# Menstrual Knowledge and Health Care behavior among Adolescent Girls in Rural, Nigeria

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#### **Abstract**

This study assessed menstruation knowledge, attitudes and health care behaviour among the adolescent girls in the Northern part of Oyo State. The study adopted a descriptive/analytical cross-sectional approach 1500 adolescents were selected at random, using a cluster random sampling method. The research instrument used was 28-items questionnaire tagged Menstrual Knowledge, Practices and Health Care Behaviour (MKPHCBQ). The instrument has a reliability co-efficient of 0.68. The participants' overall mean age at menarch was 13 years, the average duration of menstrual flow was five days and 28 days was the mean menstrual cycle. 87% reported having regular menstruation. It was found that more participants experienced dysmenorrhea during menstrual than during pre-menstrual periods. It was also found that participants' mothers' level of education determines the type of materials to be used as absorbent. 63% had positive attitude towards menstruation while only 7% consult medical doctor when experiencing menstrual problems. 38% of the participants used paracetamol when experiencing menstrual problems. One twenty girls reported to be absent from school. It was concluded that only a few of the girls seek medical advice and that they should be taught appropriate menstrual and health hygiene.

Keywords: Menstrual knowledge, Health care Behaviour, Rural adolescents, Girls

### Introduction

The beginning of menstruation in a girl marked the start of reproductive life. The menstrual period is a natural phenomenon that occurs throughout the reproductive life of every female. Despite the fact that menstruation is a normal physiological process, it is not often discuss openly especially in the rural areas. Some women, even in the developed countries, considered menstruation to be inconvenient or embarrassing (Abrahams, Fiazer, Gebski, Knight Lewellyn-Jones, Mira, & Mcnell 1995).

In Nigerian culture on the other hand, the subject of menstruation and puberty hygiene discussed at home as well as at school in most parts of the country especially in the rural areas was not adequate. This problem is observed particularly in more traditional and poorly educated environment mainly due to some cultural restrictions preventing the flow of correct information given to youngsters. The combination of traditional culture and strong impact on the restriction of discussing sex education and related issues with youngsters and their families especially in the rural areas compound the situation further. This has prevented the flow of sufficient information about puberty hygiene resulting in some incorrect perceptions about menstruation hygiene among many girls in this country. This study was conducted in the Northern part of Oyo State where such restrictions are strongly observed in many aspects of their lives, including education, health status and well being.

Consequently there are many misconceptions and superstitions associated with menstruation in this part of the world. Ignorance has led to many kinds of practices especially among the school girls, some of which are very much harmful. Menstrual problems have been reported in about 87 percent of school girls in Nigeria (Abioye-Kuteyi 2000). This highlights the need to find out the knowledge and health care behaviours associated with menstruation, as these have direct implications on the reproductive health of women. Most of the earlier studies were reported amongst adolescent girls in urban area. For example in 352 randomly selected healthy Nigerian school girls in urban areas, 187 (53.1%) had menarche but 40 percent of those were deficient in their knowledge of menstruation. Although menstrual knowledge was higher in post-menarche girls, 10 percent were also totally ignorant about menstruation and 84 percent were not psychologically prepared for the first menstruation. Girls menstrual knowledge was positively associated with parental education (Abioye-Kuteyi, 2000).

A similar study in Haryana among 130 girl students aged 13-17 years reported poor awareness and health seeking practices during menstruation. The study reported the commonest reported menstrual problem as dysmenorrhoea (40.7%) followed by irregular menses (2.3%) while only 5.3 percent consulted a doctor, 22.4 percent preferred to take counter medication from Chemist shops (Singh, Devi & Gupta (1999). Other studies have accessed knowledge and practices of menstruation in adolescent girls in urban areas.

In many communities, adolescents tend to underutilize health services, and a similar situation has been reported in the Northern part of Oyo state which may have a significant impact on the physical and social health of those affected. By contrast there is little knowledge and inappropriate health care behaviour regarding menstruation. Availability of such information could be important for appropriate health care services. This present study therefore intends to assess the menstrual knowledge, and health care behaviours among adolescent girls in rural areas in the Northern part of Oyo State, in Nigeria.

## **Objective**

- i. The main objective of the study was to assess menstruation knowledge and health care behaviour among adolescent girls within age range of 11-19 years.
- ii. To assess the type of materials used as absorbent during menstruation.
- iii. To evaluate mothers' level of education as it affects materials the adolescents use as absorbent during menstruation.

## **Research Questions**

The following research questions guided the study:

- i. What are the menstrual knowledge and health care behaviours by these adolescents of the chosen age range?
- ii. What are the various materials used as absorbent by these adolescents during menstruation?
- iii. What are effects of mothers' level of education on the type of materials the adolescents use for absorbent during menstruation?

### Methods

### Research Design

The design adopted in this study is descriptive survey.

### **Instrument**

The instrument used to obtain the data is Menstrual Knowledge Practices and Health Care Behaviour Questionnaire (MKPHCBQ). It has two sections (A and B) section A consists of demographic data such as age, class, mother's level of education, town, local government, age at first menstruation while section B consists of 28 items on menstrual knowledge and health care behaviours of adolescent girls.

## **Sample and Sampling Techniques**

This was a cross sectional descriptive study. This study was carried out in selected secondary schools in Saki, Okeho, Iseyin Iwere Ile and Igboho, all of which are located in the Northern part of Oyo State. The samples of study were adolescent girls selected at random from 10 secondary schools. The ten schools were selected through cluster random sampling method from the Northern part of Oyo state. A sample of 1,500 adolescent girls in the age range of between 11 and 19 years participated in the study.

A questionnaire with 28 items, contained also items on demographic characteristics of the respondents was designed by the researcher and was initially pilot tested on 25 students with similar characteristics of the research students. The concepts of menstruation knowledge and health care behaviours regarding menstruation were utilized in developing the questionnaire. The reliability of the questionnaire was determined by Cronbach – Alpha, indicating a correlation coefficient of 0.68.

### **Procedure**

The participants in the chosen schools completed an anonymous, self administered, structured 28 items within classroom setting and were overseen by the study researcher.

Girls were asked about personal demographic details, age of menstruation in years and months, current menstrual status and menstrual cycle length in days and whether they experience any menstrual problems and if so their severity. They were also asked to indicate whether they had sought medical advice or treatment for their menstrual problems in the last 12 months. They were also asked to indicate the materials they use as absorbent and the number of days absent from school during menstruation.

From the items of demographic characteristics of the respondents, it was found that the mean age of menarche of the respondents was 13 years and the average duration of their menstrual flow was 5 days and the mean of their menstrual cycle was 28 days, 87% reported having regular menstruation while one out of 20 girls reported case of absent from school because of menstrual problems.

### **Data Analysis**

Simple percentage count was the statistical analysis adopted in this study.

#### Results

Table 1: Distribution of Girls by Age

Age-group (yrs)	Frequency (F)	Percentage (%)
11-13	520	34.7
14-16	740	49.3
17-19	240	16
Total	1500	100

A total of 1500 adolescent girls participated in the study. Regarding their age distribution, almost 50 percent of the girls belonged to the age group 14 - 16 years, 34.7% were between age group 11-13 years while the least 16% were between age range of 17-91 years.

Table 2: Distribution of Girls by Mothers Educational Status

<b>Educational Status</b>	Frequency (F)	Percentage (%)
Illiterate	170	11.3
Primary	270	18
Modern Schl.	300	20
Grade II	480	32
NCE and above	280	18.7
Total	1500	100

Majority of the participants 32% had their mothers to be holders of grade II Certificate, 20% of the mothers of the participants had modern three certificates, mothers with NCE and above were 18.7%. 18% of the participants' mothers were primary six leaving certificate holder while only 11.3% of their mothers were illiterate.

Table 3: Distribution of Girls Based on Maternal Educational Status and Materials Used As Absorbent

Education	Clothing		Sanitary Pad		Cotton Wool		Tissue paper		Total%	
	Material		F	%	F	%	F	%		
	F	%							F	%
Illiterate	75	(44.1)	15	(8.8)	20	(11.8)	60	(35.3)	170	(10)
mothers										
Literate	50	(3.8)	830	(62.5)	200	(15)	250	(18.7)	1,330	(100)
mothers										
Total	125	(8.3)	845	(56.3)	220	(14.7)	310	(20.7)	1,500	(100)

Out of 170 participants from illiterate mothers (44.1%) used clothing materials as absorbent, 8.8% used sanitary pad, 11.8% used cotton wool while 35.3% were using tissue paper. Of 1,330 from literate mothers 3.8% were using clothing materials, 62.5% were using sanitary pad, 15% were using cotton wool while 18.7% were using tissue paper as absorbent.

Table 3b: Self-Reported Signs and Symptoms of Menstruation

Signs and Symptoms		Pre	menstrual	Menstrual		
		No	Percentage (%)	No	Percentage(%)	
Psyc	Psychological Symptoms					
i)	Depression	270	18	315	21	
ii)	Moodiness	630	42	570	38	
iii)	Tension	300	20	375	25	
iv)	Irritability	690	46	525	35	
v)	Anxiousness	330	22	390	26	
Physiologi	Physiological Symptoms					
i)	Weight gain	765	51	420	28	
ii)	Greasy skin	480	32	360	24	
iii)	Headache	495	33	720	48	
iv)	Breast enlargement	570	38	315	21	
v)	Fatigue	435	29	510	34	
vi)	Increase appetite	330	22	390	26	
Dysmenor	Dysmenorrhea					
i)	Abdominal pain	810	54	840	56	
ii)	Cramp	750	50	930	62	
iii)	Backache	375	25	450	30	
iv)	Pain the thights	270	18	345	23	
v)	Nausea	225	15	420	28	

Premenstrual Symptoms in participants yielded depression 18%, moodiness 42%, tension 20%, irritability 46% and anxiousness 22% while the menstrual symptoms yielded depression 21%, moodiness 38%, tension 25%, irritability 35% and anxiousness 26%.

For the physiological signs and symptoms premenstrual symptoms in participants weight gain 51%, greasy skin 32% headache 33% breast enlargement 38%, fatigue 29% and increase appetite 22% while the menstrual symptoms weight gain yielded 28%, greasy skin 24% headache 48% breast enlargement 21% fatigue 34% and increase appetite 26%.

In dysmenorrhea complex, 54% of the participants had abdominal pain, 50% had cramps, 25% had backache, 18% had pain the thights while 15% had nausea during premenstrual period. During menstrual period, 56% of the participants had abdominal pain, 62% had cramps, 30% had backache, 23% had pain the tight while 28% had nausea.

Table 4: Health Seeking Behaviour When Experiencing Menstrual Problems

Source of Health	No	Percentage
Seeking	Frequency (F)	(%)
Consult mother	375	25
Self Medication	600	40
Pray about it	270	18
Endure it	150	10
Consult Medical	105	7
doctor		

Responses to each of the five items revealed that 25% of the participants chose to consult their mothers whenever they experienced menstrual problems, 40% engaged in self medication, 18% engaged in prayers, 10% endured it while only 7% consult medical doctors.

**Types of Drug Used** Frequency (F) Percentage (%)i) Paracetamol 114 38 ii) Aspirin 37 19 ii) Magnesium triscate mixtures 18 6 iii) Alabukun 36 12 v) Phensic 45 15 vi) Andrew liver salt 30 10

**Table 5: Drugs Used When Having Menstrual Problems** 

38% of the respondents used paracetamol when experiencing menstrual problems, 19% used Asprin, 15% used Phensic, 12% used Alabukun, 10% used Andrew liver salt while only 6% used magnesium triscate mixtures.

Participants' Attitudes Frequency (F) Percentage (%) Menstruation is part of woman's life 186 62 God created menstruation to punish women 39 13 People that have menstrual problems are suffering 15 5 from the sins of their forefathers Menstruation is a curse on womanhood 60 20

**Table 6: Attitudes of the Participants towards Menstruation** 

From the results obtained from the respondents 62% had positive attitude towards menstruation, they agreed that menstruation is part of a woman's life. The remaining 38% had negative attitude towards menstruation. 20% were of the opinion that menstruation is a curse on womanhood, 13% agreed that God created menstruation to punish women and 5% agreed that people who are suffering from menstrual problems are suffering from the sins committed by their forefathers.

### Discussion

Adolescents who participated in this study were residing in the rural area, it follows therefore that, their cultural background and upbringing is expected to influence their menstrual knowledge and health care attitude.

Almost 50% (49.3%) of study participants belonged to the age group 14 - 16 years 34.7% were between ages 11-13 while the least 16% were between age ranges of 17-19 years.

Table 2 which indicates distribution of girls by mothers educational status shows that 11.3% of the study participants were from illiterate mothers. 18% of them were from mothers with primary school leaving certificate 20% of the study participants were from mothers with modern three leaving certificates, 32% of their mothers possessed Grade II Certificate while 18.7% of the participants' mother had NCE certificate and above.

Concerning the influence of maternal educational status on materials used as absorbent majority (44 .1%) of the participants from the illiterate mothers used clothing materials as absorbment for menstruation.

While 62.5% of the participants from the literate mothers used sanitary pad as absorbent for menstruation. This finding corroborates that of Cronye and Kritezinger (1991) which indicated that girls menstrual knowledge was positively associated with parental education. The finding of this study indicates that majority of the girls from literate home were familiar and were using modern absorbent (sanitary pad) while those from the illiterate mothers were still using clothing materials as absorbent.

Reponses of the health seeking behaviour of the participants when experiencing menstrual problems shows that 25% consult their mothers, 40% engaged in self medication, 18% engaged in the use of herbs, 10% endure it while only 7% consult medical doctor. This study supports the findings of Singh, Devi & Gupta (1999) who carried out a similar study in Haryana and found that the commonest reported menstrual problem was dysmemorrhea (40.7%) followed by irregular menses (2.3%) while only 5.3% consulted a doctor, 22.4% preferred to take counter medication from chemist shops.

Majority (38%) of the study participants used paracetamol when experiencing menstrual problems, aspirin was also in great use by the participants followed by the use of Phensic, Alabukun, Andrew liver salt and magnesium triscate mixtures in that order.

In this study (62%) of the participants had positive attitude towards menstruation, the remaining 38% had negative attitude towards menstruation.

## **Conclusion**

Girls of all age groups were included in this cross – sectional study, which provided an advantage of gaining insight as to how the perceptions and practices of girls change with time. Literacy was found as important influencing factor. The role of the mothers in imparting knowledge on menstruation was another important factor that was observed. Due to some cultural and religion restrictions, many young girls in this country especially in the rural areas received no sufficient information regarding menstrual hygiene, causing incorrect and unhealthy practices during their menstrual period. The results of this study indicate a need for development of a comprehensive education programme with strong puberty education components. The mothers of young girls should be educated with appropriate and menstrual health hygiene, and be empowered with necessary skills to communicate with and transfer the information to their children.

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