

Knowledge and Practices of Menstrual Hygiene among Female Undergraduates of Babcock University, Ilishan-Remo, Ogun State

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Abstract

Menstrual hygiene management involves continuing regular activities during menstruation. However, lack of effective menstrual hygiene management can restrict access to health, education and future prospects among girls. This study aimed to assess the knowledge and practices of menstrual hygiene among undergraduates of Babcock University. The study was a cross-sectional study, participants were 413 female undergraduates recruited using convenience sampling. All consenting participants completed a self-administered structured questionnaire while the data management was analyzed using descriptive and inferential statistics. Knowledge about menstrual hygiene was 83%, while 53.4% of participants changed absorbent materials twice daily. There was a statistically significant relationship between the age of adolescents and practices of menstrual hygiene ($r=0.845$, $p<0.05$). The study concludes that there is need for parents to create time for education as well as financial and psychosocial support to adolescents during menstruation.

Key words: Menstrual practices, menstrual hygiene, menstruation.

Introduction

Menstruation is a physiological process; but in the absence of adequate education, it can translate to a major challenge for adolescent girls relative to response to its onset, interpretation, expectations and management. Many girls in developing countries have been reported to lack appropriate knowledge and sufficient information regarding menstruation and its management¹. Despite information from friends, books, and the media; parents represent a major source of information on the practical concerns that accompany puberty and menstruation. Hygienic management of menstruation has been reported as a factor for healthy reproductive and dignified life among females.²

Poor menstrual hygiene has been associated with stigma, ill health, school absenteeism and increased school drop-out rates among young girls.³ Poor menstrual hygiene management may affect the reproductive tract although the specific infections, strength of effect and the route of transmission remain unclear.⁵ In addition, the girl's self-image may be negatively impacted by incorrect attitude to management of menstruation.⁶ The financial demand of menstrual management provides an additional challenge to females; financial constraints hinders availability of hygienic products thereby encouraging uptake of unhygienic alternatives with its attendant health risk⁷. Also, girls and women in workplaces or schools often miss work/school activities due to lack of access to sanitary materials while toilet facilities are unavailable in some communities⁸. Therefore the fear of embarrassment from leaking experiences and dysmenorrhea limits involvement in recreational, religious or social activities.⁹

Although menstruation is a physiological process, it is not usually opened to public discussion;⁴ while misinformation from cultural, religious and traditional beliefs surrounding menstruation. In a region from India, menstruation is viewed as a disease, therefore women are denied access to sleeping beds, the kitchen or contact with male members of their family.¹⁰

Consequent to ignorance about hygienic menstrual management, some adolescent girls are prone to complications which include urinary as well as reproductive tract infections.¹² In some communities, females are denied access to water points or food that others will eat, religious rituals and sanitation facilities during menstruation-a period when they need water and sanitation the most.¹³

In a report, access to water and sanitation at school during menstruation were available in about 48% of all schools globally¹⁴ while the toilets when available lack waste disposal bins leading to improper disposal of menstrual sanitary items.¹⁵

Due to ignorance, many mothers are incapable of educating their daughters on hygienic menstrual management; others lack the finance to support hygienic practices for their daughters while a number pass on incorrect cultural and traditional beliefs. This study aimed to assess the knowledge and practices of menstrual hygiene among undergraduates of Babcock University

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Methodology

The study was a cross-sectional (descriptive) study involving female undergraduates of Babcock University, Nigeria using convenience sampling. The sample size of 413 was calculated using Taro Yamane formula. Participants were female undergraduates at the study site who had attained menarche at the time of the study while non-students of the study site, girls yet to attain menarche and teachers were excluded from the study. All participants completed a self-administered questionnaire designed for the study after informed consent was obtained. The data was analyzed using Statistical Package for the Social Science (SPSS) version 23. Descriptive statistics with frequency tables were employed for demographic characteristics while inferential statistics was with Pearson Product Moment Correlation.

Results

There were a total of 413 participants aged 15 to 23 years (mean age 1.7), 259 (62.2%) were aged 15 to

17years, 277(67.1%) were of Yoruba tribe, 270(65.4%) were Christians, 322(78%) were the first female child in the family while 291(70.5%) of the parents were civil servants.

Also, 222 (78%) have heard of the term menstruation previously, 91(22%) were not aware that menstrual hygiene practice can be good or bad, 322(78%) agreed that menstrual hygiene refers to activities that promote health during menstruation, 229 (55.4%) use sanitary pad and reported it as a good menstrual hygiene practice; 275(66.6%) opined that poor menstrual hygiene can lead to diseases while 259(62.57%) revealed that good menstrual hygiene involves the use of reusable cloth as absorbent during menstruation, 254(61.5%) reported that they know that there are foul smell during menstruation, 284(68.8%) reported they know that girls should take more nutritious diet during menstruation; 308(74.6%) reported that they know that menstruation is not a life-long process while 302(73.1%) reported they were taught about menstruation before the onset of their first

Table 1: Socio-demographic Characteristics of the respondents N=413

Variables	Categories	Frequency	Percentage
Age	15-17years	257	62.2
	18-20years	3	0.7
	21-23years	153	37
Ethnicity	Yoruba	277	67.1
	Igbo	109	26.4
	Hausa	1	0.2
	Others	25	6.1
Religion	Christianity	270	65.4
	Islam	135	32.7
	Others	8	1.9
Are you the first female child in your family	Yes	322	78
	No	91	22
Occupation of parent	Civil servant	291	70.5
	Vocational worker	122	29.5

Table 2: Analysis of Knowledge of Menstrual Hygiene N=413

Items	Yes	No
Have you heard of the term menstruation?	322(78%)	91(22%)
Menstrual hygiene practices can be good or bad?	91(22%)	322(78%)
Menstrual hygiene is those activities that promote health during menstruation?	322(78%)	91(22%)
The use of sanitary pad is a good menstrual hygiene practice?	229(55.4%)	184(44.6%)
Poor menstrual hygiene can lead to disease?	275(66.6%)	138(33.4%)
Good menstrual hygiene involves the use of reusable cloth as absorbent during menstruation?	259(62.7%)	154(37.3%)
Do you know that there is a foul smell during menstruation?	254(61.5%)	159(38.5%)
Do you know that a girl should take more nutritious diet during menstruation?	284(68.8%)	128(31%)
Do you know that menstruation is not a life long process?	308(74.6%)	105(25.4%)
Were you taught about menstruation before the onset of your first experience?	302(73.1%)	111(26.9%)

experience.

The mean score for knowledge about menstrual hygiene is 17.6 (SD 1.09477) on a scale point of 20 of 10 items. However, 56(10%) had a score of 0-10, 14(7%) had a score of 8-14 while 342 (83%) had a score of 15-20.

Findings also revealed that 221(53.5%) of the respondent take bath twice during their menstruation while 91(22%) take their bath thrice. Two hundred and nine (50.6%) of the respondents buy and use menstrual management materials monthly, 123(29.8%) twice in a year while 81(19.6%) reported once in a while. In

addition, 199(48.2%) of the respondent flush the menstrual materials in the toilet while 113(27.4%) bury the menstrual materials. 24.5% of the respondent reported that they change their menstrual management materials daily while 53.4% reported two times. More than half of the respondents do not stay away from other activities during their period.

Furthermore, most of the respondents strongly disagreed that their family allow them to use toilet paper and cloth materials when menstruating while 33.9% of the respondents strongly agreed that there is no adequate water supply facilities to enable me change

Table 3: Summary of knowledge of menstrual hygiene

Knowledge of Menstrual Hygiene	Frequency	Percentage
High (15-20)	342	83
Moderate (8-14)	14	7
Low (0-10)	56	10
Total	413	100

Table 4: Menstrual Hygiene Practices N=413

Variables	Categories	Frequency	Percentage
How many times do you bath when menstruating	Once	101	24.5
	Twice	221	53.5
	Thrice	91	22
How often do you buy and use menstrual management materials	Once in a while	81	19.6
	Twice in a year	123	29.8
	Monthly	209	50.6
How do you dispose used menstrual materials	Burning	81	19.6
	Flushing in the toilet	199	48.2
	Burying	113	27.4
	Washing and reusing	20	4.8
How often do you change your menstrual management materials daily	Once	101	24.5
	Two times	221	53.4
	Three times	91	22
Do you stay away from all other activities during your period	Yes	129	31.2
	No	284	68.8

Table 5: Factors associated with Menstrual Hygiene Practices N=413

Items	Strongly Disagree	Disagree	Agree	Strongly Agree
My family only allows the use of toilet paper and cloth material when menstruating.	180(43.6%)	75(18.2%)	72(17.4%)	86(20.8%)
There is no adequate water supply facilities to enable me change regularly.	37(9%)	99(24%)	137(33.2%)	140(33.9%)
There is no adequate waste disposal method to discard properly.	70(16.9%)	41(9.9%)	61(14.8%)	241(58.4%)
I do not have money to buy sanitary pad always so I sometimes use other materials.	78(18.9%)	25(6.1%)	87(21.1%)	223(54%)
My religion forbids me from attending church, mosque or school during my period.	90(21.8%)	93(22.5%)	101(24.5%)	129(31.2%)
I do not have enough sanitary pad to change regularly.	105(25.4%)	106(25.7%)	41(9.9%)	161(39%)

Table 6: Pearson Product Moment correlation showing the relationship between age of adolescent and menstrual hygiene practices

Variables	Mean	Standard Deviation	N	R	P	Decision
Age	1.7480	.96485	413	0.845	0.05	Sig
Good practice of menstrual hygiene	2.6193	.85500				

$$r=0.845 \ N= 413 \ p< 0.05$$

regularly, additionally, 58.4% of the respondents strongly agreed that there is no adequate waste disposal method to discard properly, 54% of the respondents strongly agreed that they do not have money to buy sanitary pad always so they sometimes use other materials. Majority of the respondents 31.2% reported that their religion forbids me from attending church, mosque or school during period while 39% strongly agreed that they don't have enough sanitary pads to change regularly.

There was a significant relationship between age of adolescents and good practices of menstrual hygiene ($r=0.845, p<0.05$). The hypothesis was accepted which states that, there was a significant relationship between age of adolescents and good practices of menstrual hygiene.

Discussion

The result of demographic characteristics showed that 62.2% of the respondents were between the ages of 15 to 17 years. This may be associated with the fact that undergraduates in private Universities tend to be relatively younger compared to their counterpart in the public Institution. Majority (67.1%) were Yoruba which may be connected to the area where the School is situated (South western Nigeria).

The result showed that 83% of the respondents had high knowledge of menstrual hygiene, 7% had moderate knowledge and 10% of the respondents had low knowledge of menstrual hygiene. The result is consistent with the findings that school age students between the ages of 12-15 years are aware of menstrual hygiene¹⁴. Similar study was reported that young girls transiting into adulthood need good menstrual hygiene for improved wellbeing while in school and to maintain attendance in school.

The result of the analysis on menstrual hygiene shows that more than half of the respondents do not stay away from other activities during menstruation.

The result is consistent with the findings that young girls change their menstrual materials whenever it is soaked while 24.4% change twice a day and 77.5% of the girls wash their hands after removing the soiled material¹⁶. Another study reported that most girls in urban schools reported they do not use school toilets because it is not well managed, problem with privacy, and lack of water and disposal facility. More than half

of the respondents (56%) had access to toilet at home with adequate privacy. Additionally, a study reported that 5% of respondents had facility for disposing material waste while 95% do not have any facility. In the same study, 50% of the girls the need for disposal facility while 50% did not. This indicates that facilities for disposal were grossly deficient and half of the girl's are not even aware about the need for proper disposal

On the factors associated with menstrual hygiene practices, majority of the respondents strongly disagreed that their family only allows the use of toilet paper and cloth materials when menstruating. 33.9% of the respondents strongly agreed that there was no adequate water supply facilities to enable them change regularly. Most of the respondent had no adequate waste disposal method to discard properly. 58.4% of the respondents strongly agreed they do not have money to buy sanitary pad always so they sometimes use other materials. 31.2% reported that their religion forbids them from attending church, mosque or school during my period. And 54% strongly agreed they have enough sanitary pads to change regularly. The result corroborates the findings that culture of community has significant impact on the ineffective menstrual hygiene practice while 6.2% used designated piece of cloth which is washed and re-used. 91.3% of those that did not use it said it was expensive and they cannot afford it while the remaining 8.7% claimed that sanitary pads cause vaginal itching¹⁷. Also another study reported that poor education on menstrual hygiene in rural are significant impact on good menstrual hygiene in school age students and financial problem as cause for not using sanitary pads¹⁷. Additionally, 95% of the school girls used old pieces of rags as menstrual absorbent materials and their reason was not being able to afford sanitary pads.¹⁸

The result of hypothesis showed that there was a significant relationship between age of adolescents and good practices of menstrual hygiene. Additionally, there is a significant association between age and the level of good practice of menstrual hygiene¹⁹

Conclusion and Recommendations

Based on the outcomes of this study, it is hereby recommended that parents should create more time towards for their female adolescents towards giving necessary psychosocial support during menstruation

and school can partner with Non-governmental organizations towards provision of menstrual kits for young female adolescents.

References

1. Omigbodun OO, Omigbodun AO. Unmet need for sexuality education among adolescent girls in Southwest Nigeria: A qualitative analysis. *African journal of reproductive health*. 2004 Dec 1:27-37.
2. Ahmed R, Yesmin K. Menstrual hygiene: breaking the silence. Beyond construction: Use by all. A collection of case studies from sanitation and hygiene promotion practitioners in South Asia. London: Water Aid. 2008 Mar 1:283-7.
3. Aniebue UU, Aniebue PN, Nwankwo TO. The impact of pre-menarcheal training on menstrual practices and hygiene of Nigerian school girls. *Pan African Medical Journal*. 2009; 2(1).
4. House S, Mahon T, Cavill S. Menstrual hygiene matters: a resource for improving menstrual hygiene around the world. *Reproductive Health Matters*. 2013; 21(41):257-9.
5. Sumpter C, Torondel B. A systematic review of the health and social effects of menstrual hygiene management. *PloS one*. 2013; 8(4).
6. Garg R, Goyal S, Gupta S. India moves towards menstrual hygiene: subsidized sanitary napkins for rural adolescent girls—issues and challenges. *Maternal and child health journal*. 2012;6(4):767-74.
7. African Population and Health Research Center (APHRC). Experiences and Problems with Menstruation among Poor Women and Schoolgirls in Nairobi. In: Policy Brief No. 20. Nairobi, Kenya: APHRC, 2010.
8. Sadeque S S. "Talking Menstruation: About Time?". *Dhaka Tribune*. May 2015.
9. Crofts T. Menstruation hygiene management for schoolgirls in low-income countries. Loughborough, UK, Water, Engineering and Development Centre (WEDC). 2012..
10. Tomar S. "The Periodic Misogyny of Tribal Madhya Pradesh". *Hindustan Times*. 2015
11. Dasgupta A, Sarkar M. Menstrual hygiene: how hygienic is the adolescent girl?. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*. 2008 Apr; 33(2):77-80.
12. Kamath R, Ghosh D, Lena A, Chandrasekaran V. A study on knowledge and practices regarding menstrual hygiene among rural and urban adolescent girls in Udupi Taluk, Manipal, India. *Global journal of medicine and public health*. 2013; 2 (4):1-9.
13. Sommer M, Hirsch JS, Nathanson C, Parker RG. Comfortably, safely, and without shame: defining menstrual hygiene management as a public health issue. *American Journal of Public Health*. 2015 Jul;105 (7):1302-11.
14. Kjellén M, Pensulo C, Nordqvist P, Fogde M. Global review of sanitation system trends and interactions with menstrual management practices. Stockholm Environment Institute.; 2012; 25
15. Patle R, Kubde S. Comparative study on menstrual hygiene in rural and urban adolescent. *International Journal of Medical Science and Public Health*. 2014 Feb 1; 3(2):129-33.
16. Ezenduka P O, Iheanacho P N. Menstrual hygiene practices among secondary school Girl's in Enugu South Local Government Area, implication for health education. *Journal of Science Teachers Association of Nigeria*. 2008; 43(1), 44–52
17. UM L, Yusuf MW, Musa AB. Menstruation and menstrual hygiene amongst adolescent school girls in Kano, Northwestern Nigeria. *African journal of reproductive health*. 2010; 14(3):201-7.
18. Pillitteri SP. School menstrual hygiene management in Malawi: more than toilets. WaterAid report. 2011.
19. Thakre SB, Thakre SS, Reddy M, Rathi N, Pathak K, Ughade S. Menstrual hygiene: knowledge and practice among adolescent school girls of Saoner, Nagpur district. *J Clin Diagn Res*. 2011 Oct 1; 5(5):1027-33.