



KNOWLEDGE AND PRACTICE OF MENSTRUAL HYGIENE ASSESSMENT AMONG FEMALE SUBJECTS IN AGUOBIRI COMMUNITY BAYELSA STATE, NIGERIA

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ABSTRACT

Aim/ Objectives: *This study assess the level of knowledge and practice of menstrual hygiene among adolescents and to determine the various menstrual hygiene practices maintain among female subjects between <14 – 19yrs in Aguobiri community.* **Methods:** *A cross sectional observational study design was employed in this study with 133 structured questionnaires used to generate primary data from the subjects using sampling method.* **Results:** *Findings from this study shows that age range of the respondents were <14yrs (18%), 14–17yrs (63.9%) and 18–19yrs (18.1%). Additionally, majority of the respondents were within class of Jss2–SS1 (45%) while farming (34%) was the most predominant occupation of the populace followed by fishing (23%), trading (28%), and civil servants (15%). Regarding hygiene related practice during menstrual period, the study revealed that 32% of the respondents used sanitary pad, 21% pieces of cloth, 12% tissue papers and 7.5% pieces of foam respectively. Furthermore findings from this study shows that 32.3% of the respondents use only water to wash their body after removal of sanitary pad, 39.8% use water and soap, while 21.1% of the respondents cleans their body with tissue papers and 6.8% use none of the above. Regarding how respondents change sanitary pads during menstruation– one per day (39.8%), twice per day (39.8%), trice per day (17.3%), and four per day (3.1%). The observable difference may be attributed to socio–economic condition among the subjects.* **Conclusion:** *This study have shown that majority of the respondents have a poor knowledge of good menstrual hygiene. Thus the use of non–sanitary (30.8%) pad by the respondents and its potential risk factors should be discourage through the creation of awareness and enlightenment campaign by health workers in the community and at the state level .*

KEYWORDS:

Menstruation, Hormones, Adolescent, Hygiene, Respondents, Sanitary pads.



INTRODUCTION

Menstruation is the monthly shedding of endometrial lining of the uterus through the vagina in a regular fashion that occur as a universal and normal phenomenon during the reproductive age of females (Sommer *et al.*, 2015; Abioye, 2000). The cycle comprises of three phase namely: menstrual, proliferative and secretory phase. Menstrual hygiene is the principle of maintaining cleanliness of the body during menstrual flow. It requires basic facilities such as appropriate clothes, soakage material, water, soap, and toilet facilities with privacy. Poor menstrual hygiene physiological implications include itching or rashes in the perianal region, bad odor, and also major complications such as pelvic inflammatory disease and toxic shock syndrome (WHO, 2014) Women can also have related complications during conception and pregnancy. Unaddressed menstrual hygiene is also said to hamper the achievement of some of the millennium developmental goals (Thakur *et al.*, 2014). The onset of menses takes place during adolescent period in which dominant physiological and emotional changes manifest. Bleeding usually last between 3 to 7 days. Periods stopped when the hormone hcG reaches its peak level during pregnancy, the initial months of breastfeeding, pre-pubertal period and at menopause (Imran *et al.*, 2015).

Adolescent is an essential period where females are preparing and adjusting themselves to manage their menstrual bleeding in safe and clean way (WHO, 2014). This is also the ideal time that girls often join different environments including high schools and make plans for their next adulthood life (Thakur *et al.*, 2014). However, most adolescent girls (10 to 19 yrs.) enter their pubertal age (maturity) without preparing themselves due to the shortage of adequate information (Fernandes *et al.*, 2008). Most women are uncomfortable to discuss “menses” due to belief that it has a social taboo thereby obstructing access to gain adequate information (Roose, 2015; Keith, 2016).

Even the little information they receive most commonly from religious institutions, peers, family member is often selective and surrounded by misperceptions (Aniebue *et al.*, 2019). For example, people in developing countries like Ethiopia often perceive menstruation as being a cursed or sign of diseases, punishment from God, a lifelong process and others (Goldstucket *et al.*, 2011; Chin, 2014). As a result, adolescent girls perceive menstruation as something embarrassing that should be kept hidden (WHO, 2010; Cutis, 2016). This can increase the vulnerability of adolescent girls to have mental, emotional and physical problems. These conditions further impair the daily activities, academic performance, school

attendance, and social relationships of adolescent girls (Rheinländer *et al.*, 2009; UNICEF, 2012).

The issue of menstrual hygiene is inadequately acknowledged and has not received proper attention. (Gumanga *et.al.* 2012). Good hygienic practices, such as the use of sanitary pads and adequate washing of the genital areas, are essential during the menstrual 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.

Women with better understanding of menses often have safe and clean way of managing their menstrual bleeding and vice versa. It is uncovered that poor menstrual hygiene practice can be a reason for reproductive and genitor-urinary tract infection, cervical cancer, school absenteeism, or drop-out, poor academic performance, lower self-esteem and poor quality of life. Moreover, girls have also often experienced feelings of fear, confusion and shame during their menstruation period as a result of smell, leakage, staining of clothes and dropping of sanitary materials during their class schedules. This can have also a negative impact on the concentration, class participation and confidence in their studies. (Oyebola *et al.*, 2002; Aniebue *et al.*, 2019).

Although poor knowledge and unsafe menstrual hygiene practice have such considerable clinical implications for the girls and their future offspring's. (Liu *et al.*, 2021; House, 2013; Kaur, 2018). It has been reported that 40–45% of adolescent school girls have poor knowledge and unsafe hygienic practice of their menstrual bleeding. This might have a clinical implication to integrate the promotion of menstrual hygienic practice in the health care system and comprehensive efforts including policy implication needed to improve girls' knowledge and safe hygienic practices towards menstruation right from her adolescent period (Onyegegbu *et al.*, 2018; Loughnan, 2016; Wilbur, 2019). Several studies conducted in Nigeria are yet to direct major attention on the knowledge, attitude and practices of menstrual hygiene among adolescent girls most especially in this area of study. Hence there is a need to re-examine the association between poor menstrual hygienic practices among female adolescents in Aguobiri community Bayelsa state, Nigeria.

MATERIALS AND METHODS

Study Design

A cross sectional observational study design was employed in this study with well Self-Structured questionnaires to collect the desired data from the entire female subjects using random sampling method.

Study Area

This research work was carried out at Aguobiri Community Bayelsa State, southern Nigeria at a coordinates of 4°55'29"N 6°15'51"E..

Study Population

The study population was derived from the number of household present as residents of Aguobiri community comprising 25 household with a projected population size of 520 as at 2017 using annual exponential growth rate of 2.9% as population growth rate as at the 2006 National Census' This gives projected population of 520 people. (Population census, 2016).

Population size /sampling technique

A convenience random sampling technique was used in this study.

The sample size of this study was calculated from the projected population of the study area using Taro Yamane's formula (1967) to give a sample size of 133

Data Analysis

Data obtained was analyzed using both descriptive and inferential statistics presented in frequency and percentage using SPSS version 23.0.

Ethical Consideration Consent /

Institutional ethical approval was obtained from the research and ethical committee department of the Bayelsa State College of Health Sciences. Participant informed consent was also obtained before they could freely participate in the study in accordance with Helsinki declaration.

Inclusion Criteria: Only female adolescent between the ages of twelve to nineteen residing in Aguobiri community were used for this study

Exclusion Criteria: Female adolescent below ten and above twenty years including those residing outside Aguobiri community were excluded from this study.

RESULTS

Table 1 Age frequency characteristic of Respondents

Variables (yrs.)	Frequency	Percentage (%)
<14	24	18%
14-17	85	63.9%
18-19	24	18.1%
Total	133	100%

Field source, (2024)

Table 1 reveals the age range <14yrs (18%) of the respondents to be lowest accompany by age 14-17yrs (63.9%) being the highest among the respondents followed by age 18-19yrs (18.1%) respectively.

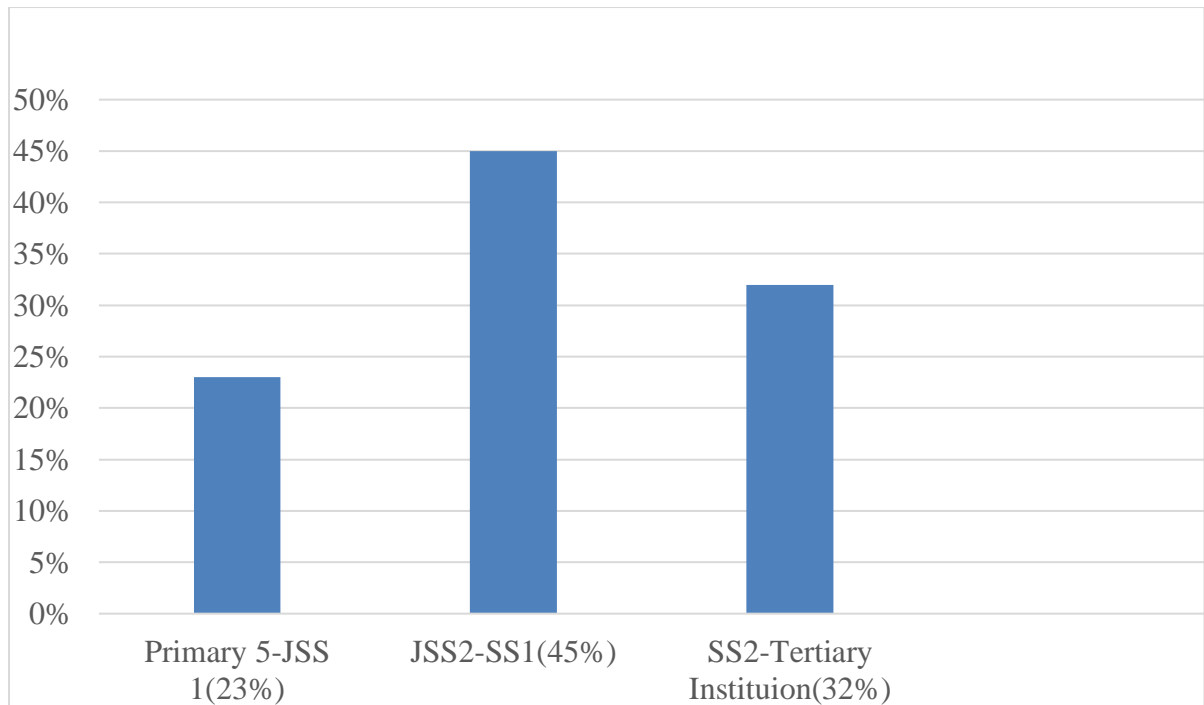


Figure 1: Educational level of Respondents. Field source, (2024)

Figure 1 above reveals the educational level of respondents in various classes expressed in percentage. primary5 –Jss1 (23%), Jss2-SS1 (45%), and SS2-Tertiary institution (32%). This analysis also shows that majority of the respondents are within the class of Jss2-SS1 (45%)

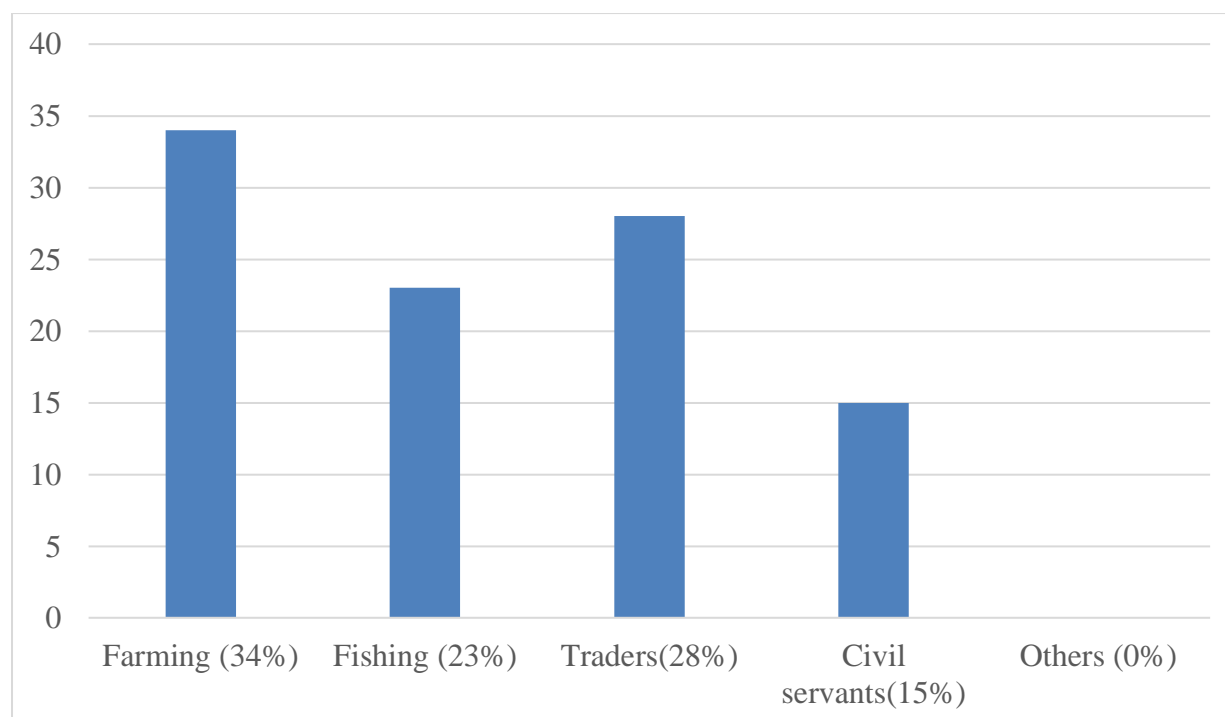


Figure 2: Parent's Occupational distribution. Field source, (2024)

Figure 2 reveal the occupational distribution of respondent's parent's as follows; farming (34%), fishing (23%), trading (28%), civil servants (15%) indicating that majority of the respondent's parents are farmers by profession .

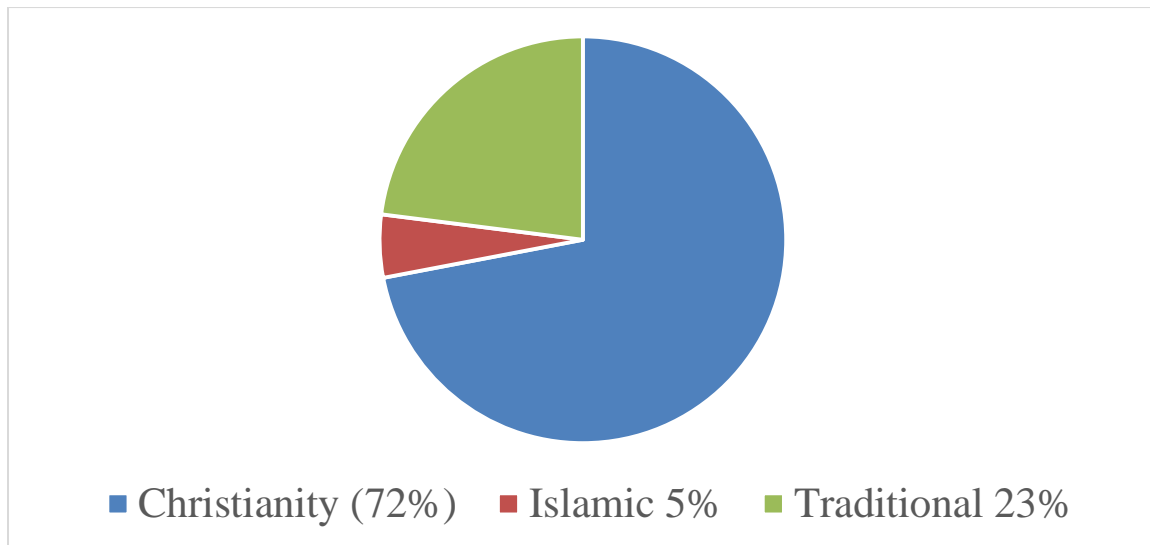


Figure 3: Distribution of Respondents Religion affiliate. Field source, (2024)

Figure 3 Reveals the religion distribution of respondents as follows; Christianity (72%), Islamic (5%) and traditional (23%). This chart shows that majority of the respondents are Christians in this area of study.

**Table 2: knowledge Level of good menstrual hygiene practice among adolescents in
Aguobiri.**

S/N	Variables	N (133)	SA	%	A	%	D	%	SD	%
1	Menstruation is the monthly shedding of blood through the cervical opening of the vagina	133	40	30.1	37	27.8	41	30.8	15	11.3
2	Menstruation is a normal physiological process caused by hormones?	133	49	36.8	42	31.6	16	12	26	19.6
3	Sanitary pads should be used when a female see her menses	133	43	32.3	19	14.3	42	31.6	29	21.8
4	Depending on your menstrual flow, sanitary pad should be change three times daily?	133	31	23.3	20	15	31	23.3	51	38.4
5	Only water should be used to wash menstrual blood (body) during menses?	133	34	25.6	37	27.8	21	15.8	41	30.8

Field source, (2024)

Key: D= Disagreed, SD= Strongly disagreed, A =Agreed, SA=Strongly agreed

Table 3:Various menstrual hygiene practices by Adolescent

S/no	Variables	Response	Percentage N (%)
1	Self-made pad	36	27.1%
2	Sanitary pad	43	32%
3	Pieces of cloth	28	21%
4	Tissue paper	16	12%

5	Pieces of form	10	7.5%
	Total	133	100%

Field source, (2024)

Table above Show the percentage of respondents in relation to their various menstrual hygiene practice; self-made pad (27.1%), sanitary pad (32%), pieces of cloth (21%), tissue papers (12%), and pieces of foam (7.5%).The analysis reveals that majority (32%) of the respondents use sanitary pad during their menstrual period.

Table 4: Consistency in Changing Materials used During Menses

S/No	Variables	Response	Percentage n (%)
1	Once per day	53	39.8%
2	Twice per day	53	39.8%
3	Three times per day	23	17.3%
4	Four times per day	4	3.1%
	Total	133	100%

Field source, 2024

Table 4 shows the percentage of respondents in relation to how they change sanitary pads during menstruation. The analysis shows that majority (39.8%) of the respondents changes their materials during menses once and twice per day

Table 5: Sanitary Habit Maintained After removal of menstrual pad

S/No	Variables	Response	Percentage n (%)
1	Water only	43	32.3%
2	Water and soap	53	39.8%
3	Clean my body with tissues paper	28	21.1%
4	None of the above	9	6.8%
	Total	133	100%

Field source, (2024)

Table 5 shows that 32.3% of the respondents use only water to wash their body after removal of sanitary pad, 39.8% use water and soap, while 21.1% of the respondents cleans their body with tissue paper and 6.8% of the total respondents use none of the sanitary methods at the end of their menstrual period indicating poor menstrual hygiene practice.

Table 6: Percentage Knowledge and Implication for poor Menstrual Hygiene Practices

S/ N	Variables	SA	%	A	%	D	%	SD	%
1	Poor menstrual hygiene is a risk factor of offensive body odor.	49	36.8	29	21.8	38	28.6	17	12.8
2	The use of non-sanitary pad(tissues paper ,old pieces of cloth, etc) are potential risk factor of female infertility	29	21.8	21	15.8	41	30.8	42	31.6
3	Reused of sanitary pads could	43	32.3	27	20.3	42	31.6	21	15.8

	possible lead to irritation of the vagina								
4	Use of medicated soap to wash the body during menstruation can increase you chance of having urinary tract infection	35	26.3	27	20.3	25	18.8	46	34.6
5	Poor menstrual hygiene can result to irregular menstruation	32	24.1	33	24.8	31	23.3	37	27.8

Field source, (2024)

Table 6 Reveals that majority of the respondents have a good knowledge of health implication regarding poor menstrual hygiene practice.

DISCUSSION

Menstruation is one of the most important changes occurring among females during adolescent years. Physiological changes associated with puberty have major impact in girl's physical, psychological and social development. Findings from this study revealed the age range of the respondents as <14yrs (18%), 14-17yrs (63.9%) and 18-19yrs (18.1%). The educational level of the respondents in various classes was higher among females in Jss2-SS1 (45%) followed by SS2-tetiary (32%) compared with primary5- Jss1 of 23%. Regarding the occupational level of the parents, farming appears to be the major occupation embarked upon followed rapidly by trading and then fishing with civil servants being the least.

The respondents were mainly Christians (72%) and traditional religion (23%) with the least (5%) being Muslim. The study further reveal an increase number of subjects using sanitary pads (33%) as a means of maintaining hygiene practice during their menstrual period. This was accompany by 27.1% among subjects using self-made pads and pieces of cloth, tissue papers and pieces of foam. Additionally most adolescent girls were observed consistently changing their pads ones or twice during their menstrual period daily. However 3.1% of the studied subjects cared about the sanitary status of their vagina by regularly changing their pads four times daily consistently.

More so, subjects who cleans their body with soap and water in addition to water only (31%; 32.3%) makes up the highest number among the respondents while those that doesn't care about their body sanitary condition at the completion of menses are 6.8% in number.

Conclusion

Most respondents have skeptical knowledge (30.8%) about menstruation and the use of sanitary pad (31.6%) during their periodic cycle. However the percentage of adolescents making use of sanitary pads (32%) is quite encouraging compared with those applying pixies of foam (7.5%) in Aguobiri community. Hence the consistency in changing pads twice per day (39.8%) among the respondents should be maintained.

Conflict of Interest: Non declared among authors

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