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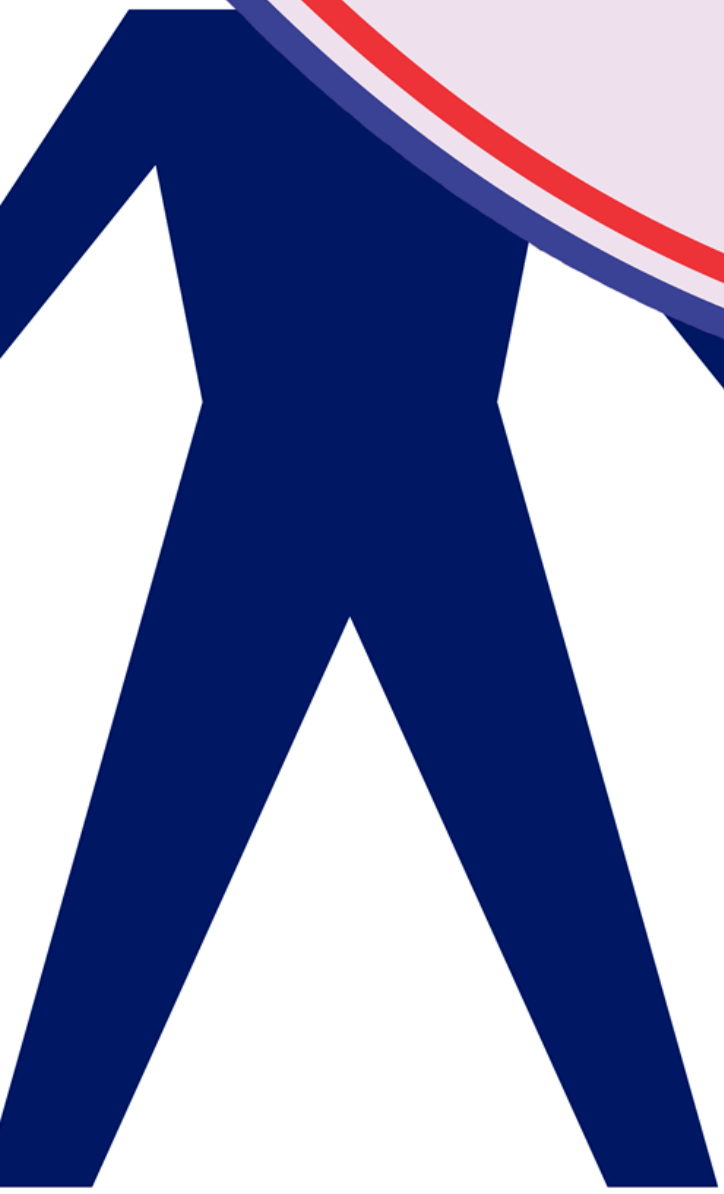

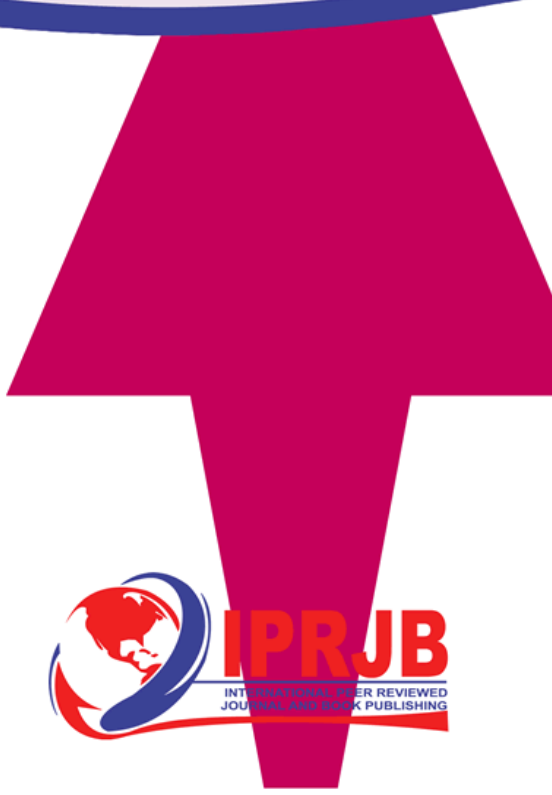

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Knowledge, Attitude and Practices of Menstrual Hygiene Management among Orphan and Vulnerable Adolescents in Lagos State

Sontyo Jimin, Iwuala Felix, Lannap Faith, Oke Olufemi, Ayeni Olugbenga, Grace Kumolu, Olakunle Osinowo

Association for Reproductive and Family Health

Corresponding Author's Email: Sontyo Jimin +2347033586445 Sontyo.j@arfh-ng.org, sontyojimin@gmail.com

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Abstract

Purpose: During adolescence, young people develop their adult identity, and move toward physical and psychological maturity. Puberty, marked by the onset of menarche, is recognized as an important stage, marking the transition from girlhood to womanhood. From this stage until menopause, reproductive health and basic menstrual hygiene practices are important aspects in their lives. The study examined the knowledge, attitude, and practices of menstrual hygiene management among orphan and vulnerable adolescents in Lagos State.

Methodology: the study was cross sectional and used quantitative research methods. Semi-structured questionnaires were used to collect data from the female adolescent students aged 8-17 years. A total of 434 orphan and vulnerable female adolescents enrolled in the Integrated Child Health and Social Services Award (ICHSSA 2) project funded by USAID in Lagos State, Nigeria. The study was conducted across the 11 local government areas where the ICHSSA 2 project is being implemented. Adolescents were scored for their level of knowledge, attitude, and practices of menstrual hygiene management.

Findings: the study found that the mean age at menarche is 12 years. Knowledge and menstruation about menstruation is appreciable. About 92% of the participants had knowledge about menstruation before experiencing it, Majority of the adolescent receive information on MHM first from their mother (62.7%) and 88.5% of the participants use sanitary pads using 3-4 pads per day. 94.5% of the participants have good Practices (WASH) of Menstrual Hygiene Management. Access to sanitary pads is challenging.

Unique Contribution to Theory, Practice and Policy: Most of the orphans and vulnerable adolescent girls had good knowledge and practices of menstrual hygiene management. This demonstrates a need to design acceptable awareness creation and advocacy programs to improve the knowledge and promote safe hygiene practices of adolescent girls, in line with the SCT and KAP theory. Provision of MHM materials in schools and the inclusion of menstrual hygiene management into the school curriculum to achieve a near total coverage of safe hygiene practices among adolescent girls should also be prioritized as a matter of policy.

Keywords: Menstrual Hygiene Management, Adolescent Girls, Water Sanitation and Hygiene, Orphans and Vulnerable Children (OVC)

INTRODUCTION

Adolescence is a significant period in the life of a female. Adolescents are a large and growing segment of the world's population. More than half of the world's population is below the age of 25, and one in every two young people in the world is an adolescent (Lawan et al, 2010). During adolescence, young people develop their adult identity, and move toward physical and psychological maturity. Puberty, marked by the onset of menarche, is recognized as an important stage, marking the transition from girlhood to womanhood. From this stage until menopause, reproductive health and basic menstrual hygiene practices are important aspects in their lives. Menstruation is one of the physical changes that occur in girls at the start of puberty and the average age of the onset of puberty for many girls is between 7 and 13 years, every adolescent girl menstruates on an average of 3-5 days every month until menopause, a woman's period may not be the same every month and it may not be the same as that of other women (O'Grady, 2009). Menstruation is a normal and physiological process of the discharge of blood from the uterus, it is partly blood and partly tissue from the inside of the uterus. It flows from the uterus through cervix and out of the body through the Vagina (El-Mowafy et al. 2010).

Taboos, myths, and restrictions are associated with menstruation, in many societies it is consider unclean or dirty this act can leave a negative impact on adolescent girls (Jain et al. 2017, Haque et al. 2014, Thakre et al. 2011) and menstrual period if poorly managed may be accompanied by bad odor, discomfort, reproductive tract infection, pelvic inflammatory diseases and vaginal thrush, smelling and embarrassment among others (Lawan et al. 2010, Lahme et al. 2016, Oche et al. 2012). In addition, disregarding girls' specific needs for information about reproductive health can lead to gynecological complications, including HIV, sexually transmitted diseases, and unwanted pregnancies which may later lead to unsafe abortions and sometimes death (Lahme et al. 2016, Pillitteri et al. 2014). Adolescent girls often lack knowledge regarding reproductive health including menstruation which can be due to socio-cultural barriers in which they grow up (El-Mowafy et al. 2014) and menstruation becomes an unpleasant experience for adolescent girls due to poor water, sanitation, and hygiene facilities and inadequate menstrual hygiene management materials (Van Eijk et al. 2016).

Menstrual hygiene management is described as the process whereby "women and adolescent girls use a clean menstrual hygiene management (MHM) material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing their bodies as required and having access to facilities to dispose of used menstrual management material" (UNICEF, WHO 2014). Menstrual hygiene management is a challenging phase for most adolescent girls especially at the onset as it marks pubertal development. The challenges and factors that influence its management differ from one socio-cultural and economic background and environmental contexts. Such challenges include inadequate knowledge and good menstrual hygiene management materials which have far-reaching consequences. Worse is that issues concerning menstrual hygiene are usually tagged with certain taboos and socio-cultural restrictions. These challenges faced by adolescent girls according to studies in low-income and middle-income countries greatly affect their dignity, their schooling, educational careers, and subsequent opportunities to lead fulfilled lives. Lack of access to menstrual hygiene products can often mean that women and girls have considerable difficulty in going about their lives during menstruation and can be almost entirely restricted to the home, both

due to practical reasons and the stigma frequently attached (APHRC, 2010). Studies have found that girls in low-income settings miss or struggle at school during menstruation if it is not possible for them to effectively manage their menstrual hygiene (Boosey et al., 2014). In a study conducted by UNICEF, "Girls who used clothes like napkins, pieces of materials, towels, tissue paper or other menstrual materials apart from sanitary pads. This set of girls expressed fear of such materials falling out of their underpants during active play. Another study in Taraba State Nigeria showed of 297(13-15 years) adolescent girls, only less than half used sanitary pads, while the majority used other materials. Reasons for non-use include lack of knowledge, high cost, unavailability, shame of buying from a shop, and tradition of using cloth (Nnennaya et al. 2021).

Studies from the African and the Asian continents have demonstrated unsatisfactory menstrual hygiene management among adolescent, it was estimated that about 200 million women and girls from developing countries struggle on daily basis during their menstrual period to get access to clean water for washing, and as well as convenient places for changing their pads. Hygienically managing menstruation in adolescence can be challenging and enigmatic. Social norms and cultural practices surrounding menstruation mean that most adolescents receive incomplete or inaccurate information on menstrual hygiene management (MHM). The lack of practical life skills to effectively manage menstruation could reduce adolescent girls' self-esteem, impair their health and truncate their education. The United Nations Children's Fund (UNICEF) has been at the forefront of efforts to provide menstruation education; and water, sanitation, and hygiene (WASH) facilities in schools. Despite the critical importance of MHM to adolescent girls, studies show that most educational institutions do not provide adolescents with the necessary information prior to menarche. Mothers and female family members, who may not have the necessary knowledge and skills in MHM, are often the main source of information for most adolescents (Chandra-Mouli & Patel, 2017, Boakye-Yiadom et al. 2018). Girls most often ask mothers, other female family members as well as peers to obtain information about menstruation (Nnennaya et al. 2021, Adika et al. 2011). Frequently, these people are either not well equipped to fill gaps in girls' knowledge or do not feel comfortable discussing menstruation due to religious or cultural restrictions (Nnennaya et al. 2021, Onyegegbu et al. 2008). Though menstruation a normal physiologic process, it is still associated with negative feelings and notions in some individuals and communities hence the culture of silence and shame surrounding it and sexuality in general (Gumanga et al. 2012).

Studies have shown that most adolescents have inaccurate knowledge and misconceptions 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, Boakye-Yiadom et al. 2018). Even though, many studies have looked at knowledge, attitude, and practices of menstrual hygiene management among young women and adolescents in Nigeria and some parts of Africa, some of the studies have found a high and low knowledge of menstrual hygiene among adolescents. However, there are few studies on knowledge, attitude, and practices of menstrual hygiene management among orphan and vulnerable adolescents in Lagos State, this study fills this gap.

Theoretical and Conceptual Framework

This study is grounded in social cognitive theory (SCT) which suggests that individuals learn by observing others. Whether an observed behaviour is learnt and enacted depends on (i) whether the individual has self-efficacy regarding the behaviour, (ii) the reinforcement an individual receives for performing the behaviour and (iii) whether the environment supports enactment (Albert Bandura, 1997). The theory provides opportunities for social support through instilling expectations, self-efficacy and using observational learning and other reinforcements to achieve behaviour change. It suggested that if there is an (i) increases girls' self-efficacy to manage their menstruation (e.g. through provision of an MHH kit and pain management options), (ii) positively reinforces girls' learning (and also that of boys, teachers and parents) to create a more supportive MHH environment (e.g. through drama) and (iii) reinforces behaviour change through positive reinforcement and expectations (e.g. through improving WASH facilities). Increase self-efficacy will lead to effective improvement in the attitude and behaviour of adolescent towards Menstrual Hygiene management. The study also uses Bronfenbrenner's ecological systems theory (Lohrmann, 2010), which argues that a child's development is affected by multiple layers of interacting influences, useful for exploring the impact of the environment on adolescents, their immediate family/community, and the societal landscape. This includes the environmental, organizational, and personal factors that interact to affect health and well-being. It also supports working with communities, including providing support, relevant information, and building their capacity to advocate for improved knowledge on health.

The study also aligns with the KAP theory. The KAP theory divides the process of human behavior change into three steps: acquiring knowledge, generating attitudes/beliefs, and forming practice/behaviors, during which human health behaviors can also be effectively changed.

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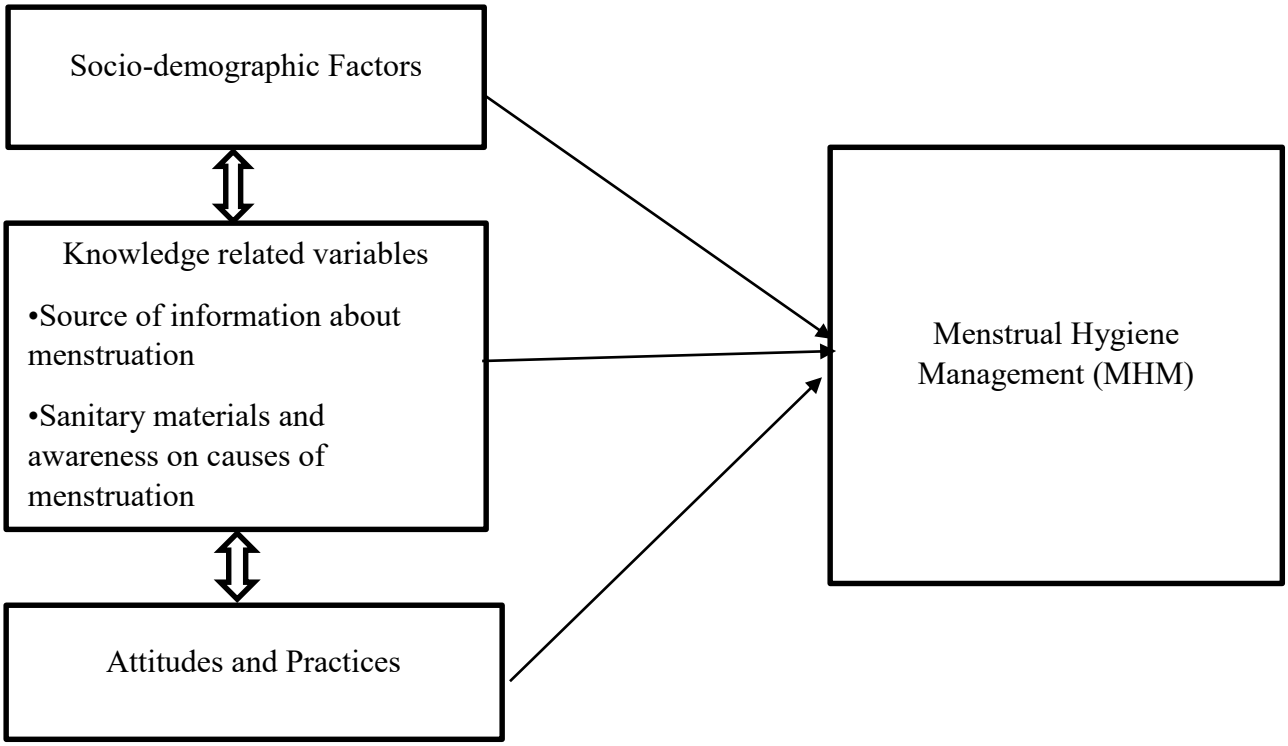
Conceptual Framework



METHODOLOGY

This is a cross-sectional, descriptive, and quantitative study. A simple random sampling technique was used to select the participant. A standardized questionnaire was used to collect information from adolescents aged 8-17 years who are enrolled in the Integrated Child Health and Social Services Award (ICHSSA 2) project funded by USAID in Lagos State, Nigeria. The study was conducted across the 11 local government areas where the ICHSSA 2 project is being implemented.

Study Location

The study was conducted among the orphan and vulnerable adolescents enrolled in the USAID-funded ICHSSA 2 project being implemented across 11 local government areas in Lagos State, Nigeria. The ICHSSA 2 project is a USAID-funded project designed to mitigate the impact of HIV/AID on vulnerable children/adolescents and their households. These LGAs are ; Agege, Ajeromi, Apapa, Badagry, Ikorodu, Kosofe, Lagos Mainland, Lagos Island, Ojo, Shomolu and Surulere LGAs.

Study Participants

The participants of the study were 434 orphan and vulnerable adolescent girls. Participants were drawn through a random sample from the adolescent who are both HIV positive and Negative.

Inclusion and Exclusion Criteria

Adolescent boys and girls who have not started menstruating were excluded from the study. Adolescent girls who are menstruating and between the age of 8-17 years and is either HIV positive or negative were included in the study.

Sampling Technique

Multi-stage sampling was used to ensure a representative sample. The sample consisted of 434 adolescents both HIV positive and negative from 11 implementation LGAs of Lagos state. The 11 LGAs were ranked based on the total number of adolescent girls aged 8-17 years on the project.

Sample Size

The sample size of the study is 434 female adolescents. In which 223 adolescents were HIV positive while 211 adolescents were HIV negative.

Instruments for Data Collection

The data collection instrument used for this study was designed and piloted using Kobo Collect toolbox before deployment for fieldwork. The questionnaire has four sections. Section A contained information on socio-demographic characteristics, Section B had information on knowledge of Menstrual hygiene management, Section C contained information on the attitude of respondents toward menstrual hygiene management, and Section D contained information on practices of the menstrual hygiene management. Experienced data collectors were engaged and trained on the survey instruments. Trained data collectors used the designed questionnaire which was digitized on Kobo toolbox to collect data using an android phone from selected adolescents.

Variable and Measures

The variable in this study includes socio-demographic variables, knowledge, attitude, and practices of menstrual hygiene management. The socio-demographic variables measured include age, education, age at menarche, place of residence, HIV status, respondent class, caregiver education, and caregiver employment status. Knowledge and practices of menstrual hygiene management variable was measured by asking on common perceptions and water hygiene and sanitation during menstruation.

Data Analysis

Data were analyzed using Stata 14 and processed using the descriptive method. Logistics regression was used to uncover the predictors of Knowledge, attitude, and practice of menstrual hygiene management among orphan and vulnerable adolescents.

RESULTS

Table 1; shows the results of the socio-demographic profile of the participants. In all, 434 adolescent female beneficiaries participate in the study. The participant's age ranges from 8-17 years. The table shows that more than half of the adolescents (58%) fall between the ages of 15-17 years. Also, most of the adolescents start menstruating at the age of 12 years (23%). Nearly all of the participants are in school (91%) and are in the senior secondary category (83%, 70%, and 88% respectively) than the junior category (47%, 52%, and 57% respectively).

Furthermore, more than half of the participants reside in the rural area of the state (51%). There is a slight difference between the HIV status of the participants 51% of the adolescents were HIV positive while 49% were HIV Negative. Most of the caregivers responsible for the orphan and vulnerable adolescents graduated from secondary school (56%) and are major traders (69%)

Table 1: Socio-demographic profile of the study population (n=434)

Socio-demographic variables	Frequency (n=434)	Percentage (%)
Age group		
8-9	10	2.1
10-14	170	39.3
15-17	254	58.6
Age at menstruation		
8-10	80	18.4
11-14	329	75.7
15-17	25	5.8
Educational status		
Yes	397	91.6
No	37	8.4
Class in school		
JSS1	47	11.8
JSS2	52	13.1
JSS3	57	14.4
SS1	83	20.9
SS2	70	17.6
SS3	88	22.1
Place of residence		
Rural	224	51.7
Semi-urban	64	14.8
Urban	146	33.5
HIV status		
Positive	223	51.4
Negative	211	48.6
Caregiver education		
No education	38	8.8
Primary	137	31.6
Secondary	244	56.2
Tertiary	15	3.4
Caregiver employment status		
Unemployed	21	4.8
Artisan	39	9.0
Civil Servant	33	7.6
Female Sex worker	40	9.2
Trader	301	69.4

Knowledge and Attitude of Menstrual Hygiene Management

From Table 2, it shows below that almost every adolescent is aware of and have information about menstrual hygiene management (92.8%). Majority of the adolescent receive information on MHM first from their mother (62.7%). More than three-quarter of the participant understand that

menstruation is a normal process of development (86%) and mostly believe menses start between 12-13 years of age (55.7%) with a normal duration of 3-5 days (81%). Less than three-quarters of the participants (71%) said they know where to go and get more information on Menstrual hygiene if they want to know more about it.

However, more than half of the participants (50%) disagree with the wish that girls do not have to menstruate, and they agree that menstruation does not interfere with their school performance.

Table 2: Knowledge and Attitude of Menstrual Hygiene Management

Knowledge on menstruation	**Frequency (n)**	**Percentage (%)**
Yes	402	92.8
No	31	7.2
Sources of information		
Mother	252	62.7
Sister	41	10.2
Friends	26	6.5
Teachers	81	20.2
Others	2	0.5
Awareness on causes of menstruation		
Normal process of development	373	86.1
Caused by disease	3	0.7
Curse/Sin	1	0.2
Don't know	35	8.1
Others	21	
Age at which menses occur		
8-9	10	2.3
10-11	94	21.7
12-13	241	55.7
14-15	80	18.5
Don't know	9	1.8
Knowledge on normal duration of menstruation		
3-5 days	352	81.3
5-7 days	77	17.8
Don't know	4	0.9
Knowledge on where to go get additional information on menstruation		
Yes	308	71.1
No	125	28.9
Ever wished girls don't menstruate		
Agree	138	31.9
Disagree	215	49.7
Not sure	80	18.5
Menstruation interferes with school performance		
Agree	139	31.9
Disagree	220	50.8
Not sure	75	17.3

Attitude towards Restriction during Menstruation

As shown in the table below, almost half (48%) of the participants disagree that there should be any restriction during menstruation. Also, about half (50%) of the participants disagree that there should be a restriction as to what a girl can do or not do during menstruation at home.

Furthermore, nearly all the participants (95%) recorded that they have not faced any restriction of not being allowed in school but more (58%) than half of the participants agree that they are not allowed to go/participate in any religious activities. Most of the participants also disagree they were not allowed to cook, touch/sit with a male member of the family, and are not allowed to sleep in the usual bed or sleep on the floor during menstruation (93.8%, 76.9%, and 85.5%) respectively.

Table 3: Attitude towards Restrictions during Menstruation

Do you think there should be restrictions during menstruation?	**Frequency (n=434)**	**Percentage (%)**
Agree	131	30.3
Disagree	208	48.0
Not sure	95	21.7
There should be a restriction as to what a girl can do or not do during menstruation at home		
Agree	148	34.2
Disagree	213	48.9
Not sure	73	16.9
Have you faced the following restriction during menstruation?		
Not allowed school		
Yes	20	4.6
No	414	95.4
Not allowed to go/participate in any religious activities		
Yes	253	58.2
No	181	41.8
Not allowed to cook/touch utensils		
Yes	28	6.2
No	406	93.8
Not allowed to touch/sit with a male member of the family		
Yes	100	23.1
No	334	76.9
Not allowed to sleep in usual bed/ sleep on the floor		
Yes	64	14.5
No	370	85.5

Practices of Menstruation Health Management among Orphan and Vulnerable Adolescents

In table 4 below, 88.5% of the participants use sanitary pads and 57% of the participants used 3-4 pads per day. Most of the participants used disposal pads or tampons (83.4%). The result further shows that even though most of the participants use disposable pads, nearly all the participants do

not have access to these pads (82.5%) on their own, they rely on their mother/siblings to buy for them, or they use cloth and tissues (24.7%, 22.6) respectively. The result shows that two-thirds of the participant have provision for clean toilets or rooms in their school to change their sanitary pads (77.6%) and mostly all the participants used this toilet for changing.

Furthermore, 94.5% of the participants attend school during menstruation and have provisions to wash their hands during the time they change their pads (82.5%). Among the challenges faced during menstruation that prevent school attendance. 70% of the participants recorded stomachache as a major challenge they have. 49% recorded waist pain while 10% said they do not attend school because of the fear of being stained from using substandard pads during school.

More than half (66.3%) of the participants said they have someone in school they see in case they have a complication with menstrual hygiene. 42% of the participant used the toilet and public waste bin to dispose of their used sanitary pads and more than half (58%) of the adolescents and two-thirds (78%) of the adolescents washed their hands before and after changing their sanitary pads during their last menstruation.

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Table 4: Practices (WASH) of Menstrual Hygiene Management

Do you use a sanitary pad?	**Frequency (n=434)**	**Percentage (%)**
Yes	384	88.5
No	50	11.5
How many sanitary pads do you use per day?		
1-2	153	39.9
3-4	220	57.4
5-6	11	2.6
Material used for Menstruation		
Disposable pad/tampon	362	83.4
Cloth	43	9.9
Reusable pad	6	1.4
Cotton wool	23	5.3
Supply of sanitary pad		
Yes, I always have	76	17.5
I have sometimes	284	65.4
No, I use cloth or cotton	74	17.1
What do you use when your sanitary pads finish		
I use cloth for the period	107	24.7
I borrow money to buy	39	8.8
My parents/sibling buy for me	182	42.0
I use tissue	98	22.6
others	8	1.6
Provision for clean toilet in school to change sanitary pad		
Yes	336	77.6
No	98	22.4
Places for changing sanitary pad		
Toilet	353	81.5
Hidden corners	42	9.5
Bedroom	21	4.8
Bush path to school	16	3.7
I used an unsecured toilet	2	0.5
Attend school during Menstruation		
Yes	410	94.5
No	24	5.5
Provision (location, soap, and water) to wash your hands		
Yes	357	82.5
No	77	17.5
Challenges faced during menstruation that prevent school attendance		
Stomachache	304	69.9
Waist pain	64	14.8
Headache	15	3.5
No safe space to change sanitary pad	6	1.4
I may be stained without using a sanitary pad	45	10.4
Anyone you see in case of complication with Menstrual hygiene		
Yes	288	66.3
No	146	33.7
Disposal method		
Toilet	184	42.5
Public waste bin	178	41.1
I burn it	33	7.6
Improvised holes	13	3.0
Sanitary waste bin within school	26	5.8
Do you wash your hands before changing menstrual material?		
Yes	255	58.9
No	15.2	35.1
Always	17	3.9
Never	10	2.1
Do you wash your hand after changing menstrual material?		
Yes	339	78.3
No	23	5.3
Sometimes	69	15.9
Never	3	0.5

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Discussion

A total of 434 orphan and vulnerable adolescents participated in the study. Seventy-five percent of the participant experienced their first menstruation between the ages of 11-14 years with a mean age at menarche being 12.0 ± 1.6. Knowledge about menstruation is appreciable. About 92% of the participants had knowledge about menstruation before experiencing it. This is similar to other studies conducted in Nigeria and other countries (Nnennaya&Dogara et al, 2021, Jamwal et al, 2015, Sahoo et al, 2015, Zelalem, et al, 2019). This may be connected with the study location which was done in Lagos State, Nigeria and most of the schools in Lagos State have had awareness of menstruation and menstrual hygiene in most if not all the schools in Lagos state. This study showed that mothers, teachers and siblings are the primary source of information on menstruation for these adolescents, this study agrees with results in previous studies both in Nigeria and outside countries that recorded mothers are the leading source of information (Nnennaya&Dogara, 2021, Lawan et al, 2010, Van Ejik et al, 2016). However, this study is contrary to studies conducted in Ethiopia and Egypt, which recorded that most participants got information about menstruation from friends and media this might be due to the strong influence of peer groups in the school and that menstruation was freely discussed by this adolescent in schools. According to Nnennaya &Dogara et al, 2021, it is agreed that mothers should provide the primary information on sex education, especially mother to the girl child but the only concern is the depth of knowledge passed by mothers is a function of their level of education, communication skills as well as socio-cultural prescription. This therefore often leads to incomplete or incorrect information about sex education.

Menstrual hygiene management during menstruation is of considerable importance as it can affect women's health by increasing their vulnerability to infections of the urinary tract and perineum which can result in infertility in the long run (Nnennaya &Dogara, 2021, Thakre et al, 2011, Fernandes et al, 2008). This study found that 88.5% of the adolescents interviewed make use of disposable sanitary pads, this study is like studies conducted in the Taraba, Kano, and Sokoto (Nnennaya &Dogara, 2021, Lawan et al, 2010, Garba et al, 2018). This higher use of sanitary pads could be because the study was done in Lagos state where awareness of menstruation is highly in place as noted in the study and also because most of the adolescents reported that when their sanitary pads finish its mostly their parent that bought for them which shows that most of their parent is aware when they are having their menstruation.

This study reported that 57.4% of the adolescent changed their sanitary pads three times per day, this report is like a study done in Sokoto by Garba, 2018 who recorded that 70% of the respondents changed sanitary pads at least three times a day but a study in Ile-Ife by Aluko et al reported a lower percentage (42.5%) and study in Taraba by Nnennaya &Dogara, 2021 (43.4%). This may be due to urbanization in Lagos state and the rural settings in Ile-Ife and Taraba state.

On the method of disposal, the study reveals that 42.5% of adolescents disposed of a used sanitary pad in the toilet, 41.1% in a public waste bin, and 7.6% by burning, this study is like studies conducted in Taraba and Ile-Ife where the toilet was the major disposal method. This study on the disposal method was followed by the public waste bin but studies in Taraba and Ile-Ife recorded burning the used sanitary pad as the second disposal method, this difference is due to the fact the study location prohibited burning of waste. The contrast finding to this study is the study conducted in Kano (Lawan, 2010) which reported public waste bins as the major disposal method for used

sanitary pads. On WASH practices, most of the participants (77.6%) had a provision in school and at home for clean toilets where they can change their sanitary pads, and 82.5% of the participants also have a place where they can wash their hands before and after changing their menstrual materials during the last period. This may also be due to knowledge of WASH on the project and some of the targeted schools including COVID-19.

The study established key issues relating to menstrual hygiene to be access to quality menstrual hygiene materials, WASH facilities support and sources of information at menarche. However, these also relate to other studies in Nigeria and Africa. There were no significant differences in knowledge or practices between HIV positive adolescent girls and those who were negative. The study could not establish the effect of menstrual hygiene on school attendance as schools have reasonable, even though not adequate support for such girls. However, by extension, related menstrual pains or cramps, lack of access to quality menstrual hygiene products may impede attendance and performance.

Conclusion

Most of the orphans and vulnerable adolescent girls had good knowledge and practices of menstrual hygiene management. This demonstrates a need to design acceptable awareness creation and advocacy programs to improve the knowledge and promote safe hygiene practices of adolescent girls. Inclusion of menstrual hygiene management into the school curriculum to achieve a near total coverage of safe hygiene practices among adolescent girls should also be done. There is need to further strengthen the capacity of schoolteachers handling adolescent girls to be well informed of the diverse issues related to menstrual hygiene and how this affects school attendance and performance. While the study desired to look at outcomes relating to school, the study found more challenges around access to menstrual hygiene materials and psychological implications influencing the perception and attitudes. Overall, implementing partners and others designing programs for adolescent girls must take cognizance of the diversity of management of menstrual hygiene for girls of different ages and localities. While discussions around menstrual hygiene are shrewd in mystery, schools are now more open to supporting adolescent girls, which must be encouraged by development partners. Considering the commencement of menstrual as a very challenging period in these adolescent girls; especially access to quality sanitary pads and WASH support for its management, programs and school administrators must continue to strengthen advocacy for free access to sanitary pads and WASH facilities for adolescent girls in schools. Infrastructure in schools must adequately consider the sensitivity of menstrual hygiene. Overall, successful menstrual hygiene must be multi-sectoral and gender sensitive for protection and dignity.

Conflict of Interest

The authors declare that there is no conflict of interest.

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