

ATTITUDE OF FEMALE SECONDARY SCHOOL STUDENTS TOWARDS MENSTRUATION AND MENSTRUAL HYGIENE PRACTICES IN ABOH MBAISE LOCAL GOVERNMENT AREA OF IMO STATE, NIGERIA

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Abstract

The purpose of the study was to determine the Attitude of Female Secondary School Students towards Menstruation and Menstrual Hygiene Practices in Aboh Mbaise Local Government Area of Imo State, Nigeria. Specifically, the study identified four objectives with the corresponding research questions, and two hypotheses were postulated which guided the study. The population for the study comprised of 3,805 female secondary school students in Aboh Mbaise local government area of Imo state. The study adopted the descriptive survey design, using questionnaire as tool for data collection. The instrument was validated by three experts. Three hundred and eighty (380) copies of the questionnaire were distributed but three hundred and thirty-eight (338) copies were returned and correctly filled which gave a return rate of 97.6 per cent. A multi-stage sampling procedure was used to select 380 female secondary school students representing 10 per cent of the population. Data generated were analyzed using percentages and mean while Chi-square and ANOVA was used in testing hypotheses at .05 level of significance and at appropriate degrees of freedom. The results revealed that female secondary school students have positive attitude towards menstruation and there was significant difference in the menstrual hygiene practices according to age $f=104, df=3 \& 28, p=.9517 > .05$). The study therefore recommends that there is need for health educators and parents to encourage safe and hygienic practices among the adolescent girls and bring them out of misconceptions regarding menstruation.

Keywords: Attitude, Menstruation, Menstrual Hygiene Practices, Adolescent girls

Introduction

Menstruation is a natural phenomenon which occurs throughout the reproductive life of every female and the onset is one of the most important changes occurring during the adolescent years. This change sometimes makes the adolescent to hide her feelings from others since they may not understand the physiology of it. Dipali, Seema and Rupali (2009) explained that adolescents because of various myths, misconceptions and restrictions during menstruation, develop negative attitude towards this natural phenomenon. Busari (2012) observed that in Nigerian culture, the subject of menstrual and puberty hygiene is not properly discussed at home as well as at school in most parts of the country especially in the rural areas. This has prevented the flow of sufficient information about puberty hygiene resulting in some negative attitude about menstrual hygiene among many girls in this country.

Menstruation is still regarded as something unclean or dirty among this segment of the population. Adhikari, Kadel, Dhungel and Mandel (2007) observed that many young girls feel uncomfortable talking about menstruation and an issue like cleanliness is not a subject to be discussed openly. Menstruation and menstrual hygiene in the rural areas remain very sensitive, secretive and surrounded with negative attitudes of social taboos. From experience and observations, there is the culture of silence and shame on issues relating to sexuality and menstruation. In most families, it is often treated with great secrecy and fear. As a result, the girls are not motivated to take the event lightly. This may result in inadequate knowledge, misconception and wrong ideas leading to undue fear, anxiety and undesirable attitudes in the minds of young girls. Shame often associated with menstruation and the cruelties of people laughing at young girls when they find out they are menstruating seem to make them to have negative attitude towards this phenomenon. The situation gets even more complicated if young girls have to go to school or other public places where there is no toilet or no hygienic toilet facilities such as water and soap, and no facilities for disposal of used

menstrual materials. Even in homes, a culture of shame forces adolescents to find well-hidden places to dry the rags used during menstruation.

Menstruation, according to Lawn, Natisa and Aisha (2010), is the periodic vaginal bleeding that occurs with the shedding of the uterine mucosa. Menstruation refers to the periodic discharge of blood from the uterus, which occurs every 28 to 32 days from puberty to menopause. It can also be the cyclic, periodic discharge of blood, mucosal tissue, cellular debris and unfertilized ovum from a non-pregnant uterus through the vagina. It is one of the signs of puberty which occurs one or two years following the appearance of secondary sexual characteristics. Dasgupta and Sarka (2008) opined that the first menstruation (menarche) occurs between 11-15 years with a mean of 13 years. This continues every month until late forties or fifties. Olds, London and Ladewig (1992) explained that menstrual blood mixes with the normal vaginal mucosal secretions and perspiration, and causes decomposition and odour when it comes in contact with air. This fermentation of the menstrual blood along with the vaginal mucosal secretions occurs in the perineal region (between the vaginal orifice and the anus), because the region is moist and warm, thus providing a medium for bacterial growth. In view of the blood which can accumulate and decompose in the perineal region, it is obvious that some degree of hygiene practices must be adopted for cleanliness and protection from stains as well as prevents infection. This strengthens the need for menstrual hygiene practices.

Menstrual hygiene is personal hygiene during menstruation. Menstrual hygiene is an issue adolescents have to deal with in their lifetime. Information on good menstrual hygiene is crucial for the health, education and dignity of female adolescents. Roose, Spijksms, Vandaalen and Singeling (2010) noted that menstrual hygiene is fundamental to the dignity and well-being of women and girls, and is an important part of the basic hygiene, sanitation and reproductive health services. Good hygiene practices such as the use of pads and adequate washing of the genitals are essential during menstruation (Subhash, Sushama, Monica, Nidhi, Ketaki & Suresh, 2011). Menstrual hygiene practices refer to those actions that are physically demonstrated by female adolescents during menstruation and which have influence on the female reproductive health, actions or behaviours which in turn promote the health of women. Menstrual hygiene practices include choice of the feminine hygiene products, how often and when to change menstrual protective products, disposal of used menstrual protective material, bathing and hand washing, care of the clothing used during menstruation and care of the vulva and vagina, as well as the supposed benefits of vaginal cleansing at the end of each menstrual period.

Dasgupta and Sarka (2008) stressed that hygiene-related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to reproductive tract infections (RTI), pelvic inflammatory diseases and other complications. The authors also observed that millions of women are sufferers of reproductive tract infections and its complications, and the infection is often transmitted to the offspring of the pregnant mother. Adolescent girls who have adequate knowledge regarding menstrual hygiene and safe practices are less vulnerable to reproductive tract infections and its consequences. Therefore, adequate knowledge about menstruation right from puberty may increase safe practices and help in mitigating the suffering of millions of women, including adolescent girls.

Purpose of the study

The purpose of the study was to determine the attitude and practices of female secondary school students towards menstruation and menstrual hygiene practices in Aboh Mbaise Local Government Area of Imo State. Specifically, the study was set to determine the:

1. attitude of female secondary school students towards menstruation;
2. menstrual hygiene practices among female secondary school students;
3. attitude of female secondary school students towards menstruation according to age and
4. menstrual hygiene practices among female secondary school students according to age?

Research questions

The following research questions were posed to guide the study.

1. What is the attitude of female secondary school students towards menstruation?
2. What are the menstrual hygiene practices among female secondary school students?
3. What is the attitude of female secondary school students towards menstruation according

to age?

4. What are the menstrual hygiene practices among female secondary school students according to age?

Hypotheses

Two null hypotheses were tested at .05 level of significance.

1. There is no significant difference in the attitude of female secondary school students towards menstruation according to age.
2. There is no significant difference in the menstrual hygiene practices among female secondary school students according to age.

Method

Cross sectional survey research design was used for the study. The population for the study consisted of 3,805 female secondary school students in Aboh Mbaise Local Government Area of Imo state. A multi-stage sampling procedure was used to draw a sample of 380 female secondary school students in the Local Government Area. The sample was done in three stages. Stage one involved random selection of five secondary schools from the nine existing secondary schools in Aboh Mbaise Local Government Area of Imo State. The second stage involved simple random sampling of balloting with replacement to select seventy-six female students from each of the selected five schools in the local government area. The third stage involved systematic selection of twelve female students from each of the six classes in each of the selected five secondary schools giving a total of three hundred and eighty female secondary school students. The instrument for data collection was the researchers' structured questionnaire Menstrual Hygiene Attitude and Practices Questionnaire (MEHAPQ). It had three sections. Section A was concerned with the bio-data of the respondents, section B consisted of eight questions on attitude towards menstruation while section C comprised of nine questions on menstrual hygiene practices arranged in four-pointscale. Based on the objectives of the study. The instrument was validated by three experts from the Department of Human Kinetics Health and Education, Alvan Ikoku College of Education, Owerri. Split-half method using Cronbach Alpha statistic was used to establish the internal consistency of the instrument. The validated instrument was administered by the researchers and three research assistants on face to face basis to the respondents. Data collected was analyzed using the Statistical Package for Social Science (SPSS) batch system. Research questions were answered using mean while ANOVA and Chi-square statistics were used to test the null hypotheses at .05 level of significance and at appropriate degrees of freedom.

Results

Table 1

Percentage of Attitude of Female Secondary School Students towards Menstruation (N = 338)

S/n	Statements	%%	Decision		
			Disagree	Agree	
1.	I felt like a woman when I started menstruating.	16.9%	83.1%	3.28	+ve
2.	Menstruation is an experience worth having.	25.1%	74.9%	3.00	+ve
3.	I don't feel like menstruating.	63.3%	36.7%	2.29	-ve*
4.	I am happy seeing my menses every month.	28.4%	71.6%	3.01	+ve
5.	Menstruation is a disease.	65.6%	34.4%	2.13	-ve*
6.	I feel ashamed of myself when i'm menstruating.	27.77%	55.0%	19.5	-ve*
7.	I don't feel comfortable discussing menstruation.	49.1%	50.9%	2.47	-ve*
8.	Onset of menstruation is a fearful and shocking.	33.2%	66.8%	2.81	+ve
Grand Mean				2.67	Positive

Table 2: Frequency and Percentage of Menstrual Hygiene Practices of Female Secondary School Students (n=338)

S/n	Items	F	%
1.	Material used as menstrual protective material?		
	Piece of cloth	80	23.7
	Tissue	86	25.4
	Pad	162	47.9
	Tampoon	10	3.00
2.	Frequency of changing your menstrual protective material in a day?		
	Once	28	8.3
	Twice	74	21.9
	Thrice	140	41.4
	Whenever it is soaked with menstrual blood	96	28.4
3.	Methods for disposing soiled menstrual protective material?		
	Throw away into the dust bin/pit latrine	189	55.9
	Flush in the water closet system	37	10.9
	Wash and re-use	60	17.8
	Burn in the fire	52	15.4
4.	Care of piece of cloth or rag after use as menstrual protective material?		
	Wash with water only	13	3.8
	Wah with soap and water	114	33.7
	Wash with water, soap and d disinfectant	194	57.4
	Do not wash at all	17	5.0
5.	Frequency of hand washing after changing menstrual protective material?		
	As often as it is necessary	96	28.4
	Before touching the menstrual protective material	29	8.6
	After removing stained menstrual protective material	203	60.1
	Do not remember to wash at all	10	3.0
6.	Method of drying menstrual protective material after washing before re-use?		
	Spread inside a room without sunlight	56	16.6
	Dry it outside the house without direct sunlight	53	15.7
	Dry with pressing iron	21	6.2
	Dry it outside the house with sunlight	208	61.5
7.	Frequency of bathing during menstruation		
	Once a day	22	6.5
	Twice a day	84	24.9
	Thrice a day	181	53.6
	Anytime menstrual material is changed	51	15.1
8.	Ways of care for the clothings/outfit and underwears during menstrual period?		
	Change clothing and underwears when soiled	112	33.1
	Change them once or twice a day	80	23.1
	Wash off stained and continue to use	26	7.7
	Change them each time menstrual material is changed	120	35.5
9.	Materials used in cleaning external genitalia during Menstruation?		
	Antiseptic and soap	72	21.3
	Antiseptic and soap	161	47.6
	Soap and water	26	7.7
	Tissue or rag	79	23.4

Table 1 shows that female secondary school students had positive attitude to items 1, 2, 4 and 8, and negative attitude to item numbers 3, 5, 6 and 7. The grand mean of 2.67 indicates that the students had positive attitude towards menstruation.

Data in Table 2 show that 23.7 percent percent of girls used piece of cloth during menstruation, 25.4 percent used tissue, 47.9 used sanitary pad and 3.05 percent used tampon. Regarding how often female students change their menstrual protective materials during menstruation in a day, 8.3 percent indicated they changed once, 21.9 changed twice, 41.4 percent changed thrice while 28.4 changed theirs whenever it is soaked with menstrual blood. With respect to methods for disposing soiled menstrual protective material, 55.9 percent throw away into the dustbin or pit latrine, 10.9 percent flush in the water closet cistern, 17.8 percent washed and re-used while 15.4 percent burn theirs in the fire. With regard to care of clot after use, 3.8 percent admitted that they wash with water, 33.7 percent of the respondents washed with soap and water, 57.4 percent washed with water, soap and disinfectant while 5.05 percent did not wash at all.

The Table further revealed that 28.4 percent wash their hands as often as it is necessary during menstruation in a day, 8.6 percent washed their hands before touching the menstrual protective material, 60.1 percent of the girls wash their hands after removing stained menstrual protective material and 3.0 percent did not remember to wash at all. With respect to the ways menstrual protective materials are dried after washing before re-use, 16.6 percent of the respondents spread the cloths inside a room without sunlight, 15.7 percent dried it outside the house without direct sunlight, 6.2 percent dried the cloths with pressing iron while 61.5 percent dry it outside the house with sunlight.

As shown in the Table, 6.5 percent of the girls bath once in a day, 24.9 percent bath twice, 53.6 percent bath thrice in a day while 15.1 percent bath anytime menstrual material is changed. The Table further shows that 33.1 percent indicated they changed clothing and underwears when soiled, 23.1 percent changed them once, 7.7 percent washed off stained area and continue to use while 35.55 percent change them each time menstrual material is changed. In cases of cleaning the genitalia during menstruation, 21.3 percent use antiseptic and soap, 47.6 percent used soap and water, 7.7 percent used only water while 23.4 percent admitted they used tissue or rag in cleaning their genitalia during menstruation.

Table 3
Mean Response Regarding Attitude of Female Secondary School Students towards Menstruation According to Age (N=338)

S/n	Statements	Age			
		10-12	13-15	16-18	19 and above
		(47)	(94)	(138)	(59)
		\bar{X} Dec	\bar{X} Dec	\bar{X} Dec	\bar{X} Dec
1.	I felt like a woman when I started menstruating.	3.09 +ve	3.23 +ve	3.42 +ve	3.15 +ve
2.	Menstruation is an experience worth having.	3.00 +ve	3.15 +ve	3.04 +ve	2.66 +ve
3.	I don't feel like menstruating.	2.3 -ve	2.18 -ve	2.24 -ve	2.49 -ve
4.	I am happy seeing my menses every month.	2.94+ve	2.89 +ve	3.16 +ve	2.92 +ve
5.	Menstruation is a disease.	2.36 -ve	2.24 -ve	2.04 -ve	1.98 -ve
6.	I feel ashamed of myself when i'm menstruating.	2.62 +ve	2.29 -ve	2.30 -ve	2.44 -ve
7.	I don't feel comfortable discussing menstruation.	2.66 +ve	2.46 -ve	2.39 -ve	2.51 +ve
8.	Onset of menstruation is a fearful and shocking	2.81 +ve	2.57 +ve	2.86 +ve	3.05+ve
Grand	\bar{X} 2.73 +ve	2.62 +ve	2.68 +ve	2.65 +ve	

Key: +ve = Positive, -ve = Negative.

Data in Table 3 show that female secondary school students irrespective of their age groups had positive attitude towards menstruation (10-12 years = \bar{X} =2.73; 13-15 years = \bar{X} = 2.62; 16-18 years = \bar{X} =2.68, and 19 years and above = \bar{X} =2.65) when grand mean were considered. Specifically, the respondents in all the age groups did not feel like menstruating (\bar{X} =2.73). In addition, all the age groups had negative attitude towards the item "menstruation is a disease". Furthermore, with exception of respondents in age group of 10-12 years who have positive attitude towards feeling

ashamed of themselves whenever they were menstruating ($\bar{X} = 2.62$), all other age groups had negative attitude as depicted by the respective means: 13-15 years (2.29), 16-18 years (2.30) and 19 years and above (2.44). The Table further shows that respondents within the age groups 13-15 years (2.46) and 16-18 years (2.39) had negative attitude towards “I do not feel comfortable discussing about menstruation”.

Table 4

Proportion of Menstrual Hygiene Practices According to age (n=338)		Age			
S/n	Items	10-12	13-15	16-18	19 and above
1	Materials used as menstrual protective material				
	Piece of cloth	44.7%	30.9 %	3.8 %	18.6%
	Tissue/cotton wool	19.1%	27.7 %	25.4%	27.1%
	Sanitary Pad	34.0%	41.5%	56.5%	49.2%
	Tampoon	2.1%	.0%	4.3%	5.1%
2	Frequency of changing menstrual protective material during menstruation in a day				
	Once	10.6%	7.4%	10.1%	3.4%
	Twice	25.5%	20.2%	21.7%	22.0%
	Thrice	34.0%	44.7%	39.9%	45.8%
	Whenever it is soaked with menstrual blood	29.8%	27.7%	28.3%	28.8%
3	Ways used for disposing used menstrual protective material.				
	Throw away into the dust bin/pit latrine	55.3%	53.2%	60.1%	50.8%
	Flush in the water closet system	8.5%	3.2%	11.6%	23.7%
	Wash and re-use	19.1%	25.5%	12.3%	16.9%
	Burn in the fire	17.0%	18.1%	15.9 %	8.5%
4	Care of use of piece of cloth or rag as menstrual protective material after use.				
	Wash with water only	4.3%	3.2 %	3.6%	5.1%
	Wash with soap and water	3.0%	41.5%	31.9 %	25.4%
	Wash with water, soap and disinfectant	57.4%	51.1%	60.9%	59.3%
	Do not wash at all	4.3 %	4.3%	3.6%	10.2%
5	Frequency of hand washing after use of menstrual protective material during menstruation in a day.				
	As often as it is necessary	19.1%	27.7%	24.6 %	45.8%
	Before touching the menstrual protective material	10.6%	3.2%	14.5%	1.7%
	After removing stained menstrual protective material	66.0%	66.0%	57.2%	52.5%
	Do not remember to wash at all	4.3%	3.2 %	3.6%	0%
6	Ways of drying piece of cloth or rag as menstrual Protective material before re-use during menstruation.				
	Spread inside a room without sunlight	21.3%	12.8%	15.9%	15.3%
	Dry it outside the house without direct sunlight	14.9%	5.3%	5.1%	3.4%
	Dry with pressing iron	53.2%	66.0%	59.4%	66.1%
	Dry it outside the house with sunlight	10.6%	16.0 %	19.6%	15.3%
7	Frequency of bathing during menstruation in a day				

	Once a day	.0%	5.3%	8.0%	10.2%
	Twice a day	23.4%	28.7%	23.9%	22.0%
	Thrice a day	57.4%	50.0%	55.8%	50.8%
	Anytime menstrual material is changed	19.1%	16.0%	12.3%	16.9%
8	Ways of caring for the clothings/outfit and underwears during menstrual period.				
	Change clothing and underwears when stained	27.7%	35.1%	36.2%	27.1%
	Change them once or twice a day	27.7%	21.3%	23.9%	23.7%
	Wash off stained and continue to use	8.5%	9.6%	3.6%	13.6%
	Change them each time menstrual material is changed	36.2%	34.0%	36.2%	35.6%
9	Materials used in cleaning external genitalia during menstruation.				
	Antiseptic and soap	19.1%	17.0%	22.5%	27.1%
	Soap and water	53.2%	48.9%	45.7%	48.8%
	Only water	4.3%	7.4%	6.5%	13.6%
	Tissue or rag	23.4%	26.6%	25.4%	13.6%

Data in Table 4 reveal that 47.7% of girls in the age groups 10-12 years used more of piece of cloth as a menstrual protective material, 21.5 % of those under 13-15 years used more of tissue/cotton wool, 56.5% of the students under 16-18 years used more of sanitary pads while 5.1% of those under 19 years and above used tampon. The Table further reveals that a proportion of 10.6% of females aged 10-12years changed their menstrual protective material once during menstruation in a day, 25.5% of those aged 10-12 years changed twice in a day, 45.8% of the respondents under the ages of 19 years and above changed thrice during menstruation in a day and also 29.8% of those in this age group changed menstrual protective material more whenever it is soaked with menstrual blood.

With respect to the method of disposal of the used absorbent, it was found that a majority (60.1%) of the girls between the ages of 16-18 years throw away in the dustbin or pit latrine, 23.7% of those from 19 years and above flush in the water closet cistern, 25.5% of females between the ages of 13-15 years wash and re-use while 18.1% of those between 13-15 years burned it in the fire. For care of menstrual protective material if piece of cloth was used, 4.3% of those between the ages of 10-12 years wash with water only, 41.5 % of females of those between the age of 13-15 years wash with soap and water, 60.9% of females aged 16-18 years wash with water, soap and disinfectant while 10.2% of females between the ages from 19 years and above do not remember to wash at all. With regard to how often the students wash their hands during menstruation in a day, greater proportion of those from 19 years and above 45.8% do it as often as it is necessary, 14.5% females aged 16-18 years wash before touching the menstrual material, 66.0% of ages 10-12 and 13-15 wash after removing stained menstrual protective material while 4.3% of those within the age of 10-12 years do not remember to wash at all.

In cases of re-used cloth, 19.6% of females between the age of 16-18 years spread inside a room without sunlight, 21.3% of students aged 10-12 years dry it outside the house without direct sunlight and 14.9% of them dry with pressing iron, while 66.1% of ages 19 and above dry it outside the house with sunlight. Regarding bathing during menstruation, 8.0% of those between 16-18 years bath once in a day, 28.7% of ages 13-15 years bath twice a day and 57.4% of this age group also bath thrice in a day while 19.1% of those between the age of 10-12 years bath anytime menstrual material is changed.

The Table further reveals that 36.2% of females between the age of 16-18 care for their clothing or outfit and underwears during menstrual period by changing it when stained, 27.7% of those between the age of 10-12 years change once or twice in a day, 13.6% of ages 19 years and above wash off stained area and continue to use, while 36.2% of those between 16-18 years of age change them each time menstrual protective material is changed. Finally, 27.1% of the female students between the age of 19 years and above clean their genitalia with antiseptic and water during menstruation, 53.2% of females between 10-12 years clean with only soap and water, 13.6% of ages

19 years and above wash with water only while 26.6% of 13-15 years clean their external genitalia with tissue or rag only.

Table 5

Result of One-Way Analysis of Variance (ANOVA) Testing the Null-Hypothesis of no Significant Difference in The Attitude of Female Secondary School Students towards Menstruation according to Age

Attitude	Sum of Squares	Mean Square	df	F-cal	P-value
Between Groups	.051	.017	3	.104	.957
Within Groups	4.523	.162	28		

*Not significant

Table 5 shows the F-value of .104 with its corresponding P-value of .957 which is greater than .05 level of significance at 3 and 28 degrees of freedom. The null hypothesis of no significant difference is therefore accepted. This implies that attitude of female secondary school students towards menstruation is the same for all the age groups.

Table 6

Summary of Chi-Square(x²) Analysis on Menstrual Hygiene Practices according to Age

S/n	Items	X-Cal value	df	X ² -crit	P-Val
1.	Which of the following do you use as menstrual protective materials	27.680	9	16.919	.001*
2.	How often do you change your menstrual protective material during menstruation in a day	4.38	9	16.919	.887
3.	Which of the following methods do you usually use for disposing soiled menstrual protective material	23.078	9	16.919	.006*
4.	If piece of cloth or rag is used as menstrual protective material, how do you care for it after use	8.199	9	16.919	.514
5.	How often do you wash your hands during menstruation in a day	24.470	9	16.919	.004*
6.	If piece of cloth or rag is used as menstrual protective material, in which of the following ways is it dried after washing before re-use	11.287	9	16.919	.257
7.	How often do you bath during menstruation	7.73	9	16.919	.561
8.	In which of the following ways do you care for the clothing/outfit and underwear during menstrual period	8.294	9	16.919	.505
9.	Which of the following materials do you use in cleaning your external genitalia during menstruation	9.128	9	16.919	.426

*Significant

Data in Table 6 show the Chi-square analysis on menstrual hygiene practices of female secondary school students according to age. The Table revealed that the Chi-calculated and the P-value for the following items 1(x-cal = 27.680, P-value = .001), 3(x-cal = 23.078, p-value = .006) and 5(x-cal = 24.470, p-value = .004) with their corresponding values which were less than .05 level of significance. The hypothesis of no significant difference is therefore rejected. This implies that there was significant difference in the responses of students regarding these menstrual hygiene practices according to age. The Table further show that the Chi-calculated and the P-value for items 2(x-cal = 4.38, p-Val = .887), 4(X-cal = 8.199, P-value = .514), 6(x-cal = 11.287, P-val = .257), 7(x-cal = 7.738, P-val = .561), 8(x-cal = 8.294, P-val = .505), and 9(x-cal = 9.128, P-val = .426), were greater than .05 level of significance. The hypothesis of no significant difference is therefore accepted. This implies that there was no significant difference on the menstrual hygiene practices of female secondary school students regarding these items according to age.

Discussion

Result in Table 1 indicates that indicates that female secondary school students had positive attitude towards menstruation. This finding was expected and is in consonance with that of Busari (2012) which reported that the respondents had positive attitude towards menstruation. The female students may have been equipped with adequate information and skills on menstruation thereby empowering to have positive attitude. This may also be due to proper health education programme in schools which focused on sexuality education (menstrual health and hygiene practices) among girls.

Result in Table 2 show that greater percentage of the female students used sanitary pad. This finding was anticipated and therefore not a surprise. This finding is in consonance with that of Gharoro (2013) which observed that majority of the students used disposable pads as absorbent materials to collect their menstrual blood. The reason may be as a result of availability of sanitary pads in our local markets. Besides it is affordable and easy to apply. Moreover, the rate at which sanitary pads are advertised in the media has popularized the use as the best protective material. The Table further shows that most of the rural girls used old clothes as menstrual pads and that they re-used the clothes after washing them with soap and water. This finding is in line with that of Abioye-Kuteyi (2000) who observed that girls use unsanitary materials as menstrual absorbent. The reason is because the students could not afford sanitary pads due to low socio-economic status, lesser availability of the sanitary pads in the rural areas. The implication of this practice is that this can affect their health and increase their vulnerability to infection.

Result in Table 3 show that female secondary school students irrespective of their age have positive attitude towards menstruation when grand mean was considered. This was not expected and therefore a surprise. However this finding is in line with the findings of Mohammad and Farzaneh (2004) which reported that adolescent girls irrespective of age had positive attitude regarding menstruation. Female secondary school students between the ages of 13-15 years are still young, have little or ugly experience of menstruation and are expected to have negative attitude towards menstruation. However, those above 16 years are above and are expected to show positive attitude. This situation may be due to the high literacy status of the mothers and small inhibitions for the mothers in talking to their daughters regarding the significance, hygienic practices and a healthy attitude towards menstruation.

Result in Table 4 revealed that most of the female students of all ages used sanitary pad as menstrual protective material. This finding is in line with the findings of Lawan, Nafisa and Aisha, (2010) which reported that the students' practice of menstrual hygiene was also associated with respondents' age group. Female students of all ages live in the local government and probably may have been buying menstrual protective material from the same market at a cheaper and affordable price to the reach of everybody. They changed menstrual protective material once, twice, thrice and when it soaked with menstrual blood. The commonly method of disposal were by throwing it in the dustbin/pit latrine, flushing in the water closet cistern, wash and re-use and burning it in the fire. For care of menstrual protective material if piece of cloth was used, all ages washed with water, soap and disinfectant. With regard to how often the students wash their hands during menstruation in a day, all ages washed before touching the menstrual material, after removing stained menstrual protective material, was as often as it is necessary and some do not remember to wash at all. They spread menstrual cloth inside a room without sunlight, outside the house without direct sunlight, and used iron to press or spread outside the house with sunlight. Female students of all ages also changed their clothing/outfits once, twice, thrice in a day, when stained, washed off stained area and changed clothing or outfit each time menstrual protective material is changed. Female students of all ages cleaned their genitalia with antiseptic, water, soap, disinfectant and tissue or rag. Roose, Spijkms, Vandaalen and Singeling (2010) noted that menstrual hygiene is fundamental to the dignity and well-being of women and girls, and is an important part of the basic hygiene, sanitation and reproductive health services. Therefore, the inability of the female students to maintain menstrual cleanliness is likely to expose the girls to infections if the perineal region is not properly cared for.

Table 5 shows that female secondary school students of various age groups had positive attitude towards menstruation. This is in consonance with the finding of Mohammad and Farzaneh (2004) which reported that no significant difference was found between the three age groups regarding attitude towards menstruation. Female secondary school students between the ages of 13-15

years are still young, have little or ugly experience of menstruation and are expected to have negative attitude towards menstruation. However, those above 16 years are above and are expected to show positive attitude. The situation may be due to the high literacy status of the mothers and small inhibitions for the mothers in talking to their daughters regarding the significance, hygienic practices and a healthy attitude towards menstruation.

Table 6 show that there was significant difference in the menstrual hygiene practices according to age. This is expected and therefore not a surprise. This finding is in consonance with the findings of Subhash, Sushama, Monica, Nidhi, Ketaki and Suresh (2011) which reported that the difference on hygiene practices regarding menstruation according to age was not found to be statistically significant. Female secondary school students between the ages of 13-15 years are still young, have little or ugly experience of menstrual hygiene practices.

Conclusions

From the findings of the study, the following conclusions were drawn;

1. Female secondary school students demonstrated positive attitude towards menstruation.
2. Majority of the female secondary school girls adopted hygienic practices during menstruation.
3. Female secondary school students irrespective of their age groups demonstrated positive attitude towards menstruation.
4. Female secondary school students irrespective of their age groups adopted good practices of menstrual hygiene.
5. There was no significant difference in the attitude of female secondary school students towards menstruation according to age.
6. There was significant difference in the menstrual hygiene practices of female secondary school students according to age.

Recommendations

Based on the findings, discussion and conclusions of the present study, the following recommendations were made:

1. Ministry of health and Curriculum planners should therefore not relent in its efforts to institutionalize sexuality education in both public and private secondary schools and in tertiary institutions of learning in Nigeria.
2. There is need to for health educators and parents to encourage safe and hygienic practices among adolescent girls and also bring them out of misconceptions regarding menstruation.

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