



Original Research Article

Awareness of Menstrual Hygiene Among Female Undergraduate Students of Federal Polytechnic Nekede Owerri, Imo State

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DOI: [10.5281/zenodo.17083703](https://doi.org/10.5281/zenodo.17083703)

Submission Date: 15 July 2025 | Published Date: 09 Sept. 2025

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Abstract

Public health professionals around the world are becoming more interested in menstrual hygiene. Maintaining good cleanliness during menstruation is essential for women's and girls' dignity. The awareness of managing menstruation hygiene among female undergraduate students at Federal Polytechnic Nekede Owerri, Imo State, was investigated in this study. A cross-sectional study methodology was used, and 400 female undergraduate students from Federal Polytechnic Nekede in Owerri, ages 16 to 35, were purposefully chosen for the study. A structured questionnaire that was given to the research participants served as the study's instrument. Frequencies and percentages were used to display the gathered data in tables and barcharts. According to the findings, 30 (7.5%) of the participants concurred that female undergraduate students at Federal Polytechnic Nekede in Owerri have a high awareness level regarding the management of menstruation hygiene. The study's additional findings showed that 150 respondents, or 37.5%, strongly agreed that there is a low societal attitude towards menstruation and menstruating female undergraduate students at Federal Polytechnic Nekede, and that 150 respondents, or 37.5%, agreed that female undergraduate students at Federal Polytechnic Nekede, Owerri, engage in poor menstrual hygiene management practices. Additionally, 100 respondents, or 25%, concurred that there are many factors influencing menstrual hygiene among female college students. In conclusion, students' awareness and practice of menstrual hygiene were lacking.

Keywords: awareness, menstrual hygiene, female undergraduate, Owerri.

Introduction

Menstruation is a normal part of women's lives, and as such, menstrual hygiene is a crucial component of basic hygiene practices [1]. Despite being a normal occurrence, menstruation has been and continues to be handled in secret in the majority of developing nations, such as Nigeria and Zambia. Cultural taboos surrounding sexuality and reproductive health are mostly to blame for this. Teenagers exhibit a lack of awareness and understanding regarding reproductive health, reproductive functions, and related issues [2]. Adolescence is regarded as a phase of a woman's life that signifies her passage from girlhood to womanhood. The commencement of menarche marks the beginning of this significant milestone. Menstrual hygiene and reproductive health are crucial aspects of women's lives from this point on till menopause. Adolescent girls' unique health requirements, however, receive little attention, despite the fact that doing so will improve their physical and mental health and capacity to handle the demanding demands of reproductive health. later in life [3]. In the worst situation, the latter could entail pelvic inflammation, urinary tract infections (UTI), and unintended pregnancies [4].

The health care and education institutions have difficult tasks in providing essential reproductive health services, such as information sharing, counselling, and support. In Zambian society, gender norms and cultural and religious values are significant obstacles to teenagers' ability to communicate about reproductive health issues. A crucial component of reproductive health is menstrual hygiene, which is the efficient control of menstrual bleeding by women and girls. Improper handling of this practice can result in vaginal thrust, pelvic inflammatory diseases, urinary tract infections, foul

odour, soiled clothing, and ultimately embarrassment, which violates a girl's dignity [5]. The authorities in charge of the relevant sectors of water and sanitation, health, and education often overlook important conditions that are essential to comprehending the process. This includes being aware of proper menstrual hygiene, having the appropriate social and cultural setting as well as the facilities required to manage menstruation in a dignified and hygienic manner [6].

Even though reducing morbidity and mortality from exposure to disease agents that are made worse by environmental hazards is one of the document's goals, menstrual hygiene is not addressed in the National Sanitation and Hygiene Component Document on Gender Mainstreaming. The sanitation component's priority areas are primarily sanitation, solid waste management, and hygiene education; the unique needs of adolescent girls (and women) in terms of latrine design and construction are not taken into account or even mentioned. This also holds true for the school sanitation hygiene education program. Add to this the reality that Zambia's preventive health program mostly ignores and fails to address the needs of women and girls. [7] The relationship between menstrual hygiene and the Millennium Development Goals (MDGS) is another crucial factor. Although it is a reality that actions to properly manage menstrual hygiene would immediately help to MDG-7 on this topic, menstrual hygiene has rarely received recognition. Ecological sustainability. Menstrual hygiene also affects the environment since, in the absence of appropriate management techniques, it leads to a waste problem [8]. Furthermore, poor menstrual hygiene may significantly impede the achievement of MDG-2 on universal education (goal number 3) and MDG-3 on gender equality and women's empowerment (target number 4) because of its indirect impact on gender disparity and school absence. The problem isn't being adequately addressed, though. The physical infrastructure, socioeconomic circumstances, and traditional norms and beliefs all have an impact on menstruation behaviours. For instance, it is prohibited for women to cook or prepare food during their periods, so they must refrain from doing so in accordance with cultural customs. Rather, most women and girls utilise tissue of any kind, chitenges (traditional cotton shawls that African women wrap around their waists), or rags that are typically pulled from old blankets. The cloths are used repeatedly and frequently washed without soap and with dangerous and insufficient water. Girls' right to privacy is fundamentally violated by gender-unfriendly general infrastructure, particularly in educational institutions, and the absence of suitable menstrual protection alternatives in the form of hygienic, secure, and private restrooms for girls in schools [9].

In Zambia, adolescent girls' and women's poor reproductive health, disease and infections, and a very high percentage of school absences are all caused by some of the actions mentioned, particularly when combined with inadequate or ignorant understanding. [10] Additionally, the process by which women and adolescent girls use a clean Menstrual Hygiene Management (MHM) material to absorb or collect blood that can be changed in private as often as necessary during the menstrual period, washing their bodies as needed with soap and water and having access to facilities to dispose of used MHM material is known as menstrual hygiene management [11]. Nonetheless, schools have the potential to be significant locations for Menstrual Hygiene Management (MHM). Girls may not be able to safely and hygienically manage their periods if they lack the necessary facilities, such as gender-segregated improved restrooms, a sufficient supply of safe water in schools for hand and clothing washing, a drying area, and sanitary menstrual supplies. These could lead to limited engagement in extracurricular activities like athletics and school cleanup, absenteeism, and a decreased ability to focus in class. [12]

For females, the commencement of menstruation signifies sexual maturity; nonetheless, it did not encourage sexual behaviour prior to marriage. Mothers and teachers who were interviewed knew very little about the connection between the menstrual cycle and fertility. According to a number of girls, they were warned not to approach the lads while they were menstruating because they might become pregnant. Young females who had sex were therefore more likely to be ignorant about the use of contraceptives, and this ignorance frequently led to unwanted pregnancies and STDs. This put the boys and girls at risk for unintended pregnancy and influenced them to make poor sex-related decisions. Men would occasionally treat girls as objects of sexual abuse after they began menstruation. Participants once more ascribed this to the cultural belief that girls who menstruate were considered adults who had acquired secondary sexual traits. Menstruation was associated with the cessation of formal schooling in Kashna since it represented females' maturity and marital preparedness. This frequently resulted in the females leaving school to get married, while the other research locations did not show a correlation between early marriage and school dropout. [13]

Moreover, hygiene is a collection of actions taken to maintain one's health. Menstruation and the management of menstrual hygiene are still subject to several social, cultural, and religious constraints, which pose significant obstacles. An individual between the ages of 10 and 19 is regarded as an adolescent. Adolescence is the time between childhood and maturity that is characterised by a child's growth and development. Menarche is also a female adolescent's first menstrual event. The typical age at menarche, which is between 12 and 13 years old, is largely constant across the population. Unfortunately, the situation worsens for girls because of ignorance about menstruation preparation and management or because of shyness and shame [14]. Girls frequently felt constrained in their ability to perform everyday tasks, which led to their social isolation from their peers and their inability to engage in particular activities like running, jumping, and manual labour. Typically talkative girls also become quieter in class and are unable to engage in the typical

activities. In other instances, the girls were said to exhibit erratic moods and a lack of cooperation in both their social and academic connections. Lack of information, communication, and helpful advice before menarche and during menstruation are the main causes of the difficulties faced by schoolgirls. Parents, particularly mothers and siblings, should address these issues before they reach adulthood because informal education at home is the fundamental basis for learning [15]. When reproductive-aged females experience regular shedding of the uterine lining or recurrent peeling of the inner section of the uterus during monthly menstrual cycles, this is referred to as menstruation. The cycle interval can be changed by both physical and emotional reasons, including illness, extreme exhaustion, worry or anxiety, and strenuous activity. The cycle may also be impacted by certain environmental variables like height and temperature. Menstruation lasts for 2–8 days, during which time the average amount of blood lost is 30–80 ml, and the average amount of iron lost is 0.5–1 mg each day. Gynaecological malignancies also cause changes in menstrual flow or length at menopause. Menstrual flows rise in circumstances of endometriosis, fibroids, and polyps, and anaemia can result from excessive blood loss during menstruation. Blood mixed with fluid, cervical and vaginal secretions, bacteria, mucus, leucocytes, and other cellular debris make up the monthly discharge, commonly known as the menses or menstrual flow. [16] The menstrual discharge has a characteristic smell and is dark crimson in hue. Every woman has a different menstrual flow, which can occur roughly at the start of her period or roughly throughout her cycle. Hormonal fluctuations, as well as a person's food, lifestyle, age, and surroundings, can all affect the colour of their menstrual fluid, which can range from crimson to brilliant red to dark brown to black. Period fluids may or may not be present. not have an offensive smell, particularly when exposed to air. [17] For girls and women in developing nations, where access to clean water and sanitary facilities is frequently limited, managing menstrual hygiene can be especially difficult. Furthermore, traditional traditions make it challenging to have conversations about menstruation in public. This restricts women's and adolescent girls' access to pertinent and significant information regarding the typical bodily processes. Their dignity and health education are directly impacted by this. One could argue that information access is a human right. Many teenage girls and women who are menstruating come from low-income families. During menstruation and childbirth, the absence of easily accessible, safe water, sanitation, and hygiene (WASH) is especially concerning [18]. Every woman of reproductive age has to deal with the problem of menstrual hygiene, and female undergraduate students at Federal Polytechnic Nekede Owerri, Imo State, lack adequate knowledge about reproductive health in general and the menstrual cycle in particular, as well as the physical and psychological changes that come with puberty [19]. Due to a lack of awareness on the management of menstrual hygiene, female undergraduate students at Federal Polytechnic Nekede continue to report cases of Pelvic Inflammatory Diseases (PID). Due to a lack of awareness and understanding, millions of women and teenage girls in developing and less developed nations are battling issues related to inadequate menstrual hygiene practices [20].

Despite all of the health education and information they received at the Federal Polytechnic Nekede, female undergraduate students continue to report infections such as vaginal thrush/candidiasis, pelvic inflammatory disorders, and upper urinary tract infections as a result of inadequate management of their monthly hygiene.

Materials and Method

Introduction

Research Design

An explorative study design was used to look into the perceptions, practices, and experiences of female undergraduate students associated with menstrual hygiene management. This design was found most appropriate as it employs qualitative methods to gain an understanding and insight of the phenomenon of menstrual hygiene.

Setting

The Federal Polytechnic Nekede Owerri is a federal government polytechnic located in Owerri West-local government area in Imo State, South-Eastern Nigeria.

Population of the Study

The study participants were girls' undergraduate students within the age of 18 to 25 years from the Federal Polytechnic Nekede Owerri, Imo State.

Inclusion Criteria: Respondents must be residents of the Owerri West L.G.A from Federal Polytechnic Nekede, between the ages of 16-35 years.

Exclusion Criteria: People who were excluded from the study were those who were not residents of Owerri West L.G.A from Federal Polytechnic Nekede male, pregnant mothers, and that above reproductive age.

Distribution of female students in different faculties within Federal Polytechnic Nekede, Owerri.

Faculty	Population	Sample size
School of Engineering Technology (SET)	15,000	100
School of industrial and Applied Science (SIAS)	10,000	50
School of Business Management Technology (SBMT)	5,000	50
School of Environmental Design and Technology (SEDt)	5,000	50
School of General Studies (SGS)	5,000	50
School of Agriculture and Agricultural Technology (SAAT)	5,000	50
School of information and communication Technology (SICT)	5,000	50
TOTAL	50,000	400

Instruments for data collection:

Relevant information used for this study was collected through the use of structured questionnaire and interview of the students to find out the level of awareness of menstrual hygiene management practice among female undergraduate students of Federal Polytechnic Nekede Owerri, Imo State.

Validity of the instrument

Validity in a research study deals with the truth of an interpretation, meaning the instrument's credibility. The questionnaire instrument was subjected to face to face validation by the supervisor and two experts from the department of measurement and evaluation in Imo State University Owerri, and this was done to make the questionnaire more effective and efficient in measuring what it is intended to measure. For the purpose of ensuring proper validation, the experts from measurement and evaluation were given the questionnaire together with the "Objectives of the study" and "Research Questions".

Reliability of instrument

A test retest method was used to ascertain the reliability of the instrument and identify any problems that may be encountered during administration. Twenty (20) copies of the questionnaire were administered in a face – to – face basic to different people for the sample and the same administered to same individuals after 14 days. The two results remain consistent showing high positive correlation.

Method of data collection

The data of this study were collected through the aid of structured questionnaire titled "Awareness of menstrual hygiene management among female undergraduate students of Federal Polytechnic Nekede Owerri". The questionnaires were distributed to the respondents, and this was done to ensure a speedy return of the questionnaires as well as the need to prevent a loss of it.

Data Analysis

The data were analyzed through the use of percentage frequency method. The purpose of using percentage frequency method is to simplify the problems of comparison and helps to show qualitative characteristics in numerical forms.

Results

The data gathered were presented according to the order in which they were arranged in the research questions, simple frequency percentage method were used to analyze the demographic information of the respondents while the chi-square test was adopted to test the research hypothesis.

Table_1: Awareness level of the menstrual hygiene management among female undergraduate students of Federal Polytechnic Nekede Owerri, Imo State

	Frequency	Percent	Valid percent	Cumulative percent
Valid strongly agreed	100	25%	25%	25%
Agreed	30	7.5%	7.5%	7.5%
Undecided	20	5%	5%	5%
Disagreed	100	25%	25%	25%
Strongly disagreed	150	37.5%	37.5%	37.5%
Total	400	100.0%	100.0%	

Table 2: Assessment on the societal attitude towards menstruation and menstruating female undergraduate students of Federal Polytechnic Nekede Owerri, Imo State

	Frequency	Percent	Valid percent	Cumulative percent
Valid strongly agreed	150	37.5%	37.5%	37.5%
Agreed	100	25%	25%	25%
Undecided	30	7.5%	7.5%	7.5%
Disagreed	70	17.5%	17.5%	17.5%
Strongly disagreed	50	12.5%	12.5%	12.5%
Total	400	100.0	100.0	

Discussion

The study's conclusions in light of comparable research carried out in other developing nations in South America, Asia, and Africa. The research conducted for this study found that insufficient menstrual habits and a lack of awareness, which were linked to cultural norms, had a significant impact on how people perceived menstruation and, by extension, menstrual hygiene and reproductive health [21]. It became clear that most of the study participants before menarche were not well-prepared for the physical and mental changes that come with coming of age, nor were they well-informed about it. Poverty is another significant element affecting the girls' menstrual hygiene standards. It stood high on the list for both individuals and institutions. These elements were shown to be significant barriers to the respondents' adoption of good menstrual hygiene practices, together with subpar facilities and services such as an inadequate water supply and poor sanitation at home and especially in schools. The circumstances were unpleasant, embarrassing, and violated the girls' right to privacy when combined with a gender-discriminatory environment. The study's conclusions show how well-informed teenage females are about menstruation [18].

Menstrual hygiene is a neglected topic in South Asian water, sanitation, and hygiene programs, according to both studies. While there was little information provided about the physiological process of menstruation, let alone menstrual hygiene, the two studies discuss the limited value of the girl-to-girl orientation, focussing primarily on ritual practices, cultural issues, and behavioural caution towards males [19]. The results of this study also showed that the Western Province has a lot of coming-of-age or puberty rituals that are based on a mix of taboos, superstitions, myths, and misconceptions. The main conclusion of this study was that the females received instruction throughout the initiation rites. Older ladies served as their instructors and "initiation counsellors." In addition to teaching the girls useful life skills, such as how to wear clothing and/or period pads, they also introduced them to customary puberty practices. For young girls in particular, this could be frightening and even traumatic. The study's conclusions show that gender discrimination poses a harm to social wellness, mental health, and physical health.

According to the study's findings, 100 participants (25%) strongly agreed and 150 respondents (37.5%) strongly disagreed. This is consistent with the views of [20], who believed that menstrual hygiene and reproductive health should be included in home education and school curricula. Since 150 (37.5%) of the research study's participants are ignorant of menstrual hygiene practices, they are extremely vulnerable and urgently need to be given sufficient information and understanding about menstrual hygiene management techniques. According to [20], who conducted research on similar topics in Nagpur District, India, and Maghlaya, India, they recommended that menstrual hygiene and reproductive health be included in school curricula and home education, respectively, in order to help girls manage their periods correctly and from the start and lead healthy lives. However, a research of teenage girls' menstrual knowledge and another study by [21] both support the aforementioned findings, which look at menstrual hygiene as a neglected topic. 150 (37.5%) of the research participants lack sufficient information and understanding on the management of menstrual hygiene. They are extremely vulnerable and need to be given prompt attention by providing sufficient information and education on managing menstrual hygiene in homes and schools [22]. The study attempt to determined the awareness of menstrual hygiene management among female undergraduate students of Federal Polytechnic Nekede Owerri Imo State, as established in the study, there a lots of elements that effect teenage females on menstrual hygiene practices. This factor threaten the girls physical, mental and social wellbeing. This component comprises emotional stress, structural and personal poverty, lack of sanitation facilities and services, traditional culture, and ignorance about the menstrual cycle.

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CITATION

Chinagorom, J. O., Okemma, E. U., & Nwanyaka, H. I. (2025). Awareness of Menstrual Hygiene Among Female Undergraduate Students of Federal Polytechnic Nekede Owerri, Imo State. In *Global Journal of Research in Medical Sciences* (Number 5, pp. 27–32). <https://doi.org/10.5281/zenodo.17083703>