

# Knowledge, Practices And Socio-Cultural Restrictions Associated With Menstruation And Menstrual Hygiene Among In-School Adolescents In Ile-Ife, Nigeria

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## Abstract

**Background:** A fifth of the world's populations are adolescents, four out of five lives in developing countries like ours. Adolescence in girls is marked by the unique phenomenon called menarche. The perception and reaction of girls towards menstruation depends to a larger extent upon their awareness and knowledge of this phenomenon and also on the view of the society. The objective of this study was to assess knowledge, practices and socio-cultural restrictions associated with menstruation and menstrual hygiene among in-school adolescents in Nigeria

**Methodology:** A multistage sampling technique was used. Adolescents girls (N= 382) completed questionnaires regarding socio-demographic details and assessing knowledge of in-school adolescent girls about menstruation and menstrual hygiene. Data was analyzed using STATA 11.

## Results:

The mean age of the 382 participants was 15 years (SD  $\pm$  1.4 years). Mean age of attaining menarche was 12.74 years (range 8-17 years) and the mean duration of menstruation was 4 days (range 1-8 days). 197 (51.57%) were from private Secondary School and 185 (48.43%) were from the Public Secondary School. 46 % of the respondents had poor knowledge about menstruation and 54% had good knowledge. Adolescents from public school had better knowledge of menstruation than those from private school; this difference was found to be significant. ( $\chi^2 = 29.09$ ;  $P = 0.000$ ). 89.27% of the adolescent girls used sanitary pads as absorbent during their menstrual period

**Conclusion:** There is still insufficient level of knowledge and misconceptions about menstruation among in- school adolescents in Nigeria. Health education sessions on sexuality in schools and for mothers in the communities are necessary.

## BACKGROUND

Adolescence in girls has been recognized as a unique period which signifies the transition from girlhood to womanhood. This transition is marked by a unique phenomenon called menarche. Menarche is the onset of menstruation. Menstruation is the periodic vaginal bleeding that occurs with shedding of the uterine mucosa. [1] Menstruation, a normal physiological process, may be looked as more than just a physiological process depending on the socio-cultural and economic context. [2, 3]

The perception and reaction of girls towards menstruation depends on their awareness, knowledge of this phenomenon and on the view of the society towards menstruation. It may be viewed either positively or negatively by the society. A positive perception of menses would be considering it a sign of femininity, fertility and womanhood. The negative perceptions include a linkage to being vulnerable to different illnesses, or creating feelings of disgust and shame. [4] It is an event with socio-cultural implications. A number of studies carried out in developing countries have shown varying socio-cultural beliefs and practices related to

menstruation. The beliefs and practices include the use of unsanitary absorbent materials, prohibitions in going to religious places, talking about menses at public places, lifting heavy objects.[5-7] Although mothers have been the major source of information on menstruation to pre-menarchal girls.[5, 8] Often the information passed is not adequate to prepare adolescent girls for menstruation.[8]

Good hygiene, such as use of sanitary pads and high washing of the genital area, is essential during menstruation. Women and girls of reproductive age need access to clean and soft absorbent sanitary products, which in the long run can be protective to their health. [3] It has been rightly observed that women having better knowledge regarding menstrual hygiene and safe practices are less vulnerable to reproductive tract infections and its consequences. [9]

Public health experts, adolescents and policy makers who work with adolescents need up to date information on knowledge, practices and socio-cultural restrictions related to menstruation so as to help shape policies and programs on improving adolescence reproductive health. This study aims at assessing knowledge, practices and socio-cultural restrictions associated with menstruation and menstrual hygiene among in-school adolescent in Ile – Ife, Osun state Nigeria.

## **SUBJECTS AND METHODS**

The study was carried out in Ife Central Local Government Area of Osun State in Nigeria. Ife Central Local Government is one of the administrative divisions of the state and made up of a major town called Ile Ife. A multi-stage sampling method was used in selection of subjects for the study. A total sample of 382 in-school adolescents was selected from six secondary schools in the local government area. The schools were stratified into public and private schools. Three schools were randomly selected from each stratum. A class was selected from each stratum of classes of senior secondary school (SSS), 1 to SSS3 by simple random sampling technique to make a total of 3 classes per school. The study limited respondents to senior classes based on various studies in Nigeria that reported average age of attainment of menarche to about 13 to 14 years. [10] The number of students to be selected from each school was based on proportionate sampling. From the three classes chosen in each school, a proportionate sample was taken from each class based on the number of female students in each stratum and the already determined sample size of the school. The respondents were selected by simple random

sampling. The management and staff of the school reviewed the study protocol and gave permission for the study. The questionnaire also stated that students could choose not to participate in the study without consequences and verbal consent was obtained from the adolescent girls before data collection. The confidentiality of the information was maintained by assigning identification numbers to each questionnaire and data entered was pass-worded.

## **TESTING PROCEDURE**

Informed verbal consent was obtained from the participants after the aims and objectives of the study were explained to them. The management and staff of the school reviewed the study protocol and gave permission for the study. The confidentiality of the information was maintained by assigning identification numbers to each questionnaire and data entered was and secured with a password. Data was collected using a facilitated self – administered questionnaire. The participants gave responses to questions related to socio-demographic details like age, sex, class, type of school, religion and ethnicity of participants. In addition to this information, participants completed an attached questionnaire that assessed knowledge of in-school adolescent girls about menstruation and menstrual hygiene. Maximum obtainable mark on the knowledge levels is 10. The median score of the respondents was used as the cut-off mark to classify the adolescent students into those who have good knowledge about menstruation and those who have poor knowledge about it. The questionnaire was pre-tested to establish the validity of the questionnaire items.

## **STATISTICAL ANALYSIS**

The data was entered using epi data software and analyzed using STATA 11 software. The data was analyzed based on various aspects in terms of frequencies, percentages and means. Further analysis was done through chi-square tests.

## **RESULTS**

Socio-demographic characteristics of participant

The mean age of the 382 participants was 15 years (SD ± 1.4 years). Mean age of attaining menarche was 12.74 years (range 8-17 years) and the mean duration of menstruation was 4 days (range 1-8 days). 197 (51.57%) were from private Secondary School and 185 (48.43%) were from the Public Secondary School as shown in Table 1.

**Table 1**  
Socio-demographic characteristics of the respondents

Adolescents classification	Frequency	Percentage %
Early Adolescent (10-13 years)	57	14.92
Mid – adolescent (14-16 years)	268	70.16
Late Adolescent (17-19 years)	57	14.92
Total	382	100.00
Religion	Frequency	Percentage %
Christianity	271	70.94
Islam	109	28.53
Traditional	2	0.52
Total	382	100.00
Type of School	Frequency	Percentage %
Public	197	51.57
Private	185	48.43
Total	382	100.00
Class	Frequency	Percentage %
SSS 1	65	17.02
SSS 2	175	45.81
SSS 3	142	37.17
Total	382	100.00
Ethnicity	Frequency	Percentage %
Yoruba	351	91.88
Igbo	22	5.76
Hausa	9	2.36
Total	382	100.00

Regarding menstrual knowledge, 46% of the respondents had poor knowledge and 54% had good knowledge about menstruation. Also adolescents from public school had better knowledge of menstruation than those from the private school. 64.25% of adolescents in public school had good knowledge compared to 35.75% of adolescents in private school. This difference was found to be significant. ( $\chi^2 = 29.09$ ; P-value = 0.000)

**Table 2**  
Assessment of knowledge about menstruation based on school type

Type of school	Knowledge of Menstruation		Total	$\chi^2$	P-value
	Good knowledge	Poor Knowledge			
Public	133 (64.25%)	64 (36.57%)	197 (51.57%)		
Private	74 (35.75%)	111 (63.43%)	185 (48.43%)		
Total	207	175	382	29.09	0.000

When queried about the practice of menstrual hygiene majority of the respondents 341 (89.27%) among the

adolescent girls used sanitary pads as absorbent during their menstrual period. The remaining forty one respondents (10.73%) used either designated piece of clothes, any available piece of cloth, tampons and some frequently change panties (Table 3). 59% of the adolescents in public school change their absorbent material daily while 36% of those in private school do so. 26% of students in public schools change their absorbent material as required while 58% of those in private school change theirs as required. Six percent of the adolescents in private schools change their absorbent material only once throughout a period while 15% of adolescents in public school do so. This difference was found to be significant at  $\chi^2 = 39.90$  and p-value 0.000 (Table 4). Majority of the respondents disposed their menstrual absorbents materials by flushing them in the toilets (61.3%), burning (24.6%) %, disposal with domestic wastes (9.16%), while (5 %) buried it.

**Table 3**  
Absorbent materials used during menstruation

Type of absorbent material	Frequency	Percentage %
Old Clothes	11	2.88
Designated piece of clothes	20	5.24
Sanitary pads	341	89.27
Tampons	3	0.79
Frequent change of panties	7	1.83
Total	382	100.00

**Table 4**  
Frequency of change of absorbent materials during menstruation and school type

Frequency of change of absorbent materials during menstruation	Type of School		Total	$\chi^2$	P-Value
	Public	Private			
Daily	116 (58.88%)	67 (36.22%)	183		
As required	52 (26.40%)	107(57.84%)	159		
One in One period	29 (14.72%)	11 (5.95%)	40		
Total	197	185	382	39.90	0.000

Coming to the practices regarding socio-cultural restrictions associated with menstruation and the reasons why they practice them, findings showed that 64% of the respondents observed culturally restricted activities during menstruation while only 36% did not. Twenty three percent of the respondents revealed that going to religious places is forbidden while 20.70% of the responses claimed that they are forbidden to talk about menses at public places. Almost 18% of the respondents observe the restrictions because they felt it is sinful, while 16.55% of the participants claimed that

they observe these restrictions because it makes their menses more regular and 7.43% of the respondents of observe restrictions because failure to do so will hamper their menses.

## DISCUSSIONS

Concerns about menstruation have been a recurrent issue in studies to ascertain the unmet need for sexuality education in Nigeria. [6, 11] Sufficient knowledge about menstruation and menstrual hygiene will prevent associated reproductive ill-health among female adolescents. In this study, about half of the respondents had good knowledge about menstruation. This finding is similar to those reported in past studies. [12] However, it is contrary to what Lawan et al [3] found out in Kano where only 4% had good knowledge about menstruation. The difference may be related to the categorizations of knowledge into good, fair and poor as illustrated by Lawan et al. However in this study, female adolescents in public schools had better knowledge of menstruation compared to those in private school. This is similar to the study in Kano, Nigeria and in Karachi, Pakistan. [5, 13] This difference may be due to the fact that the public schools are more accessible to researchers and non- governmental organizations for health education sessions.

Menstrual hygiene practices are important in the promotion of reproductive health and prevention of diseases among female adolescents. This study found out that majority of the in-school adolescents used sanitary pad as absorbent during their menstrual period. This finding is similar to reports by Lawan [3] and Shipra et al [8]. However, this is different from what Adinma et al [6] found in Onistha, Nigeria where toilet tissue paper was the most commonly use menstrual absorbent. Abioye-kuteyi also reported the use of unsanitary menstrual absorbents in about two-thirds of girls studied in Southwestern Nigeria. Majority of the respondents change their menstrual absorbent material daily and practice good disposal method for menstrual absorbent materials. This is similar to the findings of Shipra.[8] The type of absorbent material used and the frequency of change have a great bearing on the reproductive health of adolescents.[5] The use of unsanitary materials like clothes and tissue papers can be a medium for organisms to thrive, and may be a source of pelvic infection.

Two-third of respondents is forbidden to engage in certain activities during their menstruation. This shows that information given on menstruation from generation to

generation is based on social and cultural myths and could adversely affect the practice and perception of adolescents towards menstruation. A fifth of the respondents in this study revealed that female adolescents are forbidden to go to religious places, talk about menses in public and others are forbidden from cooking, bathing and lifting heavy objects. This is similar to findings in Egypt and India where girls avoid socialization, religious places and are not allowed to cook. Adolescents observed the above restrictions because they believed it is sinful and claimed that failure to do so will hamper their menses.

In conclusion, there is still insufficient level of knowledge and misconceptions about menstruation among in-school adolescents in Nigeria. To break the continuum of transfer of inadequate knowledge and misconceptions to the next generation, health education sessions on sexuality in schools, and for mothers in the communities are indispensable in improving the quality and accuracy of information about menstruation passed on to adolescents.

## References

1. Oyebola DO, Female Reproduction. Essential Physiology for students of Medicine, Pharmacy and Related Disciplines. 2002, Nihort Press: Ibadan. 232-244.
2. Umeora OIJ, E.V., Menstruation in rural Igbo Women of South East Nigeria: Attitudes, Beliefs and Practices. Afr. Reprod, Health, 2008. 12(1): 109-115.
3. Lawan UM, Yusuf NW, Musa AB, Menstruation and menstrual hygiene among adolescent school girls in kano, North western Nigeria. Afr. J Reprod. Hlth, 2010. 14(3): 201–207.
4. Kalman M, Taking a different path: Menstrual preparation for adolescent girls living apart from their mothers. Health care for women International, 2003. 24(10): p. 868-879.
5. Lawan, UM, Yusuf NW, Musa AB, Menstruation and Menstrual Hygiene amongst Adolescent School Girls in Kano Northwestern Nigeria African J of Reprod. ealth 2010. 14(3): p. 201-208.
6. Adinma, E.D, J. Adinma, Perceptions and practices on menstruation amongst Nigerian secondary school girls. African J of Rep Health, 2009. 12(1): p. 74-83.
7. Dhingra R, Kumar A, Kour M. Knowledge and Practices Related to Menstruation among Tribal(Gujjar) adolescent Girls. Ethno-med, 2009. 3(1): p. 43-48.
8. Shipra N, Aimol K.R, Knowledge of Adolescent Girls Regarding Menstruation in Tribal Areas of Meghalaya. Stud Tribes Tribals, 8(1): 27-30 (2010)
9. Mudey AB, K.N, Mudey GA, Goyal RC, A crosssectional study on awareness regarding safe and hygienic practices amongst school going adolescent girls in rural area of Warha District., India. Glo. J. Hlth, 2010. 2(2): 225–231.
10. Deborah C , Russell V, Adolescent development. BMJ, 2005. 330: p. 301-304.
11. Omigbodun, O.O, Omigbodun A.O, Unmet need for sexuality education among adolescent girls in Southwest Nigeria: A qualitative analysis. Afr J of Rep Health, 2004: p. 27-37.
12. Abioye-Kuteyi, E., Menstrual knowledge and practices

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amongst secondary school girls in Ile Ife, Nigeria. The J of the Royal Soc for the Prom of Hlth, 2000. 120(1): p. 23.

13. Ali, T.S, Rizvi S.N, Menstrual knowledge and practices of female adolescents in urban Karachi, Pakistan. J of Adolescence, 2010. 33(4): p. 531-541.

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