Menstruation and Menstrual Hygiene Experiences of In-School Adolescents in Urban and Rural Secondary Schools in Cross River State, Nigeria: A Qualitative Study

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Abstract:

Background: Menstruation, a normal physiological occurrence in females from puberty to menopause is yet to become a regular subject of discussion between parents/caregivers and their children/wards leading to misinformation and poor hygiene practices among adolescent girls.

Objective: This study aimed at exploring in-school adolescent girls' experiences at menarche and current menstrual hygiene practices.

Methods: Adolescent female students from junior secondary-two to senior secondary-two in eight schools participated in audiotaped focus group discussions. There were two groups per school; one from junior and one from senior students. Thematic and content analysis of the transcripts were conducted manually. Ethical approval was obtained and all ethical principles were observed.

Results: Majority of the adolescents had no prior knowledge of menstruation before menarche. After a menstrual accident, leading to stained underwear, whomever they confided in, provided the emergency education on sanitary materials. Materials used included, sanitary pads, tissue paper and rags. Men's involvement in emergency education was minimal including referrals with or without education. Participating schools lacked gender sensitive toilets and sanitary pads leading to students missing classes because they had to go home to clean up. Culturally, there is fear of harm from evil people through soiled sanitary materials so, disposal was done in secret. Some religious organizations placed restrictions on girls/women, such as getting on the worship altar during menstruation. On relationship with boys after menarche, the teenagers heard the warnings; "avoid touching", respect yourself around boys, or "do not play" with boys.

Conclusions: It is recommended that schools should organize annual menstrual hygiene education sessions for parents, students and teachers.

Keywords: Adolescent Health, Menstruation, Menstrual hygiene, Reproductive Health, Sanitary materials

Introduction:

Menstruation, a normal physiological occurrence in females from adolescence to menopause has not yet become a regular topic of conversation between parents / care givers and children/wards¹. It is often a taboo subject, rife with religious and cultural taboos². Unfortunately, adolescence being a period of curiosity about the biological and physical changes occurring simultaneously, leads young girls to make enquiries from their peers resulting in misinformation about menstruation among adolescent girls.

Sex and sexuality education in schools often focuses on the relationship between menstruation and reproduction. The details of what happens when a girl menstruates and how to manage the phenomenon is often missing^{3,4}. While reproductive health information is crucial for adolescents generally, lack of simple correct information about safe menstrual hygiene practices for adolescent girls is a major unmet need in the existing sexuality education curriculum⁴.

The current global population according to United Nations Population Fund is estimated at 7.9 billion in 2021⁵, of which 25% are 0-14 years old, 16% are adolescents 10-19 years old and 23.6% are 10-24 years old. The adolescent population in the less developed regions of the world is 17% while for least developed regions it is 22.3%. With such a large population of young people, it is important to look into the sexual and reproductive health knowledge and practices and be able to generate data that will inform appropriate interventions for this

subset of the population. The main aim of this study was to explore in-school adolescent girls' menstrual hygiene views / perspectives and culturally oriented actions.

Methods:

Study setting

The study setting comprised of eight secondary schools selected from two Local Government Areas in Cross River State. Cross River State is a coastal state in the South-South Geopolitical zone of Nigeria. It occupies 20,156 square kilometers and is bounded to the North by Benue State, to the West by Ebonyi and Abia States, to the East by the Cameroon Republic and to the South by Akwa-Ibom State and the Atlantic Ocean. It has an estimated population of 3,344,000⁹ (Cross River State on line, 2011). It is made up of 18 Local Government Areas (LGA). The three major language groups in Cross River State are Bekwarra, Efik and Ejagham with numerous other sub-groups having a few distinct and many inter-related cultural beliefs and practices. Majority of indigenous Cross Riverians subscribe to the Christian beliefs while others including some residents of various ethnic groups in Nigeria subscribe to Islamic beliefs and other traditional African Religious beliefs. The Cross River State economy is predominantly subsistence agriculture, hospitality-focused businesses, petty trading and civil service.

Study Population and Sample

The target population of this study was in-school adolescent girls in Junior Secondary 2 (JSS2) to Senior Secondary (SSS) 2, within the age bracket of 10 to 18 years. Adolescent female students from junior secondary-two to senior secondary-two in eight schools participated in focus group discussions about their menstrual hygiene knowledge and practices. Each school had two groups, one JSS and one SSS group, giving a total of 16 focus group discussions. The number of participants per group ranged between seven and 10. The FGDs took place within the school premises however, no teacher was allowed within hearing range of the discussions.

Data Collection:

Ethical approval was obtained from the Ethical Review Board of Cross River State, Ministry of Health. The approval was transmitted through in a letter referenced CRS/MH/CGS/E-H/018/Vol. II/122. The research team for each FGD comprised of a facilitator, a note-taker and an observer. The tool for data collection was a pretested FGD guide made up of five sections; the introduction, group rules, questions, closing remarks and sociodemographic data section. All ethical principles guiding research with human subjects were observed. Only adolescent girls who provided assent in addition to the consent from the parents and school administration could participate in this study. The discussions were audiotaped. All audio tapes were transcribed verbatim into a word document. Thematic and content analysis were conducted manually using Colazzi's data analysis steps to guide the process ²³.

Results:

The mean (SD) age of participants was 14. The main themes associated with menstrual hygiene among adolescent girls are *knowledge*, *cultural and religious taboos/restrictions*, *emergency education*, *male involvement* and *relationship with boys after menarche*. Majority of the adolescents had *no prior knowledge* of menstruation before menarche. They didn't know what it was and how it felt like to be a menstruating female. As a result, menstrual accidents were common. All the participants reported that they had no explanations about menstruation from teachers, family or friends prior to menarche. After a *menstrual accident*, almost always leading to stained underwear and external wear, the girls reported being embarrassed and were sometimes teased by boys in the class.

Upon reporting a menstrual accident to an adult, whomever they confided in, provided the *emergency education* on sanitary materials. Materials often recommended included, pads, tissue paper and rags. The rags were often old pieces of cloth cut in rectangular pieces and are folded to desired thickness before use. The confidants were

mostly women however, few men, often single/separated or divorced fathers, brothers and uncles were approached as confidants after a menstrual accident. These men were often the primary caregivers of, or lived in the same household with the adolescent girl. Some of the men *referred* the adolescent girl to a female friend or family member immediately, while others provided initial palliatives; provided pad or tissue before referral.

Participating schools lacked toilets and sanitary pads so students missed classes because they had to go home to clean up. While in school, the female teachers were usually the 'go-to' persons for young girls who may have experienced a menstrual accident, even if it was not their first time. Some of these teachers allowed the student to use the Teachers' toilet to change or were given permission to go home if use of teachers' toilets was not feasible. More often than not, the female teachers provided the student with tissue or pad from their own private packs or used their money to purchase the items for the students.

Disposal of sanitary materials is often in secret. Culturally, there is *fear of harm* from evil people through the soiled sanitary pad. Some cultural beliefs associated with menstruation include not going to farm, to avoid 'spoiling' the crops.

Other beliefs were mostly religious in nature and they were justified by several religious organizations with scripture from the Old Testament of the Holy Bible. Majority of the beliefs stop women and girls from participating in activities in Church such as serving at the Alter or singing in the choir during menstruation.

"In our church, girls with menses do not go to the Altar" (13-year-old respondent).

The severity of the separation depends on the type of religious organization. These organizations also tend to have educational sessions that teach young men and women about their bodies including menstrual hygiene.

On relationship with boys after menarche, the teenagers heard the warnings; "avoid touching" or "do not play" with boys. Some teenagers took these words literally. Staying away from boys altogether and/or developing unhealthy social interactions with their peers of the opposite sex.

The Teenagers Department teaches about menstruation and encourage us to <u>respect ourselves when around</u> boys" (13-year-old respondent).

Discussion:

The mean age of the participants fell within the adolescent period of 10-19years constituting 16% of the current global population⁵. Menstrual hygiene practices and experiences of adolescent girls vary across cultures and societies especially in low and middle-income countries (LMICs). Despite the fact that menstruation is a natural process, menstrual practices are still shrouded with several sociocultural restrictions, taboos, misconceptions, negative attitudes, and punitive practices, all of which impact adversely on the outcomes of adolescent girls^{10, 11}.

Several cross-sectional studies in different LMICs have been conducted to explore the determinant factors that underpin menstrual hygiene practices among adolescent girls. Some of the limiting factors identified include poor access to information on good menstrual hygiene practices ^{12,13}, lack of access to quality hygiene products and high cost of sanitary pads ^{14,15}, entrenched cultural beliefs and practices and lack of access to WASH facilities ^{16,17},

On the other hand, some other studies have shown that good knowledge of menstrual hygiene management 11,18, mother's education and family income have been found to promote better menstrual hygiene practice among adolescent girls.

Qualitative and mixed method studies are very important in understanding the contextual underpinnings of culture, beliefs, culturally oriented actions and practices of individuals, families, groups and societies; and in this regard menstruation and menstrual hygiene practices. Several studies have attempted to gain deeper insight into the socio-cultural nuances surrounding menstrual hygiene practices especially in LMICs. This was the

motivation that informed the application of a qualitative method in exploring the menstrual hygiene experiences of our respondents.

In a related study by Mohammed et.al.²⁰ using a multi-method survey approach to explore the menstrual knowledge, sociocultural restrictions, and barriers to menstrual hygiene management among adolescent schoolgirls and schoolboys in Ghana, revealed that maternal education was protective against poor menstrual knowledge, and that adolescents who came from homes without television and radio sets reported poor menstrual knowledge compared to their counterparts who have television and radio sets in their homes.

Their study²⁰ also revealed that girls are not permitted to prepare certain local dishes during their periods. They were also forbidden from participating in religious activities such as reading the Holy Quran or praying in the mosque during their period. Moreover, open discussions about menstruation and its management was not encouraged at home and girls face stigmatization during their periods because they are considered unclean and impure. The study by Mohammed at al.²⁰ highlights the strong influence of religious belief and practices in promoting gender exclusivity.

Another qualitative study by Gold-Watts et al.²¹ exploring how adolescent girls in rural Thirumalaikodi, in Tamil Nadu, India experience menarche and menstruation, and how their experiences connect to the sociocultural context found that the onset of menarche which heralds the biological transition to puberty, automatically triggers some institutionalized cultural codes that shape and imposes define gender norms for the girls. These norms in-turn generate, sustains and reproduce stigmatizing attitudes towards the girls that imposes on them the societal belief systems and practices regarding menstrual hygiene practices. This study by Gold-Watts et al.²¹ also brings to the fore the strong influence cultural beliefs and norms have in defining gender stereotypes for young adolescent girls who have to live with and endure this imposed stigmatized way of dealing with their monthly periods for a greater part of their lives, until they transit into menopause, much later in the course of their lives.

Hennegan et al.²² undertook a systematic review and qualitative meta-synthesis of the experiences of women and girls of menstruation in low- and middle-income countries (LMICs). The studies they included in their meta-synthesis captured the experiences of over 6,000 participants from 35 countries that included Kenya, Uganda, Ethiopia, India, Nepal, as well as countries from East Asia, the Pacific, Latin America, the Caribbean, the Middle East, North Africa, and Central Asia. The domains /thematic areas of menstrual experiences explored comprised: menstrual practices, perceptions of practices and environments, control of bleeding and odour, as well as confidence, shame and distress in the face of stigmatization and how these components of experience are interlinked and contribute to the negative impacts on women's and girls' lives. The areas that impact negatively on the menstrual health of the girls that were examined included - the harms to physical and psychological health, education and social engagements.

The finding of this meta-synthesis showed that in the sociocultural context, menstrual stigma and gender norms, influenced the experiences of adolescent girls and limited their knowledge about menstruation, it also limited the social support they could have relied on, and further entrenched pre-existing gender-stereotypes. These menstrual stigmas shaped and internalized the negative self-image created by society and externally enforced the stereotyped behavioural expectations. Resource limitations was found to underpin the inadequacy of the basic physical infrastructure needed to support menstruation, it also created an economic environment that restricted access to affordable menstrual materials²¹.

The economic cost of menstrual hygiene makes it harder for those in lower socio-economic status to afford hygienic materials. Women and girls resort to the use of tissue or rags due to the high cost of sanitary materials in Nigeria. Similar findings were reported Ajari and colleagues. Most churches prefer abstinence-only sex education for adolescents and teenagers hence the use of coded language such as "respect yourself around boys" or "avoid touching" instead of the actual words for sexual activities. The use of ambiguous words and phrases leaves room for interpretation, which the undeveloped vocabulary of an adolescent girl, may result in wrong and often misleading interpretations and wrong decision-making processes regarding their sexual and reproductive health. Socio-cultural restrictions of women and girls during menstruation have been recorded across the world^{2,7-9}

Conclusions:

It is therefore recommended that School Health Nurses in collaboration with the school management should undertake sexuality education programmes including menstrual hygiene education and training for students annually. It is important that societies in LMICs begin to re-evaluate gender norms that dehumanize the female gender and subject them to health risks particularly with regards to menstrual hygiene management.

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