part of each school's personal and social education program. Young people through a range of formal and informal sources learn menstrual information (Anand and Garg, 2015). Some girls begin their periods for the first time (whether at school or otherwise) without being aware of menstruation, which must be incredibly terrifying.

According to a research by Chinyama, Chipungu, Rudd et al., 2019, students who mature earlier than their peers experience higher levels of distress. Some parents will not (or will feel unable to) discuss the subject with their children, so it is critical that children learn about menstruation while in school. This means that teachers must be at ease when discussing menstruation with their students. Puberty and menstruation should be covered in teacher education so that all teachers feel informed and capable of discussing the subject. Teaching should also obviously account for cultural, ethnic, racial, and religious differences in development and attitudes, be appropriately timed and provide appropriate information for both girls and boys (Muralidharan, Patil and Patnaik, 2015). Girls want information on sanitary protection, such as what to use, when and how to use it, and for how long. They also want to know about blood volume, towel absorbency, and disposal methods.

Sanitation and sanitary pads should be provided concurrently. Dolan and Tofaris' (2018) study found out that the loss of sanitation facilities has been a shocking side effect of the ministry of health's provision of free sanitary pads in Kenya. Many schools lack access to adequate waste disposal systems. Pit latrines in girls' toilets quickly filled up after disposable sanitary pads were introduced to schools. Students were forced to defecate in public, which did more harm than good. To address this issue, the government is now looking into more sustainable solutions such as reusable sanitary towels. The proper disposal of sanitary towels is critical in creating safe, sanitary, and long-lasting toilets for girls (UNESCO, 2018).

2.5 Summary and study gaps identification

The above literature reviewed has identified the implications of sanitary towels on girls' education not only in Kenya but also globally. It is evident that the extent of these implications on girls' education differ according to regions with those living in poverty being affected more. Studies by Ameade and Majeed, (2015) indicate that lack of sanitary towels in one way or another impacts on girls' education. This study further concludes that provision of sanitary towels to school girls is an intervention that has sought to eliminate menstruation related barriers.

Most of the scholars' work reviewed focused on perception of students towards menstruation (Malusu and Zani, 2014), impact of sanitary towels provision on performance (Wambui, 2019) and attendance of girls in education (Wang'anya, 2018). These studies touched on some extent the aspect of educational access and participation. The current study strived to look into access and participation in education deeply in relation to provision of sanitary towels. Studies on provision of sanitary towels and menstruation have also mostly focused on primary school girls (Wambui,2019; Muthaa and Njue, 2015; Wang'anya, 2018) whilst the government of Kenya provides sanitary towels to both primary and secondary school girls. This study intended to fill this gap by looking at the secondary school girls' context. The current study also goes ahead to explore policies in place unlike other studies such as Chinyama, Chipungu, Rudd et al. (2019), which looked at participation of girls in education as affected by menstruation.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents methodology that guided the study. It is presented in several sections: research design, variables, location of the study, target population, sampling techniques and sampling size, research instruments, piloting study, validity and reliability of research instruments, data collection techniques, data analysis, logistical and ethical considerations.

3.2 Research Design

This study adopted descriptive research design using a survey method in collection of the data. The design used both qualitative and quantitative research paradigms. Kombo, (2006) noted that descriptive design is ideal for collecting information on people's opinions on educational issues. Through this design, one collects information by administering questionnaires and conducting interviews. It was appropriate for the study as it enabled the researcher to collect data from an education officer, public secondary schools' principals, teachers and learners on the efficacy of GSTI on girls' educational access and participation in Kuresoi South Sub-County, Nakuru County.

3.2.1 Variables

The independent variable in this study was the Government's Sanitary Towels Initiative. The dependent variable was the educational access and participation of secondary school girls. The intervening variable was the school environment.

3.2.2 Study Locale

The study was conducted in public secondary schools in Kuresoi South Sub-County one of the 11 sub-counties in Nakuru County. The need for such a study in Kuresoi South Sub-County was necessitated by the prevalence of the location having the lowest number of females in secondary schools as reported by the Nakuru County Education office. Kuresoi South had a population of 4016 girls in secondary schools in the year 2019 as compared to those of other areas such as Naivasha (13189), Njoro (9352), Nakuru North (9549), Kuresoi North (6686) and Subukia (4152) (Ministry of Education, Nakuru County, 2019). The locale is also a rural area made up of a community of mostly farmers with low income. There are high rates of poverty with the KNBS (2018) estimating a total of 26.6% of the community with stable income (those employed and in business) and the other 73.4% struggling to earn their livelihood. This therefore means that most families cannot afford to meet many expenses including catering for sanitary towels for the females in the household. GSTI is an intervention aimed at improving girls' access and participation in education. Kuresoi South Sub-County was therefore suitable for this research as the scholar was concerned on the efficacy of the intervention (GSTI) on girls' educational access and participation. The study locale also provided contexts, which were representative of other parts of the country.

3.3 Target Population

The target population was 3160 secondary school girls, 92 teachers and 23 principals in public secondary schools in Kuresoi South Sub-County. Principals were part of the respondents because they are the ones responsible for receiving the sanitary towels from the government hence knowledgeable on the government's sanitary towels initiative.

Teachers were also helpful in providing information regarding educational access, participation of the girls in academic and co-curricular activities in relation to provision of sanitary towels. Secondary school girls were part of the respondents as they are the direct beneficiaries of GSTI and were therefore suitable to provide information on how the intervention has influenced their education. The County Education Officer was also important to inform the study on policy issues concerning GSTI.

3.4 Sampling Techniques and sample size

This section outlines the sampling techniques and sample that was drawn from the target population for the current study

3.4.1 Sampling Techniques

This study employed techniques namely: purposive, stratified and simple random sampling to select the respondents. Stratified random sampling was applicable in selecting secondary schools from each category. There was an equal allocation whereby the same number of schools was selected from each category (mixed day, mixed boarding and girls boarding) in Kuresoi South Sub-County as shown in Table 3.1. In purposive sampling, a sample is picked by the researcher because they are informative to the study (Mugenda and Mugenda, 2003). This was useful in picking all principals from the selected schools and an education officer. To choose teachers and learners from selected schools, simple random sampling was utilized.

Table 3.1 Table of secondary schools sampled.

Category of schools	Number of schools	Sample size
Mixed Day	15	2
Mixed Boarding	2	2
Girls Boarding	3	2
Total	20	6

3.4.2 Sample Size

A sample size is referred to as the quantity of items selected to be the sample for a study (Kothari, 2004). 329 respondents made up the sample size. The researcher used 10% to decide the number of students that were selected. This is because 10% of large population and 30% of small population is statistically significant and generally acceptable in social sciences. Therefore, 316 secondary school girls, 6 teachers; one from each of the six schools selected, 6 principals and 1 education officer made up this sample size. Table 3.2 is the summary of the study sample.

Table 3.2 Sample Size Distribution.

	Number	Sample size	
Students	3160	316	10%
Teachers	21	6	30%
Principals	21	6	30%
Education officer	1	1	
Total	3203	329	

Source: Researcher (2021)

3.5 Research Instruments

Three sets of research instruments were utilized to gather data useful in achieving the objectives of the study. These instruments include: questionnaires, interviews and documentary analysis.

3.5.1 Questionnaires

Questionnaires are research instruments considered the best for descriptive research design (Kombo and Tromp, 2006). Cohen, Manion and Marrison (2011) categorize questionnaires as unique, detailed tools that will aid a researcher to collect information on a broad range of aspects on study variables. Questionnaires are advantageous for a number of reasons: reduction of biasness, its ability to acquire information from a huge number of people simultaneously and ease of gaining information with the aspect of confidentiality (Graveter and Forzano, 2003). Issues dealing with human reproductive system such as menstruation are considered sensitive hence the importance of questionnaires to collect such information. Questionnaires were administered to secondary school girls as it helped them

disclose confidential information regarding their menstruation and lack of sanitary towels as an issue affecting their education. The questionnaire (Appendix I) was sectioned to three. The first part was about the students' profile such as age, whom they live with and socio-economic status of the parent/ guardian. The second part involved background information on menstruation of the girls whereby the researcher was interested in the age when they started menstruating and their general experience on menstruation. The third section was on the trends of provision of GSTI and its implications on girls' educational access and participation.

3.5.2 Interview Schedules

Interviews are research instruments involving oral administration of questionnaires or interview guides (Orodho, 2017). Information was gathered through interviews with the education officer, administrators and teachers. The questions used were structured and open ended. The interview guide for principals (Appendix II) sought to get the opinion of principals on the efficacy of GSTI on educational access and participation of secondary school girls in Kuresoi South Sub-County. Appendix III is the interview schedule for teachers. The aim of this schedule was to find out from class teachers the impact of GSTI on girls' access and participation in education. This tool was suitable for this research because it ensured the reliability of information gained as the researcher had the opportunity to intensively examine the issue at hand. Through interviews, there is an opportunity for further clarification hence a complete and comprehensive understanding of the objectives from the respondents.

3.5.3 Documentary Analysis

This is an instrument that relies on documents to gain information. Documents refer to kept records of an event by the actual participants. This information is stored for the purpose of transmitting information that will be utilized in the future (Best, 2010). This research tool is crucial since it uncovers data which may not be gotten from any other source. According to Creswell (2012), data obtained from documents are well thought out since the concerned give attention towards compiling them. The research benefitted from school documents such as class registers, school enrollment registers and principals' data sheet.

3.6 Piloting Study

To enhance validity and reliability of the research instruments, a piloting study was conducted in one secondary school possessing the same characteristics as the target population. Piloting served as a pre-test for the instruments to be used in the actual study. Data collection procedures that were used in the piloting study were the same as those that were eventually used in the main study. This enabled the researcher to detect deficiencies in the tools and be able to correct them before the actual study. These deficiencies, for instance, lack of clear instructions, ambiguous questions or cluttered questions in the research instruments were revealed hence the researcher rephrased the questions until they were appropriate for the study. The piloting study allowed the researcher to change the instruments such that errors in the actual study were minimized and provided valid and reliable data (Kombo and Tromp, 2006).

3.6.1 Validity of the instruments

Best (2010), terms validity as the measure of how well the research tool measures what it is intended to measure. It is the extent to which the outcomes from analysis of data are actual representatives of what is being studied. Validity was measured by critical examination of the instruments by the researcher aided by the supervisors. After being subjected to this thorough examination, the content and the impression of the instruments were improved according to expert advice. Pilot study was also used as a basis to assess face and content validity of the research tools. This was done by incorporating expert recommendations concerning issues such as: the clarity of questions, instructions and relevance.

3.6.2 Reliability of the instruments

Reliability refers to the ability of a research instrument to yield the same results upon repeated trials (Orodho, 2009). The researcher employed the test-retest method for the respondents where there was repeated administration of questionnaires to the respondents in the pilot sample. The first test was administered then after two weeks a similar test was also administered. The consistency of the responses was then assessed by the researcher and therefore concluded on their reliability. Here, spearman rank order correlation was used to compute the correlation co-efficient. The findings were subjected to the following formula:

$$r = 1 - \frac{6(\sum d^2)}{N(N^2-1)}$$

Where \sum is summation, d^2 the sum of square difference between rank 1 and rank 2 and N is the population. The correlation coefficient obtained was 0.78 ($p > 0.75$) which ascertained the reliability of the instruments.

3.7 Data Collection procedure

This refers to the process of obtaining some information to prove certain phenomena under study (Kombo and Tromp, 2009). This process of data collection was divided into two stages. The first step was the preparatory stage, during which the researcher got authorization to collect data from the National Commission for Science Technology and Innovation (NACOSTI), after receiving approval from the institution. This research permit was given to the County commissioner and sub-county Director of education seeking further permission to conduct research in the study area. The actual data collection was the second phase.

3.7.1 Data collection

Primary data was collected using questionnaires and interviews. Secondary data was obtained through the analysis of relevant school documents. These tools were useful in generating both qualitative and quantitative data.

3.7.2 Administering the Questionnaires

The researcher visited the sampled schools to coordinate with the various principals concerning the research. The clarification of the study's purpose was given and rapport established with the various principals and with them, plans for the actual management of the research instruments were formed. With the assistance of a research assistant, the researcher oversaw the distribution of questionnaires to the students.

3.7.3 Interview process

The researcher liaised with the principals and the class teachers on the appropriate period to conduct the interviews. The researcher then conducted interviews with the principals and class teachers at the stipulated time. The interview proceedings were recorded electronically and manually.

3.7.4 Secondary Data Collection

This was obtained from analyzing the appropriate school documents. The documents that were analyzed included class registers and school enrollment registers.

3.8 Data Analysis and Presentation

This research used both quantitative and qualitative approaches of analyzing data. This is due to the fact that the objectives of this study had both qualitative and quantitative aspects. The questionnaires were made up of both open-ended and closed questions. The closed questions were analyzed quantitatively while the open-ended were analyzed qualitatively. Quantitative data was analyzed using descriptive statistics where data was coded, entered into the computer and analyzed using the Statistical Package for Social Sciences (SPSS) version 23. The respondents' responses on each item of the objectives were used to determine frequencies and percentages. The information was then displayed in the form of frequency tables and graphs. The qualitative data, on the other hand, was analyzed using content analysis which is a methodical methodology for compression of many text words into fewer categories of content based on the coding guidelines (Berelson, 1996). This was useful in deriving important content from observation and interview notes. The researcher then presented this data in narrative form thematically.

3.9 Logistical and Ethical Considerations

3.9.1 Logistical considerations

Before the data collection exercise, an introduction letter was first obtained from Kenyatta University Graduate School. This enabled the researcher to go ahead and obtain a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). The researcher also sought for a letter of introduction from the Nakuru county commissioner of education which aided in the introduction of the research in the sampled schools. The researcher also obtained permission from the principals of the sampled secondary schools in Kuresoi Sub-County in order to conduct the research.

3.9.2 Ethical considerations

The researcher ensured the respondents' privacy and confidentiality by instructing them not to write their names on the instruments. The researcher further used the letters of the alphabet to name the selected schools and their principals to maintain the confidentiality of the respondents. Informed consent was also ensured and no respondent was forced or otherwise bribed to take part in the research. This was done by assuring all the respondents that they were at will to participate in the study and that they could withdraw if they should wish so. Appreciation notes were sent to the schools after data collection.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the findings, interpretation and discussion based on the objectives of the study. The objectives were:

1. To examine the trends of girls' access and participation in education prior to the Government's Sanitary Towels Initiative in Kuresoi South Sub-County, Kenya.
2. To analyze the trends in the provision of Government's sanitary towels to girls' secondary schools in Kuresoi South Sub-County, Kenya.
3. To evaluate the implications of the Government's Sanitary Towels Initiative on girls' educational access and participation in secondary schools in Kuresoi South Sub-County, Kenya.
4. To suggest strategies that can be employed to ensure the sustainability of Government's Sanitary Towels Initiative in enhancing girls' educational access and participation in secondary schools.

The chapter is presented in several sections: general and demographic information of participants, and findings under each objective.

4.2 General and Demographic Information

4.2.1 General Information

The sample size for the study was 329 respondents made up of 316 secondary school girls, 6 teachers, 6 principals and 1 education officer. Purposive, stratified and simple random

sampling were employed in drawing the sample. The 316 students were to fill in the questionnaires. Among them, 315 responded to and returned the questionnaires duly filled contributing to a return rate of 99%. The great response rate might be due to the positive relationship between the researcher and the respondents.

4.2.2 Demographic Information

This segment describes the characteristics of the study population. The study sought to determine the gender distribution of the respondents, age of learners, teaching experience of the teachers and category of their schools. The study also further investigated the learners' background in terms of who they lived with and what their parents or guardians did for a living. The respondents were drawn from high schools in Kuresoi South Sub-County, Nakuru County. The learners were required to fill in their age in the first section. Majority (91.4%) were between 15-19 years old, while 4.8% and 3.8% were aged 10-14 years and 20- 24 years respectively. To realize the purpose of this study, the respondents were female students. The class teachers sampled were also female given the important role female teachers play in advising girls on how to deal with issues relating to menstrual management. As for the principals, only 2 (33.3%) from the 6 schools sampled had female principals while the other 4 (66.7%) were male. Table 4.1 shows the teachers' and principals' teaching experience.

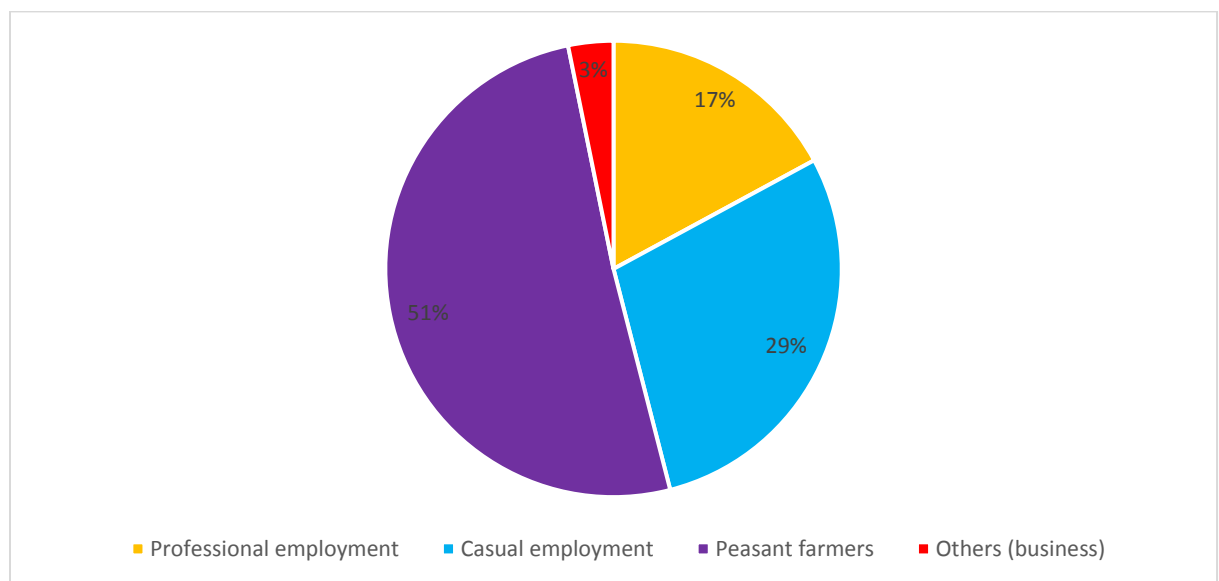
Table 4.1 Teachers and Principals teaching experience

Experience	Teachers		Principals	
	F	%	F	%
0-5 years	1	16.7	0	0
6-10 years	2	33.3	0	0
11-15 years	2	33.3	1	16.7
16-20 years	1	16.7	2	33.3
Above 20 years	0	0	3	50

Source: Fieldwork interviews (2021)

From table 4.1, majority (66.6%) of the class teachers had been teaching for 6-15 years. One teacher (16.7%) had an experience of 0-5 years and another (16.7%) 16-20 years. Most of the principals (50%) had been teaching for over 20 years, the minority (16.7%) had a teaching experience of 11-15 years and the others (33.3%) 16-20 years.

Figure 4.1 Pie chart showing means of livelihood for parents/ guardians



Source: Fieldwork questionnaires (2021)

Figure 4.1 illustrates 160 of the students (50.8%), reported that their parents/ guardians depended on farming as their primary source of income, 91 (28.9%) depended on casual employment, 54 (17.1%) on professional employment and 10 (3.2%) on businesses.

Table 4.2 Category of schools

Item	Frequency	Percentage
Girl’s boarding	105	33.3%
Mixed boarding	104	33%
Mixed day	106	33.7%
	315	100

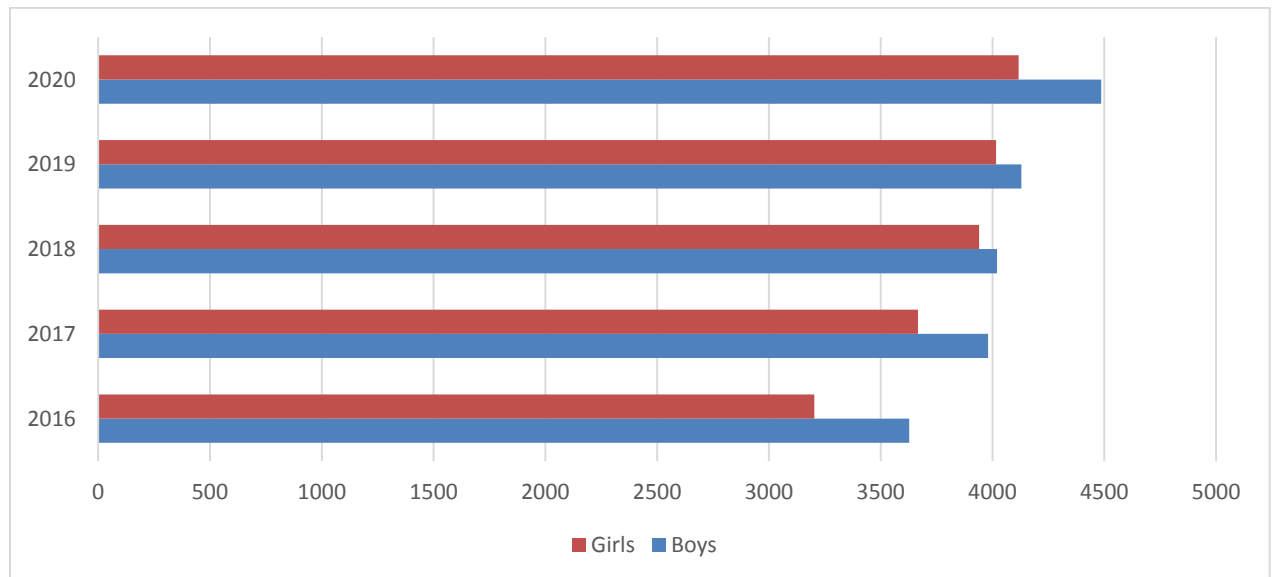
Source: Field work interviews (2021)

Table 4.2 shows what category of schools the respondents sampled for this research came from. The sample comprised of 105 (33.3%) learners from girls’ boarding school, 104 (33%) from mixed boarding and 106 (33.7%) from mixed day schools. The sample was almost equal in order to understand the situation from all categories of schools.

4.3 Trends of girls’ educational Access and Participation

The first objective of this study sought to examine the trends of girls’ access and participation in education before GSTI in Kuresoi South Sub-County, Kenya. To establish this, information was obtained from the interview schedules with the class teachers, principals and education officer, documentary analysis and student questionnaire. The study sought to examine access in terms of enrollment and participation trends of the girls and the various factors affecting this. Findings indicated that girls’ enrollment in secondary schools in the study locale were lower as compared to that of the boys. Figure 4.2 summarizes the findings:

Figure 4.2 Student Enrollment trends in Kuresoi South sub-county



Source: Field work documentary analysis (2021)

It is also evident from figure 4.2 that enrollment trends rose significantly in the years 2019 and 2020 and can be attributed to the introduction of GSTI from the year 2018. For the schools sampled, the trends were the same with boys' enrollment being higher than that of the girls. School A for instance, had a population of 409 students, 263 (64.3%) boys and 146 (35.7%) girls; school B had a population of 450, 250 (55.6%) boys and 200 (44.4%) girls; school C had a population of 240, 150 (62.5%) boys and 90 (37.5%) girls; school D had a population of 700, 380 (54.3%) boys and 320 (45.7%) girls; schools E and F were girl schools and had population of 502 and 540 respectively.

The research also aimed to identify trends in educational participation of the learners and the factors affecting the learners' educational access and participation. Through interview schedules, it was established that the participation trends of boys and girls in the study locale was almost at par. However, several factors brought about the differences in the

participation trends. These factors include poverty, teenage pregnancy, early marriages, menstrual issues, absenteeism and insecurity. A principal from one of the schools made the following statement concerning poverty in the study locale:

“Most parents here are small scale farmers and casual laborers especially as tea pickers at the estates. The students are also involved in this and you can find many of them during the holidays and weekends trying to make ends meet. Most of the boys are involved in the bodaboda business while the girls pluck tea because of the poverty in this area.” (Principal, school A)

The issue of poverty also cut across all the other factors with learners reporting that they had to miss school because their parents could not afford to cater for the costs of education. Data from Kuresoi South Sub- County education office revealed increased cases of teenage pregnancies among the secondary school girls also attributed majorly to poverty. The total number of pregnancy cases for the academic year 2020/2021 was 259. This was composed of 50 form ones, 51 form twos, 44 form threes and 63 form fours.

The researcher probed further on menstrual issues bringing about differences in access and participation trends of learners. Menstrual related issues such as lack of sanitary towels, abdominal pain and general discomfort were prominent. One of the girls indicated that:

“...lack of sanitary towels is a major issue that has been affecting our access and participation in education. This specifically causes fear of staining uniform and embarrassment.” (Student, School B)

This was also supported by one of the teachers from a mixed day school who made the following statement:

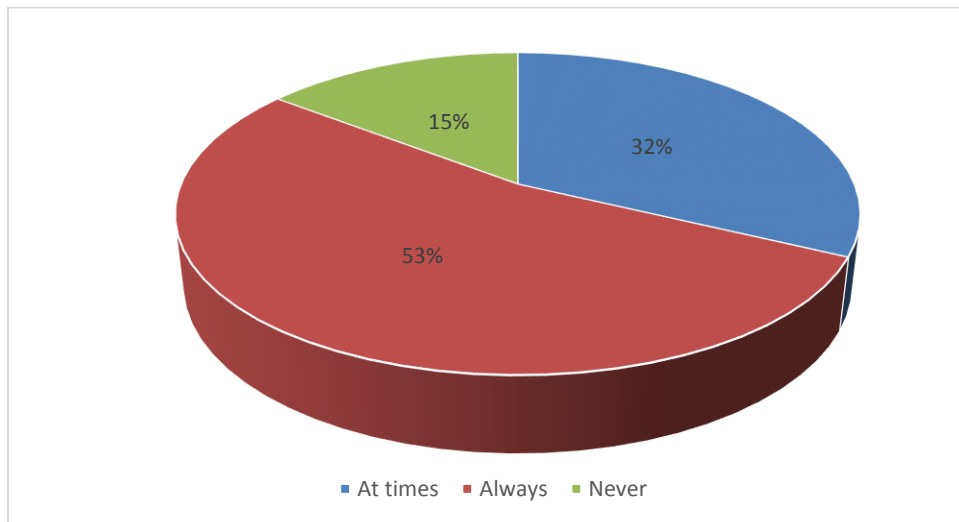
“... most of the learners here come from very humble backgrounds and cannot afford the basic amenities. Therefore, before the government started providing sanitary towels, those girls who began menstruating while in school went back home because they did not have sanitary towels. Most of them did not come back.” (Class teacher, school C)

Another teacher from a boarding school made the following remarks:

“... our girls have had a rough time in the past because of lack of sanitary towels. At such moments, they could not come to class and when they did, they lacked the confidence to participate fully. This is especially when a girl is expected to do some presentations and it is a male teacher so he wouldn't understand and excuse the girl.” (Class teacher, school D)

The study also sought the learners' responses on whether they attended school during menstruation. There were mixed reactions with majority of them 53% reporting that they were always in school, some (32%) attended school at times and the minority (15%) did not fully attend school during menstruation. Figure 4.3 shows the summarized presentation of the findings.

Figure 4.3 Pie chart showing attendance of girls during menstruation



Source: Fieldwork questionnaires (2021)

A documentary analysis of the previous class attendance records indicated a trend of 53% of the girls missing class for 2-3 days every month in the year 2017 prior to GSTI. The

years 2018 and 2019 witnessed an increase in total attendance of the girls with absenteeism rates of the girls generally at 40% and 28% for the two years respectively. These findings corroborated the findings of a study done by Dolan and Tofaris (2018) that sought to find out if there was an improvement in school attendance when there was provision of sanitary towels. The findings showed that access to sanitary care and puberty education for school girls improved attendance rates by 17% which is equal to 3.4 learning days in every 20 days.

It was evident that prior to the GSTI, lack of sanitary towels was a problem to secondary school girls in Kuresoi South sub-county. Access and participation of girls in education was affected greatly due to this. This is in line with Ameade and Majeed's (2015) study in Ghana which found out that 36.9% of the students had their schooling negatively affected by lack of sanitary towels during menstruation with their greatest worry being soiling their uniforms and discomfort leading to not concentrating in class, absenteeism, restrained physical activity and self-consciousness.

4.4 Trends in Government provision of Sanitary towels to girls in secondary schools in Kuresoi

The second objective of this study sought to analyze the trends in the provision of Government's sanitary towels to girls' secondary schools in Kuresoi South Sub-County, Kenya. First, the study sought to find out if the learners had received sanitary towels from other sources apart from the government. Findings indicated that most students were provided with sanitary towels by their parents or guardians. Only one, (16.7%) of the schools had received sanitary towels from well-wishers and non-governmental organizations. The other schools (83.3%) had to come up with their own means to provide

sanitary towels to those girls whose parents and guardians could not afford to prior to the GSTI. One principal who had recently transferred to one of the mixed day schools in the study locale noted the following:

“The other station I was in was along the highway and we received visits and donations from well-wishers and NGOs often. This place is kind of marginalized and it is rare to even see any visitors let alone receive help from other organizations.” (Principal, school E)

The respondents were then asked if they had been receiving sanitary towels from the government. The findings showed that of the 315 students who responded, 15 who account for the minority (5%) indicated that they had not received any sanitary towels from the government while 300 students, the majority (95%) had received them. These findings are presented in table 4.3

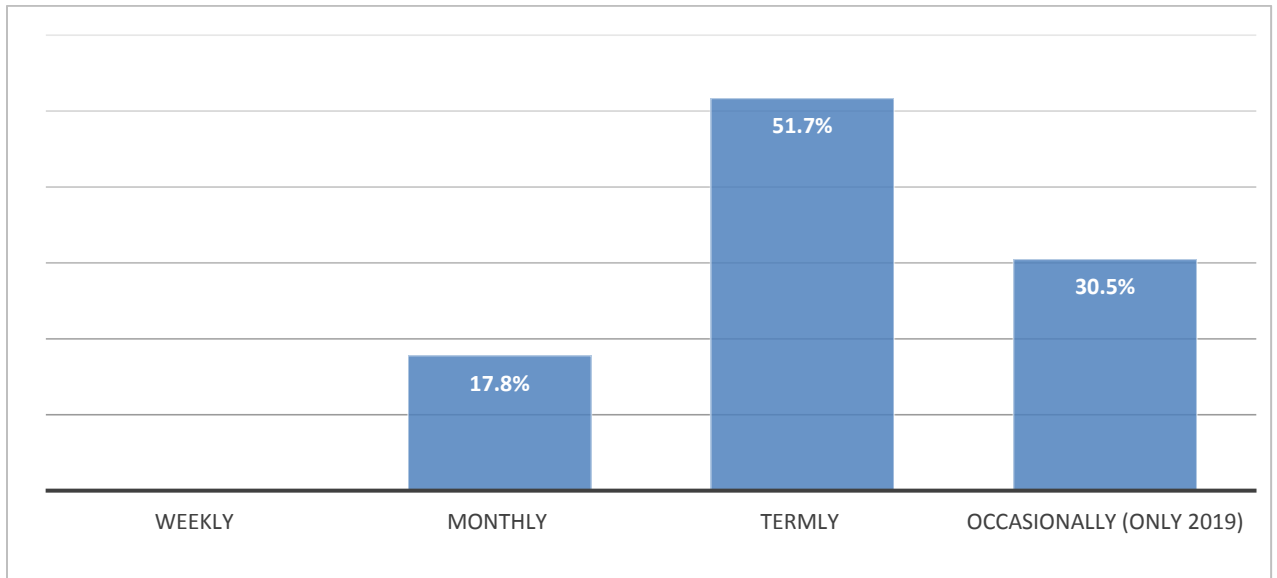
Table 4.3 Students’ responses on whether they receive sanitary towels from government

Item	F	%
Yes	300	95
No	15	5
Totals	315	100

Source: Field work questionnaires (2021)

Those who responded positively to having received sanitary towels from the government were further asked to indicate the regularity of the supply. From the questionnaires, 51.7% of the respondents were supplied with sanitary towels termly, 17.8% monthly while 30.5% indicated that they were supplied occasionally only once in the year 2019. The responses are illustrated in Figure 4.4.

Figure 4.4 Students' responses on the regularity of supply of sanitary towels



Source: Field work questionnaires (2021)

The researcher also sought to find out how the sanitary towels were distributed among the students. The majority, 135 (58.7%) of the students said that the sanitary towels were distributed only one packet per student while 52 (22.6%) were given two packets each and 43 (18.7%) were given three packets. None of the schools distributed more than three packets per student. This evidenced an unequitable distribution of the sanitary towels in the various schools. MHM 2019-2030 policy states that at least 2 packets per menstrual cycle is adequate for menstrual management and from the findings it is evident that the government only covers a small percentage of the girls' needs in terms of sanitary towels.

There were also issues on quality with the girls suggesting that the quality of the sanitary towels could be improved. One of them noted that:

“Some of the pads that we were given by the government were very light and could not be held firmly in place maybe because they did not put enough glue. They should also make them thicker and more secure.” (Student, school C)

Through an interview schedule with an education officer, the researcher attempted to establish the policy level on implementation of the government initiative on provision of sanitary towels. The education officer pointed out that this initiative was a partnership of the MOE and the MOH. Upon further probing on the implementation of this initiative in the study locale, the education officer made the following statement:

“...basically, counties are supposed to include this initiative into their County Integrated Development Plan and budget for it which this county has done. We have been receiving sanitary towels from the government from time to time. The school head teachers are then expected to come to the sub-county offices to pick the pads and take them to their schools. Unfortunately, the supply has been inconsistent recently especially due to the disruption of the school calendar.” (Education officer, A).

4.5 Educational Access and Participation of girls in relation to provision of Sanitary Towels

The researcher sought to find out the implications of the Government’s Sanitary Towels Initiative on girls’ educational access and participation in secondary schools in Kuresoi South Sub-County, Kenya. Responses on this were compiled from questionnaires and interviews and the findings are as shown below.

4.5.1 Academic Access and Participation of secondary school girls

In objective three, the study found it necessary to look at the academic or curricular aspect differently from the co-curricular aspect of education. To achieve this, the students were asked to indicate how much they agreed with specific GSTI assertions, as shown in table 4.4:

Table 4.4 Students’ responses on curricular participation

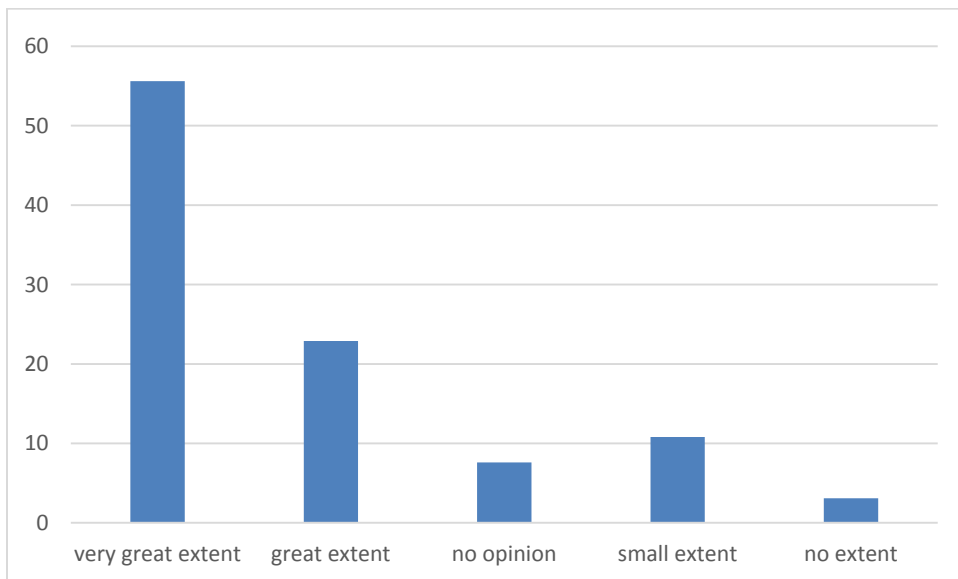
Item	Frequency				
	SD	D	N	A	SA
Always present in class	5 (1.6%)	16 (5.1%)	21 (6.7%)	91 (28.8%)	182 (57.8%)
Freely stand to answer questions	8 (2.5%)	32 (10.2%)	41 (13.1%)	86 (27.3%)	148 (46.9%)
Mingle freely with classmates	7 (2.2%)	36 (11.4%)	63 (20%)	104 (33.1%)	105 (33.3%)
Move freely even among boys	41 (13.1%)	74 (23.5%)	48 (15.2%)	54 (17.1%)	98 (31.1%)
Concentrate in study activities	12 (3.8%)	14 (4.4%)	47 (14.9%)	74 (23.5%)	168 (53.3%)
Comfortable in class during period	29 (9.1%)	51 (16.1%)	43 (13.5%)	52 (16.3%)	142 (45%)
Volunteer to dust the board	39 (12.3%)	39 (12.3%)	54 (17.1%)	90 (28.9%)	93 (29.4%)

Source: Field work questionnaires (2021)

Over half of the girls strongly agreed that the GSTI has positively impacted their participation in various activities in the classroom. The majority, 182 (57.8%) stated that with the GSTI they are always present in class while 91(28.8%), 21(6.7%), 16(5.1%), 5(1.6%) agreed, neutral, disagreed and strongly disagreed respectively. Majority of the girls also agreed that GSTI enabled them to freely stand and answer questions, mingle freely even among boys, concentrate in study activities, volunteer to dust the board and were comfortable in class during their menstruation period. These findings concur with Muthaa and Njue’s (2015) study that sought to find out whether girl-child participation in education was influenced by accessibility of sanitary facilities. According to the survey, 72.3 percent of the girls believed that the availability of sanitary pads had a bigger effect on their concentration in class and that the availability of sanitary towels had very large influence on the performance of girls in class.

The study also attempted to investigate the impact of sanitary towel availability on female class attendance. According to the majority (55.6 percent), the availability of sanitary towels had a significant impact on class attendance. The minority (3.1%) believed that the provision of sanitary towels had no effect on class attendance of girls. Another 22.9% indicated to great extent while 7.6% and 10.8% indicated no opinion and to a small extent respectively. Figure 4.5 present a comprehensive analysis of the same.

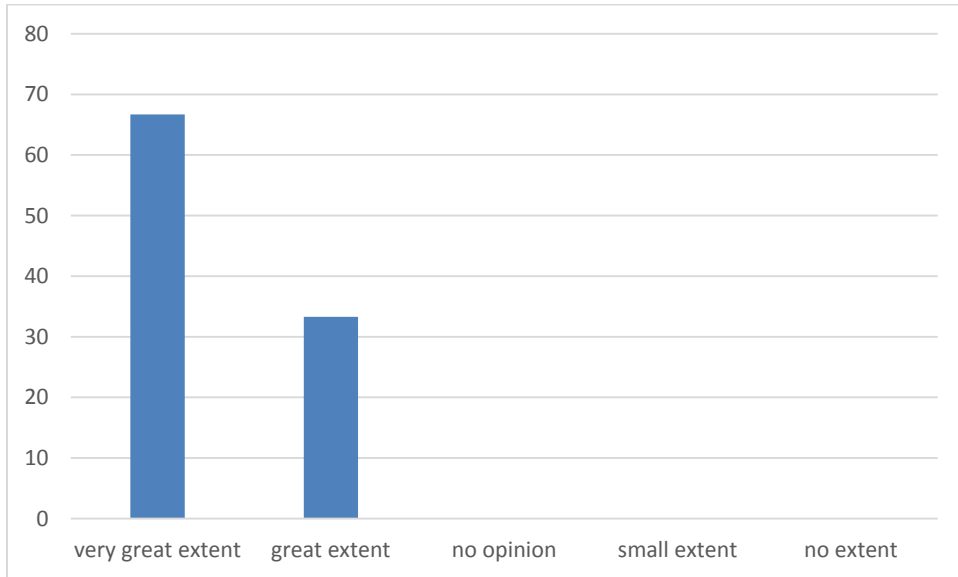
Figure 4.5 Students’ opinion on the extent to which sanitary towels influence their class attendance



Source: Field work questionnaires (2021)

The researcher was further interested to get the opinions of the class teachers on whether the availability of sanitary towels influence performance and to what extent. The majority 4 (66.7%), opined that it influences performance to a very great extent while the minority 2 (33.3%) to a great extent. The findings are summarized in figure 4.6:

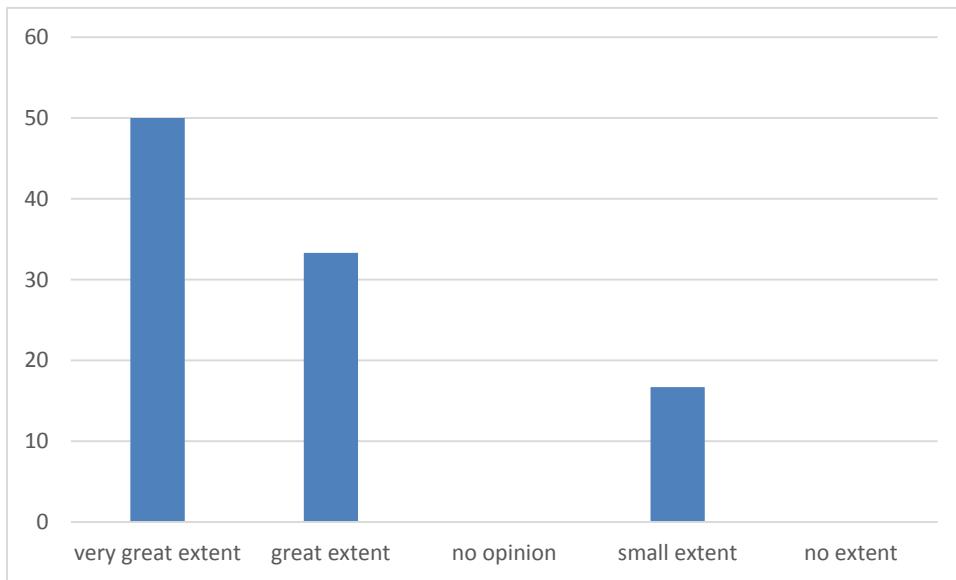
Figure 4.6 Class teachers' opinion on influence of sanitary towels on girls' performance



Source: Field work interviews (2021)

The study further sought the principals' opinions on the extent to which sanitary towels influence enrollment. A half of the principals (50%), held the opinion that it influenced enrollment to a very great extent, a third (33.3%) to great extent and 16.7% to a small extent. This is as shown in figure 4.7:

Figure 4.7 Principals’ opinion on influence of sanitary towels on girls’ enrollment



Source: Principals’ interview (2021)

To add on the above opinions, one teacher also said:

“Availability of sanitary towels has a positive impact. Girls are motivated to come to school because even if they lack the sanitary towels at home they know they can find them in school.” (Class teacher, school C)

This implies the positive outcome of provision of sanitary towels. The findings above are in line with Montgomery et al, (2016) study, which found out that access to adequate sanitary towels translated to higher attendance, higher performance and higher enrollment rates.

4.5.2 Co-curricular Access and Participation of secondary school girls

The respondents listed sports, games, clubs and societies as the co-curricular activities they took part in at school. The study sought to find out how often the girls participated in these activities during menstruation. Majority of the girls 135 (42.9%) indicated that they

participated in extracurricular activities on occasion during their menstruation period. Those who always participate in co-curricular activities even during menstruation were the minority 87 (27.6%) while the rest 93 (29.5%) never participate in the activities during menstruation. The results were summarized in table 4.5

Table 4.5 Participation in co-curricular activities

Item	Frequency	Percentage
Sometimes	135	42.9%
Always	87	27.6%
Never	93	29.5%
	315	100

Source: Field work questionnaires (2021)

The students were further prompted to explain why they wouldn't participate fully in the co-curricular activities during their menstruation period. According to the information obtained from the questionnaires, it was due to discomfort and fear of staining. This was noted through the following statement made by one student:

“...I do not take part in co-curricular activities during my periods when I do not have enough pads to change many times. I do not want others to know that I am on my periods when I stain my clothes so I just tell the teacher I am not well and I do not play.” (Student school F)

Interviews with class teachers also indicated lower participation of girls in co-curricular activities during menstruation. One female teacher noted the following:

“...you can easily notice when a girl is on her menses by the way she appears uncomfortable to the point of not participating. I have observed many of them restricting their movements, refraining from outdoor play and even social interaction. Upon inquiry, most of the girls who restrict themselves in such a

manner do not have adequate sanitary towels and therefore avoid moving that much so they do not stain their clothes. Those who afford to change sanitary towels regularly are freer, you can tell the difference.” (Female teacher, school B)

These findings agree with Chinyama et al., (2019) study which highlighted the main reason for girls not participating in co-curricular activities as the lack of sanitary towels and those with makeshift pads fear that they may drop or leak if they involve themselves in co-curricular activities during this period. The researcher further sought to know the impact of GSTI on the girls’ co-curricular participation. The GSTI had a favorable effect on girls’ involvement in co-curricular activities. The students highlighted issues to do with comfort, confidence and increased participation in co-curricular activities confirmed by their responses as follows:

“...this program by the government has enabled me to play comfortably this is because I now change before going to the field then I play freely and do not stain my clothes. (Student, school E)

“...when the sanitary towels are available, a girl plays and cheers freely and happily. This is because she can get enough to change as many times hence, she is comfortable.” (Student, school D)

“...this program has helped prevent shame, no one can know that I am on my periods now. It has given me confidence, raised my self-esteem and courage to participate and even mingle with others. (Student, school C)

One of the teachers also noted that:

“GSTI has brought positive impact. The girls are now more motivated to come to school and participate in all activities. Girls’ participation in co-curricular activities is at par with the boys. They now mingle freely with their classmates and take part in sporting activities with confidence.” (Class teacher, school B)

4.6 Strategies for sustainability of GSTI

The fourth objective sought to offer techniques that can be used to guarantee the sustainability of Government’s Sanitary Towels Initiative in enhancing girls’ educational

access and participation in secondary schools. To address this, information was sought from teachers, students and the education officer through questionnaires and interviews.

The majority (82.5%) suggested that there should be increased supply of the sanitary towels to ensure that everyone has enough to take them through the year. The government should also invest more resources in the production and supply of the same. The students noted that:

“The government should supply a lot of sanitary towels to schools that we may get them every month. The sanitary towels should be made available throughout the year. The regular supply would help avoid shortages and this would be of great help especially to those girls from humble backgrounds.” (Students)

From the interview schedules, one teacher suggested that:

“There have always been problems on supply and therefore the government should agree on policies stating clearly what should be done. The supply should be regular as over half of these students are needy, and it will boost their attendance in school especially during that period.” (Class teacher, school F)

Another teacher from a different school said:

“The leadership beginning from the principals should air these issues during their meetings so all girls are given priority especially here in Kuresoi where most parents are humble and most depend on bursaries to pay school fees.” (Class teacher, school E)

An interview with one Education Officer shed more light on the GSTI:

“The problem is always on funding, if only the government would gear more resources towards this initiative, then there would not be shortages. Sensitization on government policies is also prudent so that all the education stakeholders understand clearly how this initiative is run and what the public is entitled to.” (Education officer, Kuresoi South)

It is clear from the above findings that while there is policy on this initiative as stipulated by the Menstrual Hygiene Management (MHM) policy (2019-2030), the stakeholders have

not been sensitized and are therefore not aware of how this initiative runs. The study concludes that for the sustainability of this initiative, all stakeholders should be sensitized on the policy guidelines. There were also issues on quality with the girls suggesting that the quality of the sanitary towels could be improved. One of them noted that:

“Some of the pads that we were given by the government were very light and could not be held firmly in place maybe because they did not put enough glue. They should also make them thicker and more secure.” (Student, school C)

Educating about menstruation was also another strategy mentioned by the respondents.

One of the principals during the interview observed that:

“This community is a bit conservative and issues to do with sexual and reproductive health are not talked about openly. The girls here from the way they have been socialized find it hard to open up about their issues, most learn of these things from their friends. It would be prudent if in addition to provision of sanitary towels, everyone is educated on menstruation.” (Principal, school F)

One student added that:

“...we were given some underwear and sanitary pads and were not educated on how to use them. I learnt from my friends because I could not ask anyone at home. They should also educate us on menstruation and how we are supposed to deal with it especially on the hygiene and the stomach pain. We were also given some iron pills once but they did not explain exactly what it was for” (Student, school A)

These sentiments are in line with the MHM (2019-2030) policy whose objective, in addition to providing safe and hygienic menstrual products, is to combat myths, taboos and shame associated with menstruation by providing women, girls, men and boys access to on menstruation information.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes research findings, presents the conclusions and makes recommendations. Lastly, the chapter provides suggestions for further research. The study investigated the efficacy of GSTI on girls' educational access and participation in Kuresoi South Sub-county. The study was guided by the following research questions:

1. What are the trends of secondary school girls' access and participation in education prior to the Government's Sanitary Towels Initiative in Kuresoi South Sub-County?
2. What are the trends in the provision of Government sanitary towels to girls' secondary schools in Kuresoi South Sub-County?
3. To what extent is the impact of Government's Sanitary Towels Initiative on girls' educational access and participation in secondary schools in Kuresoi South Sub-County?
4. Which strategies could be employed to ensure the sustainability of Government's Sanitary Towels Initiative in enhancing girls' educational access and participation in secondary schools?

5.2 Summary of the findings

5.2.1 Trends of girls' Access and Participation in Education

The first objective focused on examining the trends of girls' access and participation in education prior to the Government's Sanitary Towels Initiative in Kuresoi South Sub-County, Kenya. The study sought to examine access in terms of enrollment and

participation trends of the girls and the various factors affecting this. The findings indicated disparity in educational access and participation trends caused by factors such as poverty, teenage pregnancy, early marriages, menstrual related issues and insecurity. The study was specifically interested in menstrual related issues and it found out that lack of sanitary towels was a major issue affecting the girls' educational access and participation.

Most students were provided with sanitary towels by their parents or guardians. Those who could not afford purchasing the sanitary towels, had to go back home when they began menstruating while in school. Those girls in boarding schools also faced a rough time and had to miss classes when they did not have the sanitary towels. Even when they attended class, they did not participate with confidence. There was a trend of 53% of the girls missing class for 2-3 days every month in the year 2017 prior to GSTI. The years 2018 and 2019 witnessed an increase in total attendance of the girls with absenteeism rates of the girls generally at 40% and 28% for the two years respectively. Only one of the schools had received sanitary towels from well-wishers and non-governmental organizations. The other schools had to come up with their own means to provide sanitary towels to those girls whose parents and guardians could not afford to prior to the GSTI.

5.2.2 Trends in Government Provision of Sanitary towels

The second objective sought to analyze the trends in the provision of Kenyan Government's sanitary towels to girls' secondary schools in Kuresoi South Sub-County. Minority (23%) of the students had not received any sanitary towels from the government while the majority (73%) had received them. On the regularity of the supply, 51.7% of the respondents were supplied sanitary towels termly, 17.8% monthly while 30.5% were

supplied occasionally. For most schools, the sanitary towels were distributed only one packet per student while others were given two packets and three packets each. None of the schools distributed more than three packets per student.

5.2.3 Educational Access and Participation in Relation to Provision of Sanitary

Towels

On the third objective, the study established that GSTI has positively impacted their participation in various activities in the classroom. GSTI has enabled them to be always present in class, freely stand and answer questions, mingle freely even among boys, concentrate in study activities, volunteer to dust the board and were comfortable in class during their menstruation period.

The majority (71%) of the girls did not participate all the time in co-curricular activities during their menstruation. The teachers noted that there were times when the girls isolated themselves and refrained from much physical activity. The study established that GSTI has impacted girls' involvement in co-curricular activities positively. The students highlighted that through GSTI they have comfort, confidence, motivation, dignity leading to increased participation.

5.2.4 Strategies for sustainability of GSTI

The fourth objective sought to suggest strategies that could be employed to ensure the sustainability of Government's Sanitary Towels Initiative in enhancing girls' educational access and participation in secondary schools. The respondents gave various suggestions that include increased supply of the sanitary towels to ensure that everyone has enough to take them through the year. The government should also invest more resources in the

production and supply of the same. There were also issues on quality with most girls suggesting that the quality of the sanitary towels could be improved making them thicker and more secure. The teachers also recommended more funding and clear policies for the initiative to be sustainable.

5.3 Conclusions

This study draws several conclusions from its findings. From the objectives, the study concluded that secondary school girls in Kuresoi South sub-county have had issues on access and participation prior to GSTI. Those who could not afford to purchase sanitary towels and could not be provided by their schools had to miss class. The study further concludes that lack of sanitary towels can have negative effect on girls' access and participation in education.

Secondary schools in Kuresoi South sub-county have been receiving sanitary towels from the government. The study further revealed that the sanitary towels provided by the government were sometimes not enough for all the students throughout the year. The sanitary towels were distributed only one or two packets per student. The GSTI objective is to increase access of sanitary products to school going adolescent girls, which in turn would improve their access and participation in education. The current study concludes that this objective has been achieved only partially as evidenced by the findings showing that the supply and distribution of sanitary towels to students was inadequate. To fully achieve its objective, the GSTI should further be improved.

5.4 Recommendations for Policy and Further Research

5.4.1 Policy Recommendations

Based on the study findings, the following recommendations were made:

1. At the national level, there is need for clear policy guidelines on the government provision of sanitary towels to girls in educational institutions.
2. The government should also guarantee that sanitary towels are always available in all schools nationwide with further consideration given to funding and sustainability of the initiative.
3. The GSTI should be monitored and evaluated to better inform policy and allow resolving of the initiative's deficiencies.
4. At the school level, more training of teachers on menstrual health and management could be considered. Schools should also be more creative on ways to supplement the government provision so that the girls are provided for throughout the year.
5. Synergy between the government and all education stakeholders especially the parents are critical in solving the various issues raised by the study.

5.4.2 Recommendations for further research

1. There is need for a further nationwide research on the effects of provision of sanitary towels on performance of adolescent girls in all institutions of learning with the aim of capturing everyday geographies of menstruation to inform future programs and policies that aim to address gender parity within the education system.

2. The current study examined the efficacy of Government's Sanitary Towels Initiative on Educational Access and Participation of secondary school girls in Kuresoi South Sub-County, Nakuru County, Kenya. There are other numerous factors that have the potential to affect the performance of the adolescent girls in school like gender-based violence, disintegrated families, poverty, culture, peer pressure among others. Future studies should examine other factors that have the potential of affecting the adolescent girls' performance in Kenyan schools.

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APPENDICES

Appendix I: Students' Questionnaire

Dear Respondent,

My name is Diana Chepkoech, a Master's of Education student at Kenyatta University. This questionnaire is part of my Master's degree research. This research seeks to explore the efficacy of Government's Sanitary Towels Initiative on Educational Access and Participation of secondary school girls in Kuresoi South Sub-County, Nakuru County, Kenya. The questions attached will be useful in collecting relevant information about your school in relation to the area under research. Your co-operation will be highly appreciated. All the data gathered in this study will be held in strict confidentiality. Taking part in this study is voluntary and you may withdraw at your convenience.

Diana Chepkoech.

Kenyatta University,

Department of Educational Foundations,

P.O BOX 43844-00100,

NAIROBI. Tel 0791788083

Section A: Students' profile

1. How old are you? Give the exact age in the cell below.

[]

2. Whom do you live with?

Both parents []

Single parent []

Relative []

Others

3. What do your parents/ guardians do for a living?

Professional employment []

Casual employment []

Peasant farmers []

Any other, specify

4. What category is your school?

Girls' boarding [] mixed boarding []

Mixed day [] others

.....

Section B: Background information

5. How old were you when you started menstruating? []

6. What was the experience when you started menstruating?

.....

Very good [] Good [] Neutral [] Bad [] worse

[]

7. How do you feel when you get your periods while in school?

Comfortable [] neutral [] uncomfortable []

Explain your answer

8. What do you use during menstruation?

Sanitary towels [] rags [] old clothes [] others.....

Section C: Government's Sanitary Towels Initiative

9. Does your school receive sanitary towels from the government?

Yes [] No []

10. If yes, how regular is the supply?

Weekly [] Monthly []
Termly [] other [specify]

11. How are the sanitary towels distributed among the students?

1 packet [] 2 packets [] 3 packets [] more than 3
[specify]

12. Do you attend school during throughout your menstruation period?

At times []
Always []
Never []

13. What are the main reasons for missing school during menstruation? (Tick all that apply)

Lack of sanitary towels []
Abdominal pains []
Fear of staining uniform []
Any other (specify)

14. In your opinion, does the provision of sanitary towels to the girls by the government affect attendance in any way?

Increased attendance [] decreased attendance []
No difference []

15. Do you think the Government's Sanitary Towels Initiative increases girls' access to education? Yes [] No []

Explain your answer
.....

16. What co-curricular activities are there in your school?

Clubs and societies []

Games and sports []

17. How often do you participate in these co-curricular activities during menstruation?

Sometimes []

Always []

Never []

18. Has the provision of sanitary towels enabled you to participate in co-curricular activities?

.....

19. To what extent do you agree with the following statements? (tick your answer in the table below) The Government's Sanitary Towels Initiative has impacted me in the following ways: during menstruation,

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I'm always present in class					
I can freely stand and answer questions					
I mingle freely with my classmates					
I can move freely even among the boys					
I can concentrate in my study activities					
I feel more comfortable in class during my period					
I can volunteer to dust the board					

20. Suggest ways of improving the Government's Sanitary Towels Initiative to ensure increased access and participation of secondary school girls in education.

.....

THANK YOU

Appendix II: Interview schedule for principals

Section A: Contextual and Personal Data

1. Gender: Male [] Female []
2. School type: Girls [] Mixed []
3. School status: Boarding [] Day []
4. Category: National [] County [] Sub-County []
5. How many years have you taught at secondary school level?
1-5 years [] 6-10 years [] 11-15years [] 16-20 years []
More than 20 years []

Section B: Trends in the provision of Government’s sanitary towels

6. Does your school receive sanitary towels from the Kenyan government? ...
7. How regular is the supply?
8. How are the sanitary towels distributed among the students?

Section C: Government’s Sanitary Towels Initiative on girls’ access to education

9. What are the impacts of Government’s Sanitary Towels Initiative on girls’ access to education in your school?
.....
10. How does the provision of sanitary towels to the girls by the government affect attendance?
.....

Section D: Government’s Sanitary Towels Initiative on academic participation of girls

11. How does the provision of sanitary towels by the government affect academic participation of girls in your school?

.....

12. Does the frequency of provision of sanitary towels by the government affect girls’ engagement in class activities?

.....

Section E: Government’s Sanitary Towels Initiative on co-curricular participation of girls

13. Do girls participate fully in co-curricular activities?

14. If not, what could be the barriers to girls’ participation in co-curricular activities?

15. Do you think the provision of sanitary towels by the government are adequate to increase girls’ participation in co-curricular activities?

16. What are the effects of Government’s Sanitary Towels Initiative on co-curricular participation of girls in your school?

.....

17. Suggest strategies that can be put in place for sustainability of GSTI

.....

Appendix III: Interview schedule for class teachers

Section A: Contextual and Personal Data

1. School type: Girls [] Mixed []
2. School status: Boarding [] Day []
3. Category: National [] County [] Sub-County []
4. Indicate your gender: Male [] Female []
5. How many years have you taught as a secondary school teacher?

Section B: Trends in the provision of Government’s sanitary towels

6. Do you receive sanitary towels from the Kenyan government?
.....
7. How regular is the supply?
.....
8. Is the provision of sanitary towels by the government adequate enough to cover the students’ needs?
9. Are there other providers of sanitary towels?

Section C: Government’s Sanitary Towels Initiative on girls’ access to education

10. What are the impacts of GSTI on girls’ access to education in your school?
.....
11. What is the difference in attendance rates of girls before and after the Government’s Sanitary Towels Initiative?

Section D: Government’s Sanitary Towels Initiative on academic participation of girls

12. What are the effects of GSTI on academic participation of girls in your school?

.....

Section E: Government’s Sanitary Towels Initiative on co-curricular participation of girls

13. Do girls participate fully in co-curricular activities? Yes [] no []

14. If no, what could be the barriers to girls’ participation in co-curricular activities?

15. Do you think the provision of sanitary towels by the government are adequate to increase girls’ participation in co-curricular activities?

16. What are the effects of the Government’s Sanitary Towels Initiative on co-curricular participation of girls in your school?

.....

17. Suggest strategies that can be put in place for sustainability of GSTI

.....

Appendix IV: KU Authorization Letter



KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 020-8704150

Our Ref: E55/28323/2018

DATE: 27th May, 2021

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MS. DIANA CHEPKOECH – REG. NO. E55/28323/18

I write to introduce Ms. Diana Chepkoech who is a Postgraduate Student of this University. She is registered for M.Ed. degree programme in the **Department of Educational Foundations**.

Ms. Chepkoech intends to conduct research for a M.Ed. thesis Proposal entitled, **“Efficacy of Government’s Sanitary Towels Initiative on Access and Participation in Education among Secondary School Girls in Nakuru County, Kenya.”**

Any assistance given will be highly appreciated.

Yours faithfully,

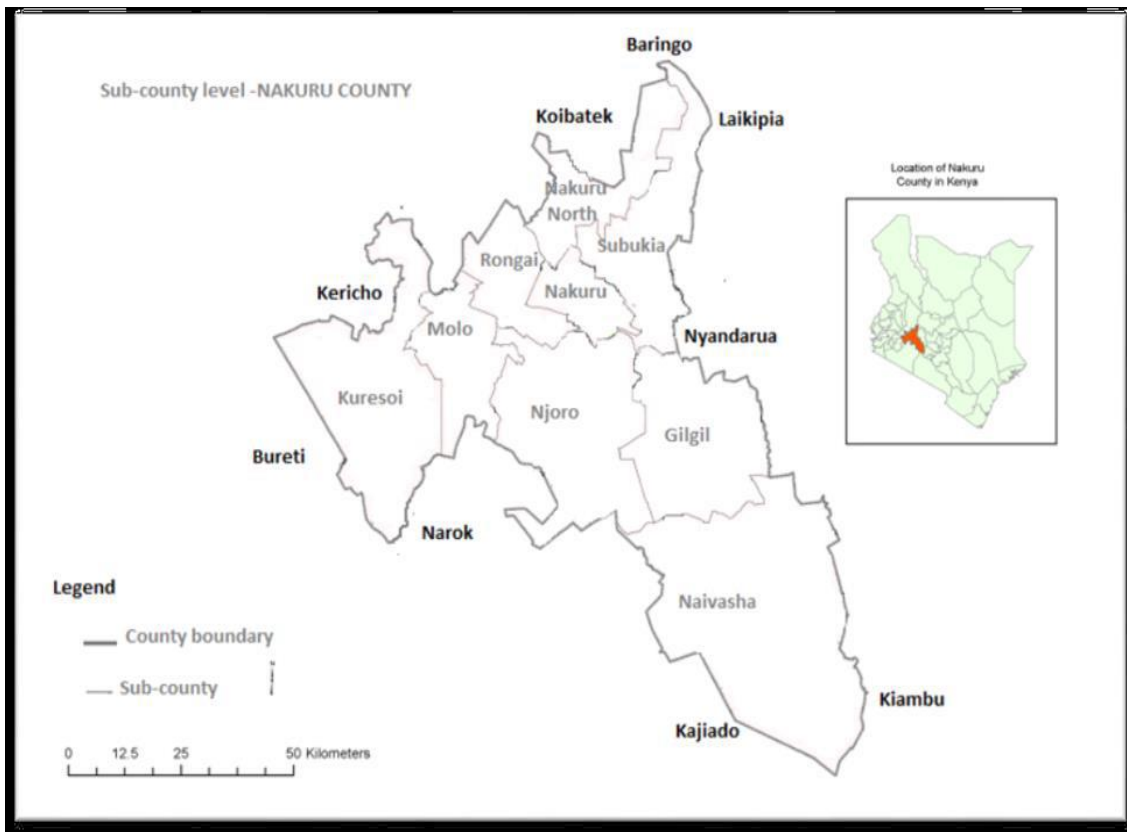

PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL

AM/cww

Appendix V: NACOSTI Research Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 431843	Date of Issue: 22/June/2021
RESEARCH LICENSE	
	
This is to Certify that Ms., Diana Chepkoech of Kenyatta University, has been licensed to conduct research in Nakuru on the topic: EFFICACY OF GOVERNMENT'S SANITARY TOWELS INITIATIVE ON ACCESS AND PARTICIPATION IN EDUCATION AMONG SECONDARY SCHOOL GIRLS IN NAKURU COUNTY, KENYA for the period ending : 22/June/2022.	
License No: NACOSTI/P/21/11297	
431843 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Verification QR Code	
	
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Appendix VI: Map of study locale



Source: Nakuru County Education office