

Perception and Acceptability of Reusable Menstrual Pads among Secondary School Girls in Ilorin, Kwara State

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Abstract

The inability to afford disposable menstrual pads is a major problem in girls and women in the developing. Therefore, there is a need for low-cost options like reusable sanitary pads. Reusable sanitary pads are a cheap, effective and empowering tool for young girls who cannot afford disposable materials. A cross-sectional descriptive research design was used to determine perception and acceptability of reusable menstrual pads among secondary school girls in Ilorin, Kwara State. Data were collected using a self-structured questionnaire and a purposive sampling technique was used to select 262 respondents from the target population. Data collected were analyzed using descriptive and inferential statistics and the level of significance was set at 5%. The findings of the study revealed that the majority of the respondents attain menarche at the age of 10 and 12 years. More than half of the respondents had poor perception 145 (55.3%) and poor acceptability 148 (56.5%) about reusable menstrual pads. The major reasons for non-acceptability of reusable menstrual pad were lack of awareness 72 (27.5%), stress of washing reusable menstrual pads 36 (13.7%), risk of contracting infection 24 (9.2%) and inability to afford it 10 (3.8%). This study therefore recommended that menstrual health promotion campaigns and interventions should be put in place to promote positive perception and accessibility to reusable menstrual pads among young girls in the face of the Nigeria economic crisis where women and young girls constantly experience period poverty.

Keywords: Acceptability, Menstruation, Perception, Reusable pads, Secondary school girls.

Introduction

Accessibility to menstrual hygiene supplies is a basic human right. However, due to exorbitant cost and unavailability of these menstrual hygiene supplies, many adolescents in rural areas and urban slums do not use hygienic menstrual absorbents leading to adverse health outcomes, school absenteeism and decreased social participation [1, 2].

Approximately 200 million menstruating girls in low- and middle-income countries (LMICs), especially girls from low economic status, struggle with menstrual hygiene management (MHM) daily [3-5]. The United

Nations Children's Fund estimates that 1 in 10 African girls either skips school during menstruation or drops out entirely because of lack of menstrual hygiene management options [6, 7]. Menstrual hygiene management (MHM) has been defined as "women and adolescent girls using a clean menstrual management material to absorb and collect blood, that can be changed in privacy as often as necessary for the duration of the period, using soap and water for washing the body as required and having access to facilities to dispose of used menstrual management materials" [5]. Menstrual hygiene is fundamental to the dignity and wellbeing of

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women and it an important part of the basic hygiene and reproductive health services to which every woman and girl has a right [8].

However, managing menstrual hygiene is one of the major problems for adolescents around the world, especially among secondary school girls living in low- and middle-income countries (LMICs) where lack of materials for ensuring successful menstrual hygiene is common [9, 10]. Most in-school adolescents lack adequate solutions to manage menstruation, and imported disposable menstrual materials are excessively expensive for young girls to afford, thus leading to period poverty [11, 12]. Period poverty occurs when young girls and women cannot afford proper menstrual hygiene products, including tampons and sanitary pads. According to United Nations Population Fund, period poverty refers to the increased economic vulnerability women and girls face due the financial burden posed by menstrual supplies [12].

Period poverty force many young girls to trade sex with men to afford menstrual products while some improvise with unhygienic and uncomformable alternatives such as newspapers, tissue papers, dried grass, or even go without sanitary pads altogether, making menstruating periods a dreadful experience for the schoolgirls [11-13].

Nevertheless, one of the notable innovations to address accessible and low-cost sanitary products is the reusable pad. Reusable sanitary pads are cheap, effective, and empowering tool for women especially young girls who cannot afford disposable menstrual materials [12]. Reusable sanitary pads are also known as washable or reusable cloth menstrual pad. These are made from several types of fabric, most often cotton flannel or hemp. Most styles have wings that secure around the underpants, but some are without wings. Reusable menstrual pads do not need to be disposed of after use and therefore offer a more economical alternative. They are allergen and perfume free and can be more comfortable for people who

suffer from irritations from using disposable pads [14].

Despite these benefits, attention has been given to disposable menstrual materials which are costly, and little has been done to understand girls' perception and acceptability of reusable menstrual pads which is very significant in Nigeria where almost half the population is living below the international poverty line and are unable to afford basic life needs such as food, water, clothing, shelter not to mention hygienic menstrual supplies [15]. Furthermore, there is a paucity of information on the perception and acceptability of reusable menstrual pads among secondary school girls. Consequently, this study aimed to assess the perception and acceptability of reusable menstrual pads among secondary school girls in Ilorin, Kwara State.

Research Hypothesis

There is no significant association between perception of respondents and their acceptability of reusable menstrual pads in UNILORIN secondary school.

Materials and Methods

Study Design

A descriptive cross-sectional study was conducted to obtain information from secondary school girls to determine their perception and acceptability of reusable menstrual pads in Ilorin Kwara state.

Study Population and Sample Size Calculation

The population for this study comprised of female girls between ages 9 to 18 years attending secondary school in Ilorin, Kwara State. The sample size was 262 which was calculated using Fisher's formula:

$$\text{Sample size (S)} = \frac{(z^2) pq}{d^2}$$

Using test statistic (z) of 1.96 at 95% confidence interval, estimated proportion of an

attribute in a population (p) is 0.50, q is 1-p, and the desired level of precision (d)=0.05. Purposive sampling technique was used to select the 262 secondary school girls who have started menstruation and were willing to participate in the study.

Data Collection

The instrument for data collection was a self-structured questionnaire. It consists of four sections, section A was designed to reveal the socio-demographic data of respondents, section B and C were made up of items about perception and factors affecting the acceptability of reusable menstrual pads among secondary school girls. Face and content validity of the instrument was done by experts who are nursing researchers, while the internal consistency of the instrument was measured using Cronbach Alpha, which showed a score of 0.74. This indicates that the questionnaire is

reliable. Written permission to use the secondary school for the study was obtained from the school authority. The parental consent forms requesting the permission of the parent or guardian to allow her child to participate in the study were duly signed for participants by the class teachers, and informed assent forms were duly signed by the participants. Confidentiality and anonymity were ensured as names were not required on questionnaires and cannot be traced to the participants. Respondents were granted the freedom to withdraw at any point they want.

Data Analysis

The data collected were collated using Statistical Product and Service Solution (SPSS) version 24. The data were analyzed using descriptive statistics in the form of table, percentage, and bar chart. Inferential statistics in form of Chi square was used to test the hypothesis with level of significance set at 0.05.

Results

Table 1. Socio- Demographic Characteristics of Respondents (n=262)

Variable Responses		Frequency	Percentage
Age (X=15.14) (SD=2.539)	Less than 10	10	3.8
	10-15	129	49.2
	16-20	123	47.0
Class	*JSS 1- JSS 3	78	29.8
	*SSS 1- SSS 3	184	70.2
Religion	Islam	145	55.3
	Christianity	113	43.1
	Traditional	4	1.5
Ethnicity	Yoruba	195	74.4
	Igbo	25	9.5
	Hausa	40	15.3
	Others	2	0.8
Occupation of parents	Trader	119	45.4
	Civil servant	135	51.5
	Unemployed	8	3.1
Who do you live with	Parents	204	77.8
	Guardian	56	21.4
	Others	2	0.8
How old were you when you started menstruation	9	15	5.7
	10	58	22.1

(X=11.77) (SD=1.607)	11	40	15.3
	12	59	22.5
	13	55	21.0
	14	18	6.9
	15	17	6.5

*JSS-Junior Secondary School *SSS-Senior Secondary School

Table 1 shows that 129 (49.2%) of the respondents were between 10-15 years, 123 (47.0%) were between 16-20 years while 10 (3.8%) were less than 10 years of age. The majority of the respondents 184 (70.2%) were in Senior Secondary School (SSS) 1- 3class while 78 (29.8%) were in Junior Secondary School (JSS) 1- 3 class. Most of the respondents 145 (55.3%) practiced Islam, 113 (43.1%) practiced Christianity while 4 (1.5%) practiced Traditional religion. Majority of the respondents 195 (74.4%) belonged to Yoruba ethnic group, 40 (15.3%) belonged to Hausa ethnic group, 25 (9.5%) belonged to Igbo ethnic

group while 2 (0.8%) belonged to other ethnic groups. Most of the respondents' parents 135 (51.5%) were civil servants, 119 (45.4%) were traders while 8 (3.1%) were unemployed. The majority of the respondents 204 (77.8%) lived with their parents, 56 (21.4%) lived with their guardians while 2 (0.8%) lived with other people. 59 (22.5%) of the respondents started menstruation at the age of 12 years, followed by 58 (22.1%) at the age of 10 years, 55 (21.0%) at the of 13 years, 40 (15.3%) started at 11 years, 18 (6.9%) started at 14 years, 17 (6.5%) started at 15 years while 15 (5.7%) started at 9 years of age.

Table 2. Perception of Adolescent Girls Towards Reusable Menstrual Pads (n=262)

Variable	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)
Reusable menstrual pads are clean.	15(5.7)	24(9.2)	28(10.7)	22(8.4)	173(66.0)
Reusable menstrual pads are unhygienic.	97(37.0)	70(26.7)	8(3.1)	22(8.4)	65(24.8)
Reusable pads are irritating	130(49.6)	24(9.2)	52(19.8)	2(0.8)	54(20.6)
Reusable menstrual pads will make me get stained easily	76(29.0)	110(42.0)	54(20.6)	22(8.4)	0(0.0)
Reusable menstrual pads are expensive.	8(3.1)	133(50.8)	40(15.2)	39(14.9)	42(16.0)
Reusable menstrual pads will cause infection.	8(3.1)	125(47.7)	28(10.7)	30(11.5)	71(27.0)
Reusable pads will not be as comfortable as disposable pads.	22(8.4)	137(52.3)	50(19.0)	35(13.4)	18(6.9)
Reusable menstrual pads are not easily available to buy.	40(15.2)	130(49.6)	54(20.6)	8(3.1)	30(11.5)

Table 2 shows that 173 (66.0%) of the respondents strongly disagreed that reusable menstrual pads are clean, 97 (37.0%) strongly agreed that reusable menstrual pads are unhygienic, and 130 (49.6%) strongly agreed that reusable pads are irritating. 110(42.0%) of

the respondents agreed that reusable menstrual pads will make them get stained easily, while half of the respondents 133 (50.8%) agreed that reusable menstrual pads are expensive. 137 (52.3%) of the respondents agreed that reusable menstrual pads will not be as comfortable as

disposable pads and almost half of the menstrual pads are not easily available. respondents 130 (49.6%) agreed that reusable

Table 3. Acceptability of Reusable Menstrual Pads by Respondents (n=262)

Variable Responses		Frequency	Percentage
I can never use reusable menstrual pads	Yes	150	57.3
	No	112	42.7
Will you use reusable menstrual pads if made available for you	Yes	98	37.4
	No	122	46.6
	Not too sure	42	16.0
Will you use reusable menstrual pads if given for free	Yes	100	38.2
	No	110	42.0
	Not too sure	52	19.8
I will use reusable menstrual pads if taught how to make it	Yes	133	50.8
	No	92	35.1
	Not too sure	37	14.1
I prefer disposable to reusable menstrual pad	Yes	225	85.9
	No	37	14.1
I can recommend reusable menstrual pads for others to use	Yes	49	18.7
	No	130	49.6
	Not too sure	83	31.7

Table 3 shows that majority 150 (57.3%) of the avowed that they can never use reusable menstrual pads, 122 (46.6%) stated that they will not use reusable menstrual pads even if made available, 110 (42.0%) said that they would not use reusable menstrual pads if given for free. However, half of the respondents 133

(50.8%) acknowledged that they will use reusable menstrual pads if taught how to make it, but majority 225(85.9%) preferred disposable to reusable menstrual pad and 130 (49.6%) said that they cannot recommend it for others to use.

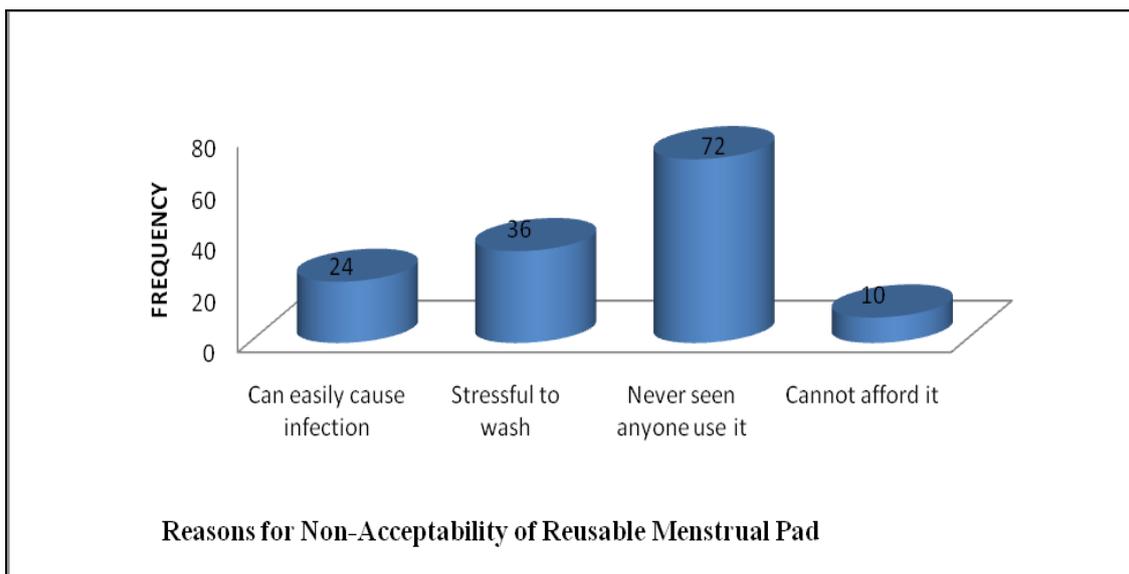


Figure 1. Reasons for Non-Acceptability of Reusable Menstrual Pad

Figure 1 shows the major reasons for non-acceptability of reusable menstrual pad among respondents where 72 (27.5%) of the respondents said that they have never seen

anyone use it, 36 (13.7%) said it is stressful to wash reusable menstrual pads, 24 (9.2%) said it can easily cause infection while 10 (3.8%) said they cannot afford it.

Table 4. Statistical Illustration of Relationship between Perception of Respondents and their Acceptability of Reusable Menstrual Pad (n=262)

Variable Responses		Perception of reusable pad			Chi-Square X^2	df	P-Value	Remark
		Positive (n=117)	Negative (n=145)	Total				
Acceptability of reusable pad	Good	17	97	114	14.146 ^a	1	0.001	Significant
	Poor	100	48	148	-	-	-	H ₀ rejected
	Total	117	145	262	-	-	-	

Table 4 shows a significant association between perception of respondents and their acceptability of reusable menstrual pad with P-value=0.001 < 0.05. Since the P-value is lesser than the significance value (0.05), the null hypothesis was rejected, and the alternate hypothesis accepted

Discussion of Findings

Socio Demographic Profile

More than 40% of the respondents were within the age range of 10-15 which implies that the respondents are in their teen, and this is expected age bracket for secondary school students in Nigerian educational system. The majority of the respondents were in senior secondary school 1- 3 classes. Approximately half of respondent's parents were civil servants. A large percentage of the respondents started menstruation at the age of 10 and 12 years. This is contrary to a study conducted in Ghana where majority of the respondent's experienced menarche between ages 13 and 15 years [16].

Perception of Adolescent girls towards Reusable Menstrual Pads

The study revealed that most of the respondents perceived reusable pads to be unclean, less hygienic, irritating, and unreliable as they can get soiled easily during menstruation. More than half of the respondents perceived that reusable menstrual pads is not as comfortable as disposable pads and are not

easily available. Furthermore, half of the respondents affirmed that reusable menstrual pads are very expensive. Overall, it is indicative that secondary school girls have negative perception about reusable menstrual pads. This resonates with the study conducted in Delhi, where most of the respondents had poor perception about reusable sanitary products and its price was perceived to be high as against the benefit of the product [1]. The poor perception is associated with narrow-minded norms and programs which discourage the use of other menstrual absorbents; thus, limiting girls' choices for menstrual management. In contrast to this study, [16] reported positive perception about reusable menstrual pads as majority of the respondents perceived reusable pads to be more reliable and convenient to manage [17].

Acceptability of Reusable Menstrual Pads by Respondents

In this current study, more than half of the respondents avowed that they can never use reusable menstrual pads no matter the circumstances and cannot recommend it for others to use. Similarly, a study conducted by in Egypt revealed that most of the women prefer disposable sanitary pads to reusable menstrual absorbents due to several factors including inaccessibility of the product to purchase [18]. [3] argued that people commended the use of the disposable menstrual materials which has several challenges including affordability, poor

disposal methods, lack of attention on sanitation facilities and the lack of standard protocols to regulate the quality of menstrual products to reusable ones [3]. The study revealed that more than half of the respondents had poor acceptability and the major reasons for non-acceptability of reusable menstrual pad were lack of awareness, stress of washing reusable menstrual pads, risk of contracting infection and inability to afford it. This is contrary to a previous study where washing menstrual blood away from reusable pad and reusing the product was not an issue [18]. Furthermore, [19] stated that reusable menstrual pads are free of potentially harmful chemicals, allergen-free, comfortable, and less expensive in the long term. Therefore, there is need to correct the wrong reasons for non-acceptability through dissemination of information to secondary school girls and women on reusable pads.

Nevertheless, half of the respondents agreed that they will use reusable menstrual pads if taught how to make it. This denotes the need for dissemination of adequate information and training on reusable menstrual materials which may influence their perception and acceptability. According to Ghimire reusable sanitary pads are becoming more popular and have been getting much praise from environmentalists because they contain less overall waste compared to disposable menstrual products [20]. However, school girls need to have adequate knowledge and positive

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perception regarding reusable pad to facilitate acceptance, since significant association was found between perception of respondents and their acceptability of reusable menstrual pad

Conclusion

This study has assessed the perception and acceptability of reusable menstrual pads among secondary school girls in Ilorin, Kwara State. The results revealed poor perception and acceptability of reusable menstrual pads respondents. There is need to put in place interventions that will educate and train young girls on reusable menstrual pads since majority claimed they will use the reusable menstrual pads if they have knowledge on how to make it. Consequently, there is need to organise menstrual health promotion campaigns and interventions that will promote positive perception and accessibility of reusable menstrual pads among young girls in the face of the Nigeria economic crisis where women and young girls constantly experience period poverty.

Conflict of Interest

The authors have no conflict of interest to declare.

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