

Factors Influencing Menstrual Hygiene Management Practice among Senior Secondary School Female Students in Calabar South Local Government Area, Cross River State, Nigeria

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Abstract

The purpose of the study was to examine factors influencing menstrual hygiene management practice among senior secondary school female students in Calabar South Local Government Area, Cross River State, Nigeria. To achieve this purpose, two null hypotheses were formulated and tested at 0.05 level of significance. Survey research design was adopted for the study. Purposive sampling technique was adopted in selecting four secondary schools while systematic random sampling technique was adopted in selecting two hundred and eighty-three respondents used for the study. A four point modified scale questionnaire was the instrument used for data collection. The questionnaire was duly validated by experts. To test the hypotheses formulated for the study, simple linear regression statistical tool was employed for data analysis. The result obtained from analysis of data and testing of hypotheses revealed that there was a significant influence of lack of basic amenities and cultural beliefs on menstrual hygiene management practice among students in the study area. Based on these findings, it was recommended, among others, that school authorities should ensure that basic amenities like water, conveniences and waste disposal facilities are adequately provided to enable students carry out effective menstrual hygiene management.

Keywords: menstrual, hygiene, management, practices, taboos

Introduction

Menstruation which is referred to as the monthly cyclical bleeding in women is characterized by the discharge of uterine blood through the vagina. It is a normal physiological process in females (Hamal & Susma, 2014). The onset of menstruation symbolizes both femininity and fertility. Most of adolescents experience menarche, which is the first onset of menstruation and the journey into womanhood, at about 12-13 years. The menstrual cycle is characterized by the rise and fall of hormones (Dan et al., 2021a). Menstruation is triggered by falling progesterone level and is a sign that pregnancy has not occurred. The first menstruation period known as menarche, usually begins between the ages of 12 and 15 (Archibald, 2018).

Menstrual hygiene is a need for menstruating women and girls. Although, there are some studies on menstrual hygiene management in foreign articles, there is limited evidence on menstrual hygiene management practices in Nigeria. Additionally, menstrual hygiene management is constrained by inadequate water, sanitation and hygiene facilities in many school settings in the country. Menstruation and menstrual hygiene management related problems adversely affect girl's school attendance and school performance. Furthermore, studies identified that many school girls claimed difficulty in concentration and limited participation during class time due to the discomfort and humiliation during menstruation (Budhathoki & Sharma, 2018).

Okwara (2018) posited that menstrual hygiene management practices among school girls can affect multiple areas across the sustainable development goals (SDGs) agenda including health, education, gender equality and women empowerment. Many teenage girls in impoverished nations do not have access to proper sanitary facilities, resources, or information to manage their menstruation. As a result, girls began to practice improper hygiene during their periods, which has a detrimental effect on their education, health, and sense of dignity. The water, sanitation, and hygiene (WASH), sexual and reproductive health, and education sectors failed to provide enough attention despite the significant obstacles associated with menstruation hygiene (Gena, 2020).

Diversity and taboos have an impact on menstrual hygiene management practices; thus, it is important to identify the practices of menstrual hygiene management to intervene accordingly (Davis, 2018). However, there is scarce information about menstrual hygiene management practices in Nigeria. Most schools in the country are not equipped with the

basic amenities for menstrual management such as menstruation materials, running water and disposal facilities.

According to Dan et al. (2021b), menstrual health and hygiene (MHH) is essential to the well-being and empowerment of women and adolescent girls. Adolescent girls worldwide are menstruating, but majority of them lack access to menstrual products, and affordable and appropriate menstrual hygiene materials. Information on good practices and a supportive environment where they can manage menstruation without embarrassment or stigma is grossly inadequate. Period is a natural body function; it is unacceptable that girls are stigmatized because they menstruate, or miss school because they cannot afford menstrual hygiene products; these products are a necessity and not a luxury as they are often treated.

World Bank (2018) opined that a minimum of 500 million females worldwide do not have access to sufficient facilities for managing their menstrual hygiene (MHM). A significant barrier for women and girls can be inadequate WASH (water, sanitation, and hygiene) facilities, especially in public settings like workplaces, schools, or health clinics. Girls and women find it difficult to maintain their menstrual hygiene in a discreet, secure, and respectable way when there are insufficient separate restrooms with doors that can be shut discreetly, or when there are no enough resources to wash their hands or dispose of used sanitary pads. There is increasing evidence that girls' incapacity to maintain menstrual hygiene in schools leads to absence from classes, which has detrimental effects on both the country and the girls' individual lives financially (Dan et al., 2021a). A growing body of evidence shows that girls' inability to manage their menstrual hygiene in schools, results in school absenteeism, which in turn has severe economic costs on their lives and on the country (Tan et al., 2017).

Shallo et al. (2018) asserted that though menstruation is a normal physiology in the female life, if not managed safely, it can interrupt daily activity or it may lead to health problems. Poor water sanitation and hygiene (WASH) facilities in schools, inadequate puberty education and lack of hygienic menstrual hygiene management items (absorbents) cause girls to experience menstruation as shameful and uncomfortable. This study aimed to assess the extent of unsafe menstrual hygiene practice and factors influencing it among school females in Ambo Ethiopia. An institutional-based mixed method cross-sectional study was conducted from March 01 to 15/2018 to collect data from 364 school females, teachers and investigators' observation. To collect the data, self-administered technique, interview, observation and Focal Group Discussions (FGD) techniques were used. Data

were analysed using SPSS statistical software versions 20. Uni-variate, bivariate and multiple logistic regression analysis were done. With 95% CI, the p-value of less than 0.05 was taken as the level of significance. The result shows that the prevalence of unsafe menstrual hygiene management practice was 53.6%, which implies that urgent response from the stakeholders is of paramount importance. Factors such as the age of the females, frequency of discussing menses with mothers and sources of information about menses were variables significantly associated with menstrual hygiene management practice. The findings of the study show that high numbers of school females' menstrual hygiene management were poorly managed. This implies that urgent measure is needed from the stakeholders to solve these problems so that sustainable development goal number 3, 4 and 5 will be achieved. To rid of the current problems which school females are facing, comprehensive and different sectors collaboration is important. Specifically, education sectors, water and sanitation sectors, and health sectors bear the frontline responsibilities.

Given the multiple challenges women and adolescent girls face, it is evident that promoting menstrual hygiene management is not only a sanitation matter; it is also an important step towards safeguarding the dignity, bodily integrity and overall life opportunities of women and girls. Adolescents face a lot of challenges during menstruation. In addition to persisting taboos, women and female capacity to manage their periods is affected by a number of other factors, including limited access to affordable and hygienic sanitary materials and disposal option, leaving many to manage their periods in ineffective, uncomfortable and unhygienic ways. In some contexts, natural materials such as mud, leaves, dung or animal skin are used to manage the menstrual flow (UNESCO, 2016). Insufficient access to safe and private toilets and lack of clean water and soap for personal hygiene also worsen the problems. As a result, menstruating women often feel frustrated and embarrassed.

Proper disposal of used menstrual material is still a challenge for many countries of the world. Most females dispose of used sanitary pads or other menstrual articles into household solid waste or garbage bins. Poor menstrual hygiene, however can pose serious health risk, like reproductive and urinary tract infections which can result in future infertility and birth complications. Neglecting to wash hands after changing menstrual products can spread infections such as hepatitis B and thrush (Torondel, 2018). Studies have found that giving out sanitary pads to girls lead to significant reduction in sexually transmitted infections and bacterial vaginosis. The lack of means for hygienic management of menstruation can cause discomfort and psychological stress and adds to the shame and

sometimes depression that women and girls experience (Sommer, 2017). However, it is advisable for schools to provide sanitation facilities as well as functional single sex toilets with a reliable supply of water and soap; educational materials on hygiene and menstrual hygiene management should also be provided and dispersed.

Menstruation is a physiological condition experienced by women from adolescence to menopause (Kaundal & Thakur, 2016). There have been many menstruation related taboos and rituals in all traditional cultures (Yagnik, 2019). Rules, beliefs and taboos about menstruation vary with communities, religions and regions. Therefore, menstruation-related rules and taboos embody attitudes, beliefs, norms and values of cultures in which they are preserved (Agyekum, 2017). For example, women can be labelled as “dirty” and “fouled” during menstruation in some cultures. Besides, they are exposed to some menstruation-related individual or social taboos like eating alone, avoiding religious rituals, not touching animals, cutting nails or hair, not removing hair and not going to school (Hennegan, 2019).

Kumar and Srivastava (2017) carried out a study on cultural and social practices regarding menstruation among adolescent girls. The study attempted to find out the existing social and cultural practices regarding menstruation, awareness levels, and the behavioural changes that come about in adolescent girls during menstruation, their perception about menarche, how they treat it, and the various taboos, norms, and cultural practices associated with menarche. The study was conducted on 117 adolescent girls (age 11-20 years) and 41 mothers from various communities and classes in Ranchi comprising residential colonies and urban slums. The findings unfold many practices, cultural and social restrictions associated with menstruation, myth, and misconception; the adaptability of the adolescent girls towards it; their reaction, reaction of the family, realization of the importance of menstruation; and the changes that have come in their life after menarche and their resistance to such changes. The article also suggests the strategies to improve menstrual health and hygiene among adolescent girls. The study concludes that cultural and social practices regarding menstruation depend on girls’ attitudes and family environment, culture and belief.

Women face menstruation related myths, cultural beliefs and social and religious norms at menarche. They are encouraged to preserve menstrual taboos especially by their mothers. These taboos affect their understanding about the importance of menstruation and their opinions about menarche. As their interactions with the society increase, their taboos are reinforced (Mukherjee, 2017). Unless menstrual related myths, cultural beliefs and

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unhealthy practices are changed, they are capable of creating negative effects regarding fundamental human rights, dignity and confidence of the woman or girl child (Yagnik, 2019).

Kumar and Srivastava (2017) carried out a study on cultural beliefs and practices of reproductive women about menstruation. The aim of this analytical cross-sectional study was to determine cultural beliefs and practices of reproductive women about menstruation. The study sample comprised women following an instagram account and their relatives. Data were collected with an online questionnaire. Obtained data were analysed with descriptive statistics and chi-square test. According to the study's findings, there are certain taboos associated with menstruation for women, and Generation Z and future generations to come are least likely to uphold these taboos.

Rajasri et al. (2020) carried out a study on menstrual morbidities, menstrual hygiene, cultural practices during menstruation, and water, sanitation and hygiene (WASH) practices at schools in adolescent girls of North Karnataka, India. The study was a cross sectional prospective study, which aimed to assess the issues related to menstruation in school girls. A cross-sectional prospective study was conducted on 1,016 school-going adolescent girls in January 2020. A questionnaire in English and in Kannada was distributed to girls of class 8 – 12, and ages between 10 and 19 years. 70.5% of the girls attained menarche by 12 to 14.9 years, 37.2% of the girls had their periods every 28-34 days, and 12.2% of the girls said they have heavy periods. 61.95% of the girls had dysmenorrheal; and 9.7% of the girls said that they required medications for the pain; 70.7% of the girls were using commercial sanitary napkins; 12.7% were using cloth, and 15.3% were using both. Again, 55.5% of the girls who were using cloth as an absorbent were not drying the cloth in sunlight. 57.1% of the girls were washing their genital more than 2 times a day. 93.8% took their baths regularly during menstruation period and 87.2% were using soap along with water. 37.7% of the girls disposed their pads by burning them, 50.8% of them disposed them in the dust bin, and 4.9% of them buried them. 8.6% of the girls said that they remained completely absent from school during periods, 17.85% said that they remained absent for a day, 53.4% of the respondents said that they have difficulty in concentrating at school. 76.1% said they had adequate water and sanitation facilities at school, 22.3% said that there was adequate facility to change their pads in school, 73.2% said they could get a spare pad in school. 43.3% of the girls said they avoided cultural functions during their periods, and 38.5% said they avoided religious ceremonies and

practices during their periods; 8.7% of the girls were made to sit outside the house during their periods.

The girls from rural areas had poorer hygienic habits, in comparison to the urban girls. Cultural restriction such as sitting outside the house during menstruation and restricting play were more in the rural girls than the urban girls. The finding of the study showed that menstrual morbidities, menstrual hygiene management and cultural belief all play a role in school absenteeism in adolescent girls. Improvement of facilities at school and conducting awareness programmes can help adolescent girls to attend schools. Prevention of girls from going to school and playing games during menstruation produce both social and educational inequalities and forbidding them from consuming some food like fish and eggs, also feeling ashamed to talk about menstruation can cause women to acquire insufficient information about menstrual hygiene management (House et al., 2017).

In some communities in Nigeria, some women are discouraged from touching or washing their genitals during their periods to eliminate the possibility that they might contaminate the water of the communal bathing area as they are seen as impure and dirty. Nevertheless, young girls should be educated about these wrong beliefs and also about the importance of maintaining hygiene during menstruation to prevent the risk of reproductive tract infections.

Hypotheses

Ho1: There is no significant influence of lack of basic amenities on menstrual hygiene management practice among senior secondary school females in Calabar South Local Government Area of Cross River State.

Ho2: Cultural belief does not significantly influence menstrual hygiene management practice among secondary school females.

Methodology

The research design adopted for this study was the survey research design. This design was chosen to investigate the situation as they are occurring at the time of a study. The population of this study was five hundred and sixty six (566) senior secondary female students in Girl's Secondary Schools in Calabar South Local Government Area of Cross River State. The sample of this study comprised of two hundred and eighty three (283) Senior Secondary School female students that was randomly selected from four Girl's Secondary Schools in Calabar South Local Government Area of Cross River State.

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The instrument used for data collection in the study was a questionnaire titled “Factors influencing Menstrual Hygiene Management Practices Questionnaire (FMHMPQ)”. The instrument was divided into two sections. Section A was designed to collect the respondents’ personal data such as name of school, age and class. Section B was design using four point likert modified scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The scores were assigned in scoring the instrument as follows; Strongly Agree (SA) had 4, Agreed (A) had 3, Disagree (D) had 2 while Strongly Disagree (SD) had 1. It contained eighteen items measuring the variables of the study. Items 1-5 measured lack of basic amenities, items 6-10 measured cultural beliefs while items 11-18 measured menstrual hygiene management practices. The items that were created for the instrument were derived from observations, experiences, and literature review. The instrument was submitted for validity by four experts. Two specialists from the Measurement and Evaluation unit and two from the Human Kinetics and Health Education Department examined a copy of the instrument. The final instrument that was deemed valid resulted from the observations and corrections. A trial test including 48 respondents who were not included in the main study group's sample was carried out to ascertain the instrument's reliability. The data collected from the respondents was analyzed using the Cronbach's alpha coefficient reliability method. This particular approach was chosen in order to assess the instrument's level of internal consistency in terms of assessing the variables under investigation. It was acceptable to accept the instrument's reliability based on the reliability index result, which ranged from 0.70 to 0.84. Simple linear regression analysis was used to analysed the the data from the respondents.

Presentation of results

Ho1: There is no significant influence of lack of basic amenities on menstrual hygiene management practice among senior secondary school female students.

The independent variable is lack of basic amenities while the dependent variable is menstrual hygiene management practice among female students. Simple linear regression statistical tool was used for data analysis. The result of this analysis is presented on table 1.

Table 1: Simple linear regression analysis of the influence of lack of basic amenities on menstrual hygiene management practice among female students in Calabar South Local Government Area of Cross River State

Model	R	R²	Adj.R²	Std error of estimate	
1	.237*	.203	.199	3.18072	
Model	SS	Df	MS	F	Sig
Regression	131.354	1	131.354	21.527	.000
Residual	2053.172	281	12.462		
Total	2184.526	282			

n=283

The result of analysis of results presented in table 1 showed that the independent or predictor variable (lack of basic amenities) has significant influence on the dependent or predicted variable (menstrual hygiene management practice) among secondary school students in Calabar South Local Government Area of Cross River State. This implied that lack of basic amenities accounted for 20.3% of menstrual hygiene management practice among students.

Ho2: Cultural belief does not significantly influence menstrual hygiene management practice among secondary school female students.

The independent variable is cultural beliefs while the dependent variable is menstrual hygiene management practice among students. Simple linear regression statistical tool was employed for data analysis. The result of this analysis is presented on table 2.

Table 2: Simple linear regression analysis of the influence of lack of cultural beliefs on menstrual hygiene management practice among students in Calabar South Local Government Area of Cross River State

Model	R	R²	Adj.R²	Std error of estimate	
1	.367*	.248	.244	3.25472	
Model	SS	Df	MS	F	Sig
Regression	148.493	1	148.493	42.249	.000
Residual	2036.033	281	16.612		
Total	2184.526	282			

n=283

The result of analysis of results presented in table 2 showed that the independent or predictor variable (cultural beliefs) has significant influence on the dependent or predicted variable (menstrual hygiene management practice) among secondary school students in Calabar South Local Government Area of Cross River State. This implied that cultural beliefs accounted for 24.8% of menstrual hygiene management practice among students.

Discussion of findings

The finding obtained from analysis of data and testing of hypothesis one in this study revealed that the null hypothesis was rejected. This implies that there was a significant influence of lack of basic amenities on menstrual hygiene management practices among students in Calabar South Local Government Area of Cross River State. The reason for this finding could be that basic hygiene and sanitation facilities are grossly inadequate in most secondary schools in the study area. The inadequate provision of convenience, water, sanitation and other basic amenities in schools constitute a challenge to the management of menstrual hygiene among students in the study area. This usually makes it difficult for some students to change their sanitary pads especially during school hours.

This finding agrees with that of Torondel (2018) who reported that poor menstrual hygiene can pose serious health risk, like reproductive and urinary tract infections which can result in future infertility and birth complications. Neglecting to wash hands after changing menstrual products can spread infections such as hepatitis B and thrush. Studies have found that giving out sanitary pads to girls lead to significant reduction in sexually transmitted infections and bacterial vaginosis. The lack of means for hygienic management of menstruation can cause discomfort and psychological stress and add to the shame and sometimes depression that women and girls experience (Sommer, 2017).

The finding obtained from analysis of data and testing of hypothesis two in this study revealed that the null hypothesis was rejected. This implies that there was a significant influence of cultural beliefs on menstrual hygiene management practices among students in Calabar South Local Government Area of Cross River State. The reason for this finding could be that there are cultural values and beliefs which differ from one tribe or ethnic group to the other. There are certain restrictions and requirements that do not encourage menstrual hygiene among students especially those in secondary schools. This could be the reason why cultural beliefs contribute to menstrual hygiene management among female students within the study area.

The finding of this study agrees with that of House et al. (2017) who reported that menstrual morbidities, menstrual hygiene management and cultural belief all play a role in school absenteeism in adolescent girls. Improvement of facilities at school and conducting awareness programmes can help adolescent girls to attend schools. Prevention of girls from going to school and playing games during menstruation produces both social and educational inequalities and forbidding them from consuming some food like fish and eggs, also feeling ashamed to talk about menstruation can cause women to acquire insufficient information about menstrual hygiene management. In some communities in Nigeria, some women are discouraged from touching or washing their genitals during their periods to eliminate the possibility that they might contaminate the water of the communal bathing area as they are seen as impure and dirty. The study concluded that young girls should be educated about menstruation related myths, cultural beliefs and social and religious norms and also on the significance of practicing good hygiene during the menstrual cycle to lower the risk of infections of the reproductive system.

Conclusion

The essence of this study was to investigate and present findings on factors influencing menstrual hygiene management practices among female students in Calabar South Local Government Area of Cross River State. The findings obtained from analysis of data and testing of hypotheses in the study revealed that there was a significant influence of lack of basic amenities and cultural beliefs on menstrual hygiene management practice among students in the study area.

Recommendations

From the findings obtained from analysis of data and testing of hypotheses in the study, it was recommended that:

- i. School authorities should ensure that basic amenities like water, conveniences and waste disposal facilities are adequately provided to enable students carry out effective menstrual hygiene management.
- ii. Cultural institutions should be sensitized by health educators on the need to eliminate all cultural beliefs that are inimical to menstrual hygiene management among students.

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