http://www.inosr.net/inosr-scientific-research/
Odongo
INOSR Scientific Research 9(2):40-50, 2023.

International Network Organization for Scientific Research ISSN: 2705-1706

Factors Affecting Menstrual Hygiene Among Schoolgirls Attending Outpatient Department at Kampala International University Teaching Hospital, Ishaka Bushenyi.

Odongo, Joseph

Department of Clinical Medicine Kampala International University, Uganda.

ABSTRACT

In the lives of girls and women, there is that adolescence stage marked by the onset of menstruation, onwards until menopause. Reproductive health and menstrual hygiene are important aspects of their lives yet information, knowledge, and practices of menstrual hygiene (MH) among school girls are inadequate with increasing challenges. This study assessed factors affecting menstrual hygiene among school girls aged (14-25) attending Outpatient Department at Kampala International University Teaching Hospital (OPD KIU-TH) in Bushenyi District. A descriptive cross-sectional study was used to reveal the knowledge, practices, and challenges faced in managing menstrual hygiene among schoolgirls. The study revealed; a lack of awareness and knowledge whereby only (45%) had information on menstrual hygiene. Low practices of managing menstrual hygiene of which 40% used pads, 90% of which used reusable pads and 30% used highly traditional materials as pads. Inadequate facilities and resources were among the great challenges affecting MH. The study found that there was a lack of awareness and knowledge concerning menstrual hygiene among school girls aged (14-25) years attending OPD-KIUTH with the highest peak among the young school girls. Further, it revealed low hygienic practices of managing menstrual hygiene among school girls because most girls who used pads used reusable pads, and if not stored well resulted in infections. The high existence of lack of facilities and sanitary pads among schoolgirls to manage their menstruation hygienically was because of resource limitations. There is a lack of knowledge, low practices, and inadequate facilities to manage menstrual hygiene among schoolgirls, and therefore stakeholders with full authority should intervene in such problems.

Keywords: Women, Menstrual Hygiene, Schoolgirls, Menstrual Pads.

INTRODUCTION

Menstrual hygiene refers to the effective management of menstrual bleeding by women and girls. It is an important aspect of reproductive health, which if not handled appropriately can cause infections of the urinary tract, pelvic inflammatory diseases, and vaginal thrush, as well as bad odor, soiled garments, and ultimately shame, leading to infringement on the girls' dignity [1-3]. Global menstrual hygiene day is celebrated on 28th May every year publically to recognize the right of women to hygienically manage their menstruation, and confront the stigma attached to menstruation with collective advocacy, education, and actions. Menstrual hygiene is incorporated with the availability of soap and clean water, to wash reusable sanitary materials and the body, as well as a suitable place of disposal for used materials [4]. Despite its significant link to water, sanitation, and hygiene promotion, menstrual hygiene is not properly addressed in the sanitation and hygiene component of the Uganda National Water and Sanitation Programs (NRWSSP) of 2007 [5]. Menstrual hygiene is not mentioned either in the National Sanitation and Hygiene Component document on gender mainstreaming despite the fact that one of the document's objectives is to reduce morbidity and mortality caused by exposure to agents of disease, which are exacerbated by environmental hazards [5]. Adolescence is understood as a stage in the

lives of females, which indicates their transition from girlhood to womanhood [6-10]. This also constitutes an important milestone, which is marked by the onset of menstruation from this stage onwards until menopause. Reproductive health and menstrual hygiene are important aspects of the lives of females. However, there is not much attention paid to schoolgirls' specific health needs. Notwithstanding that, doing so would lay a good foundation for their physical and mental well-being and their ability to cope with the heavy demands of reproductive health later in life. In a worst-case scenario, the latter may include unwanted pregnancies, HIV/AIDS, urinary tract infections (UTI), and pelvic inflammatory diseases [11-17]. Adequate availability of potable water for domestic use reduces the incidence of bacterial diseases [18-23]. Despite this, it is disheartening to know that water – sanitation, and hygiene services ignore the needs of more than half the population that menstruate on an average for 3000 days of their lifetime, with very real, practical needs as regards water and space for washing the body materials for absorbing menstrual blood and facilities for proper disposal of used materials so that women can manage this biological process with safety and dignity. Educating girls and incorporating practical aspects such as personal hygiene and sanitation in the school curriculum can have a massive influence on the overall community.

Statement of Problem

Worldwide, 52% of the female population is of reproductive age, meaning menstruation is part of their normal life, and menstrual hygiene is, therefore, an essential part of basic hygienic practices. In the poorest regions of the world, one in three women and girls have problems with menstrual hygiene and menstrual-related problems such as pain, infections, missing school and work, and others [18-20]. In Africa, 55% of women have problems with menstrual hygiene management majorly due to cultural taboos, religion, and poverty leading to unhygienic practices of managing menstrual hygiene, lack of facilities, and little knowledge of menstruation and its management [18]. A study in Uganda shows 70% of School girls in Uganda lack sufficient information about reproductive health in general and in particular about the process of menstruation as well as the physical and psychological changes associated with puberty and age. The issue of menstruation is rarely mentioned publicly, due to cultural taboos [4]. Therefore, this study will further investigate other factors that could be challenging menstrual hygiene and also identify necessary actions to be taken at local and national levels, through which the menstrual hygiene problems of school girls can be addressed since there are no any other studies done in the district.

Aim of the Study

To assess the factors affecting menstrual hygiene among school schoolgirls aged (14-25) years attending Outpatient Department at Kampala International University Teaching Hospital (OPD-KIUTH).

Specific Objectives

- To assess the knowledge of menstrual hygiene among school schoolgirls aged (14-25) years attending the Outpatient Department at KIUTH.
- To assess practices of managing menstrual hygiene among school-aged (14-25) years attending the Outpatient Department at KIUTH.
- To determine the challenges affecting menstrual hygiene among school girls aged between (14-25) years attending Outpatient Department at KIUTH.

Research Questions

- What is the knowledge of menstrual hygiene among schoolgirls aged (14-25) years?
- What are practices of managing menstrual hygiene among school girls aged (14-25) years?
- What are the challenges contributing to poor menstrual hygiene among school girls aged (14-25) years?

Justification of Study

This study will help the government of Uganda, NGOs, community leaders, and other stakeholders to understand the level

of awareness and cultural beliefs' impact on girls.

This will help in formulating policies and interventions to curve the poor menstrual hygiene among schoolgirls. The information gained will help in understanding the challenges associated with poor menstrual hygiene among school girls so as to focus and allocate resources where it was inadequate. This research completion will enable me to obtain diploma in clinical medicine and community health, I hope too, that other researchers will use the information for research and knowledge generation.

METHODOLOGY

Area of Study

Kampala International University Teaching Hospital is located in the heart of Ishaka Bushenyi in western Uganda about 360 km west of Kampala city and 50km west of Mbarara town. Bayankore, Bakiga, Bakonjo, and Batoro are the major tribes in the region. However, there are several minute tribes from different parts of Uganda and some other different Nationalities (Nigerians, Tanzanians, Kenyans, South Sudanese, Somalis, and Zambians. Burundians and Rwandese etc.). I.e. major economic activities include farming i.e. crops like bananas, beans, cassava etc. and rearing of animals, trade in retail and wholesale, Bodaboda and taxi services, industries like Igara tea, coffee factory in Ishaka, educational institutions like Kampala international university, and others.

Study Design

A descriptive study design was used to look into the knowledge, awareness, practices and challenges of school girls associated with menstrual hygiene. This design was found most appropriate as it employs qualitative methods to gain an understanding and insight of the phenomenon of menstrual hygiene.

Study Population

The study population included all schoolgirls aged (14-25) years who attended OPD-KIUTH.

Sample Size Determination

Yamane (1967) formula

$$\boldsymbol{n = \frac{N}{N + 1(e^2)}}$$

Where: **n** is the desired size of the population.

N=Total population of school female aged (14-25) years are going to attend OPI)-KIUTH during the study.

e=constant, which is 0.05

Then,

$$n = \frac{100}{100 * (0.25) * 0.05}$$

Therefore, n=80

Sample Size

The sample size was 80 school girls aged (14-25) years who attended OPD-KIUTH.

Sample Method

Simple random sampling method was used for schoolgirls aged (14-25) years who attended OPD-KIUTH.

Inclusion

All mentally sound school girls aged (14-25) years who had attended OPD-KIUTH and consented to be interviewed.

Exclusion

All schoolgirls aged 14-25 years who attended OPD-KIUTH who did not consent and or were mentally unsound.

Data Collection Methods

Questionnaires With both closed and open ended questions which do not require the respondent-s name and address were used.

Data Analysis and Presentation

Collected data was checked, tallied, and edited to ensure accuracy, completeness, and appropriateness before leaving the studied field. Data were sorted and converted to frequency tables, percentages, pie charts, and bar graphs and analyzed using Microsoft Excel software. The data collected was presented in the form of Pie charts, Frequency tables, and Graphs.

Data Quality Assurance

Data quality and consistency were taken care of throughout the process. Data was collected by the principal investigator who was well knowledgeable about the study and was compared to the pre-tested data.

RESULTS

Bar graph showing the number of respondents against their Age distribution.

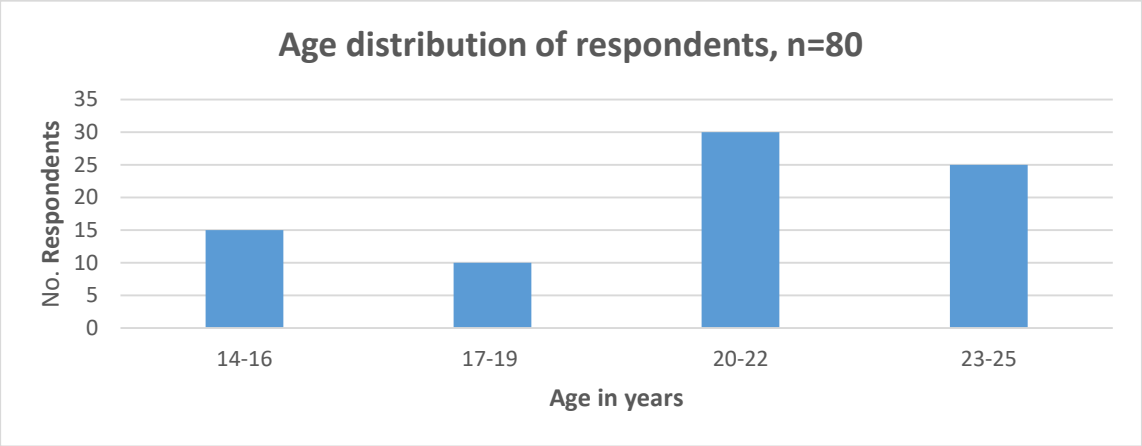

Figure 1: Age distribution of respondents

Of the total of 80 School girls that attended OPD-KlUTH and participated in this study, the majority (30) were aged (20-22) years, 25 were aged 23-25 years, 15 were aged (14-16) years and 10 were aged (17-19) years.

A pie chart showing awareness of menstrual hygiene by percentage.

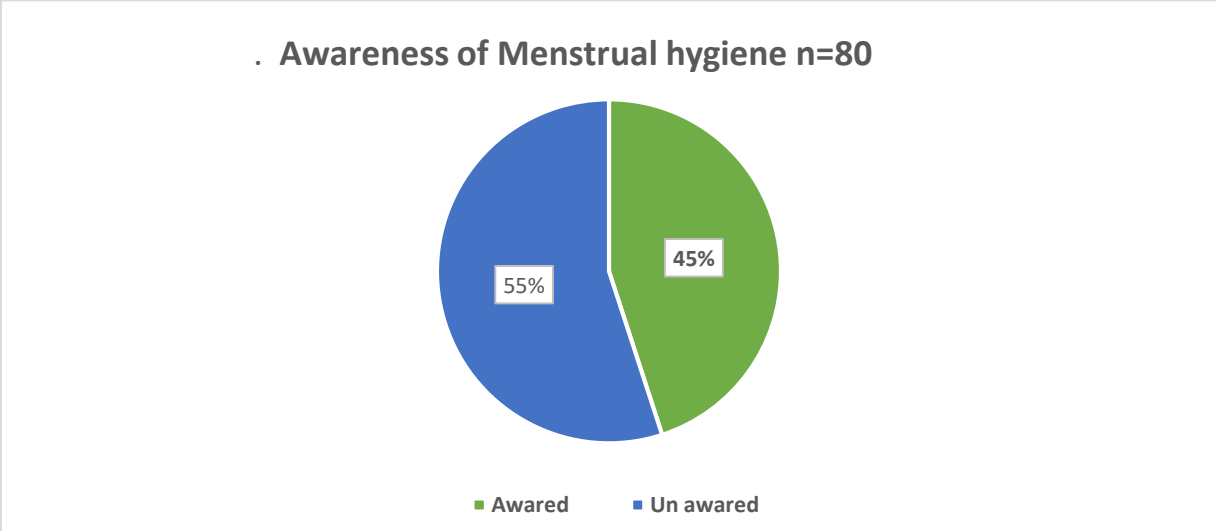

Figure2: awareness of menstrual hygiene

The study found that out of the respondents, 55% of respondent were unaware of menstrual hygiene and 45% were aware of menstrual hygiene. Of 45% (36) respondents who were aware, 50% were informed by their mothers, 28% of them from media, 14% from school, and 8% from others. The biggest percentage is from their mothers. Being in rural society, information from the media is limited to only those who can afford to buy such gadgets.

Table 1: A table showing Information on menstrual hygiene, (n=36)

Source of information	Percentage %
Mother	50
Media	28
School	14
Others	8

The study findings show an increasing knowledge of menstrual hygiene with age. The highest percentage (100%) of menstrual knowledge in the age group 23-25 years is due to the experience through the monthly process of menstruation and menstrual hygiene management followed by the age group of 20-22 years with 80%. The youngest age bracket showed the highest menstrual knowledge deficit at 61.5%.

Table 2: A table showing knowledge of menstrual hygiene, (n=80)

Age range (years)	Has knowledge	%	No knowledge	%
14-16	5	**38.5**	8	**61.5**
17-19	12	**70.6**	5	**29.4**
20-22	17	**85**	3	**15**
23-25	30	**100**	0	**0**

A pie chart showing MH on school curriculum

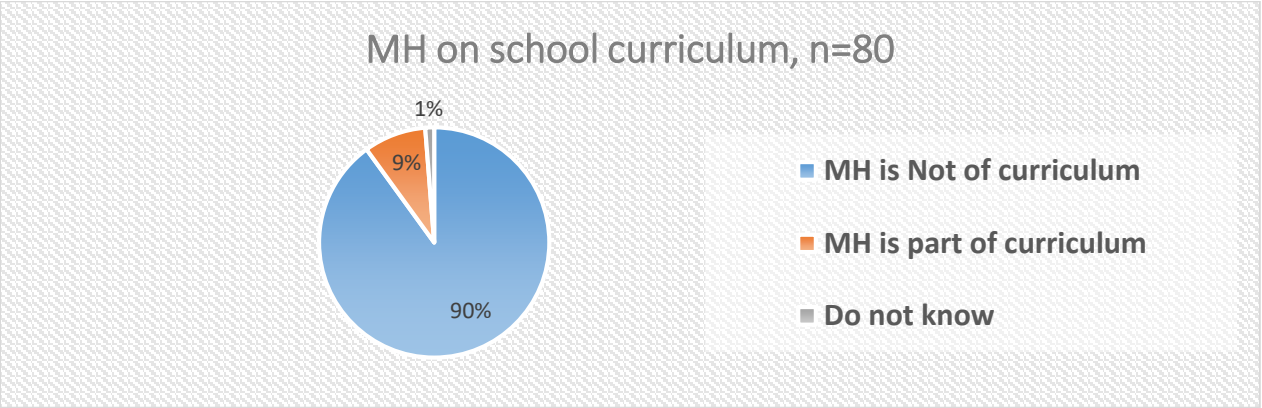

Figure 3: MH on school curriculum, n=80

From the chat 90% reported menstrual hygiene is not part of the school curriculum, 9% do not know and 1% The study found out that, from the available materials used in managing menstrual hygiene at schools, only 50% report of using pads with the majority in age range (25-23) years. 30% report of using traditional materials with the reported menstrual hygiene is likely to be part of the curriculum.

Practices

highest percentage (17.5%) usage among age group (14-16) years and the lowest among the age group (23-25) years. 12.5% report of using others with the highest percent among the age group (23-25) years.

Table 3: A table showing types of material used in managing menstrual hygiene.

Age range (years)	Pads	%	Traditional materials	%	Others	%
14-16	1	1.25	14	17.5	0	0
17-19	9	11.25	8	10	2	2.5
20-22	13	16.25	6	7.5	3	3.75
23-25	17	21.15	2	2.5	5	6.25
Total	**40**	**50**	**30**	**37.5**	**10**	**12.5**

A bar graph showing percentage of girls using pads against type of pads.

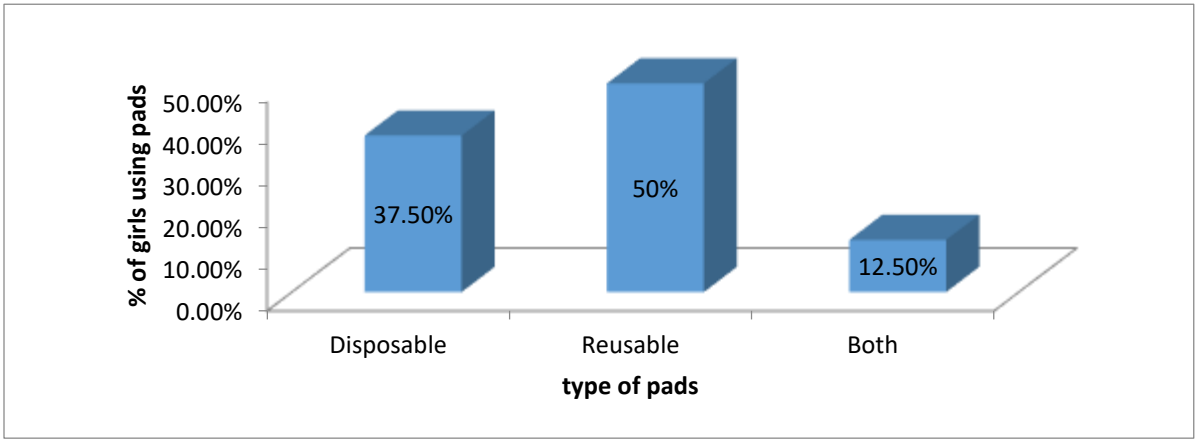

Figure 4: Use of pads (disposable, reusable, and both), n=40

The study found out that, out of the 40 respondents that use pads, 50% use reusable pads, 37.5% disposable pads and 12.5% uses both types of pads.

A pie chart showing the traditional materials used in menstrual hygiene.

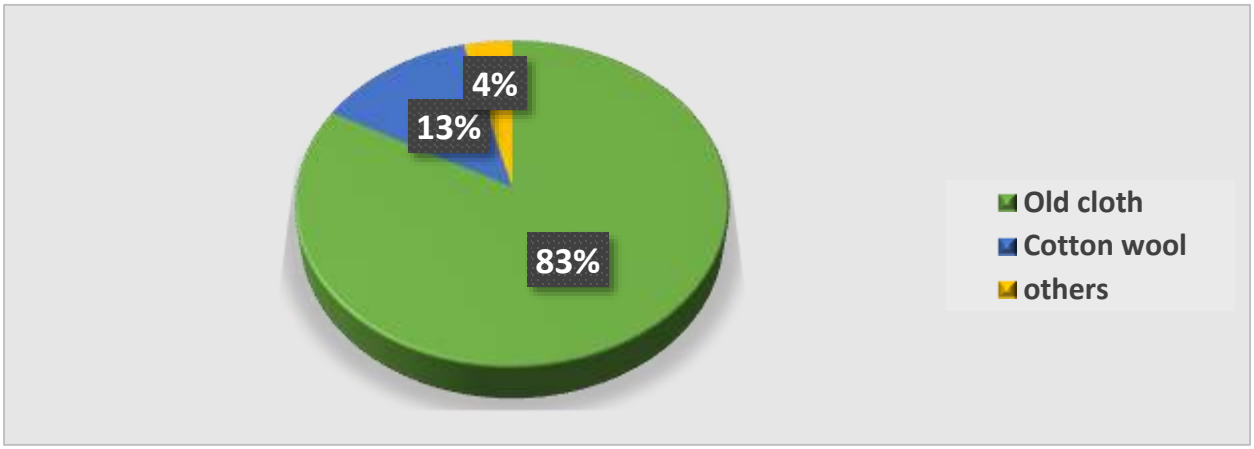

Figure 5. Traditional materials used in menstrual hygiene, n=30

Of the 30 that reported the use of traditional materials, 83% use old cloth, 13% use Cotton wool and 4% use other materials.

Challenges Faced In Managing Menstrual Hygiene at School

From the study, of the 80 respondents interviewed, only 2.5% reported enough

facilities at school of which age range of (17-19) years was the majority. While of 87.5% reported of not having enough facilities at school for managing menstrual hygiene of which the majority from age range (20-22) years.

Age groups (17-19) and (23-25) years had the same number of respondents that reported not enough facilities at school and 10% responded they did not know with majority aged (14-16) followed by (17-19) years.

Table 4: Table showing the availability of facilities for managing menstrual hygiene at school n=80

Age range (years)	Enough facilities	%	Not enough facilities	%	I do not know	%
14-16	0	0	5	6.25	6	7.5
17-19	2	2.5	20	25	2	2.5
20-22	0	0	25	31.25	0	0
23-25	0	0	20	25	0	0
Total	**2**	**2.5**	**70**	**87.5**	**8**	**10**

A bar graph showing the available facilities in percentage against the type of facilities.

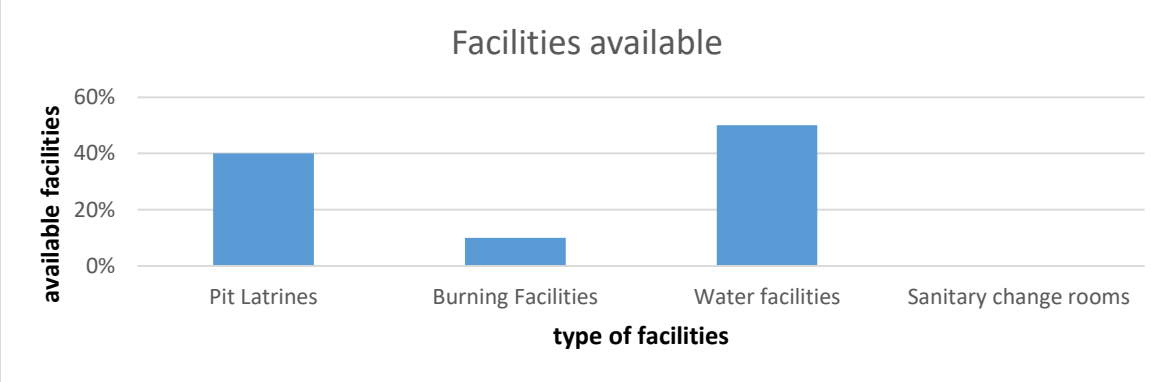

Figure 6: Facilities available for managing menstrual hygiene at school, n=80

In the figure above 50% of respondents reported water facilities were available, 40% reported that latrine /toilets were available, while only 10% reported that burning facilities were available as facilities for managing menstrual hygiene at school and non-reported of sanitary change room as a facility being available.

A bar graph showing a number of respondents with limited resources for buying pads against age group.

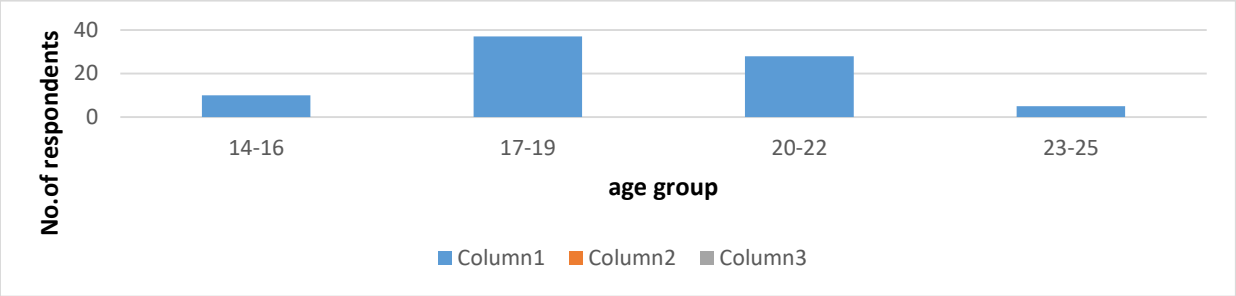

Figure 7: Limited resources for buying pads.

All respondents reported lack of money for buying pads, the highest numbers among the age group (17-19) followed by (20-22) and lowest among the age group (23-25) years.

A pie chart showing lack of sanitary facilities for managing MH by age group

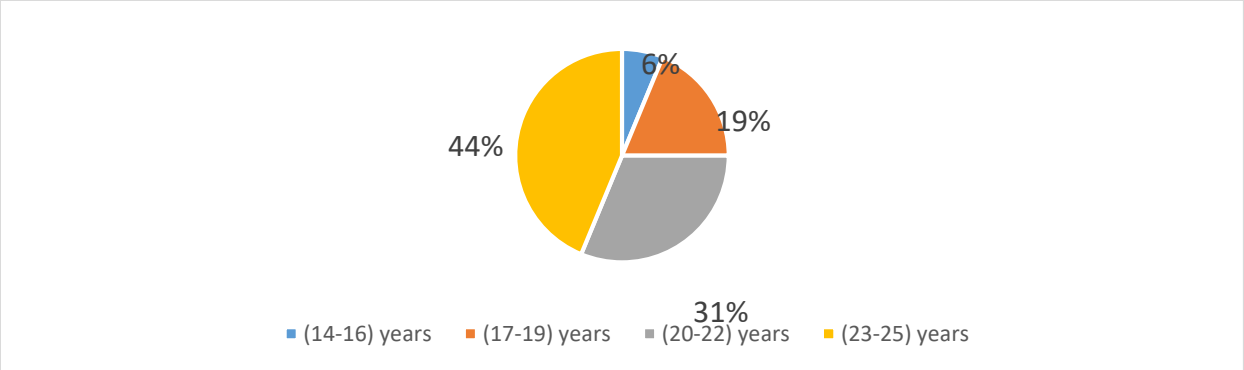

Figure 8: Lack of sanitary facilities for managing menstrual hygiene, n=80

From the study of the 80 respondents interviewed, all reported lack of sanitary facilities, 44% from the age group (23-25) years, followed by 31% and among the age group of (20-22), 19% of (17-19) years and 6.25% among (14-16) years.

DISCUSSION

The study found out that only 45% of the respondents were aware and had knowledge concerning menstrual hygiene among school girls aged (14-25 years attending OPD- KIUTH with the highest peak among the age group (23-25) years since they had undergone monthly periods of menstruation several times. The study is similar to the study conducted in Sub Saharan Africa and Asia by [21]. The study found that there was as low as 48% awareness and knowledge of menstrual hygiene among school girls in Nepal. Also, the study finding is dissimilar to the study conducted by [1]. The study found that awareness and knowledge of menstrual hygiene among school-going girls in West Africa was 6% among urban living. This study found that there were low hygienic practices in managing menstrual hygiene among school girls. Only 50% of them use pads and the remaining use traditional materials, this is inconsistent with the study conducted in Africa which found that usage of sanitary pads was as low as 18% among Tanzanian women with the reminder using cloth or toilet paper while in Nigeria 31% used pads and 56% used toilet tissue or cloth [4]. But this study was not in agreement with the study conducted in South Africa which found that 57% used pads and the rest used traditional

materials [22]. The study revealed there was high existence of lack of facilities and sanitary pads among school school-girls to manage their menstruation hygienically. From the study 90% of the schools lacked facilities and this is similar to the study conducted in East Africa which found that 98% of schools lacked facilities for helping girls manage menstrual bleeding [23]. This was also in agreement with the study conducted in Malawi with 94% lacking sanitary facilities at school to help menstruating girls manage their menstruation hygienically [24]. The study was consistent with a study conducted in Uganda that showed a lack of toilets at schools for managing menstrual hygiene [25-27]. This above result was the result of poverty in most of the developing countries challenging the provision of necessities to its citizens [5].

CONCLUSION

The study concludes -that there is a lack of knowledge about menstrual hygiene among school girls. There are low hygienic practices in managing menstruation. Limited resources to access pads and other facilities for maintaining menstrual hygiene at school were the greatest challenges affecting menstrual hygiene.

Recommendation

In order to satisfy the needs uncovered by this present study, below are specific recommendations; Incorporate Menstrual hygiene into the school curriculum and encourage teachers to do more sensitization on menstrual hygiene. Provision of free sanitary pads by the ministry of Health and encourage parents to do the same. Setting up adequate facilities for maintaining menstrual hygiene like pit latrines, water sources, and wash rooms by schools.

REFERENCES

[1]. Oche, M.O., Umar, A.S., Gana, G.J. and Ango, J.T. (2012). Menstrual Health: The Unmet Needs of Adolescent Girls' in Sokoto, Nigeria. *Scientific Research and Essays Academic Journals,* 7:410-418.

[2]. Ifediora, A. C., Obeagu, E. I., Akahara, I. C. and Eguzouwa, U. P. (2016). Prevalence of urinary tract infection in diabetic patients attending Umuahia health care facilities. *J Bio Innov*, 5(1): 68-82.

[3]. Ifeanyi, O. E., Chinedum, O. K. and Chijioke, U. O. (2018). Trichomonas vaginalis: complications and treatment. *Int J Curr Res Med Sci*, 2018; 4(5): 76-89.

[4]. WHO-UNICEF (2012). Menstrual hygiene in Sub Saharan Africa.

[5]. Kuhlmann, A. S, Henry, K. and Wall, L.L. (2017). Menstrual Hygiene Management in Resource-Poor Countries. *Obstet Gynecol Surv*., 72(6):356-376.

[6]. Ezera, A., John Cletus, I., Godwin Ray Anugboba, O., Joseph Obiezu Chukwujekwu, E. and Osamuyime, I. (2007). Chromobacterium violaceum associated with recurrent vaginal discharge among apparently healthy females in Ekpoma, Nigeria. *Online Journal of Health and Allied Sciences*, *6*(1).

[7]. Dhingra, R., Kumar, A. and Kour, M. (2009). Knowledge and practices related to menstruation among tribal (Gujjar) adolescent girls. *Ethno Med.,* 3:43–8.

[8]. Garba I, Rabiu A, Abubakar IS. Menstrual hygiene among adolescent school girls in Kano. *Tropical Journal of Obstetrics and Gynaecology.* 2018; 35(2):153–157.

[9]. Nwosu, D. C., Amajioyi, O., Ibebuike, J. E. and Ozims, S. J. (2015). Prevalence of bacterial and parasitic urinary tract infections in female students of Imo state University. *WJPPS*, 4(5):152-67.

[10]. Wavamunno, I., Aliero, A.A., Bashir, A., Pius, T., Atuheire, C. and Ntulume, I. (2019). Assessment of Oral Health Knowledge and Behavior Related to Oral Hygiene Status among Selected Secondary School Students in Kasese District, Western Uganda. *International Journal of Research and Reports in Dentistry*, 1-12.

[11]. Obeagu, E.I., Alum, E.U. and Obeagu, G.U. (2023). Factors Associated with

Prevalence of HIV Among Youths: A Review of Africa Perspective. *Madonna University Journal of Medicine and Health Sciences*, **3**(1): 13-18.

[12]. Obeagu, E. I. and Obeagu, G. U. (2016a). A review on haematological profile in menstruating, premenopausal and menopausal women. *International Journal of Advanced Research in Biological Sciences*, 3(11):92-108.

[13]. Okorie, N., Obeagu, E. I., Odigbo, C. N., Ibe, O. E., Usanga, V. U., Jacob, I. C. and Obi, I. (2022). Cytological Evaluation of Urinary Samples among Vesicovaginal Fistula Patients in National Obstetrics Fistula Centre, Southeastern Nigeria. *Asian Journal of Medicine and Health*, *20*(10):136-146.

[14]. Asogwa, F. C., Ugwu, O. P. C., Alum, E. U., Egwu, C. O. and Edwin, N. (2015). Hygienic and sanitary assessment of street food vendors in selected towns of Enugu North District of Nigeria. *American-Eurasian Journal of Scientific Research*, 10(1): 22-26.

[15]. Odoki, M., Aliero, A. A., Tibyangye, J., Maniga, J. N., Eilu, E., Ntulume, I. and Bazira, J. (2020a). Fluoroquinolone resistant bacterial isolates from the urinary tract among patients attending hospitals in Bushenyi District, Uganda. *The Pan African Medical Journal*, 36(60): 1-12

[16]. Odoki, M., Aliero, A. A., Tibyangye, J., Onkoba, S. K., Alkali, B., Maniga, J. N. and Bazira, J. (2020b). Phylogenetic analysis of multidrug resistant E. coli isolates from the urinary tract in Bushenyi district, Uganda using the new Clermont phylotyping method. *African Journal of Microbiology Research*, 14(2):51-64.

[17]. Alum, E. U**.,** Uti, D. E., Agah, V. M., Orji, O. U., Ezeani, N. N., Ugwu, O. P., Bawa, I., Omang, W. A. and Itodo, M. O. (2023). Physico-chemical and Bacteriological Analysis of Water used for Drinking and other Domestic Purposes in Amaozara Ozizza, Afikpo North, Ebonyi State, Nigeria. *Nigerian Journal of Biochemistry and Molecular Biology*,

[18]. 37(1): 1-8.

[19]. WHO (2010). Developing Guidelines for Water, Sanitation and Hygiene Promotion in Schools.

[20]. Obeagu, E. I., Obarezi, H. C., Obeagu, G. U., Onyenweaku, F., Okafor, C. N. and Essein, U. C. (2016b). Evaluation of Variations of Haematological Profile of Menstruating Women in Umuahia, Nigeria. *Scholars Academic Journal of Biosciences (SAJB)*, 4(12):1113-1116.

[21]. Odoki, M., Aliero, A. A., Tibyangye, J., Maniga, J. N., Wampande, E., Kato, C. D. and Bazira, J. (2019). Prevalence of bacterial urinary tract infections and associated factors among patients attending hospitals in Bushenyi district, Uganda. *International Journal of Microbiology*, 4246780.

[22]. Water Aid (2013) Is Menstrual Hygiene and Management an Issue for School Girls? A Comparative Study of Four Schools in Different Settings of Nepal, Water Aid in Nepal.

[23]. Pilliteri, S. P. (2011). School Menstrual Hygiene Management in Malawi: More than toilets. *Sanitation and Hygiene Applied Research for Equity*. WaterAid report, 24.

[24]. Sommer, M. (2010). The social and health impact of girls' experience of menstruation and schooling in Tanzania. Journal of Adolescence, 33(4):521-529.

[25]. Wilson, E., Reeve, J. Pitt, A., Sully, B. and Julious, S. (2012). Investigating a reusable Sanitary Pad in a Rural Educational Setting. ScHARR Report Series, No: 27.

[26]. Crofts, T. and Fisher, J. (2012). Menstrual hygiene in Ugandan schools: an investigation of low-cost sanitary pads. *J Water Sanitation Hyg Dev.,* 2:50–8.

[27]. Tukundane,A.(2023).Evaluation of Menstrual Hygiene Management among Girls at Karamurani Catholic Primary School, Mwizi Sub County, Mbarara District. *IDOSR Journal of Biochemistry, Biotechnology And Allied Fields* 8 (1), 26-41.

Odongo, Joseph (2023). Factors Affecting Menstrual Hygiene Among Schoolgirls Attending Outpatient Department at Kampala International University Teaching Hospital, Ishaka Bushenyi. *INOSR Scientific Research,* 9(2):40-50.