

# **Menstrual Hygiene Management and its Effect on Girl Child's Class Attendance in Secondary School Education in Kenya: An Analytical Study.**

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## **Abstract**

School and class attendance for the girl child does present a challenge to the schools and government due to absenteeism occasioned by menstrual cycle. The challenge is encapsulated in the Ministry of Education data which indicate that a girl on average absents herself from school for four days in 28 days (month) and loses 13 learning days, equivalent to two weeks of learning every school term. In an academic year (nine months) a girl loses 39 learning days equivalent to six weeks of learning time. Within the four years of high school a girl can lose 156 learning days equivalent to almost 24 weeks out of 144 weeks of learning (<https://gender.go.ke/sanitary-towels-program/>). It is against this backdrop that this study was conceived to investigate the effect of Menstrual Hygiene Management, an intervention measure that has been put in place to address the challenge. Mbita Sub County was selected as the site for the study. Mbita Sub County had 33 public secondary schools of which 5 were girls schools, 3 boys schools and 25 were mixed secondary schools. The target population was 1047 respondents which consisted of 30 school principals, 30 class teachers, 986 form four girls of 2022 cohort and 1 Sub County Director of Education. Sample sizes of 25 principals, 25 class teachers and 1 Sub County Director of Education were selected by saturated sampling technique. Two hundred and seventy six form four girls 2022 cohort were selected using simple random sampling. The objective of the study was to establish the effect of Menstrual Hygiene Management on girl child's class attendance in Mbita Sub County. The study established that Menstrual Hygiene Management highly enhanced the girl child's class attendance. The study concluded that Menstrual Hygiene Management plays a critical role in the girl child's class attendance. That is, the girl child hardly misses classes because of menstruation. The study findings are useful to education stakeholders in making policies and enhancing quality education for the girl child. The findings are also useful to researchers as they form baseline information.

**Keywords:** Menstrual Hygiene Management, effect, Girl Child's Class Attendance, Secondary School Education, Kenya: An analytical Study.

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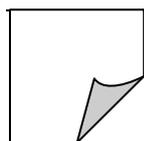
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## **I. Introduction**

Globally, Menstrual Hygiene Management is an insufficiently acknowledged problem especially in rural low-income countries (Tjon, 2007). This is despite the fact that there are 1.2 billion adolescents, representing one in every five people in the world today (Shankaraiah, Haveri, Mallappa, & Saheb, 2013). "Menstruation is a natural part of girls' reproductive cycle. It is a key sign of reproductive health and without menstruation, life cannot be generated: (UNICEF, 2016). Knowing that menstruation is a normal, healthy occurrence and knowing how to manage it effectively can increase an adolescent girl's confidence level and self-esteem. It also encourages a more supportive environment between parents, teachers and fellow students (UNICEF, 2016).

Effective Menstrual Hygiene Management is critical for the mental and physical wellbeing of the adolescent girls (Parker, Smith, Verdemato, Cooke, Webster & Carter, 2014). Kandpal, Semwal and Negi (2012) observed that "good Menstrual Hygiene Management is crucial not only for the health and education of



the adolescent girls but also for their dignity.” Juyal, Kandpal, Semwal and Negi (2012) concluded that if the “adolescent girls are empowered and made aware of menstrual hygiene right from early adolescent period, they will be better prepared to accept the menarche when it starts and be better equipped and knowledgeable about how to manage their menses effectively.” Kenya’s local media reported a suicide case of a girl who was allegedly embarrassed by her teacher after having her menses for which she had not prepared for (*Daily Nation* 18<sup>th</sup> March, 2020).

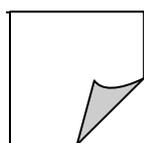
Adolescent girls must have the necessary knowledge, structural facilities and an enabling environment to manage their menstruation hygienically and with dignity (Omidvar & Begum, 2010). A number of researchers have found that adolescent girls, especially from the low-income areas, usually lack adequate and correct knowledge regarding Menstrual Hygiene Management (Sapkota, Sharma, & Khanal, 2013). Moreover, prior awareness of menstruation before its onset is poor among adolescent girls, particularly in low-income countries (Chebii, 2018). The lack of knowledge can be due to socio-cultural barriers in which the adolescent girls grow up in. The girls need accurate information, education and an enabling environment to cope with their menstruation needs.

Menstrual Hygiene Management is a silent emotive issue in Kenya that is only discussed in public on special days like the International Day of the Girl child observance usually celebrated on October 11<sup>th</sup> every year since 2012 when it was declared by the United Nations. It is on these occasions that stakeholders petition the government to provide sanitary pads to school girls. Most stakeholders believe that when sanitary pads are supplied to school girls, it is a step towards making Kenya a better place for all girls. Provision of sanitary pads to the adolescent girls means a lot as it helps girls who otherwise rely on use of tissue paper or rags during their menstruation. Many girls in Arid and Semi arid lands do not have access to sanitary pads. The consequences are that many girls are prevented from attending schools and classes because they feel unclean and ashamed. Infact there are many instances where girls drop out of school on the onset of menarche. When they stay at home, they become more vulnerable to violation of their rights, for instance early marriage or rather child marriage. Menstruation is silently linked to the girl child’s dignity and has great impact on their access to education and academic performance in school, as they miss class more often than not when menstruating. Dysmenorrhea is the most devastating aspect of menses. It typically includes vomiting, nausea, fatigue and severe pain. This is where Menstrual Hygiene Management serves as a real intervention measure to eradicate it, if not mitigate the plight that accompany menstruation. It is against this backdrop that The President of the Republic of Kenya signed into Law the Basic Education Amendment Act (2016) which places the responsibility of providing free, adequate, sufficient and quality sanitary towels on the government to reduce the number of girls missing school during their menstrual cycle. If the government implements this robust plan then many girls including those in Arid and Semi-Arid Lands (ASALs) can access education and perform well in their education. This move by the Kenya government demonstrates its commitment to the United Nations Sustainable Development Goals, particularly Goal 4 which is a commitment to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This goal is a pivotal driver for positive change, emphasizing the transformative power of education in fostering a sustainable and equitable world.

Notwithstanding the intent of Menstrual Hygiene Management, poverty factor is a reality. Homa Bay County in which Mbita Sub county is located, poverty level is 77.9% against 52% in Kenya; the average low income of 1,000.00 to 2,000.00 Kenya shillings a month. The implication is that Menstrual Hygiene Management may not be considered a priority to most households. The government’s role in Menstrual Hygiene Management is therefore critical. Non-governmental organizations can also be considered as critical in the provision of Menstrual Hygiene Management materials.

According to UNICEF (2005), one in ten school age African adolescent girls miss school during their menstruation or drop out at puberty because of lack of clean and private sanitation facilities in schools (Ngugi & Nyaura, 2014; Chebii, 2018). In South Africa, “the adolescent girls are unable to buy female hygiene products and often turn to rags, socks and even notebook paper. They often lack access to clean water and private toilet facilities” (Kirk & Sommer, 2006). “The topic of menstruation is a taboo in many cultures including the different cultures in South Africa.” (Steinig, 2017; Kirk & Sommer, 2006). Young girls can therefore experience shame and embarrassment when they are menstruating and do not have the resources to manage their menstruation hygienically (Steinig, 2017). There is anecdotal evidence which shows that the lack of resources might result in young girls, particularly of high school age, missing school while menstruating. A study found that adolescent girls in South Africa can miss up to five days of school per month due to menstruation (Khumalo, 2015).

The Kenya Environmental Sanitation and Hygiene Policy, 2016 – 2030, that was launched in May 18<sup>th</sup>, 2016 include a section (5.4.6.) on Menstrual Hygiene, (Government of Kenya, 2016). The Kenya Environmental Sanitation and Strategic Framework, 2016-2020 also addresses Menstrual Hygiene Management under strategic intervention area; Scaling up sustainable access to improved rural and urban sanitation. Strategy 5.4.5 also “discusses ways of improving menstrual health and hygiene practice” (Government of Kenya, 2016).



Menstrual Hygiene Management is defined by the United Nations International Children's Emergency Fund (UNICEF, 2014) as the "use of clean material to absorb or collect menstrual blood and this material can be changed in privacy as often as necessary for the duration of the menstrual period. Menstrual Hygiene Management includes soap and water for washing the body as required and access to facilities to dispose used menstrual management materials". Previous studies have used small sample sizes, relying on qualitative, self-reported data to report barriers related to Menstrual Hygiene Management. "These barriers include poverty, hygiene taboos, inadequate information on menstrual management, poor social support, and insufficient water, sanitation, and hygiene facilities in schools" (Sahin, 2015).

The growing qualitative research suggests that adequate sanitation facilities/infrastructure in schools as it relates to Menstrual Hygiene Management may improve student participation or cognitive function, particularly for girls at the onset of menstruation (Huynh, 2019). However, quantitative literature has recently begun to explore this association. Of these studies, "educational outcomes typically address absenteeism, with few studies assessing sanitation at the school level using cognitive development measured by test scores as an outcome" (Grant, Lloyd, & Mensch, 2013). Lack of studies assessing sanitation, specifically the role of gendered spaces at the school level, using achievement scores as an educational outcome highlights a gap this study tried to fill.

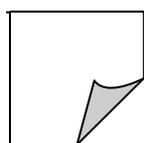
### **Synthesis of Literature on Effect of Menstrual Hygiene Management on Girl Child's Class Attendance in Schools**

"Sanitary towel is an absorbent item worn in the underwear when menstruating, bleeding after giving birth, recovering from gynecologic surgery, experiencing a miscarriage or abortion, or in any other situation where it is necessary to absorb a flow of blood from female genitalia," (Cambridge English dictionary, 2020). Studies have shown that most aspects of an adolescent girl's life are affected by lack of sanitary facilities thus lowering the girl's level of self-esteem and confidence among other issues. This is experienced when the girls lack sanitary towels which results to leakages and exposures which causes great embarrassments. A review of several studies earlier done indicate that lack of these sanitary towels results in embarrassments, anxiety and shame when girls stain their clothes which makes them be stigmatized. The school girls interviewed for the various studies generally described menstruation as "a time of anxiety and discomfort especially at school, leading to low concentration in class" (Chebii, 2018). The study focused on school girls as the respondents while this present study focused on principals, class teachers and girl child as the respondents.

Ngugi and Nyaura (2014) stated that "menstruation causes Kenyan adolescent girls to lose an average of 3.5 million learning days per month. Limited access to safe, affordable, convenient and culturally appropriate methods for dealing with menstruation has far reaching implications for rights, physical, social and mental well-being of many adolescent girls in Kenya and other developing countries. It undermines sexual and reproductive health and well-being and has been shown to restrict access to education, (Ngugi & Nyaura, 2014). "Faced with the complete lack of sanitary pads, this can only mean that the girls miss school for considerable period of time. This has negative impact on the quality of learning they receive, their overall academic performance, their retention and transition through the education system," (Chebii, 2018). The study looked at areas such as retention and transition of students in the education system whereas the current study will focus on the effects of MHM on students' participation in school.

Constant discomfort in class and regular absence from school negatively affect girls' participation. It makes girls be away from school longer than expected which affects their academic performance. Interrupted attendance, insufficient learning and therefore poor results in the long term can contribute to eventual drop out (Mueve, 2011). UNESCO estimates that one in ten African adolescent girls miss school during menses and eventually drop out because of menstruation related issues. These include inaccessibility of affordable sanitary protection, the social taboos related to menstruation, and the culture of silence that surrounds it (Mundy, 2011). The study was carried out in a number of African countries and focused on African adolescent girls. This was too wide for the target and sample population. The current study focused on specific case study at secondary schools in Mbita Sub County.

A study in Kenya by Ministry of Education in 2007 found that "sanitary pads provision coupled with sexual and reproductive health education could reduce absenteeism amongst girls by over three and a half days per month. The study showed other important benefits in terms of girls' self-esteem and self-confidence. Ministry of Education further explained that thousands of Kenyan school girls miss one and a half school months of class each year due to their menstrual cycles. School absence lowers girls' academic performance and self-esteem and widens gender disparities in educational achievements." This study by the Ministry of education was generalized which may not apply to a specific area of study and therefore may not be fully relied upon as far as Mbita sub county is concerned. The current research will be focusing on secondary school going students and specifically in Mbita Sub County.



“Many girls who cannot afford sanitary towels endanger their health by resorting to unhygienic solutions such as leaves, old cloth, sponges, soil or feathers, (Kaur & Kaur, 2018). Consequently, existing programs aimed at retaining girls in school tend to be labor-intensive community engagement efforts where the gains may be small, progress slow, and outcomes uncertain (Pokharel, 2018). Such programs include those by local Non-Governmental Organizations, churches and well-wishers who occasionally distribute sanitary towels to schools. Another such programs by the government was started in 2012 as part of the free education for all campaign (Jewitt & Ryley, 2014). The Kenyan Ministry of Education launched the NSTP in public primary schools in 2012 with the aim of increasing opportunities for poor adolescent girls in order to reduce “absenteeism among girls, improving self-esteem and participation during instruction” (Ministry of Education, 2012). This study only focused on public primary schools and not secondary schools as the case with the current study. Further, it laid more emphasis on impacts of Free Primary Education and access to sanitary towels on their academic performance. This study will review access of sanitary towels, awareness of Menstrual Hygiene Management and its effects on girl child’s participation in secondary education in Mbita sub-county. Moreover, students had a difficulty of attending class attentively due to menstrual related problems such as pain and fear of sudden menstrual blood leakage, as they did not use proper sanitary towels. About thirty nine percent of respondents perceived that menstruation had affected their academic performance or rank negatively when compared to their rank before menarche. They also had discomfort and shame sitting beside male students in the class, (Castensson, 2018). This study was carried out in Uganda while the current one will be in Kenya.

### **Research Objective**

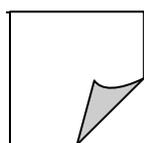
The research objective was to establish the effect of menstrual hygiene management on girl child’s class attendance in secondary schools.

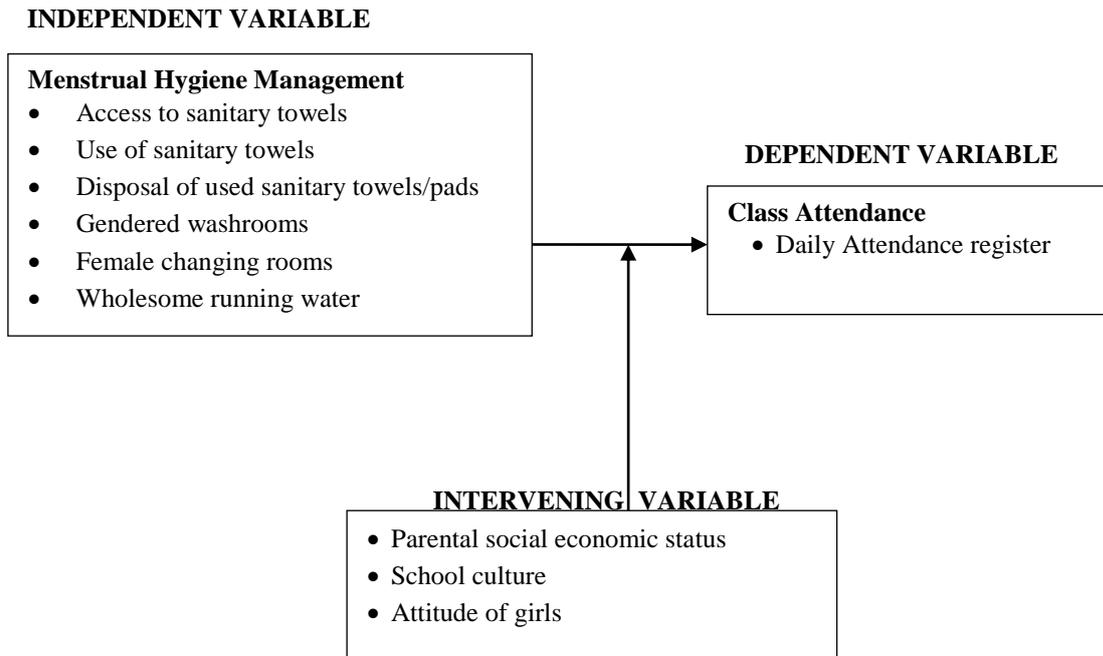
## **II. Conceptual Framework**

This research study adopted the Cultural Feminism Theory (Alcoff, 1988). The theory attempts to revalidate undervalued female attributes and commends differences between male and female genders. It affirms that women and men are different and must be treated so men and women are biologically different and must be appreciated and accorded what they deserve psychologically, socially and materially. Women in menstrual hygiene management cycles should be accorded psycho-social support and not be despised. The theory commends the positive aspects of female character or feminine personality. Cultural feminism theory advocates for a safe space for women to cater for their unique needs such as nursing rooms and gendered washrooms, facilities and materials that give women locations dedicated solely to their needs. Cultural feminism theory was justified for this study as it “strives to create and maintain a healthy environment –free of masculinity values and behaviours, such as stigmatization of menstruation and the control of women’s mobility during menstruation” (Ngomane & Sebola, 2023:301).

The conceptual frame work (Figure 1) asserts that Menstrual Hygiene Management has influence on girl child’s participation in secondary education. For the girl child to participate in educational activities, she must be in school. Attendance can only be possible when the school girl is in good health and comfortable. Crofts and Fisher (2012), state that most female students cannot afford to purchase sanitary pads. They resort to using cotton and scraps of fabric, rags and mattress stuffing. These cause infections and painful sores more often. They are also left uncomfortable and often unhealthy during their menstrual cycle. This leads to many of them missing school for a few days each month as they are too uncomfortable and/or embarrassed to attend. Even if they attend school, they remain distracted and fail to pay attention to their lessons. As a society, we can greatly appreciate that this is a huge need. Females should be healthy and comfortable during their menstrual cycle, and not forced to miss school or be preoccupied while attending, (Winkler & Roaf, 2013).

Participation is enhanced when there is confidence. According to McMahon et al (2011), many families and especially mothers, try to educate their daughters on menstruation and its management in a manner that will ensure that their privacy, intimacy and their dignity is protected and respected. However, some findings assert that policy makers and key stakeholders must acknowledge that menstruation is a natural fact of life, that must be integrated at all levels of life and only then will there be an enabling environment for adolescent girls and women to manage their menstruation adequately without shame, embarrassment, secrecy, fear, humiliation, silence, taboo and stigma, (McMahon et al, 2011).





**Figure 1: Conceptual framework showing the effect of Menstrual Hygiene Management on Girl child Class attendance in Secondary Education**

The conceptual framework indicate the independent variable as Menstrual Hygiene Management and the dependent variable as class attendance while the intervening variables include parental social economic status, attitude of girls and school culture. In this respect the relationship between these variables was hypothetical aimed at guiding the actualization of this study.

### III. Research Methodology

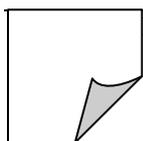
Descriptive survey research design was adopted for the study. The target population was 1047 respondents which consisted of 30 school principals, 30 class teachers, 986 form four girls of 2022 and 1 Sub County Director of Education. Sample sizes of 25 principals, 25 class teachers and 1 Sub County Director of Education were selected by saturated sampling technique. Two hundred and seventy six form four girls of 2022 cohort were selected using simple random sampling. Questionnaires and interview schedules were used to collect data. Validity of research instruments was determined by research experts in the area of Educational administration whose input was included in the final drafts. Reliability of the instruments was established by piloting in five schools (16.66%). Test re-test technique and Cronbach's alpha were used to establish the reliability. Reliability for the teachers' questionnaire was 0.72 and for girl the child 0.73 implying that they were reliable at the p value of 0.5. Quantitative data was analyzed by use of frequency counts, percentages, means and t –test analysis. Qualitative data was transcribed and analyzed for content in emergent themes and sub themes.

### IV. Results

#### Demographic Characteristics of Respondents

#### Classification of Actual and menstrual Age

Table 1 presents the ages of girl students and the ages that girl students began their menses.



**Table 1: Classification of Actual / Current Age and Menstrual (Menses) Age**

Current Age of Girls			Menses Age of Girls		
Age in years	Frequency	Percent	Age in years	Frequency	Percent
17	86	38.1	11& below	3	1.3
18	86	38.1	12	10	4.4
19	39	17.2	13	26	11.4
20	13	5.7	14	83	36.5
21 & above	2	0.9	15	75	33.4
			16	28	12.3
			17 & above	2	0.8
<b>Total</b>	<b>226</b>	<b>100</b>	<b>Total</b>	<b>226</b>	<b>100</b>

Table 1 shows that majority of the girl students (76.2%) were aged 17 and 18 years by the time they were in form 4. It can also be seen from Table 1 that majority of girl students (36.5% & 33.4%) started experiencing their menstrual flow at ages 14 and 15 years. Cumulatively 99.2 percent of the respondents had started their menstrual flow by the time they were 16 years of age. This implies that the girl students had adequate experience in menstrual hygiene management and therefore possessed adequate information that properly informed this study.

### Education Responsibility

Different stakeholders were responsible for the education of the girl students. The major responsibility taken for this study was fee payment and lunch scheme money. The details were as shown in Table 2.

**Table 2: Education Responsibility**

Category of responsible person	School Fees		Lunch Scheme	
	Frequency	Percentage	Frequency	Percentage
Father	102	45.1	32	14.3
Mother	76	33.6	140	62.8
Guardian	30	13.3	19	8.5
Sponsor	15	6.6	-	-
Self	3	1.3	-	-
School	-	-	14	6.3
Others	-	-	18	8.1
<b>Total</b>	<b>226</b>	<b>100</b>	<b>223</b>	<b>100</b>

From Table 2, majority of the girl students (45.1%) have their school fees paid by their fathers and 33.6 percent of the girl students have their fees paid by their mothers. A slightly higher percentage of girl students (62.8%) have their lunch scheme catered for by their mothers compared to 14.3 percent of the girl students having the lunch scheme catered for by their fathers. There was some proportion of the girl students having their education responsibility taken care of by their guardians or sponsors. It did not come out clearly who these actually are to the respondents.

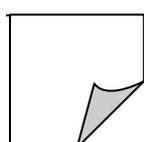
### Level of Education of Parents

Data was sought on the highest level of education the two parents of the girl students had. The findings were as displayed in Table 3.

**Table 3: Levels of Education of Parents**

Level of Education	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Class 8 & below	107	48.0	66	30.1
Form 4	74	33.2	83	37.9
Certificate	23	10.3	33	15.1
Diploma	15	6.7	20	29.1
Degree & above	4	1.8	17	7.8
<b>Total</b>	<b>223</b>	<b>100.0</b>	<b>219</b>	<b>100.0</b>

Table 3 shows that majority of the respondents (48%) had their mothers having the highest academic qualification of Class 8 and below. Only 33.2 percent of the respondents had their mothers having highest academic qualification of form 4. Majority of the respondents (30.1%) had their fathers having the highest academic qualification of class 8 and below, 37.9 percent and 15.1 had their fathers' having the highest academic qualification of form 4 and certificate respectively.



### Category of Students

It was observed that the girl students were either boarders or day-scholars. The precise classification of this was given in Table 4.

**Table 4: Category of Student**

Category of Student	Frequency	Percent
Border	169	74.8
Day scholar	57	25.2
<b>Total</b>	<b>226</b>	<b>100</b>

Table 4 shows that 25.2% of the girl students were day-scholars, while 74.8% of the girl students were boarders. Since majority of the key respondents were boarders, issues of menstrual hygiene management must have affected their class attendance or participation in other activities

### School Fees and Lunch Scheme Money Payment

Investigations were done on the status of school fees payment and lunch scheme payment. The findings were as presented in Table 5.

**Table 5: Availability of School Fees**

Aspect of availability of fees	Frequency	Percent
Not available on time	66	29.7
Sometimes available on time	112	50.5
Readily available on time	44	19.8
<b>Total</b>	<b>222</b>	<b>100</b>

Table 5 shows that 29.7 percent of the girl students had their school fees not available and 50.5 percent of the girl students had their school fees sometimes available on time. The data implies that the school fees of the girl students were not always paid on time and hence the provision of resources (like sanitary towels) for prompt management of menstrual hygiene could be hindered due to lack of finance.

### Provision of Sanitary Materials

Investigations were done on to the actual providers of sanitary material to the girl students. The findings were as shown in Table 6.

**Table 6: Sanitary Material Provider**

Category of provider	Frequency	Percent
Father	32	14.3
Mother	140	62.8
Guardian	19	8.5
School	14	6.3
Others	18	8.1
<b>Total</b>	<b>223</b>	<b>100.0</b>

Table 6 shows that 62.8 percent of the girl students were provided with sanitary materials by their mothers. A good percentage (8.1%) of the girl students get their sanitary materials from others, which could include boyfriends and well-wishers.

### Gender of Class Teachers

An investigation was done to establish the gender of the class teachers of the girl students. The findings were as shown in Table 7.

**Table 7: Gender of Class Teachers**

Gender of class teacher	Frequency	Percent
Male	8	44.4
Female	10	55.6
<b>Total</b>	<b>22</b>	<b>100</b>

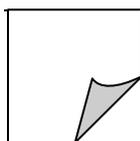


Table 7 shows that 44.4 percent of the class teachers were males and 55.6 percent of class teacher were females. There was good gender balancing and therefore adequate information about Menstrual Hygiene Management from the feminine perspective was obtained and this helped to inform the research properly.

### Work Experience of Class Teachers

Work experience of class teachers of the main girl students (Form 4 girls) was investigated. The findings were as presented in Table 8.

**Table 8: Work Experience of Form 4 Class Teachers**

Duration experience	Frequency	Percent
Below 5 Years	5	27.8
5-9 Years	9	50.0
10-14 Years	4	22.2
15-19 Years	0	0.0
20 & above Years	0	0.0
<b>Total</b>	<b>18</b>	<b>100</b>

Table 8 shows that majority of the class teachers (50%) had work experience of between 10-14 years, while 27.8 percent of the class teachers had work experience of below 5 years.

### Provision of Guidance and Counseling Services

Provision of Guidance and Counseling Services on Menstrual Hygiene Management were as shown in Table 9.

**Table 9**

**Provision of Guidance and Counseling Services on Menstrual Hygiene Management to Girl Student**

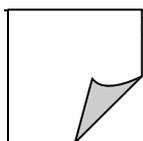
Provision of Guidance & Counseling Services Rating	Frequency	Percent
Never	62	28.2
Rarely	50	22.7
Not Sure	5	2.0
Sometimes	57	25.9
Always	46	20.9
<b>Total</b>	<b>220</b>	<b>100</b>

Table 9 shows that only 20.9 percent of the girl students always received guidance and counseling services on Menstrual Hygiene Management. 28.2% of the girl students had never received guidance and counseling services on Menstrual Hygiene Management. The statistics show that there was no consistency in the provision of this service in secondary schools.

### Research Objective

The research objective was to establish the effect of Menstrual Hygiene Management on girl child's class attendance in secondary schools.

Data was collected and the results analyzed descriptively and inferentially. The data analyzed descriptively were presented in Table 10.



**Table 10: Effect of Menstrual Hygiene Management on Class Attendance**

Aspect of Menstrual Hygiene Management	Mean Rating					NR	Total	M	SD
	Never	Rarely	Sometimes	Very often	Always				
Missing class due to menses yet parents provide sanitary pads	175 (71.1%)	37 (15.0%)	25 (10.2%)	2 (.8%)	7 (2.8%)	0 00%	246 100%	1.49	.920
Missing class due to lack of sanitary towels	200 (81.3%)	23 (9.3%)	17 (6.9%)	2 (.8%)	4 (1.6%)	0 00%	246 100%	1.32	.776
Absent due to lack of changing room in school when experiencing menses	210 (85.4%)	19 (7.7%)	7 (2.8%)	3 (1.2%)	6 (2.4%)	1 0.4%	245 99.6%	1.27	.790
Absent due to lack of quality sanitary pads	162 (65.9%)	32 (13.0%)	40 (16.3%)	3 (1.2%)	9 (3.7%)	0 00%	246 100%	1.64	1.036
Absent due to lack of wholesome water in school for use when in menses	200 (81.3%)	20 (8.1%)	15 (6.1%)	6 (2.4%)	2 (0.8%)	3 1.2%	243 98.8%	1.31	.767
Absent due to lack of adequate dustbins in school for used sanitary pads disposal	216 (87.8%)	15 (6.1%)	11 (4.5%)	2 (.8%)	2 (.8%)	0 00%	246 100%	1.21	.634
Absent due to totally lack of where to dispose sanitary towels when in menses	228 (92.7%)	5 (2.0%)	5 (2.0%)	1 (.4%)	5 (2.0%)	2 0.8%	244 99.2%	1.16	.667
Absent due to unfriendly school social environment when in menses	184 (74.8%)	26 (10.6%)	23 (9.3%)	6 (2.4%)	4 (1.6%)	3 1.2%	243 98.8%	1.44	.886
Absent due to lack of counseling by female teachers when in menses	195 (79.3%)	19 (7.7%)	18 (7.3%)	4 (1.6%)	7 (2.8%)	3 1.2%	243 98.8%	1.39	.913
Absent due to Fear of Leakage when in menses	158 (64.2%)	30 (12.2%)	33 (13.4%)	11 (4.5%)	10 (4.1%)	4 1.6%	242 98.4%	1.70	1.121
Absent due to cramps during menstruation yet painkillers were provided	94 (38.2%)	41 (16.7%)	72 (29.3%)	20 (8.1%)	14 (5.7%)	5 2.0%	241 98	2.25	1.220
Absent due to mood swings during menstruation yet counseling services were provided	134 (54.5%)	33 (13.4%)	41 (16.7%)	23 (9.3%)	10 (4.1%)	5 2.0%	241 98%	1.93	1.218
<b>Overall Mean Rating</b>								<b>1.51</b>	<b>1.220</b>

**KEY: SD – Standard Deviation; M- Mean; NR – Nil Response**

**Interpretation of Mean Rating**

- 1.00 -1.44      Very high effect
- 1.45 - 2.44      High effect
- 2.45 - 3.44      Moderate effect
- 3.45 - 2.44      Low effect
- 4.45 - 5.55      Very low effect

Table 10 shows that majority (71.1%) of the girl students do not miss school due to menstrual period or menstrual related factors. Only 15.0 percent of the respondents noted that they rarely miss school due to menses. This means menstrual periods do not affect class attendance very much.

Table 10 shows that 81.3 percent of the girl students never miss going to school because of lack of underwear. This could mean that the girls are adequately provided with underwear and so it may not be a determinant in going to school. This is further supported with a very low mean rating of 1.32. Majority of the girl students (85.4%) never miss going to school because of lack of changing room in their schools when they are in their menstrual period. This view was endorsed by a very low overall mean rating of 1.27.

Table 10 further shows that 65.9 percent of the girl students noted that girls never miss school due to lack of quality sanitary towels. The fact that 16.3 percent of the respondents noted that girls sometimes missed school due to this factor could mean that it may to a small degree affect their school attendance. The mean rating on this factor was 1.64 with a standard deviation of 1.036. It can be observed from Table 4.10 that 81.3 percent of the respondents never miss going to school because of lack of water in the school when they are in their menstrual periods. This view is further supported by a very low mean rating of 1.31. Table 10 shows that 87.8 percent of the girl students felt that girls do not miss going to school because of lack of dustbins for use when they are in their menstrual periods. This view was given a very low mean rating of 1.21. An overwhelmingly large majority of the respondents (92.7%), noted that they never miss going to school because of lack of where to dispose their sanitary towels. This could mean that they never dispose them or change them

in school or their schools are well equipped with such vessels hence no need for getting worried of where they will dispose them when they are in menstrual periods.

Table 10 further shows that 74.8 percent of the girl students noted that girls never miss going to school because of unfriendly school environment when they are in their menstrual periods. This was supported by a low mean score of 1.44. This could mean that the schools are well sensitized on this issue and hence they become even friendlier to the girls when they are in their menstrual periods. It can be observed Table 10 show that 79.3 percent of the respondents never miss going to school because of discouragements by female teachers when they are in their menstrual periods. This was supported by a low mean rating of 1.39. Table 10 also shows that 64.2 percent of the girl students noted that girls never miss going to school because of fear of leakage when they are in their menstrual periods. The fact that 13.4 percent of the respondents sometimes missed school due to this matter and with an overall mean rating of 1.70, could mean that this factor could affect school attendance of some girls.

Table 10 show that there are varied observations as relates to girls being absent from school due to sickness when in menstrual periods. Whereas 38.2 percent noted never, 16.7 percent noted rarely, 29.3 percent noted sometimes, 8.1 percent noted very often and 5.7 percent noted always being absent from school because of being sick when in menstrual periods. The overall mean rating was 2.25 with standard deviation of 1.220. This is a factor that affects school attendance from both the perspective of students as well as that of class teachers. Though majority of the respondents (54.5%) noted that girls never missed school due to mood swings when in menstrual periods, others noted that 13.4 percent rarely missed, 16.7 percent sometimes missed, 9.3 percent often missed and 4.1 percent always missed school due to mood swings when experiencing their menstrual periods. The overall mean rating for this was 1.93 with a standard deviation of 1.218. This was therefore a factor that affected class attendance.

### **T-test Analysis of Effects of Menstrual Hygiene Management on Class Attendance**

The views of the respondents were sought on effects of menstrual hygiene management on school or class attendance. The data collected were subjected to t-test analysis and the results were presented in Table 11.

**Table 11**

**T-test Analysis of Effect of Menstrual Hygiene Management on Class Attendance**

Aspect of Menstrual Hygiene Management	Respondent	Mean Rating	OMR	t-test
Missing class due to menses yet parents provide sanitary pads	Students	1.42	<b>1.91</b>	t(244)= -7.424,p=.000
	Class Teachers	2.39		
Sanitary towels	Students	1.31	1.38	t(244)= -4.815, p=.000
	Class Teachers	1.44		
Absent due to lack of changing room in school	Students	1.26	1.33	t(243)= -3.734, p=.000
	Class Teachers	1.39		
Absent due to lack of sanitary pads	Students	1.60	1.86	t(244)= -8.568, p=.000
	Class Teachers	2.11		
Absent due to lack of running water for use in school when in menses	Students	1.32	1.27	t(241)= -4.546, p=.000
	Class Teachers	1.22		
Absent due to lack of adequate toilets in school for use during menstruation	Students	1.22	1.17	t(244)= -3.025, p=.003
	Class Teachers	1.11		
Absent due to lack of where to dispose sanitary towels when in menses	Students	1.17	1.09	t(242)= -1.748, p=.082
	Class Teachers	1.00		
Absent due to unfriendly school environment when in menses	Students	1.44	1.44	t(241)= -6.119, p=.080
	Class Teachers	1.44		
Absent due to discouragement by female teachers when in menses	Students	1.38	1.50	t(241)= -5.296, p=.000
	Class Teachers	1.61		
Absent due to fear of leakage when in menses	Students	1.65	1.99	t(240)= -8.753, p=.000
	Class Teachers	2.33		
Absent due to sickness during menstruation that is not attended to	Students	2.23	2.37	t(239)= -14.737, p=.000
	Class Teachers	2.50		
Absent due to mood swings during menstruation yet well counselled	Students	1.90	2.09	t(239) = -10.750, p=.000
	Class Teachers	2.28		

**KEY: OMR -Overall Mean Rating**

Table 11 shows the average mean score responses of the respondents on the menstrual hygiene management factor with the highest effect on school attendance as missing school due to sickness during menstruation with an average mean rating of 2.37 and  $t(239) = -14.737, p = .000$ . Since the rest of the factors had an average mean rating below 2.37 respondents were in agreement that these factors are not effective in preventing the girls from attending school. Table 10 further shows that the observed difference between the mean ratings of students and class teachers views is statistically significant in Menstrual Hygiene Management factors affecting class attendance since  $p = .000$ .

## V. Discussion

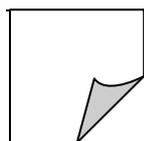
Generally, there is statistically significant effect of Menstrual Hygiene Management factors on girls' attendance in secondary schools in Mbita Sub County (except for the factor of lack of where to dispose sanitary towels). The lower the mean rating given by the respondents for each of the investigated factor, the lower the extent the factor affects school attendance in secondary schools. One of the girl student with respect to class attendance asserted that menstruation is very traumatic for young girls if unprepared. In this regard the girl student stated "Menstruation affects only girls and not boys and the onset of menstruation is normally very traumatic, threatening and embarrassing. Both girls and boys view menstruation as dirty, messy and something that must be hidden from every day's eye and particularly men menstruation, therefore is viewed as shame for the girl child one must therefore be very sensitive and always be on the alert to maintain her dignity. One of the strategies used is to keep away from the public and or otherwise undertake proper and proven menstrual hygiene management method of using sanitary towels appropriately. The challenge is sometimes and in most cases its occurrence is abrupt. This means that the girl child must be prepared for anything one step that we as girls take always is to avoid public eye and thereby feign sickness and stay indoors and therefore fail to attend school and classes accordingly. In fact most of us girls often miss classes due to menstruation, worst still when cramps develop. To some extent this is torturous psychologically. Nevertheless most of us accept as normal since it is a monthly experience and learn how to cope. The supply and use of sanitary pads is indeed handy and therefore a relieving strategy".

Menstruation disrupts girl student school attendance due to occasioned absence from school. This occurrence, being monthly and averagely taking two to four days does affect the girl students' academic performance. A close observation has revealed that indeed where poor menstrual hygiene management is experienced the girl child deteriorate in academic achievement. These cases are reported worldwide (Ngomane & Sebola, 2023). Thus it has been noted that missing of classes by girls during menstruation cycle critically affects school attendance. This was awake of call in South Africa where removal of Value Added Tax from sanitary towels was undertaken to ease menstrual Hygiene management for school going girls (Ngomane & Sebola, 2023). These researchers adopted a qualitative research approach and used desktop study method. The current study however used mixed methods research design and collected data from the girl student in secondary schools, an improvement in Ngomane and Sebola (2023) study.

The school principals were quite emphatic on the effect of menstrual hygiene management on class attendance by the girl child. One of the principals stated "There is no doubt that menstrual hygiene management is invaluable in the social and academic life of the girl child. For as who have been around for decades, the strategy is helping one girl child to access education and complete with much success. Girls are very sensitive and easily become upset by menstruation if not well handled or managed. The frequent absenteeism in school and class has been reduced significantly by the provision of mental hygiene management intervention. When one checks class attendance register he becomes satisfied that really girls more or less match the boys in mixed secondary schools. Nevertheless notwithstanding the advantages of menstrual hygiene management, some short comings have been noted. These include, some sanitary pads are not environmentally friendly, they can also be bulky, may cause irritation and are expensive. As a result there are a few girls who fail to obtain adequate pads and even some leak for the girls who cannot and rely on donations from fellow girls. In situations where the Menstrual Hygiene Management is above board the girl child class attendance even exceeds that of boys in mixed secondary schools. School principals' infact should go out of their way to solicit donations from well-wishers." From this excerpt it is clear that school management values menstrual hygiene Management as really not only critical but also invaluable. The observed  $p$  value for lack of where to dispose sanitary towels affecting school attendance was .082 which is above the set critical  $p$  value of .05. This means this is the factor where there was not enough significant evidence to support the views of the respondents on it. The factor therefore does not affect school attendance of girls in secondary schools in Mbita Sub County.

## VI. Conclusion

Menstrual Hygiene Management boosts in girl students a healthy sense of confidence essential for their development of social skills, become more resilient and espouse their full potentialities inside and outside the classroom. Thus Menstrual Hygiene Management made girls to develop a feeling of trust in their abilities,



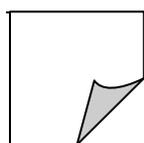
qualities and perceptions, which culminated in their motto “let us shine” as some asserted during interview. Menstrual Hygiene Management impacted positively on class attendance, participation in co-curricular activities and academic.

## VII. Recommendations

- (i) Principals of secondary schools should ensure that all girls report to their schools with adequate quality sanitary towels.
- (ii) Principals and Boards of Management should solicit donations of sanitary pads as some girls do not afford to buy them and resort to using alternative means, such as rags and reuse of old ones and stealing from others.

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