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Menstrual Hygiene Management Practices among Female Secondary School Students in Umuahia, South-Eastern Nigeria

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ABSTRACT

Proper menstrual hygiene management is essential for the good health of women. Access to clean water and sanitary facilities is essential for maintaining good hygiene. The objective of this study was to assess the menstrual hygiene management practices among female secondary school students in Umuahia, South-Eastern Nigeria. This study was a cross-sectional descriptive study of which a well-structured questionnaire was administered among secondary school girls in Umuahia, Nigeria. Results showed that for "washing of hands with soap and running water", 20 students representing 9.52% indicated very high level (VH) of practice, 28 students representing 13.33% indicated high level (H) of practice, while 64(30.48%) and 98 (46.67%) indicated low level (LL) and very low level (VL) of practice respectively. For "washing of hands before meals" 107 (50.95%) and 62 (29.52%) indicated that they did it to a VH and H respectively, while 29 (13.81%) and 12 (5.71%) respectively indicated LL and VL of practice. The results also showed that the absorbent most used was a disposable sanitary pad. The most common frequency of change of absorbent was twice a day. Ten (10) students representing 7.14% very often used reusable cloth/towel, 4(2.86%) very often used tampon, 78 representing 55.71% very often used disposable sanitary pad, 0(0.00%) very often used menstrual cup, while 8 representing 5.71% very often used toilet paper/tissue. The most frequently adopted rate of changing absorbents by students was twice a day (morning and night). The results showed that 68 (48.57%) of the students very often (VOF) changed their absorbents twice a day, while 16 (11.43%) rarely changed their absorbent twice a day. The findings of this study indicated that the menstrual hygiene management practices among the students were very poor. Adequate health promotion for secondary school girls and provision of basic toilet facilities at these schools was recommended.

Keywords: Menstruation, Hygiene, Hand-washing, Absorbents, Sanitation

INTRODUCTION

Poor menstrual hygiene management may increase a woman's susceptibility to reproductive tract infections (RTI). According to Kamath et al.[1], lack of knowledge and poor personal hygiene practices during menstruation can lead to various gynaecological problems in the reproductive life of girls. To manage menstruation hygienically and with dignity, it is essential that girls have access to water and sanitation. They need somewhere private to change their sanitary pads; clean water and soap for washing their hands and bodies; and reusable clothes and facilities for safely disposing of used materials and a

clean place to dry them if reusable. There is also a need for both men and women to have a greater awareness of good menstrual hygiene practices. Menstruation is a natural process, but in most parts of the world it is a taboo and rarely talked about. It has also been largely neglected by the society and other sectors focusing on sexual and reproductive health and education. As a result, the practical challenges on menstrual hygiene are made even more difficult by socio-cultural factors and millions of girls continue to be denied of their rights to water and sanitation health, education, dignity and gender equity. Lawan et al. [2] stated that the menarche or time of onset of menstruation varies with race and family, but the average for most girls is from 10 to 14 years until 45 to 55 years. Geographical conditions, racial factors, nutritional standards, environmental influences and indulgences in strenuous physical activity can all affect the age of menarche. [3] A woman will have approximately 500 periods in her lifetime. The estimated blood loss is between 50mls and 200mls. [3] Young girls need emotional support and assurance that menstruation is normal and healthy; and not bad, frightening or embarrassing. Before bringing any change in menstrual practices, they should be educated about the significance of menstruation and development of secondary sexual characteristics, selection of a sanitary menstrual absorbent and its proper disposal.

Mudey et al. [4] stated that there is very little awareness about menstrual hygiene among girls when they first experience it. Social prohibitions and negative attitudes of parents in discussing the related issues openly have blocked the access of adolescent girls to the right kind of information especially in rural communities. According to Eman et al. [5], the onset of menstruation is part of the menstruation process. It is the part of the female reproductive cycle that starts when girls become sexually matured at the time of puberty. Ruche et al. [6] stated that adolescence in girls signifies the transition from girlhood to womanhood. Good menstrual hygiene is crucial for the health, education and dignity of girls and women. The onset of menstruation represents a landmark event in pubertal development of the adolescent girl. Kamath et al. [1] stated that adolescent girls often lack knowledge regarding reproductive health including menstruation which can be due to socio-cultural barriers in which they grow up. These differences create various problems for the adolescent girls. Teklemariam [7] stated that the hygiene related practices of girls in the adolescent period during menstruation can have an effect on their health. The event of menarche may be associated with taboos and myths existing in our traditional society which has a negative implication for women's health particularly their menstrual hygiene. According to Teklemariam[7], most girls lack knowledge about hygiene during menstruation and as such they are exposed to vaginal diseases. Sommer et al. [8] opined that menstruation is thus construed to be a matter of embarrassment in most cultures.

Menstrual Hygiene Management (MHM) is a problem for adolescent girls in Low and Middle Income Countries (LMICS). According to Bodat et al. [9], inadequate puberty education and lack of Menstrual Hygiene/Management (MHM) items (absorbents) are the reasons why girls find menstruation as shameful and uncomfortable. Some studies [10,11] report that girls experience fear and anxiety from leaking of blood and body odour and this may lead menstruating girls to absent themselves from school. This study is aimed at assessing the menstrual hygiene management practices among female secondary school students in Umuahia, South-Eastern Nigeria.

MATERIALS AND METHODS

This study was a cross-sectional descriptive study carried out at Umuahia metropolis, South-Eastern Nigeria. The random sampling technique was used to select 210 secondary school girls between the ages of 13-18 years for the study. An informed

consent was obtained from all the participants in the study. A well-structured questionnaire was administered to the participants to fill out and submit. Tables were used to represent the data collected.

RESULTS

Table 1 showed that for "washing of hands with soap and running water", 20 students representing 9.52% indicated very high level (VH) of practice, 28 students representing 13.33% indicated high level (H) of practice, while 64(30.48%) and 98 (46.67%) indicated low level (LL) and very low level (VL) of practice respectively. For "washing of hands before meals" 107 (50.95%) and 62 (29.52%) indicated that they did it at a VH and H respectively, while 29 (13.81%) and 12 (5.71%) respectively indicated LL and VL of practice. On the other hand, for "washing of hands after using toilet", the students that responded VH and H were 72 (34.29%) and 10 (4.76%) respectively; while 60 representing 28.57% and 68 representing 32.38% respectively indicated LL and VL. For "washing of hands after the day's lectures", only 36 representing 17.14% and 30 representing 14.29% responded VH and H respectively, while 98 representing 46.67% and 46 (21.90%) respectively responded LL and VL. Finally, for "washing of hands at least five times a day", the table revealed that 23 (10.95%) responded VH, 29(13.81%) LL, and 73(34.76%) VL. The results in Table 2 revealed that the absorbent most used by female secondary school students in Umuahia was disposable sanitary pad. The most common frequency of change of absorbent was twice a day. For the results on the rate of use of absorbents, ten (10) students representing 7.14% very often used reusable cloth/towel, 4(2.86%) very often used tampon, 78 representing 55.71% very often used disposable sanitary pad, 0(0.00%) very often used menstrual cup, while 8 representing 5.71% very often used toilet paper/tissue. On the other hand, 122 (87.14%) of the students rarely used reusable cloth/towel, 134 (95.71%) rarely used tampon, while 137 (97.86%) rarely used menstrual cup. On the rate of change of absorbents, the most hygienic rate of change of absorbent is several times a day. Only 18 female students representing 12.86% very often (VOF) change their absorbent several times a day, while 106 (75.71%) rarely changed several times a day. The most frequently adopted rate of changing absorbents by students was twice a day (morning and night). The results showed that 68 (48.57%) of the students very often (VOF) changed their absorbents twice a day, while 16 (11.43%) rarely changed their absorbent twice a day. The hygienic method of disposing absorbents is throwing into special bins for pads. The results however, showed that only 26 representing 18.57% very often (VOF) disposed their absorbents by throwing into special bins for pads, while 100 (71.43%) rarely disposed theirs by throwing into special bins for pads. However, the commonly used method of disposing absorbents was by throwing into general waste bins, for which 34 (24.29%) very often (VOF) while 97 (69.29%) often (OF) threw their used absorbent into general waste bin.

Table 1: Distribution of hand-washing practices

Hand-Washing Practice	VH n (%)	H n (%)	L n (%)	VL n (%)
Washing of hands with soap and running water	20(9.52)	28(13.33)	64(30.48)	98(46.67)
Washing of hands before meals	107(50.95)	62(29.52)	29(13.81)	12(5.71)
Washing of hands after using the toilet	72(34.29)	10(4.76)	60(28.57)	68(32.38)
Washing of hands after the day's lectures	36(17.14)	30(14.29)	98(46.67)	46(21.90)
Washing of hands at least five (5) times a day	23(10.95)	29(13.81)	85(40.48)	73(34.76)

VH -very high; H -high; L -low; VL -very low; n – number; % - Percentage

Table 2: Distribution of menstrual hygiene management practices

Hygiene Practice	VOF f (%)	OF f (%)	ST f (%)	Rarely f (%)
Rate of use of absorbents				
Reusable cloth/towel	10(7.14)	3(2.14)	5(3.57)	122(87.14)
Tampon	4(2.86)	0(0.00)	2(1.43)	134(95.71)
Disposable sanitary pad	78(55.71)	4(2.86)	0(0.00)	58(41.43)
Menstrual cup	0(0.00)	2(1.43)	1(0.71)	137(97.86)
Toilet paper/tissue	8(5.71)	4(2.86)	8(5.71)	120(85.71)
Rate of change of absorbents				
Once a day	6(4.29)	9(6.43)	1(0.71)	124(88.57)
Twice a day (morning & night)	68(48.57)	54(38.57)	2(1.43)	16(11.43)
Only when it is soaked	20(14.29)	8(5.71)	10(7.14)	102(72.86)
Several times a day (not less than 3 – 4 times)	18(12.86)	2(1.43)	14(10.00)	106(75.71)
Disposal of used absorbents				
By burying	12(8.57)	6(4.29)	12(8.57)	110(78.57)
By burning	16(11.43)	6(4.29)	6(4.29)	112(80.00)
Throwing it into special bins for pads	26(18.57)	10(7.14)	4(2.86)	100(71.43)
Throwing it into the general waste bins	34(24.29)	97(69.29)	3(2.14)	6(4.29)
Throwing it into nearby bushes	4(2.86)	2(1.43)	4(2.86)	130(92.86)

VOF -very often; OF -often; ST -sometimes

DISCUSSION

Hand-washing is very necessary to avoid germs that come into contact with the hands after daily activities such as using the toilet or doing household chores such as cooking, cleaning the rooms and surroundings. In this study, about 30.48% of the students indicated a low level of hand-washing with soap and running water. Similarly, 32.38% indicated very low levels of hand-washing after toilet use. Azuogu, et al. [12] found in their study that the level of hand-washing practice among secondary school students was very low which is in line with the outcome of this study. Azuamah et al. [13] recorded that more than 80% of Owerri residents in Nigeria did not wash their hands with running water and soap after toilet use. Abruquay and Lambon [14], also in line with the result of this study revealed that 60% of workers in Ghana washed their hands with water only after visiting the toilet, and 70% did not wash their hands at all after social gatherings. To ensure good hand hygiene, proper hand-washing needs to be done with soap and running water, frequently; before meals, after using the toilet and after the day's lectures, not less than five times a day. [5] The level of hand-washing practices was found to be generally low among secondary school students in Umuahia. The students attributed this low level of hand-washing hygiene to lack of functional hand-washing facilities and to irregular water supply in most of their hostels, lodges and around their campuses.

Poor management of menstrual hygiene amongst the female students was also established. Data obtained showed that 55.71% of female secondary school students used disposable sanitary pads very often as absorbent for their menses. To ensure proper menstrual hygiene, these absorbents have to be changed frequently, at least three times a day. This study revealed that only 12.86% very often changed their absorbents at least 3-4 times a day and 48.57% very often changed their absorbents twice a day. Several studies [12,15,16] have also reported low frequency in the change of absorbents among women. These finding are also in line with that of Alam, et al. [17] who reported that about 86% of primary and secondary school girls did not change their absorbents during school hours which spanned approximately four hours for primary schools and seven hours for secondary schools. Very often, these absorbents were thrown into the general waste bins and some even burnt their used absorbent very often for fear that the absorbents might be picked up by ritualists who might harm them physically or spiritually. A study by Aluko et al. [18] corroborated some of the findings from this research in which students disposed their used absorbents through pit latrines, burning and comingled with domestic solid wastes.

These poor menstrual hygiene management practices predispose the students to exposure to bacterial infections. [19]

Adequate cleaning of the vaginal area is very important for maintaining a healthy hygiene after using the toilet. The study showed that 65.71% responded to using only tissue paper for vaginal cleansing after urination. This is similar with the review article by Garg and Singh [20] who identified the use of toilet paper and washing with water as the two major methods for perianal cleaning after defaecation. The results differ from the findings of McMahon et al. [21] in Kenya, where the study population used materials like school paper, leaves, grasses, stones, corn-cobs and even their hands in vaginal cleansing. After toilet usage, washing the vagina with water ensures proper vaginal hygiene. Following this would be proper hand washing with soap and running water. The use of wet wipes as obtainable in America and Europe is also encouraged as it combines the advantages of using tissue paper and washing with water. [20] Good menstrual hygiene is important for women and girls' health, safety, dignity, education, mobility and productivity. Poor menstrual hygiene could cause stigma and ill health, which might lead to absenteeism from school.

CONCLUSION

The findings of this study indicated that the menstrual hygiene management practices among the students were very poor. A very low number of students washed their hands with soap and running water frequently and the rate of change of absorbents was poor. This is because most of the students lacked basic amenities for the students. Adequate health promotion for secondary school girls and provision of basic toilet facilities at these schools was recommended.

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