

**MENSTRUAL HYGIENE KNOWLEDGE, PRACTICES AND INTERVENTIONS AMONG JUNIOR HIGH SCHOOL GIRLS IN THE KROBO AREA OF GHANA**

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**Abstract**

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**Purpose** — This study was conducted to assess the menstrual hygiene knowledge and practices of adolescent girls in the Krobo area of Ghana.

**Methods** — It adopted a cross-sectional study where 245 Junior High School girls from eight schools in two municipal districts of Ghana were studied.

**Findings** — The study identified that only 35% of students frequently change pads, although 96% of them use sanitary pads. It was also detected that girls avoid school when they are menstruating for reasons such as severe bleeding, fear of stains, painful periods and a lack of facilities at school which impacts their academic performance negatively.

**Conclusion & Recommendations** — The study revealed that the majority of the girls do not change pads or dispose of them while in school due to inadequate facilities. Therefore, it is highly recommended that schools give proper education and provide appropriate facilities for girls' academic advancement, good health and well-being.

**Keywords** — Menstrual hygiene, Water, Sanitation and Health, Adolescent girls, School health programme

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**Introduction**

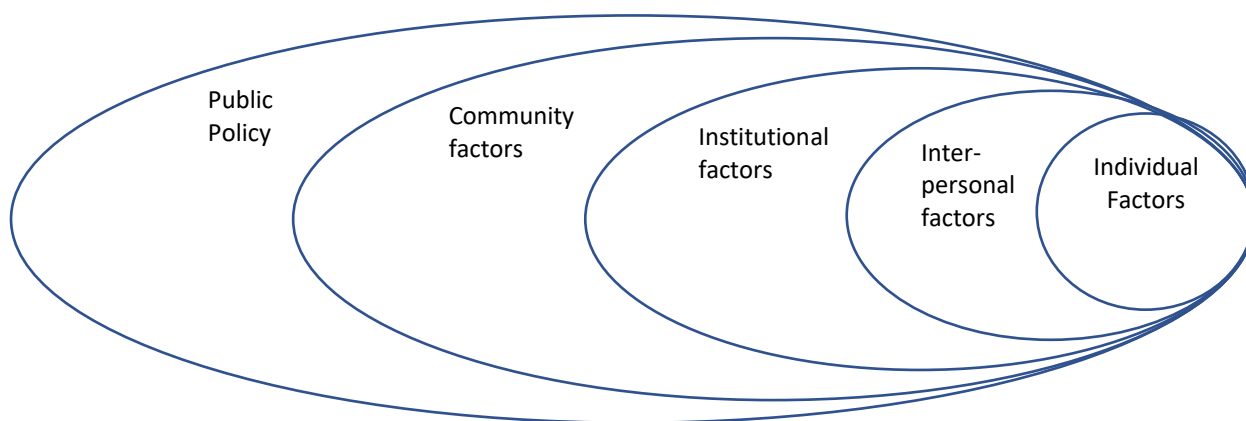
Menstrual hygiene is crucial and an integral component for achieving Goals 3, 4, 5 and 6 of the United Nations (UN) Sustainable Development Goals (SDGs). To achieve Goal 3 of Good Health and Well-being, women and girls must have good menstrual health which is one of the key components of sexual and reproductive health. Goal 4 emphasizes Quality Education for which girls need to have access to good sanitary facilities and infrastructure with the adequate water supply at schools to prevent dropouts and absenteeism. Ghana Education Management Information Systems (EMIS) 2019 data shows that one out of four Ghanaian public basic schools do not have toilets or clean water supply which is very challenging for menstruating girls to manage themselves with hygienic practices at school. Goal 5 envisions the

achievement of Gender Equality for which women and girls need to manage their menstruation with dignity, without any shame and stigma associated with it. Socio-cultural restrictions, often framed and rendered in norms, traditions, practices, attitudes, taboos and taboo-related constructs are widely practised but not widely spoken about in many cultures. This leads to the social exclusion of women and girls in several spheres, eventually pushing them gradually to the brinks and margins of a cluster of vulnerabilities. Goal 6 emphasizes Clean Water and Sanitation for which women and girls need proper sanitary facilities with adequate water and safe disposal mechanisms. A study in northern Ghana highlighted that most of the schools lack basic requirements for effective menstrual hygienic practices such as clean water, soap, privacy and dustbins (Kumbeni *et al.*, 2020).

Women and girls make up half of the world's population, and menstrual hygiene issues must be dealt with at all levels to achieve the abovementioned Sustainable Development Goals. To maintain good menstrual health, women and girls must get education on menstrual hygiene facts and practices. The majority of adolescent girls and women lack access to basic knowledge about it due to the cultural stigma linked to menstruation. Girls who attain puberty are left to handle their periods using readily available materials like a fabric without access to private restrooms, running water, or soap, especially in rural areas. The majority of rural adolescent girls utilize reusable menstrual materials such as scraps from shirts, dresses, old towels or blankets (McMahon *et al.*, 2017). A study conducted by the Ghana Education Service found that school-going adolescent girls lack adequate knowledge on managing menstruation before menarche -their first period (Edward *et al.*, 2016). Ghana has a standard puberty education curriculum with most of the schools either not teaching it or it is described as a negative experience. A study revealed that many of the teachers are males and are embarrassed to discuss puberty education and they sometimes chose not to teach it (Dolan *et al.*, 2013). About 80% of the girls, therefore, receive menstrual education from their parents (Gumanga & Kwame-Aryee, 2012). Many parents in rural areas were unable to manage the menstrual process well, which poses major health risks. They adhere to the myths and taboos related to menstruation that cause them problems because they are ignorant of the scientific facts concerning menstruation and human anatomy and physiology. In the end, neglected menstrual hygiene causes fungal infections in young girls. It is observed that women and girls who practice unhygienic methods during menstruation are subjected to reproductive tract infections and vaginal discharge (Anand *et al.*, 2015). This research is carried out to understand the menstrual pattern, knowledge and practices of menstrual hygiene among adolescent school-going girls and the facilities available to them.

Menstrual hygiene management employs a multi-level, interactive strategy called an ecological perspective, which was applied in this study (Figure 1). Numerous elements might affect or influence someone's hygiene, including intrapersonal; interpersonal; institutional; community factors; and issues related to public policy (Mc Leroy *et.al.*, 1988). **Intrapersonal factors:** Access to knowledge and information will affect a person's behaviour. In reality, girls were misinformed about menstruation hygiene. Making factual information available to girls can help dispel harmful myths and benefit them. **Interpersonal Factors:** Mothers and other women are hesitant to talk to their daughters and girls about menstrual hygiene issues due to cultural silence. Their menstrual health will improve if they are informed on knowledge about healthy menstrual hygiene habits. **Institutional factors:** Menstrual hygiene has been introduced into the curriculum in schools. However, it occasionally goes unnoticed or gets less attention in class. Menstrual hygiene management is extremely challenging at work, school, and in public areas due to inadequate water supply and a lack of sanitary and safe disposal facilities. Therefore, it is crucial to offer safe menstrual management spaces in schools and workplaces with sufficient WASH facilities. **Community Factors:** Women and girls are excluded from many facets of social and cultural life due to socio-cultural taboos around menstruation. To improve people's perceptions of menstruation, we must tackle harmful myths, taboos, and customs and break the silence. **Public policy:** The promotion of menstrual hygiene practices through resource allocation requires policies and methods.

**Figure 1: An Ecological Perspective of Personal Hygiene**



Source: Adopted from Mc Leroy *et.al* (1988)

## Materials and Methods

The objectives of this study include i) assessing the school girls' knowledge of menstrual hygiene and hygienic practices and ii) investigating the menstrual hygiene intervention and sanitary facilities available in schools. The study was a cross-sectional school-based survey, and a quantitative approach was used to collect data in March 2022 among girls who had attained menarche. A questionnaire focusing on the girls' socio-demographic characteristics, their knowledge of menstruation and menstrual hygiene practices was developed and administered. The study was conducted in Junior High Schools in the Yilo Krobo Municipality and the Lower Manya Krobo District. The sample size for this study was calculated using Cochran's formula. This was based on a 57% prevalence of menstrual knowledge from a previous study in Ghana (Ameade & Garti, 2016), a 95% confidence interval and a 5% level of precision. This gave a sample size of 232. Adjusting for a non-response rate of 5% resulted in a sample size of approximately 244 which was rounded up to 245. Multi-stage sampling technique was used to select study participants. Firstly, a total of 8 Junior High Schools (JHS) were randomly selected from the Yilo Krobo Municipality (4 schools) and Lower Manya Krobo District (4 schools). Out of the 8 schools, 4 were public JHS and 4 private JHS. Secondly, in each of the forms (JHS 1, 2, & 3), at least 10 students were randomly selected. Eligible respondents were female students who had experienced menarche. The data were analyzed descriptively employing means, proportions and percentages using Statistical Package for Social Sciences (SPSS). In addition, Chi-square analysis was used to find the association between students' characteristics and menstrual hygiene knowledge and practices. A 5% significance level was used to represent the association.

## Results and Discussion

### *Student's Characteristics*

Table 1, presents the background characteristics of the respondents. In terms of age, about 59% were between 12 and 14 years and the mean age was  $14.36 \pm 1.382$ . A majority of the respondents (52.65%) were from the Yilo-Krobo district, and a nearly equal number of respondents were from public and private schools. A scoring system was used to measure the level of knowledge where one point was given for each correct response to knowledge while 0 was given for an incorrect answer. A total score was calculated on the knowledge items and a score of more than 75% was considered good while 50 -74% was considered moderate/fair and less than 50% was poor. Similarly, each practice received a score ranging from 0 to 2 (best practice yield 2, fair practice yield 1, and poor practice yield 0) which was counted and recorded for each respondent. The higher the score, the better the practice. Each questionnaire came with a written informed consent form which the respondents were required to sign, indicating their understanding and willingness to participate in the study.

**Table 1: Socio-demographic characteristics**

<b>Age</b>	<b>Frequency (n=245)</b>	<b>Percentage</b>	<b>Mean age</b>
12 to 14	144	58.78	14.36±1.382
15 to 16	81	33.06	
17 to 18	20	8.16	
<b>Class of study</b>			
Form 1	80	32.65	
Form 2	82	33.47	
Form 3	83	33.88	
<b>Type of School</b>			
Public	120	48.98	
Private	125	51.02	
<b>District</b>			
Yilo Krobo	129	52.65	
Lower Manya Krobo	116	47.35	
<b>Religion</b>			
Christianity	235	95.92	
Islam	7	2.86	
Traditional	3	1.22	
<b>Residence</b>			
Rural	106	43.27	
Urban	139	56.73	
<b>Father's Education</b>			
Non-literate	33	13.5	
Basic Education	75	30.6	
Secondary Education	72	29.4	
Tertiary Education	65	26.5	
<b>Mother's Education</b>			
Non-literate	36	14.7	
Basic Education	108	44.1	
Secondary Education	56	22.9	
Tertiary Education	45	18.4	

**Table 2: Menstrual history and perceptions about puberty rites.**

Age at Puberty	Frequency (n=245)	Percentage	Mean Age at Puberty
10 to 12	112	45.71	12.61±1.079
13 to 14	125	51.02	
15 to 16	8	3.27	
<b>Awareness about Menstruation before Puberty:</b>			
Yes	201	82.04	
No	44	17.96	
<b>Source of Information:</b>			
Mother	130	53.06	
Sister	10	4.08	
Teacher	50	20.41	
others (Friends, Aunts, Neighbours)	11	4.49	
Nil	44	17.96	
<b>Rites of passage:</b>			
Yes	82	33.47	
No	163	66.53	
<b>Feelings about the passage:</b>			
Good, happy, excited and/or comfortable	51	21	
Bad, shy, and/or nervous	31	13	
Do not like exposing the breast	29	12	
Want the practice to continue	51	21	

**Girls' Knowledge of Menstruation**

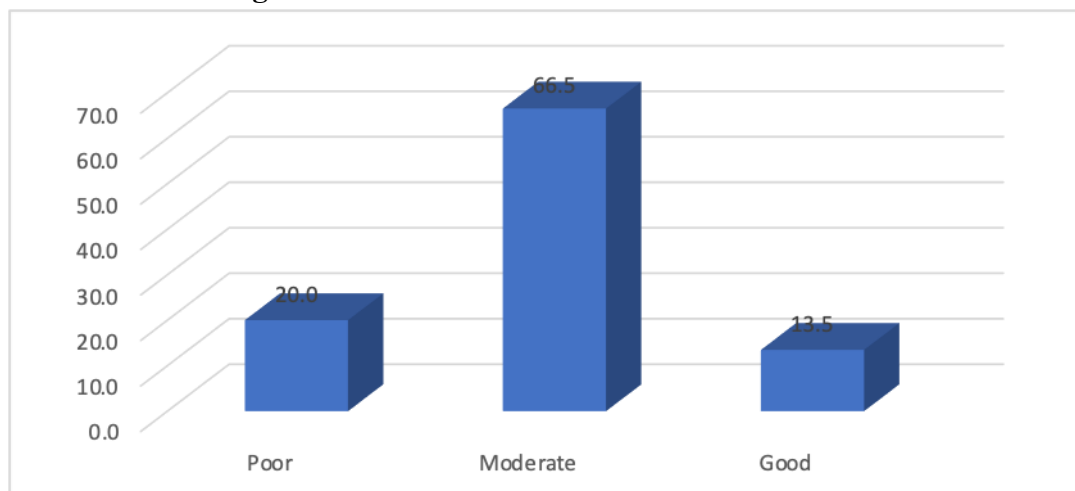


Figure 2: Level of knowledge of the respondents

**Table 3: Respondents' Knowledge of Menstruation**

<b>Knowledge about Menstruation</b>	<b>Correct Responses</b>	<b>Incorrect Responses</b>	<b>Do not know</b>	<b>Mean Score</b>
Menstruation is a physiological process	193 (78.8%)	10 (4.08%)	42 (17.1%)	0.79±0.40
Generally, girls attain puberty at the age of 10-14 years	135 (55.1%)	65 (26.53%)	45 (18.4%)	0.55±0.49
The average days of interval at which menstruation occurs are 28 to 35 days	40 (16.3%)	146 (59.59%)	59 (24.1%)	0.16±0.37
Bleeding occurs in the uterus during menstruation	160 (65.3%)	34 (13.88%)	51 (20.8%)	0.65±0.47
Menstruation lasts for 3 to 7 days	193 (78.8%)	24 (9.80%)	28 (11.4%)	0.79±0.40
Normal blood loss during menstruation (70-80 ml)	40 (16.3%)	15 (6.12%)	190 (77.6%)	0.16±0.37
Dysmenorrhea is painful menstruation	41 (16.7%)	45 (18.37%)	159 (64.9%)	0.17±0.37
Menstrual blood has blood and tissues	121 (49.4%)	78 (31.84%)	46 (18.8%)	0.49±0.50
Abdominal pain during menstruation is due to contraction of the uterus	98 (40.0%)	18 (7.35%)	129 (52.7%)	0.40±0.49
Pimples occur due to hormone secretion	134 (54.7%)	9 (3.67%)	102 (41.6%)	0.55±0.49
The best material that can be used during menstruation is a Sanitary pad	240 (98.0%)	3 (1.22%)	2 (0.8%)	0.98±0.14
Soft cotton cloth if the cloth is used	85 (34.7%)	76 (31.02%)	84 (34.3%)	0.35±0.47
Frequency of changing sanitary pads (5 hrs once)	83 (33.9%)	130 (53.06%)	32 (13.1%)	0.34±0.48
Best way to dispose of used sanitary napkins (burning)	153 (62.4%)	73 (29.80%)	19 (7.8%)	0.62±0.47
Unhygienic practices during menstruation lead to reproductive tract infections	142 (58.0%)	31 (12.65%)	72 (29.4%)	0.58±0.49
<b>Mean Knowledge Score (Maximum = 15)</b>				<b>7.58±2.45</b>

**Table 4: Personal Hygiene during Menstruation**

<b>Frequency of bath taking during menstruation</b>	<b>Frequency(n=245)</b>	<b>Percentage</b>
Once a day	4	1.6
Twice a day	229	93.5
On completion of periods	3	1.2
Three times a day	9	3.7
<b>Clean genitalia using:</b>		
Soap and water	104	42.4
Plain water	129	52.7
Saltwater	11	4.5
Others	1	0.4

**Table 5: Respondents' menstrual hygiene practices**

Menstrual hygiene practices	Frequency(n=245)	Percentage
<b>The material used during menstruation:</b>		
new cloth	4	1.6
sanitary pads	236	96.3
tissue/cotton	5	2.0
<b>Frequency of changing pads:</b>		
twice daily	143	58.4
thrice daily	85	34.7
when it gets completely soaked	17	6.9
<b>Disposal practice at home:</b>		
Burn	155	63.3
Bury	38	15.5
flushing in the toilet/dumping in the latrine	32	13.1
dump it in the bin	13	5.3
throw it in the open field	7	2.9

**Menstrual hygiene practice at School**

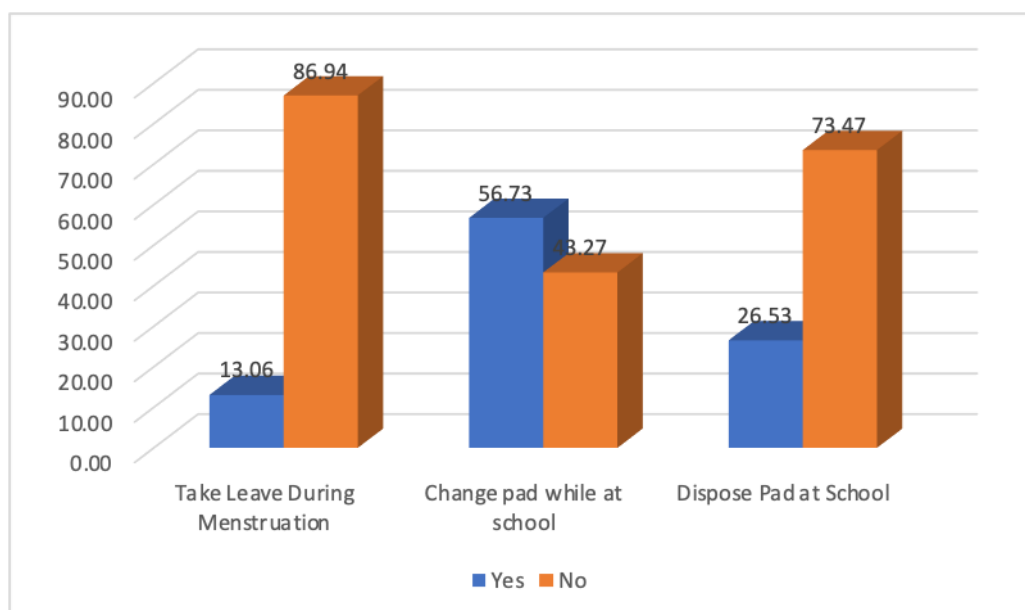


Figure 3: Menstrual hygiene practice at school

## Disposal practice at school

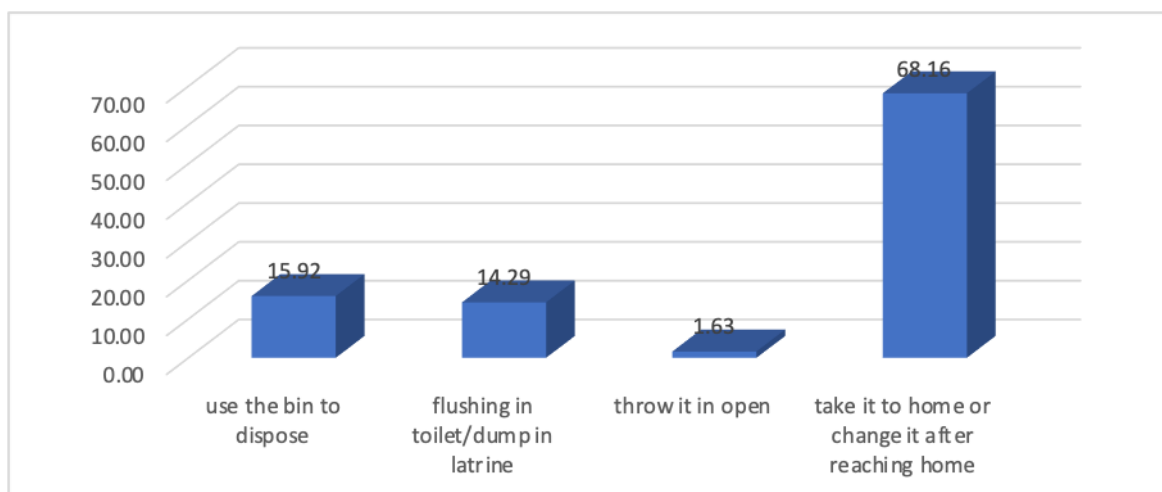


Figure 4: Disposal practice at school

Table 6: Facilities at school

Facilities at school	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Availability of sanitary pads at school	81	33.1	164	66.9
Availability of water at school	106	43.3	139	56.7
Availability of soap at School	110	44.9	135	55.1
Availability of separate toilets for boys and girls	222	90.6	23	9.4
Bin availability at school	154	62.9	91	37.1

## Level of Hygienic Practice

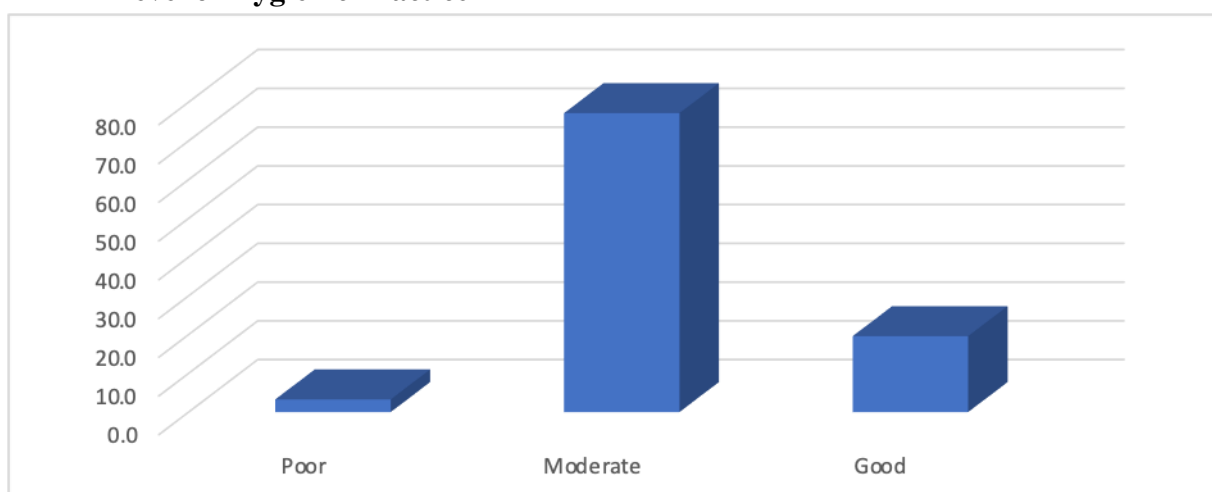


Figure 5: Level of the hygienic practice of the respondents



**Table 7: Association between Students' Characteristics with Knowledge and Practices**

Students' Characteristics	Knowledge				p-value	Practices				p-value
	Poor	Fair	Good	Total		Poor	Fair	Good	Total	
<b>Ages of the respondents</b>										
10 to 12	0	13	2	15	0.079	1	9	5	15	0.216
13 to 15	44	115	24	183		6	147	30	183	
above 15	5	35	7	47		1	33	13	47	
<b>Total</b>	49	163	33	245		8	189	48	245	
<b>Class Studying</b>										
Form 1	24	50	6	80	0.001***	2	63	15	80	0.490
Form 2	20	47	15	82		5	61	16	82	
Form 3	5	66	12	83		1	65	17	83	
<b>Total</b>	49	163	33	245		8	189	48	245	
<b>Type of School</b>										
Public	19	88	13	120	0.087	1	87	32	120	0.004**
Private	30	75	20	125		7	102	16	125	
<b>Total</b>	49	163	33	245		8	189	48	245	
<b>District</b>										
Yilo Krobo	36	85	8	129	0.000***	5	101	23	129	0.674
Lower Manya	13	78	25	116		3	88	25	116	
<b>Total</b>	49	163	33	245		8	189	48	245	
<b>Father's Education</b>										
Non-literate	5	26	2	33	0.161	2	21	10	33	0.274
Basic Education	22	45	8	75		1	61	13	75	
Secondary education	13	47	12	72		4	53	15	72	
Tertiary Education	9	45	11	65		1	54	10	65	
<b>Total</b>	49	163	33	245	8	189	48	245		
<b>Mother's Education</b>										
Non-literate	4	31	1	36	0.082*	1	30	5	36	0.425
Basic Education	26	65	17	108		4	81	23	108	
Secondary education	10	35	11	56		3	39	14	56	
Tertiary Education	9	32	4	45		0	39	6	45	
<b>Total</b>	49	163	33	245	8	189	48	245		
<b>Region</b>										
Rural	19	65	22	106	0.014**	4	77	25	106	0.340
Urban	30	98	11	139		4	112	23	139	
<b>Total</b>	49	163	33	245		8	189	48	245	
<b>Participation in the MH Programme at school</b>										
Yes	29	140	31	200	0.000	7	155	38	200	0.820
No	20	23	2	45		1	34	10	45	
<b>Total</b>	49	163	33	245		8	189	48	245	

Level of significant: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 8: Menstrual Hygiene Intervention at School**

Menstrual Hygiene Intervention at School	Public		Private	
	Yes	No	Yes	No
<b>Participated in Menstrual Hygiene session</b>	42.9	6.1	38.8	12.2
<b>Science teacher teaches Menstrual hygiene in class</b>	43.7	5.3	46.1	4.9
<b>Aware of SHEP Programme</b>	42.4	6.5	32.2	18.8
<b>SHEP activities included Menstrual Hygiene</b>	34.3	14.7	29.0	22.0

## Discussion

### *Menstrual history and perceptions about puberty rites*

The reported mean age at puberty was  $12.61 \pm 1.079$  and above half, and the respondents were between 13 and 14 years old at puberty as shown in Table 2. Krobos have the most complex puberty customs for girls in Ghana. Young girls who have had their first period endure the ceremony, known as "Dipo," which is strongly practised among them during April for four days each year (Kissi-Abrokwah et al., 2021), Opong (1973), Teyegaga (1985), and Opong (2003). In other cases, this rite of passage occurs in young females after puberty as a pre-marriage ceremony rather than necessarily coinciding with puberty or the onset of menstruation. In preparation for their marriage as Krobo women, the girls learn about premarital difficulties and sociocultural strategies to preserve their virginity during this ritual (Kissi-Abrokwah et al., 2021).

Even though this custom has sparked discussions about the exposure of breasts and bathing one's feet in goat blood, the tradition is still carried out in the community. A question about rites of passage was asked in this survey, and only one-third of the respondents said they had gone through them. When respondents were asked how they felt about the rite of passage, 55 participants, or 21%, said it was positive. Thirty-one girls, or 12%, said they felt bad, timid, or nervous while conducting the rites, while 29 girls said they did not appreciate showing their breasts.

### *Assessment of Girls' Knowledge of Menstruation*

Girls' knowledge of menstruation was calculated by assigning scores as mentioned in the methodology and categorized into poor, moderate and good. The Study recorded about 66.5% relatively have moderate knowledge about menstrual health hygiene as shown in Figure (2). Table 3 shows the responses to the knowledge on menstruation. The knowledge about the physiology of menstruation, sources of blood, duration of periods, the best material to use during menstruation and best disposal practice was quite high. However, 64.9% of the respondents did not know that dysmenorrhea is painful menstruation and 52.7% of the respondents do not know that abdominal pain during menstruation is due to contractions of the Uterus. The study showed that about 78% of the study respondents are unaware that the normal blood loss during menstruation is between 70-80ml and this can pose a danger of Anaemia in adolescent girls when care is not taken in enhancing their nutrition during menstruation. This research finds this knowledge useful and impressive in that, such knowledge contributes significantly to helping the girls prepare both psychologically and practically for the experience ahead of time so that they are not taken by unpleasant surprises. It is, however, quite worrying to know that 59% of the respondents could not provide correct answers to the average days of the interval within a menstrual cycle and this lack of knowledge about the menstrual cycle can expose adolescent girls to unwanted teenage pregnancies when they try to be explorative. The knowledge about the best material to use and disposal method is good among the respondents, however, how often sanitary pads should be changed is also very low among respondents constituting 33.9%. This calls for enhanced education because poor menstrual-related practices during menstruation could lead to reproductive tract infections. As high as 42% of respondents were not aware of

this fact, and this study finds it to be a worrying trend. The study, therefore, calls for proactive actions on adolescent health education.

### *Assessment of Girls' Menstrual Hygiene Practices*

#### i. Personal Hygiene during Menstruation

The study showed that respondents practice fairly good personal hygiene during menstruation as 93.5% indicated taking their bath twice daily during menstruation as shown in Table 4, and less than half of the respondents wash their genitalia with soap.

#### ii. Menstrual Hygienic Practices

The majority of the girls (96.3%) use sanitary pads during menstruation which is a good indicator of hygienic practice as shown in Table 5. While using sanitary napkins during menstruation is a good indicator, it is important to be mindful of how long one uses them because they are chemically manufactured and can become dangerous if used for lengthy periods. As a result, the respondents were asked how long they had been using pads. The majority, 65.3%, said they changed them less than three times per day, which is below the UNICEF recommendation of using three or more pads per day (UNICEF, 2008). This finding supports a conclusion from a junior high school study by Kumbeni and his colleagues in rural northern Ghana (Kumbeni et al, 2020). Due to the rising use of disposable sanitary pads among girls, the disposal of pads is currently a severe environmental and public health concern. This study found that 63.3% of participants burned their pads after using them. However, it was found that 15.5% of respondents buried their pads after using them, followed by 13% of students who flushed or dumped them down the toilet. This is not the best practice and needs to be addressed through education. Because commercial sanitary pads are 90% plastic and either never degrade or take a very long time to decompose, burying them could have negative environmental effects. To address environmental issues, it is crucial to teach girls about appropriate disposal techniques.

#### iii. Menstrual Hygiene Practices at School

Several studies reported on school absenteeism associated with menstruation, with one in four girls missing one or more school days during menstruation. In this study, it is found that only a few students (13%) were absent from school during menstruation, this is shown in Figure 3 and their reasons for being absent were menstrual pain, fear of staining their clothes, lack of water, and poor hygiene and disposal facilities in school toilets and this finding is in line with Van Eijk, et al (2016) and Kumbeni et al (2020). Girls, who attend schools that lack adequate toilets and water supplies, feel uncomfortable changing sanitary pads and washing in privacy and therefore they avoid changing pads and remain uncomfortably in class during their menstruation. This type of poor menstrual hygiene leads to fungal infections in young girls. In this study, it is worth noting that, about 56.73% of the participants change their pads while at school as shown in Figure 3. This is fairly suggestive that enhanced facilities at school can encourage more students to avoid having to go through the discomfort of waiting until they arrive home to change their soaked pads.

#### iv. Respondent's menstrual hygiene practices

Disposal of pads at school becomes a waste management issue and it is noted that 16% use the bin to dispose of whereas 14% of the girls flush them in toilets or dump them in the latrine which may get choked. The lack of adequate information regarding safe disposal practices of sanitary pads among women and girls will result in considerable waste management challenges if no action is taken. Also, it is observed from Figure 4 that 68.16% of the respondents take their used pads home to dispose of or try to manage with the soaked pad until they get home before they change the pad. Table 6, shows the facilities available at school and more than half of the girls reported that water and soap are not available in their school which makes it difficult for them to handle menstruation. Clean water with sufficient availability, access (both physical and economic), and quality (free from harmful organisms and pollution) are instrumental to maintaining menstrual hygiene. As the World Health Organization (WHO) notes: "Lack of safe water is a cause of serious illnesses such as diarrhoeal diseases which kill over two million people every year (the vast majority

of children in developing countries) (Salgado & House, 2005). Though specifically in respect of diarrhoeal diseases, the place and role of water in the menstrual hygiene and sanitation discourse cannot be denied. Overall assessment of the menstrual hygiene practices among the girls reveals that about 77% relatively moderate menstrual hygienic practices as shown in Figure 5.

v. *Association between Students' Characteristics with Knowledge and Practice*

There was some correlation between demographic details and knowledge of menstrual hygiene. However, concerning the association between demographic variables and menstrual hygiene practice, the only variable 'type of school' was statistically significant at a 5% level. The results showed that at a 5% significant level, respondents from Lower- Manya District have a significantly good (25) level of knowledge on menstrual health hygiene as compared to the respondents from the Yilo-Krobo District (8). A possible explanation for this could be that there are many health facilities and more reported health educational campaigns including menstrual hygiene education in the Lower- Manya District than Yilo-Krobo District. Leveraging on the existing strengths of the Lower-Manya, we can only hope that with the recent establishment of the Yilo District Hospital, health personnel will liaise with the School Health Education Programme (SHEP) Coordinators to intensify Education on Menstrual Health Hygiene and other Adolescent Reproductive issues. The Class/Form of respondents contributed positively to knowledge acquisition on Menstrual Health Hygiene( $p < 0.05$ ) given that those in forms 2 and 3 reported a good level of knowledge of menstrual hygiene (15&12) than those in forms 1 (6). This could be attributed to the repeated Social Studies and Integrated Science lessons delivered to Students which include Adolescent Reproductive Health and Menstruation. Though the level of knowledge of menstrual health hygiene between the public and private schools was not statistically significant, interestingly, respondents from public schools have a good level of practice of menstrual health (32) than their counterparts in private schools (16) at 5% significant level ( $p < 0.05$ ). This could be attributed to the high demands of work on parents of Private School Girls who might have abandoned their roles of Sex Education and good menstrual practices. It could also be a result of the non-existence of School Health Education Program (SHEP) coordinators in Private Schools or their possible poor supervision. Another major factor could be the attitude of individuals and poor parental upbringing and guidance.

Knowledge of menstrual health hygiene was reported to be significantly higher, at a good score of 22 among respondents from rural areas than those from urban areas (11). This can largely be linked to the performance of the Rite of Passage locally known as "Dipo", during which time adolescent girls are taken through personal hygiene and menstrual health. This rite of passage is largely patronized by adolescent girls from rural settings than urban setups (Table 7). It is also observed from Table 7 that the girls' participation in the menstrual hygiene programme at school is significantly associated with the knowledge of menstruation whereas there is no association with their practices.

*Menstrual Hygiene Intervention at School*

Menstrual hygiene awareness programmes have been conducted in schools occasionally through the School Health Education Programme (SHEP) under Ghana Health Service and other Non-Governmental Organizations. A few activities include education on menstrual hygiene and the distribution of sanitary pads for girls. Every Public School has a teacher designated as a School-Based Health Coordinator (SBHC) who leads the implementation of SHEP Activities. At the Yilo and Manya Krobo enclaves, where the study was conducted, it was largely observed that Respondents had very high knowledge of SHEP and its activities, especially in the Public Basic Schools. This great feat of knowledge explosion could be a result of rigorous activities and intensive supervision on the Part of SHEP in the Study Area.

## **Conclusion and Recommendations**

Menstrual hygiene management is a fundamental aspect of women's and girls' life that should be promoted so that it ensures their rights to health and dignity and also to attain the specified sustainable development

goals. It was observed that the girls have moderate knowledge and therefore have moderate practices where it is more important that we educate them on the scientific facts about menstrual hygiene, the proper management, and safe disposal of sanitary pads. We establish that women and girls have peculiar needs because of their physiological makeup and these needs need to be met without stereotyping. Schools need to ensure that water, sanitation and female-friendly facilities are consciously factored into the built environment of our educational facilities to help promote hygienic practices among girls. Besides, they must be in good shape at all times to guarantee their security when being used.

Continuous awareness programmes at schools for girls and even out-of-school girls must be enhanced to ensure better menstrual hygienic practices. The provision of sanitary pads must be available at school premises and create an enabling environment for girls to manage menstrual hygiene at schools. Menstrual hygiene management should be seen and dealt with as a collective social concern rather than relegated to the background as a female affair. The unlearning of menstruation as verbal and other taboos must be entrenched at the Junior High School level. Culturally, socially and from the formal education perspective, education on menstrual hygiene management should be extended to involve males as well as females. This is because, in the end, males and females are both beneficiaries of such knowledge as a society.

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