

EXPOSURE TO MENSTRUAL HYGIENE INFORMATION AMONG WOMEN IN SOUTH EAST, NIGERIA

MONEKE, AMAKA JULIET
Nnamdi Azikiwe University, Awka, Nigeria
Email: amyiemonexx@yahoo.com

EBEZE, UCHE VICTOR (PhD)
Lecturer, Nnamdi Azikiwe University, Awka, Nigeria
Email: ucheebeze@yahoo.com

OKAFOR, EKENE GODFREY (PhD)
Lecturer, Nnamdi Azikiwe University, Awka, Nigeria
Email: egk.okafor@unizik.edu.ng

ABSTRACT

As menstrual hygiene issues have continued to gain prominence across the globe, this work examined the extent of exposure and medium of exposure to menstrual hygiene information among women in south East, Nigeria. This study adopted a mixed research of both quantitative and qualitative designs involving the 'survey', and 'Focus Group Discussion'. Survey was used to determine the women's exposure to menstrual hygiene information. Focus Group discussion helped gain insights into their shared interpretations regarding this exposure. For the survey, multi stage probability sampling technique was employed to sample a total of 663 respondents, with 5% error margin and 99% confidence level, derived from the sample size table worked out by Krejcie and Morgan (1970), while purposive sampling was employed for the FGD. The study was anchored on the health belief model to argue that women in South East, Nigeria who are exposed to menstrual hygiene information have perceived chances of developing favourable or positive behavioural conditions. The study found that menstrual hygiene information is popular among the women in south east Nigeria but these information are still insufficient as lack of Information on Menstrual hygiene could result in Poor Menstrual hygiene which may pose some threats or health risks such as reproductive and urinary tract infections, among others. Although many of them already have some foundational knowledge on how to effectively manage their menstrual hygiene, they hardly wish to openly debate or discuss their menstrual health which they occasionally obtain through interpersonal communication/word of mouth, Internet/New media, and stories on any form of print literature. This work concludes that exposure to menstrual hygiene information among women in south east is widespread but the attention they give to such information is relatively minimal. The study recommends among others, that relevant institutions in Nigeria should provide sufficient educational contents for women in their early years of menstruation. This will help them learn how to manage their menstruation effectively. The study further recommends that the government, relevant agencies and non government organizations as well as individuals can assist by providing the healthy sanitary materials for women especially the poor, and the media should assist in the campaign for menstrual hygiene.

Keywords: Exposure, menstrual hygiene, menstrual hygiene information, women, South-East

INTRODUCTION

Across the globe, concerns about menstrual hygiene is gradually gaining prominence (Rossouw & Ross, 2021) but in Nigeria, there has been a 'culture of silence' and 'shame' regarding issues of sexuality and menstruation. However, many women in Nigeria seem unhygienic in the management of their menstrual hygiene and they tend not to be exposed to the basic information on how to effectively manage their menstruation. Instead, they are relatively vulnerable to misconceptions and controversies (Santra, 2017; Thakre, Thakre, Reddy, Rathi, Pathak & Ughade, 2011; Cheizom & Choden, 2014). They may experience

some health complications and may be unprepared to experience menstruation (Boakye-Yiadom, Aladago, Beweleyir, Mohammed, Salifu, & Asaarik, 2018). There are instances where women fail to observe some basic hygienic principles and girl child perceiving their menarche experience as ‘shocking’, a curse from God, or even as punishment for the sins of their ancestors (Hennegan, Dolan, Wu, Scott & Montgomery, 2016; Nehulkar, Holambe & Thakur, 2016). Beliefs regarding menstruation can be deep-rooted and vary according to the beliefs of the people but good menstrual hygiene contributes to the health and well-being of women. This is in relation to the fact that menstrual hygiene is a multi-dimensional, critical component of sanitation, education, and health (UNESCO, 2021).

Lack of exposure to adequate information on menstrual hygiene among women can promote misconceptions, doubts, controversies, increased unhealthy menstrual practices and biased beliefs about menstruation. Perhaps, hygienically managing menstruation can be challenging and enigmatic and social norms and cultural practices surrounding menstruation means that most young women receive incomplete or inaccurate information on menstrual hygiene management (MHM) (Boakye-Yiadom, Aladago, Beweleyir, Mohammed, Salifu, & Asaarik, 2018). Some young women enter puberty annually and are unaware, unprepared and confused by the physical changes and emotional challenges that come with it (Boakye-Yiadom, Aladago, Beweleyir, Mohammed, Salifu, & Asaarik, 2018). Therefore, lack of exposure to information and practical life skills to effectively manage menstruation could reduce women’s self-esteem, impair their health and truncate their education (Boakye-Yiadom, Aladago, Beweleyir, Mohammed, Salifu, & Asaarik, 2018). Also, poor exposure and understanding of menstruation and menstrual hygiene may lead to unsafe hygienic practice that intern increases the risk of reproductive and genito-urinary tract infections, cervical cancer, school drop-out, poor academic performance and overall poor quality of life (Belayneh, & Mekuriaw, 2019). There have also been reports that some women do not have adequate information on menstrual hygiene (Dasgupta, 2008; Jothy & Kalaiselv, 2012; McMahan, Winch, Caruso, Obure, Ogutu & Ochari, 2011; Kabiru Salami, Mettu & Abolaji, 2019). This can be linked to lack of exposure and poor attention to menstrual health information by these women, which has continued to pose a severe threat to the Nigerian society. These threats can result in several negative conditions such as health challenges, death, infertility, risky health behaviours, biased beliefs about menstruation and several others. These threats can also be more endangering among those in low- and middle- income countries such as Nigeria.

Meanwhile, menstruation is a normal physiological process of females at their reproductive age, surrounded by social taboos and supernatural beliefs (Belayneh, & Mekuriaw, 2019) and a universal and normal phenomenon during the reproductive age of females (MacGregor, Chia, Vohrah, Wilkinson, 1990). Menstruation has been associated with restrictions, shame and superstitious beliefs (Amatya, Ghimire, Callahan, Baral, & Poudel 2018), tabooed or stigmatized in many parts of the world, especially in low and middle income countries in Asia and Africa (Hennegan, Shannon, Rubli, Schwab, & Melendez-Torres 2019) and the menstrual practices and beliefs are often constructed from gender, religion and culture (Bhartiya, 2013).

Because of social taboos, women, especially in rural remote areas, reuse unhygienic cotton cloths instead of clean sanitary napkins and cloths are a common practice in low and middle income countries (Acharya, Yadav, & Baridalyne, 2006; Das, Baker, Dutta, Swain, Sahoo & Das, 2015). There have also been multiple reports of women, developing reproductive tract infections (RTIs), abnormal vaginal discharge and other health conditions due to poor menstrual hygiene practices in developing countries (Dahal, 2008; Anand, Singh, & Unisa, 2015; Ranabhat, Kim, Choi, Aryal, Park, & Doh, 2015; Gaelstel, 2013; Yadav, Joshi, Poudel, & Pandeya, 2017). Amidst these contending issues, menstrual hygiene information exists in different communication platforms where development partners, health bodies, institutions, and government establishments communicate such information. Also in some hospitals and health centers, handbills, fliers and other communication on menstrual hygiene abound. For instance, the Anambra State Ministry of Health has programmes on menstrual hygiene under the reproductive health sections targeted at women. This study is therefore set out to address the following objectives:

- i. To ascertain the extent of exposure to menstrual hygiene information among the pre-menopausal women in south East, Nigeria.
- ii. To discover the medium of exposure to menstrual hygiene information among the pre-menopausal women in south East, Nigeria

LITERATURE REVIEW

Menstruation, the periodic vaginal bleeding that occurs with the shedding of the uterine mucosa is one of the signs of puberty, and occurs one or two years following appearance of secondary sexual characteristics (Oyebola, 2002). Once established, every mature female menstruates on the average 3-5 days (minimum 2 days, maximum 7 days) each month until menopause (William & Ganong, 2003). In fact, more than 300 million people menstruate daily across the globe, but lack of access and inadequate information on menstrual hygiene remains a neglected component that affects the life course of many women and girls across the globe (UNESCO, 2021). Menstruation is a naturally occurring physiological phenomenon in adolescent girls and pre-menopausal Women (Biran, Curtis, Gautam, Greenland, Islam, & Schmidt, 2015) while Menstrual hygiene management (MHM) is an essential aspect of hygiene for women and adolescent girls between menarche and menopause (Budhathoki, Bhattachan, Castro-Sánchez, Sagtani, Rayamajhi, Rai, & Sharma, 2018). Women's period varies and when poorly managed, may be accompanied by discomfort, reproductive tract infection, smelling and embarrassment, among others (Dasgupta & Sarkar, 2008). Besides, menstrual hygiene (MH) has been variously described by scholars. For instance, Balqis, Arya, and Ritonga (2016) defined menstrual hygiene as hygienic practices of women during menstruation. Menstrual hygiene refers to management of hygiene associated with the menstrual process (UNICEF, 2019). According to Upashe, Tekelab and Mekonnen (2015), menstruation necessitates good hygienic practices such as the use of sanitary pads and adequate washing of the genital areas. It also facilitates personal hygiene and waste disposal with adequate privacy. As defined by United Nations Children Fund (UNICEF, 2021), adequate menstrual hygiene practices (MHPs) consist of the following:

“Women and adolescent girls need a clean menstrual management material to absorb or collect menstrual blood that can be changed in privacy as often as necessary for the duration of menstrual periods, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials.” UNICEF (2021).

Menstrual Hygiene Practices (MHPs) have major health and socioeconomic implications, as indicated by their relationship with the United Nation (UN) Sustainable Development Goals (SDGs) (Ameade, 2015). This could affect the life of women and threaten the survival of the society. While hygienically managing menstruation in adolescence can be challenging and enigmatic (Boakye et al, 2018), most women seem not to possess inaccurate knowledge about menstruation. Those that have knowledge tend to practice wrong menstrual hygiene management due to factors such as inadequate menstrual sanitary materials and lack of emotional or physical support (Chandra-Mouli & Patel, 2017).

The existing Literature seem to suggest that some women harbour misconceptions and inaccurate knowledge about menstruation, pointing out also that those who have the knowledge tend to practice wrong menstrual hygiene management due to factors such as inadequate menstrual sanitary materials and lack of emotional or physical support (Chandra-Mouli & Patel, 2017). These may be widely manifest in various countries including Nigeria. Although menstruation is a normal biological process and a key sign of reproductive health, ignorance and misconceptions often lead to shaming and marginalisation of menstruating girls (Santra, 2017). In Katsina State of Nigeria, Okafor-Terver & Chuemchit, (2017) discovered that although about a third of adolescent students had basic knowledge of menstruation, 3-in-5 had no knowledge of the cause of menses, the channel through which menses flow and intervals between menstruation.

However, menstrual hygiene practices still face many social, cultural, and religious restrictions which constitute barriers to menstrual hygiene management (Rajanbir, Kanwaljit & Rajinder, 2018). In many parts of the country especially in rural areas, women are not prepared and aware about menstruation so they face many difficulties and challenges at home, schools, and work places. The existing literature had suggested

that little, inaccurate, or incomplete knowledge about menstruation is a great hindrance in the path of personal and menstrual hygiene management. In some places, especially in the rural areas, women do not have access to sanitary products or they know very little about the types and method of using them or are unable to afford such products due to high cost. So, they mostly rely on reusable cloth pads (Rajanbir, Kanwaljit & Rajinder, 2018).

The study by Kabiru, Salami, Mettu & Abolaji (2019) showed that almost half of the girls from a semi-urban community in Oyo state, Nigeria had not received education about menstruation, and while most of the girls got menstrual information from their mothers, some believed that such information should not be discussed openly. Aluko, Oluya, Olaleye, Olajuyin, Olabintan, & Oloruntoba-Oju, (2014) also found that most respondents had good knowledge of menstrual hygiene practices and that knowledge of menstrual health management was significantly associated with: mother's education; absorbents changing frequency; and age-at-menarche. This present study therefore targets both the urban and rural based women who may likely not be exposed to some vital information on menstrual hygiene.

The level of exposure and perception of women towards menstruation could have a significant effect on their beliefs about menstrual hygiene information. It has been argued that women with better understanding of menses often have safe and clean way of managing their menstrual bleeding and vice versa (Lawan, Nafisa, & Musa, 2010; Czerwinski, 1996). It is equally uncovered that lack of exposure to menstrual information as well as poor menstrual hygiene practice can be a reason for reproductive and genitor-urinary tract infection, cervical cancer, school absenteeism, or drop-out, poor academic performance, lower self-esteem and poor quality of life (Tegegne & Sisay, 2014). Some women have also experienced feelings of fear, confusion and shame during their menstruation period as a result of smell, leakage, staining of clothes and dropping of sanitary materials during their class schedules (Fakhri, Hamzehgardeshi, Hajikhani Golchin & Komili, 2012), calling up the need for more exposure to menstrual hygiene information among women. This is because lack of exposure to such information can have a negative impact on the concentration, class participation and confidence of their studies (Poureslami & Osati-Ashtiani, 2002).

Although poor knowledge and unsafe menstrual hygiene practice have such considerable clinical implications for women and their future offspring (Czerwinski, 1996), it has also been reported that some young school girls in Ethiopia have poor knowledge of menstrual hygiene and also engage in unsafe and hygienic menstrual management practices (Dasgupta, & Sarkar, 2008). This might have a clinical implication to integrate the promotion of menstrual hygienic practice in the health care system (Fakhri, Hamzehgardeshi, Hajikhani Golchin & Komili, 2012), justifying the need for a comprehensive efforts including policy implication to improve womens' knowledge and safe hygienic practices towards menstruation (Fakhri, Hamzehgardeshi, Hajikhani Golchin & Komili, 2012; Poureslami & Osati-Ashtiani, 2002), and increased information spread among women on menstrual hygiene.

Nigeria has its fair share of the sordid experience of poor menstrual hygiene. For instance, Onyeji (2019) observed that school age girls in Nigeria often miss school owing to poor menstrual hygiene. According to Kuponyi (2020) Nigeria is one of the countries that place a heavy tax on menstrual products and the lack of affordable sanitary products also exacerbates anxiety and stress during menstruation and increases their vulnerability. Mahon and Fernandes (2010) had observed that menstruation among physically challenged and marginalized women and adolescent girls is not addressed sufficiently by the authorities in charge of the relevant sectors of education, health, and water and sanitation in Nigeria. Some of these acts of neglect include non-availability of knowledge of menstrual hygiene management, lack of necessary facilities and proper social and cultural environment to manage menstruation hygienically and with dignity as well as addressing disability and marginalization.

There is no doubt that there are health implications associated with the practical management of menstrual hygiene and such health risks may manifest in form of infections, life-threatening diseases and several other negative health conditions such as bad odor, and stigmatization of the girl-child. Women and girls experiencing poor menstrual hygiene are susceptible to reproductive tract infections (RTI), such as bacterial vaginosis (BV) that is sited to be more common in women with unhygienic menstrual hygiene management (MHM) practices (Baisley, Changalucha, Weiss, Mugeye, Everett, & Hambleton, 2009).

EMPIRICAL REVIEWS

Adinma & Adinma (2008) carried out a cross-sectional descriptive study involving 550 secondary school girls in southeastern Nigeria to determine their perceptions, problems, and practices on menstruation. This study was undertaken amongst adolescent secondary school girls in Onitsha, southeastern Nigeria to determine their perceptions on, medical problems associated with and key practices during, menstruation with a view to identifying information and practice gaps, and misconception on menstruation requiring address. The authors established that only 39.3% of the respondents perceived menstruation to be physiological and that abdominal pain/discomfort, (66.2%), was the commonest medical problem encountered by the respondents, although 45.8% had multiple problems. In view of these, the study recommended for a multi-dimensional approach focusing on capacity building of mothers, and teachers on sexuality education skills; using religious organizations as avenues for sexuality education; and effectively using the Mass Media as reproductive health education channels. This study was a cross-sectional descriptive study involving secondary school girls in southeastern Nigeria to determine their perceptions, problems, and practices on menstruation but the current study focused on the exposure of women in south east, to menstrual hygiene information.

Shanbhag, Shilpa, D'Souza, Josephine, Singh & Goud, (2012) assessed the perceptions and practices regarding menstrual hygiene among selected high school girls in a resource limited settings in area around Bangalore city. This was a cross sectional study done in four selected High Schools in rural areas in three districts of Bangalore Urban, Bangalore Rural and Kolar around Bangalore city. The study tool used was a pre-designed, pre-tested, structured and self administered questionnaire which was developed and translated into local language. The socio-economic status was assessed using the possession of the Above Poverty line (APL) and below poverty line (BPL) cards issued by the local government authorities by the families of these girls. The study population included all the girls studying in 8th, 9th and 10th standards. The study found that the most common source of information was the mother. Even though the term “menstruation” was heard by most of the study population, the actual knowledge regarding the process of menstruation was unsatisfactory. Personal hygiene practices were also found to be unsatisfactory, and avoidance of certain foods and practices during the time of menstruation was some of the cultural factors in play. The study recommended that the mothers, irrespective of their educational status should be taught to break their inhibitions about discussing with their daughters regarding menstruation much before the age of menarche.

Budhathoki, Bhattachan, Castro-Sánchez, Sagtani, Rayamajhi, Rai, & Sharma, (2018), explored the perceptions and the lived experience of women and young girls regarding menstrual hygiene management in the aftermath of the earthquake in Nepal. They did a mixed method study among the earthquake affected women and adolescent girls in three villages of Sindhupalchowk district of Nepal. Data was collected using a semi-structured questionnaire that captured experiences and perceptions of respondents on menstrual hygiene management in the aftermath of the Nepal earthquake. Results showed that menstrual hygiene was rated as the sixth highest overall need and perceived as an immediate need by 18.8% of the respondents. There were 42.8% women & girls who menstruated within first week of the earthquake. Reusable sanitary cloth were used by about 66.7% of the respondents before the earthquake and remained a popular method (76.1%) in the era of post-earthquake. It was found that none of the respondents reported receiving menstrual adsorbents as relief materials in the first month following the earthquake. Disposable pads (77.8%) were preferred by respondents as they were perceived to be clean and convenient to use. The study concludes that in the immediate aftermath of the earthquake, women and girls completely depended on the use of locally available resources as adsorbents during menstruation. The study brings evidence that menstrual hygiene management (MHM) activities are lesser prioritized in immediate relief works and that, as menstruation comes along with cultural and religious taboo, the menstrual hygiene management (MHM) need is at present a silent need. While the study explored the perceptions and the lived experience of women and young girls regarding menstrual hygiene management in the aftermath of the earthquake in Nepal, this current study is domesticated in Nigeria and specifically among women in south eastern, Nigeria.

Belayneh, & Mekuriaw (2019) assessed the knowledge and menstrual hygiene practice among adolescent school girls in southern Ethiopia. The study was an institutional based cross-sectional study conducted at Gedeo zone high schools among 791 randomly selected adolescent girls using multi stage sampling technique. They collected data using interviewer administered questionnaire and the Bivariable and multivariable logistics analyses were computed to identify factors associated with the poor menstrual hygienic practice. The study found that 68.3%, had poor knowledge of menstruation, about 48.1% of school girls used absorbent materials, 69.5% clean their external genitalia and 60.3% of girls had poor menstrual hygienic practice. The study concludes that majority of adolescent school girls had poor knowledge regarding menstruation and their hygienic practices are incorrect. This demonstrates a need to design acceptable awareness creation and advocacy programmes to improve the knowledge and promote safe hygienic practice of adolescent school girls during menstruation. The study examined the knowledge and menstrual hygiene practice among adolescent school girls in southern Ethiopia using the research questionnaire but the current study is focused on the Nigerian pre-menopausal women and it is aimed at ascertaining their exposure to menstrual hygiene information.

Choudhary & Gupta (2019) assessed and compared the knowledge, perceptions, and practices of adolescent girls regarding menstrual hygiene in rural and urban areas of Jodhpur. It was a cross-sectional study, conducted on school going adolescent girls in urban and rural schools of Jodhpur. The sample size for the study was 450, which was divided into rural and urban adolescent girls. A self-administered questionnaire was used for data collection. The study found that a significantly more number of girls from an urban area (56.2%) were using sanitary napkins during menstruation. It was also found that only around one fourth of the girls in study area had ever been counseled for menstrual hygiene. Also, awareness about adolescent health clinic was significantly more among urban girls. The study concludes that significant differences were observed among urban and rural adolescent girls in terms of knowledge, perception, and practices related to menstrual hygiene. The study assessed and compared the knowledge, perceptions, and practices of adolescent girls regarding menstrual hygiene in rural and urban areas of Jodhpur, using a self administered questionnaire but the current study dwelt on the exposure to menstrual hygiene information among women in south east, Nigeria, using both a questionnaire and focus group discussion.

Mukherjee, Lama, Khakurel, Jha, Ajose, Acharya, Tymes-Wilbekin, Sommer, Jolly, Lhaki, & Shrestha, (2020) did an assessment of the socio-cultural perceptions of menstrual restrictions among urban Nepalese women in the Kathmandu valley. They used a clustered random sampling, to select 1342 adolescent girls and women of menstruating age (≥ 15 years) three urban districts in the Kathmandu valley who completed the survey related to menstrual practices and restriction. The study was a cross-sectional survey study using a customized program allowing pull-down, multiple choice and open-ended questions in the Nepali language. The study found that Purifying either the kitchen, bed, bedsheets or other household things on the fourth day of menstruation was reported by 66.1% of the participants, and 45.4% saw menstruation as a “bother” or “curse.” Findings showed that even though most participants disagreed with extreme menstrual restriction practices in the urban areas of Kathmandu valley, Nepal, there were social discriminations, deep-rooted cultural and religious superstitions, and gender inequalities that continue to affect women during menstruation. The study further recommended that targeted education, awareness and interventions with focus on menstrual hygiene and gender sensitization are needed to make practical changes in knowledge, attitude and deep-rooted cultural and religious practices during menstruation. This study did an assessment of the socio-cultural perceptions of menstrual restrictions among urban Nepalese women in the Kathmandu valley but the current study is focused on women in south eastern Nigeria.

Edet, Bassey, Esienmoh and Ndep (2021) did an exploratory study of Menstruation and Menstrual Hygiene Knowledge among Adolescents in Urban and Rural Secondary Schools in Cross River State, Nigeria. The study was aimed at determining menstruation and menstrual hygiene knowledge among secondary school students as a basis for planning an appropriate health promotion intervention. Using a semi-structured questionnaire, 1,006 adolescent female students from junior secondary to senior secondary in eight schools were surveyed. The study found that 230 (56.7%) rural-based adolescent female students had a significantly poor knowledge of menstruation and menstrual hygiene practices compared to their urban counterparts 253

(42.2%). Also 435 (72.5%) in urban and 327 (80.5%) in rural schools obtained information about menstruation from their mothers. Similarly, 407 (67.8%) in urban schools and 318 (78.3%) from rural schools were informed about menstrual hygiene by their mothers. Findings also revealed that there is an urban-rural gap in knowledge of menstruation and menstrual hygiene among girls in Cross Rivers State and recommended for increased parental role in menstrual hygiene education. This study was able to explore menstruation and menstrual hygiene knowledge among Adolescents in Urban and Rural Secondary Schools in Cross River State, Nigeria but this current study is focused on women in south east Nigeria, particularly on how they are exposed to and respond to menstrual hygiene information.

Ekoko, & Ikolo, (2021) carried out a cross-sectional descriptive study in May 2019 among girls from rural community secondary schools in Delta State. This study was conducted to promote menstrual hygiene literacy among secondary school girls in rural areas of Delta State, Nigeria by the Association of Women Librarians in Nigeria, Delta State. The population consisted of all secondary school female students from rural communities in Delta State. Using multi stage sampling technique, 493 participants were selected from public secondary schools in the three senatorial districts of Delta State. Data were collected using structured self-developed questionnaires after due permission to carry out the study was obtained from school authorities. After data collection, descriptive analysis tools such simple percentage (%) was used in analyzing the data obtained. The study used the multi stage sampling technique to select the sample size for the study and the research instrument used was structured self-developed questionnaires. The study found that most students did not have any information about menstruation prior to menarche and those who had, got them from their friends. The study also found that after the awareness campaign, students became aware of the source of menstrual blood, showed more interest in using sanitary pads, began to take more baths when having their menstrual period, began to change their panties and properly disposed of their sanitary materials. The study also revealed that students indicated a positive shift in their attitude towards menstruation.

Atari, Tariquzzaman & Nancy, (2021) used the grounded theory and ethnographic fieldwork approaches and a political ecology of adolescent health (PEAH) framework to examine how school-going adolescent girls and their communities perceive sexual and reproductive health education (SRHE) and menstrual hygiene management (MHM) in Juba, South Sudan. Three young girls were purposefully selected from each of 10 government-run mixed primary schools in the region of Juba, South Sudan, as peer research evaluators (PREs) and key informants (N = 30). Each PRE interviewed and reported on three of their peers about how they talk about and manage menstruation. The findings show that political, socioeconomic, and cultural factors do influence adolescent girls' and their communities' perceptions about puberty and menstruation. In general, MHM was culturally constructed, but the results show a disproportionate emphasis on social norms rather than on SRHE, which could have long-lasting health implications for adolescent girls. The study maintained that there was a need for all stakeholders in education to come together to better grasp and address the obstacles young girls face in their communities and school environments. The study also recommended that there was a need to develop relevant training materials to assist care providers and adolescent girls to openly talk about and address sexual and reproductive health issues. The study was able to document how school-going adolescent girls and their communities perceive sexual and reproductive health education (SRHE) and menstrual hygiene management (MHM) in Juba, South Sudan but the current study examined how the Nigerian pre-menopausal women, perceive and respond to menstrual hygiene information.

These empirical works reviewed showed that that there is still room to improve the spread of menstrual hygiene among information among the people. In some studies, young women were found to be depending on their mothers for menstrual hygiene information, and are sometimes unaware of menarche and physiology of menstruation. The literature also insists that unsanitary menstrual absorbents is unsafe and unhygienic for women and that adequate knowledge of menstrual information is paramount as some women, especially in Nigeria, have insufficient knowledge of menstruation. The empirical review revealed that provisions of sufficient menstrual materials with good education of the girl child can significantly improve their wellbeing and help them avoid absenteeism from schools. The empirical reviews also established that Social

restrictions during menses in the form of religious activities, drop out from school, avoiding certain foods etc. were practiced in many families.

THEORETICAL FRAMEWORK HEALTH BELIEF MODEL

The study was anchored on the Health Belief Model (HBM) which is a psychological model that attempts to explain and predict health behaviors by focusing on the attitudes and beliefs of individuals. The Health Belief Model (HBM) applies to this study because the women in south East who are exposed to menstrual hygiene information have perceived chances of developing favourable or positive behavioural conditions. However, the different ways the women in South East, Nigeria, develop favourable behavioural conditions towards the messages of menstrual hygiene or otherwise, will help justify how efficient the messages are in addressing the dangers/ challenges of menstrual hygiene among the women.

RESEARCH METHOD

This study adopts a mixed research of both quantitative and qualitative designs involving the ‘survey’, and ‘focus group discussion’. The data collection instrument for survey is the questionnaire while data collection instrument for the Focus group discussion is focus group guide while the study population is all Nigerian women in south east, comprised of a total of 8,210,604, as at the 2006 Nigerian population census. This research sampled a total of 663 respondents, with 5% error margin and 99% confidence level, derived from the sample size table worked out by Krejcie and Morgan (1970).

With survey design, multi stage probability sampling technique was employed. South east has five states comprised of Anambra, Imo, Ebonyi, Abia and Enugu, among which three states were firstly randomly selected. The second stage of the sample was the selection of local government areas, from each of the senatorial zones in the three chosen states, that is three local government areas to represent each of the senatorial zones, making a grand total of nine local government areas. The third stage involves the selection of towns to represent each of the selected local government areas while the fourth stage involved the survey of the instrument among the entire villages in each of the selected towns.

The Focus Group was conducted in three selected states (Anambra, Enugu and Ebonyi) to represent the South East. The FGD was organized and conducted among women from the three selected states (Anambra, Enugu and Ebonyi). The FGD was organized such that four (4) participants were selected from each of the States. This amounts to a total number of twelve (12) FGD participants, who are relatively enlightened and also exposed to menstrual hygiene information. The discussion was conducted online via a WhatsApp Group, to enable respondents from different states, enjoy some convenience and comfort while giving the needed responses.

RESULTS

EXPOSURE TO MENSTRUAL HYGIENE INFORMATION

Table 1

Aware of and Exposed to Menstrual Hygiene Information

Aware of any Information on Menstrual Hygiene?				Exposed to any kind of Menstrual Hygiene Information?			
Variables	Frequency	Percent	Valid percent	Variables	Frequency	Percent	Valid percent
Yes	596	100.0	100.0	Yes	596	100.0	100.0
No	--	--	--	No	--	--	--
Total	596	100.0	100.0	Total	596	100.0	100.0

Source: Field Survey (2022)

This table shows that all the respondents are aware of and are exposed to information on menstrual hygiene. This also indicates that menstrual hygiene information is popular among the women in South East Nigeria.

Table 2

Kinds of Medium of Exposure to Menstrual Hygiene Information

Variables	Frequency	Percent	Valid percent
Editorial	4	7	7
Commentaries	2	3	3
News Analysis	1	2	2
Features	4	7	7
Opinion Articles	57	9.6	9.6
Stories on Print	142	23.8	23.8
Word of Mouth	173	29.0	29.0
Internet/ New media	173	29.0	29.0
Commercials	40	6.7	6.7
Total	596	100.0	100.0

Source: Field Survey (2022)

This table presents the various kinds of medium of exposure to menstrual hygiene information available to the people. It was established from the study, as presented in this table that the major kind of menstrual hygiene information obtained by the women is word of mouth (29%), Internet/New media (29%), and stories on any form of print literature (23.8%). Others kinds of menstrual hygiene information include opinion articles (9.6%), commercials (40%), feature articles (7%), Editorials (7%), commentaries (3%) and news analysis (2%). The implication is that the prominent menstrual hygiene information among the women are word of mouth/spoken word and the new media especially the social media platforms.

MEDIUM OF EXPOSURE TO MENSTRUAL HYGIENE INFORMATION

Table 3

Media Content through which the women are exposed to Menstrual Hygiene Information

Variables	Frequency	Percent	Valid percent
Editorial	4	7	7
Commentaries	2	3	3
News Analysis	1	2	2
Features	4	7	7
Opinion Articles	57	9.6	9.6
Stories on Print	142	23.8	23.8
Word of Mouth	173	29.0	29.0
Internet/ New media	173	29.0	29.0
Commercials	40	6.7	6.7
Total	596	100.0	100.0

Source: Field Survey (2022)

This table presents the media content through which the women are exposed to menstrual hygiene information. It was found that the women mainly obtain their menstrual hygiene information through word of mouth (29%), Internet/New media (29%), and stories on any form of print literature (23.8%). Others include opinion articles (9.6%), commercials (40%), feature articles (7%), Editorials (7%), commentaries (3%) and news analysis (2%). The implication is that word of mouth/spoken word and the new media especially the social media platforms, are the most prominently used menstrual hygiene information among women in South East, Nigeria.

Table 4

Preferred Medium of Exposure to Menstrual Hygiene Information

Variables	Frequency	Percent	Valid percent
Radio	155	26.0	26.0
Television	1	.2	.2
Internet / new media	194	32.6	32.6
Books	2	.3	.3
Handbills	3	.5	.5
Calendars	7	1.2	1.2
Schools	65	10.9	10.9
Markets	71	11.9	11.9
Community Theatre	98	16.4	16.4
Total	596	100.0	100.0

Source: Field Survey (2022)

This table shows the preferred medium of exposure to menstrual hygiene information by the women. The study established that the new media (32%), especially the social media platforms were considered by the women as the most preferred medium for obtaining menstrual hygiene information. The radio is also another widely accepted medium of exposure to menstrual hygiene information (26%). Other identified medium include: community theatre (16%), markets (11.9%), schools (10.9%), calendars (1.2), etc. The existence of several preferences notwithstanding, the major medium preferred by the respondents include: the new media and the radio device

Table 5
Accessible Medium of exposure to Menstrual Hygiene Information

Variables	Frequency	Percent	Valid percent
Radio	283	47.5	47.5
Television	92	15.4	15.4
Internet / new media	221	37.1	37.1
Total	596	100.0	100.0

Source: Field Survey (2022)

This table reveals the various accessible medium of exposure to menstrual hygiene information by the women. The study discovered that radio is the most accessible medium (47.5%), The next is the Internet/New media, especially the social media platforms (37.1%) and also the Television (15.4%). The implication is that the most accessible medium of exposure to menstrual hygiene information include: Radio, Television and Internet/New media.

Table 6
Frequency of Expose to Menstrual Hygiene Information

Variables	Frequency	Percent	Valid percent
Occasionally	596	100.0	100.0
Regularly	--	--	--
Never			
Total	596	100.0	100.0

Source: Field Survey (2022)

This table shows data on how frequent, the women are exposed to menstrual hygiene information. It was found that the women are all occasionally exposed to menstrual hygiene information. This occasional exposure may partly be related to the culture of secrecy which the society seems to give to issues related to menstrual cycle and female reproductive system.

Table 7
Access Menstrual Hygiene Messages from the media of your choice?

Variables	Frequency	Percent	Valid percent
Yes	92	15.4	15.4
No	504	84.6	84.6
Total	596	100.0	100.0

Source: Field Survey (2022)

This table presents data on whether the women access menstrual hygiene information from the media of their choice. It was established that majority of the women (84.6%) do not access menstrual hygiene messages from the media of their choice. This may also account part of the reasons why the messages hardly achieve the required behaviour change.

Table 8
Getting satisfactorily informed on Menstrual Hygiene

Variables	Frequency	Percent	Valid percent
Yes	216	36.2	36.2
No	380	63.8	63.8
Total	596	100.0	100.0

This table shows whether the respondents get satisfactorily informed about menstrual hygiene practices. It was found that only slightly above one third of them (36.2%) obtain satisfactory information on menstrual hygiene while many of them (63.8%) do not find the messages satisfactory. The implication is that majority of the respondents do not feel satisfied with the messages they obtain on menstrual hygiene. The FGD also disclosed that there is exposure to menstrual hygiene information among the women which were not prominent in the various media of communication. These are evident in the excerpts stated underneath:

Participant 1: I am exposed to menstrual information but many of the things I know about menstrual hygiene is through interpersonal communication with peers and then a few literature I have read on it

Participant 1: There was a text called ‘every woman’ a compendium of the genealogy of women’s body parts and systems and functions, which I was using then to improve my knowledge on my body changes. I have read some magazines stories about women cycles and had gathered some knowledge on the changes on women’s body parts

Participant 1: I often use the internet to obtain some of the information which I presume to be very scarce on the physical world as many people hardly talk about it. I also feel uncomfortable, discussing my own experiences with other people, especially when they choose not to make their own experiences open. I only discuss such with a health expert or a very reliable and close friend which is hardly found these days.

Participant 1: I mean having easy access to books or materials that teach about menstrual health. There seem to be scarcity of materials where menstrual hygiene are exhaustively discussed and publicly displayed but I think it is important that such issues should be recognized and that women should be exposed to such kinds of information in various stages of their lives. At least, it will enable them to have adequate knowledge on how to properly manage their menstrual hygiene.

Participant 12: I think the materials are everywhere but scattered. For instance, we can use the Internet to search and obtain all kinds of menstrual hygiene information on different topics. I also believe that some media organisations have programmes on menstrual hygiene

Participant 10: Many of these challenges call for more interventions from the government

Participant 12: I have listened to many programmes on radio regarding women’s reproductive health including breastfeeding and child bearing and some of them seem to point exclusively at point out that the women’s general health and well being. If we are to start checking for programmes that are exclusively on Menstrual Hygiene, I believe it will be rare to find.

Participant 12: There are many of the radio stations but I cannot recall all the names. I remember listening to one of such programmes recently on Purity FM

Participant 8: I usually go to hospital during my antenatal period and one of the major teachings is general cleanliness and how they should take proper care of themselves

Participant 11: I remember attending some functions organized by an NGO on women where some resource persons came to teach women about menstrual hygiene.

Participant 9: Once you start experiencing a menstrual flow, you may be forced to asking your parents and friends how you can be managing the situation. So I will say that interpersonal communication is one of the prominent ways to seek and obtain information on menstrual hygiene.

Participant 2: I strongly believe that women should be ready at an early age of their lives to expect a menstrual cycle, even though it is usually a very tough experience. I was almost disgraced by the signs when mine started but with time, I had to overcome it.

From the Discussion, the participants’ medium of exposure to menstrual hygiene information was revealed. They include: interpersonal communication with peers or word of mouth; literature sources such as books and magazines, the Internet or New Media, broadcast programmes, hospitals and some outdoor programmes organised by NGOs and so on.

DISCUSSION OF FINDINGS

It is interesting to discover that all the respondents are aware of and are exposed to information on menstrual hygiene, which implies that menstrual hygiene information is popular among the women in South East Nigeria. Previous studies had shown that most women especially those in developing countries may not have adequate information regarding how they should manage their menstrual hygiene (Boakye, David, Aladago, Beweleyir, Bawa, Marian, Salifu, & Asaarik, 2018). The result of this study supports these previous findings as the respondents are all aware of and exposed to information on menstrual hygiene, but hardly pay consistent attention to the information on menstrual hygiene. The FGD also revealed that Lack of Information on menstrual hygiene could result in poor menstrual hygiene and pose some threats or health risks such as reproductive and urinary tract infections, among many other complications among women. However, it was deduced from the FGD that use of improper or wrong menstrual material is harmful to women, and should therefore be stopped. The FGD further revealed that many women already have some foundational knowledge on how to manage their menstrual hygiene and that even when the media may not set agenda on such issues, these media organizations occasionally present them or have them embedded into health or women's issues. The survey and the FGD also showed some women hardly wish to openly debate or discuss their menstrual health.

In terms of the medium of exposure to menstrual hygiene information available to the people, it was established from the study, that the respondents mainly obtain their menstrual hygiene information through word of mouth (29%), Internet/New media (29%), and stories on any form of print literature (23.8%). The study also showed that the new media (32%) and the radio device (26%) are the preferred medium of exposure to menstrual hygiene information by the women. Others include community theatre (16%), markets (11.9%), schools (10.9%), calendars (1.2), etc. This finding aligns with previous findings that girls receive information on menstruation mainly from their mothers (Nehulkar, Holambe, & Thakur, 2016; Karout, 2016; Fakhri, Hamzehgardeshi, Hajikhani Golchin & Komili, 2012; Chauhan, Kumar, Marbaniang & Id, 2021) who tend to focus on activities to be avoided during menstruation (Wangmo, Pelzom & Dem, 2014; Pandey, 2014) but extensive information on menstrual hygiene appears to be lacking.

The study also showed the various accessible medium of exposure to menstrual hygiene information by the women to include the radio (47.5%) which is the most accessible medium, the Internet/New media, especially the social media platforms (37.1%) and the Television (15.4%). From the Focus Group Discussion, the participants' medium of exposure to menstrual hygiene Information include: interpersonal communication with peers or word of mouth; literature sources such as books and magazines, the Internet or New Media, broadcast programmes, hospitals and some outdoor programmes organised by NGOs and so on.

Based on how frequent, the women are exposed to menstrual hygiene information, the survey found that the women are all occasionally exposed to the menstrual hygiene information. This occasional exposure may partly be related to the culture of secrecy which the society seems to give to issues related to menstrual cycle and female reproductive system. Also, the FGD has shown that there is secrecy, and sensitivity often associated with issues of menstrual hygiene. One of the participants upholds the idea that his medical history remains a personal issue to him as she may not disclose some personal information to people. The study was also able to show that majority of the women (84.6%) do not access menstrual hygiene messages from the media of their choice and this may account for some of the reasons why the messages hardly achieve the required behaviour change.

The study found that 95% of the respondents do not observe the hygiene owing to the messages and that only 5% of them do so. On whether the respondents regularly seek new information on menstrual hygiene, the study revealed that below one third of the women (26.5%), regularly seek new information on menstrual hygiene while majority of them (73.5%) do not do so. This may suggest that since many of the women mainly obtain menstrual hygiene information through the Internet/new media and word of mouth, they seem relaxed about regularly seeking new information.

CONCLUSION

This work concludes that exposure to menstrual hygiene information among women in South East, Nigeria is widespread but the attention they give to such information is relatively minimal.

RECOMMENDATIONS

Consequent upon the findings, the study recommends the following:

- i. Relevant institutions in Nigerian should provide sufficient educational contents for women in their early years of menstruation. This will help learn how to manage their menstruation effectively.
- ii. The government, relevant agencies and non government organizations as well as individuals can assist by providing the healthy sanitary materials for women especially the poor, and those with low income levels
- iii. The media should assist in the campaign for menstrual hygiene. There should be more robust and frequent media programming and portrayals, persuading the women to continually imbibe the culture of menstrual hygiene practices

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