

# KNOWLEDGE, ATTITUDE AND PRACTICE OF MENSTRUAL HYGIENE AMONG PUBLIC SECONDARY SCHOOL STUDENTS IN AKINYELE LOCAL GOVERNMENT AREA OF OYO STATE

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## **Abstract**

*Adolescents are often less informed, less experienced and less comfortable accessing reproductive health information and service than adults and as a result of this, many adolescents lack appropriate and sufficient information regarding menstrual hygiene which often result in incorrect and unhealthy behavior during their menstrual period several studies have been done on adolescent reproductive health but little attention has been directed towards menstrual hygiene, therefore this study assessed knowledge, attitude and practice of menstrual hygiene among public secondary school students in Akinyele local government area of Oyo state. Health belief model provided the framework. Descriptive research design of survey and correlational types were used for this study. Multi stage sampling procedure was used to select 1200 female junior/senior secondary school adolescents in Akinyele local government. Menstrual Hygiene Knowledge questionnaire (MHKQ) ( $r= 0.72$ ), Attitude Towards Menstrual Hygiene Questionnaire (ATMHQ) ( $r= 0.81$ ) and Menstrual Hygiene Practice Questionnaire (MHPQ) ( $r=0.79$ ) were instrument used for data collection. Chi-square and Pearson product moment correlation was used to test the hypotheses at 0.05 level of significance The research question was to assess the sources of information on menstrual hygiene among in-school adolescents.. The result of the study revealed that there was no significant knowledge of menstrual hygiene among secondary school students in Akinyele Local Government area ( $X^2_{cal}= 11.92$ ,  $df= 10$ ,  $p > .05$ ), no significant positive attitude towards menstrual hygiene ( $X^2_{cal}= 34.20$ ,  $df= 20$ ,  $p < .05$ ) and no significant practice of menstrual hygiene ( $X^2_{cal}= 18.20$ ,  $df= 20$ ,  $p < .05$ ). the result also showed that there was no significant relationship between knowledge and attitude towards menstrual hygiene among secondary school students in Akinyele Local Government area ( $r=.011$ ,  $p>.05$ )but there a significant relationship between knowledge and practice of menstrual hygiene ( $r=.855$ ,  $p<.05$ ).The study concluded that public secondary schools students in Akinyele local government do not have adequate knowledge of menstrual hygiene; have poor attitude towards menstrual hygiene and do not practice of menstrual hygiene very well. The study therefore recommended that skills-based health education; more involvement of adolescents parents, schools system, society and government in menstrual hygiene. Also, there is a need for adequate training for health teachers on menstrual health.*

**Keyword:** knowledge, attitude, practice, menstrual hygiene.

## Introduction

Hygiene refers to personal and environmental cleanliness which particularly help to minimize exposure to germs. Hygienic practices vary widely, and what is considered acceptable in one culture might not be acceptable in another. Hygiene in home and everyday life setting play an important part in preventing the spread of infections. Hygiene is based on identifying the routes of spread of pathogen and applying hygiene procedures and critical points at appropriate times to break the chain of infection. The aim of personal hygiene is to promote standards of personal cleanliness within the setting of the condition where people live. Personal hygiene include: bathing, clothing, washing hands, and toilets, care of nails, feet and teeth, personal appearance and inculcation of clean habits in the young. Environmental hygiene deals with the home and other surroundings. It involves proper disposal of waste, possible and adequate water supply, hygienic storage of food among others. Poor environmental hygiene leads to health problems. Therefore, hygiene practices during menstruation are of great importance. Menstrual hygiene is defined as a practice by which women and adolescent girls use a clean material to absorb or collect menstrual blood, and this material can be changed in privacy as often as necessary for the duration of menstruation.

Santha (2011) stated that it also include using soap and water for washing the body as required and having access to facilities to dispose materials . Menstrual hygiene can be essential in ensuring that a woman's everyday life is not interrupted by menstruation. It ensures that a woman can continue with her daily routine such as going to school, going to work or doing household chores. It can also prevent potential situations of embarrassment about her. Maintaining proper menstrual hygiene is important to the wellbeing and development of the body (Kadel, 2007). The author stated that, one should bath regularly, use clean and dry feminine hygiene products such as sanitary pads, napkins, tampon, and cloths among others and change them regularly during menstruation. If a woman is using cloth, it is important that the woman regularly wash them with soap and water, and dry them completely in the sun before use; as damp clothing can carry germs that can lead to infection.

The onset of menstruation, menarche, is a life changing event for girls across the world. Women form 49.6% of the world population (*World Bank, 2011*), and will menstruate on average a cumulative 6-7 years of their life (Mahon and Fernandes, 2010). However, in the knowledge girls have regarding menstruation, products or facilities available to manage menstrual flow, along with advice and support, the contrasts observed across the globe are quite shocking. It could be argued that in the world of today, there are more complex issues to be addressed (Bharadwaj and Patkar, 2004), but providing women with the means and knowledge to practice well has widespread repercussions. Age at menarche may vary, but the majority of girls are still in school, resulting inevitable consequences for their education (Montgomery et al., 2012).

Therefore, if menstruation is a barrier to education, it is an issue that must be addressed. Menstruation, also known as a period or monthly, is the regular discharge of blood and mucosal tissue from the inner lining of the uterus through the vagina. The first period usually begins between twelve and fifteen years of age, a point in time known as menarche. (Thérès, Maria 2010). However, periods may occasionally start as young as eight years old and still be considered normal. The average age of the first period is generally later in the developing world, and earlier in the developed world. The typical length of time between the first day of one period and the first day of the next is 21 to 45 days in young women, and 21 to 31 days in adults (an average of 28 days). (Esimai and Esan, 2010). Bleeding usually lasts around 2 to 7 days. Menstruation stops occurring after menopause, which usually occurs between 45 and 55 years of age. Periods also stop during pregnancy and typically do not resume during the initial months of breastfeeding. Up to 80% of women report having some symptoms prior to menstruation. Common signs and symptoms include acne, tender breasts, bloating, feeling tired, irritability, and mood changes. These may interfere with normal life, therefore qualifying as premenstrual syndrome, in 20 to 30% of women. In 3 to 8%, symptoms are severe. (Ganguli, 2003).

A lack of periods, known as amenorrhea, is when periods do not occur by age 15 or have not occurred in 90 days. Other problems with the menstrual cycle include painful periods and abnormal bleeding such as bleeding between periods or heavy bleeding. Menstruation in other animals occurs in primates, such as apes and monkeys, as well as bats and the elephant shrew. The menstrual cycle occurs due to the rise and fall of hormones. This cycle results in the thickening of the lining of the uterus, and the growth of an egg, (which is required for pregnancy). The egg is released from an ovary around day fourteen in the cycle; the thickened lining of the uterus provides nutrients to an embryo after implantation. If pregnancy does not occur, the lining is released in what is known as menstruation. (Smith and Kaunitz, 2013).

Adolescent girls constitute a vulnerable group not only with respect to their social status but also in relation to their health. In this regard, menstruation is regarded unclean or dirty in society. The issue of menstrual hygiene is inadequately acknowledged and has not received proper attention. (Dasgupta and Sarkar, 2008). Good hygienic practices, such as use of sanitary pads and adequate washing of the genital areas, are essential during menstruation period. Women and girls of reproductive age need access to clean and soft absorbent sanitary products which in the long run protect their health from various infections. To this effect, the practice of good menstrual hygiene reduces the incidence of Reproductive Tract Infection (RTI). Thus, the consequences of RTIs are severe and may result in significant negative impact to a woman's health including chronic pelvic pain, dysmenorrhea (painful periods) and in severe cases infertility. Reproductive tract infections, which have become a silent epidemic that devastates women's lives is

closely related to poor menstrual hygiene (Ten, 2007). Every year approximately 10 % of women worldwide are exposed to genital infections including urinary tract infections and bacterial vaginosis, and 75 % of women have a history of a genital infection. Specifically, the common risk factors for vaginal infections include pregnancy and poor hygiene (both perennial and menstrual hygiene). (Aniebue , Aniebue and Nwankwo, 2009).

One of the independent variables the researcher is concerned with in the study is attitude towards adolescent menstrual hygiene. Attitude in a layman word is concerned with one's feeling toward an object, person or thing. Attitude is defined as mental and neutral state of readiness organized through experience, exerting a directive or dynamic influence upon the individual's responses to all objects and situations, which it relates (Eyo, 1995). Attitude serves as a primary function of bringing together the diverse experiences to which an individual is exposed and forming them into a cohesive organized whole (Effa-Heap, 1997). Attitude according to Odunukwe (2002), is evaluating feeling towards a particular target. The author further stated that attitude represents an organization of positive and negative emotion. Park (2007) explained that attitude is a relatively enduring organization of beliefs around an object, subject or concept, which predisposed one to respond in some preferential manner. The author maintained that attitudes are acquired by social interactions. Dieghton (1991) viewed attitude as a predisposition to classify objects and events and to reach them with some degree of evaluative consistency. Katz (1998) stated that attitude is an individual's tendency or predisposition to evaluate an object in a certain manner. Attitudes that are related to menstrual hygiene (MH) are termed menstrual hygiene attitudes. The attitudes can be positive or negative. Positive attitudes can enhance good health while negative attitudes can also lead to reproductive tract infections. It is therefore expected that the female senior secondary school students should have positive attitude with resultant positive practice.

There is a substantial lacuna in the knowledge about menstrual hygiene among adolescent girls which is also part of the variables considered in the study. Several research studies have revealed this gap and they showed that there was a low level of awareness about menstruation among the girls when they first experienced it. The knowledge of menstrual hygiene among the adolescents is a strong determinant of the effectiveness on the attitudes and practices, the menstrual period is a physiological process that occurs throughout the reproductive years of every woman, this process is associated with various mental as well as physical morbidities like premenstrual syndrome, menstruation can also predispose women to life threatening RTI if hygiene is not maintained throughout menstruation (Barathalakshmi 2014). Issue of Menstrual Hygiene begins with adolescent age. The practices, knowledge and attitude which develop at this age, are usually followed by them throughout their life and also passed on to their next generation. Therefore any faulty beliefs or practices pertaining to menstruation will affect

health of large number of women in reproductive age group. Usually adolescent girls are guided by their mother, elder sister or other family members regarding menstrual hygiene practices. So it is also necessary to assess the knowledge and beliefs of mother as well as other female family members regarding the menstrual hygiene. Menstrual hygiene practices also vary in rural and urban areas. In Indian culture, talking about reproductive function of body is considered taboo. Young females have poor knowledge and lack of awareness about physical and physiological changes associated with the onset and presence of adolescence. They hardly get any chance to learn about menstruation. Various myths and social beliefs are also prevailing to menstruation. Most girls are unaware about proper menstrual practices at the age of menarche. Use of unhygienic cloths may lead to development of infection of reproductive tract which may seriously hamper the reproductive capacity or even life of female. Several research studies have revealed gap between facts and beliefs of adolescent girls and showed that there is low level of awareness about menstruation among girls when they first experience it. Therefore there is a need to implement appropriate public health measures at various levels of prevention.

Generally, menstrual hygiene management is taught too late. The majority of the girls did not know what happened when they experienced menstruation for the first time and therefore were scare. (Sommer, 2010). Menstruation affects girls' participation and performance at school. The majority of the girls feels shy or stressed at school during menstruation and participate less due to shame, fatigue or pain. Psycho-social support for menstruating girls at school is missing. Girls would prefer discussing menstruation with other girls or female teachers at school. (House, Mahon, and Caville 2012). Negative socio-cultural beliefs may lead to forced seclusion and stigma: half of the girls said that there are activities and places that are forbidden for them during menstruation. (United Nations Children Fund, 2010).

Therefore, the study is aimed at investigating the female adolescent knowledge, attitude and practices on personal hygiene towards proper menstrual hygiene and provides necessary recommendations

### **Research Question**

1. What are the sources of information on menstrual hygiene among adolescents in Akinyele Local Government Area of Oyo State.

### **Hypotheses**

3. There will be no significant knowledge of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.

4. There will be no significant positive attitude towards menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.
5. There will be no significant practice of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.
6. There will be no significant relationship between knowledge and attitude towards menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.
7. There will be no significant relationship between knowledge and practice of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.
8. There will be no significant relationship between attitude and practice of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.

### **Methodology**

The descriptive research design of survey and correlational types were used for this study. Multi stage sampling procedure was used to select 1200 female junior/senior secondary school adolescents in Akinyele Local Government Area of Oyo State.

**Stage 1.** 30% of the schools were selected using proportional sampling technique  
18 schools

**Stage 2.** Purposive was used to select j s. s.1 and 2 and S.S 1 and 2 because S.S 3 and J.S.S 3 were writing exams.

**Stage 3.** Simple random sampling was used to select an arm in all the selected classes.

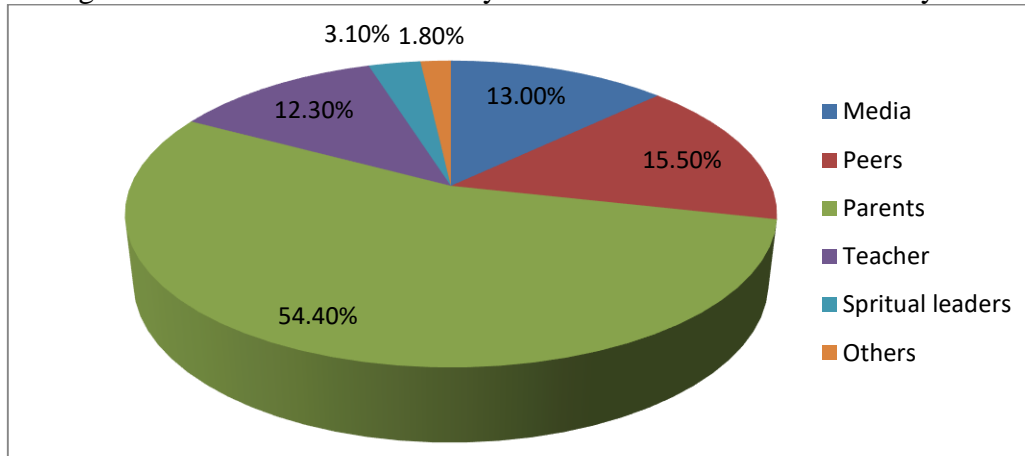
**Stage 4.** Systematic random sampling was used to select 25 female students in each class.

The research instruments that was used for this study is a self-structured questionnaire. The questionnaire was in four sections (A-c). Section A was Menstrual Hygiene Knowledge questionnaire (MHKQ) ( $r= 0.72$ ). Section B was Attitude Towards Menstrual Hygiene Questionnaire (ATMHQ) ( $r= 0.81$ ) while Section C was Menstrual Hygiene Practice Questionnaire (MHPQ) ( $r=0.79$ ). Items of the instrument were close ended and were designed in line with the 4- points modified likert type scale. It was rated as follows: SA – Strongly Agree, A – Agree (3), D – Disagree (2), SD – Strongly Disagree (1)

Pie chart was used to analyze the research question while inferential statistics of Chi-square and Pearson product moment correlation was used to test the hypotheses at 0.05 level of significance.

## Results and Discussion

**Research question one:** What are the sources of information on menstrual hygiene among in-school adolescents in Akinyele Local Government Area of Oyo State.



**Fig.1.0: Pie chart showing different sources of menstrual hygiene information to secondary school students**

Figure 1.0 above provided answer to research question one. From the chart 140 (13.0%) of the respondents consulted media for most of their reproductive information, 167 (15.5%) consulted peers/friends, 588 (54.4%) consulted their parents, 133 (12.3%) consulted teachers, 33 (3.1%) consulted spiritual leaders while 19 (1.8%) consulted other sources such as seminars and workshops. This result shows that majority of in-school adolescents consulted their parents for most menstrual hygiene information.

**Hypothesis 1:** There will be no significant knowledge of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.

**Table 1: Chi-square table showing knowledge of secondary school students on menstrual hygiene**

Items	YES	%	NO	%	X <sup>2</sup> Cal	X <sup>2</sup> Crit	Df	Sig
Q1	414	40.6	606	59.4	11.92		10	.152
Q2	623	61.1	397	38.9				
Q3	407	39.9	613	60.1				
Q4	609	59.7	411	40.3				
Q5	448	43.9	572	56.1				
Q6	431	42.3	589	57.7				
Q7	526	51.6	494	48.4				
Q8	594	58.2	426	41.8				
Q9	517	50.7	503	49.3				
Q10	543	53.1	477	46.8				

Table 3 above revealed the knowledge of menstrual hygiene among secondary school students in Akinyele Local Government area. The table shows that there is no significant knowledge of menstrual hygiene among secondary school students in Akinyele Local Government area ( $X^2_{cal}= 11.92$ ,  $X^2_{crit}=$ ,  $df= 10$ ,  $p > .05$ ). Therefore, the null hypothesis is accepted

**Hypothesis 2:** There will be no significant positive attitude towards menstrual hygiene among secondary school students in Akinyele Local Government area.

**Table 2: Chi-square table showing attitude of secondary school students towards menstrual hygiene**

Items	SA	A	D	SD	$X^2_{Cal}$	$X^2_{Crit}$	Df	Sig
Q1	624 61.2%	324 31.8%	54 5.3%	18 1.8%	34.20	27.43	20	.000
Q2	468 45.9%	498 48.8%	36 3.5%	18 1.8%				
Q3	569 55.8%	378 37.1%	55 5.4%	18 1.8%				
Q4	587 57.5%	316 31.0%	99 9.7%	18 1.8%				
Q5	180 17.6%	317 31.1%	370 36.3%	153 15.0%				
Q6	126 12.4%	135 13.2%	470 46.1%	289 28.3%				
Q7	189 18.5%	254 24.9%	361 35.4%	216 21.2%				
Q8	153 15.0%	225 22.1%	443 43.4%	199 19.5%				
Q9	966 94.7%	18 1.8%	18 1.8%	18 1.8%				
Q10	492 48.2%	187 18.3%	153 15.0%	188 18.4%				
Q11	604 59.2%	312 30.6%	49 4.8%	55 5.4%				
Q12	450 44.1%	484 47.5%	68 6.7%	18 1.8%				
Q13	564 55.3%	374 36.6%	52 5.1%	30 2.9%				
Q14	583 57.2%	323 31.7%	98 9.6%	16 1.6%				
Q15	179	309	386	146				

	17.5%	30.3%	37.8%	14.3%				
Q16	121 11.9%	132 12.9%	456 44.7%	311 30.5%				
Q17	185 18.1%	275 27.0%	352 34.5%	208 20.4%				
Q18	160 15.7%	217 21.3%	435 42.6%	208 20.4%				
Q19	927 90.9%	16 1.6%	42 4.1%	35 3.4%				
Q20	391 38.3%	186 18.2%	239 23.4%	204 20.0%				
Q21	390 38.2%	186 18.2%	197 19.3%	247 24.2%				

		Value	Approx. Sig.
Nominal	by Phi	.481	.000
Nominal	Cramer's V	.368	.000
	Contingency Coefficient	.434	.000
Interval by Interval	Pearson's R	.156	.021 <sup>c</sup>
Ordinal by Ordinal	Spearman Correlation	.098	.149 <sup>c</sup>
N of Valid Cases		100	

Table 4 above revealed that there is significant attitude towards menstrual hygiene among secondary school students in Akinyele Local Government area ( $X^2_{cal}=34.20$ ,  $X^2_{crit}=27.43$ ,  $df=20$ ,  $p < .05$ ). The crammer V result shows that their attitude is positive but very low. Therefore, the null hypothesis is rejected.

**Hypothesis 3:** There will be no significant practice of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.

**Table 3: Chi-square table showing practice of secondary school students towards menstrual hygiene**

Items	YES	%	NO	%	X <sup>2</sup> Cal	X <sup>2</sup> Crit	Df	Sig
Q1	527	51.7	493	48.3	18.20	27.43	20	.083
Q2	663	65.0	357	35.0				
Q3	539	52.8	481	47.2				
Q4	510	50.0	510	50.0				
Q5	604	59.2	416	40.8				
Q6	440	43.1	580	56.9				
Q7	639	62.6	381	37.4				
Q8	426	41.8	594	58.2				
Q9	620	60.8	400	39.2				
Q10	457	44.8	563	55.2				
Q11	603	59.1	417	40.9				
Q12	543	53.2	477	46.8				
Q13	604	59.2	416	40.8				
Q14	527	51.7	493	48.3				
Q15	557	54.6	463	45.5				
Q16	511	50.1	509	49.9				
Q17	672	65.9	348	34.1				
Q18	570	55.9	450	44.1				
Q19	525	51.5	495	48.5				
Q20	621	60.9	399	39.1				

Table 5 above revealed that there is no significant practice of menstrual hygiene among secondary school students in Akinyele Local Government area ( $X^2_{cal}=18.20$ ,  $X^2_{crit}=27.43$ ,  $df=20$ ,  $p < .05$ ).

**Hypothesis 4:** There will be no significant relationship between knowledge and attitude towards menstrual hygiene among secondary school students in Akinyele Local Government area of Oyo State

**Table 4: Correlation table showing the relationship between knowledge and attitude towards menstrual hygiene**

		Knowledge of menstrual hygiene	Attitude towards menstrual hygiene
Knowledge of menstrual hygiene	Pearson Correlation	1	.011
	Sig. (2-tailed)		.719
	N	1020	1020
Attitude towards menstrual hygiene	Pearson Correlation	.011	1
	Sig. (2-tailed)	.719	
	N	1020	1020

The table above shows that there is no significant relationship between knowledge and attitude towards menstrual hygiene among secondary school students in Akinyele Local Government area. ( $r=.011$ ,  $p>.05$ ), therefore the null hypothesis is accepted.

**Hypothesis 5:** There will be no significant relationship between knowledge and practice of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.

**Table 5: Correlation table showing the relationship between knowledge and practice of menstrual hygiene**

		Knowledge of menstrual hygiene	Practice of menstrual hygiene
Knowledge of menstrual hygiene	Pearson Correlation	1	.855
	Sig. (2-tailed)		.000
	N	1020	1020
Practice of menstrual hygiene	Pearson Correlation	.855	1
	Sig. (2-tailed)	.000	
	N	1020	1020

The table above shows that there is a significant relationship between knowledge and practice of menstrual hygiene among secondary school students in Akinyele Local Government area. ( $r=.855$ ,  $p<.05$ ), therefore the null hypothesis is rejected.

**Hypothesis 6:** There will be no significant relationship between attitude and practice of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State.

**Table 6: Correlation table showing the relationship between attitude and practice of menstrual hygiene**

		Attitude towards menstrual hygiene	Practice of menstrual hygiene
Attitude towards menstrual hygiene	Pearson Correlation	1	.021
	Sig. (2-tailed)		.510
	N	1020	1020
Practice of menstrual hygiene	Pearson Correlation	.021	1
	Sig. (2-tailed)	.510	
	N	1020	1020

The table above shows that there is no significant relationship between attitude and practice of menstrual hygiene among secondary school students in Akinyele Local Government Area of Oyo State. ( $r=.021$ ,  $p>.05$ ), therefore the null hypothesis is accepted.

### Discussion of findings

The finding of this study is in line with Aniebue, Aniebue and Nwankwo, (2009) who found that every year approximately 10 % of women worldwide are exposed to genital infections including urinary tract infections and bacterial vaginosis, and 75 % of women have a history of a genital infection. Specifically, the common risk factors for vaginal infections include pregnancy and poor hygiene (both perennial and menstrual hygiene).

The finding of this study tallied with the finding of Dasgupta and Sarkar, (2008) which is a survey of 160 girls in West Bengal, India, when they found that 67.5 per cent were aware of menstruation prior to menarche, but 97.5 per cent did not know the source of menstrual bleeding. Also Water Aid, (2009) in Nepal, 92 per cent of 204 adolescent girls surveyed had heard about menstruation, but the majority of respondents reported that they were not prepared in any way for their first period.

The result of this study is also in support of the view of Patle and Kubde (2014) who concluded that poor menstrual health management (MHM) in schools have been shown to cause adolescent girls worry and humiliation, contribute to monthly absenteeism and lead to poor performance in schools. Also the result

agreed with the view of UNICEF (2010) who stresses the importance of school toilets which are built to accommodate menstruating girls' specific needs for privacy, space, washing facilities and correct disposal or cleaning of menstrual pads. The finding of this study is also in line with Sommer (2010) who suggests that acquaintance with a country's beliefs around menstruation and providing girls with correct information about puberty are important elements in a holistic school MHM package. They stated further that ignorance about menstrual issues is prevalent not only amongst schoolgirls but also in organizations and communities. Patle and Kubde (2014) also concluded that menstrual hygiene is an insufficiently acknowledged problem especially in official programmes. They stated further that from research, it becomes clear that the lack of menstrual hygiene in many countries in Africa and Asia is perceived as an urgent problem and that several grass roots initiatives are trying to find a solution.

### **Conclusion and recommendations**

The result from this study has confirmed the need for health educator and other health practitioners to have a shift in paradigm from theoretical teaching to skill based health education in order to improve their services to clients especially the adolescents. The importance of adolescents' parents, schools' system, society and government getting effectively involved in adolescents' reproductive health information learning and dissemination cannot be over emphasized. Efforts should be made in the area of interdisciplinary collaboration to ensure that dialogue and intervention on adolescent reproductive health (menstrual hygiene) integrate these contextual factors into social welfare practice. Finally, these findings implicate the need for health teachers to have adequate training and knowledge of adolescent reproductive health for effective dissemination and better result cumulating into reduction in reproductive health related social vices among the adolescents.

Furthermore, this review suggests that new intervention strategies must go beyond addressing the relationship within knowledge, attitude and practice of menstrual hygiene to address the socio-cultural and behavioural determinants that influence menstrual hygiene information seeking of adolescents as well as the ways in which these factors mediate biological and genetic risks. The multi-factorial nature of the risks to the health and well-being of adolescents, and the complex interrelationships among these factors, suggest that multidisciplinary interventions designed to address this need is especially needed.

Multidisciplinary and interdisciplinary research, which would inform the development of intervention strategies, is also needed. Both basic and applied research is necessary, as well as interdisciplinary collaboration to develop interactive models and new stage-specific perspectives on human behavior, health, and illness. Consequently, the resulting adverse health effects of poor menstrual hygiene are preventable. Efforts to address this through practice, policy, and research could contribute to enhanced health conditions for secondary school

adolescents. Furthermore, many of the health concerns of adolescents—including pre-marital sex, abortion, STIs as well as their risk behaviors, affect not just themselves but everyone in the community since adolescents are from families and family form the smallest unit of a community, so whatever affects the family affects the community. Therefore, efforts to address these concerns and improve adolescents' health not only will lead to enhanced health conditions for the adolescents, but will also contribute to building healthier families and community.

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