

Menstrual Knowledge Status among School Going Girls in Mulundi Sub-Location, Kitui County

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Abstract

Menstruation is part of female human health that signifies the transition from childhood to adulthood. Correct menstrual knowledge entails having accurate knowledge of physiological changes, which accompanies body changes. Knowledge extends to being well versed with the advantages of correct menstrual practices and the consequences of poor menstrual management. Menstrual hygiene knowledge was evaluated in four (4) primary and 3 secondary schools within Mulundi sub Location. Mulundi sub Location was chosen among many areas due to its economic status, which is similar to that of most sub-Locations within Kitui County. The sampled schools draw their learner's population within the location and the immediate locations thus a good representation of the area. The study adopted a mixed-method approach, which involved the collection of qualitative and quantitative data. Quantitative data was collected using questionnaires administered to 140-school going girls aged between 10-19 years. The qualitative data was acquired through the use of focused group discussions and key informant interviews. The qualitative data reported as verbatim quotes suggest more campaigns are needed to enlighten girls on the menstrual subject. The study reveals that 68% of the girls could define menstruation correctly while 14% and 9% thought it was a disease and curse respectively. A percentage constituting 9% had no idea of menstruation. The parents were ranked as the highest source of menstrual information constituting a percentage of 39.1%. Based on the study findings, teachers contributed 33.2% of the menstrual knowledge by girls. Other sources of menstrual knowledge included individuals, peer educators and religious groups. Though over half of the sampled population were knowledgeable, the study recommends the inclusion of more sessions on the menstrual subject in the school's curriculum.

Keywords: School going, menstruation, knowledge, Mulundi, sanitary wear

1. Introduction

Menstruation is a natural normal process that occurs to girls within a minimum of 12 years but mostly 13 years (Jones, Griffiths, Norris, Pettifor, & Cameron, 2009). The period of menstruation takes place varies from one female to another but on average five days. The accompanying menstrual management and attitude depend on knowledge among other factors. Menstrual knowledge has various sources notably parents, teachers, peers, media and religious sources among others. Some sources of menstrual knowledge are prone to cultural bias.

In Latin America, many religious groups terms menstruating women as impure. This has led to fear by women discussing the subject of menstruation (González-Becerra et al., 2019). Further, studies in India show that more than 71% of the girls had inadequate awareness of menstruation as some caught their first menstruation as a surprise. Largely in India, menstrual processes are associated with fear and shame (Deo, 2005 & Bharatwaj, 2014)

Inadequate information on menstrual hygiene has been reported in girls in Mali where menstrual information is not publicly shared as required by culture. Malian culture bars girls from initiating a conversation necessary to improve their capacity to manage menstruation in school despite the necessity of ample environment for discussing their needs and asking questions (TRINIES, CARUSO, SOGORÉ, TOUBKISS, & FREEMAN, 2015)

A cluster sampling technique in 12 public and private schools in Tanzania reveals that the involved institutions offer education on menstrual Knowledge to both boys and girls. Study findings further reveal that a larger population of girls needed more information on MHM and preferred getting this information from the school. The study recommended a supportive environment for MHM and the inclusion of health education on MHM in both primary and secondary school curricula with separate sessions for girls and boys (Kimwaga, Mayo, & Guya, 2014)

Institution based survey in North Eastern Ethiopia report stigma to over 35% of school going women due to low care during menstruation. The knowledge was depended on age, grade and resident. The study recommended sensitization on menstrual subject as the population with low knowledge is significance (Shumie & Mengie, 2022)

A study meant to establish menstrual knowledge status in Kajiado County Kenya reported challenges in menstrual hygiene management (MHM), especially at school. The study was meant to assess the knowledge of MHM among primary school girls from the pastoralist community using a cross-sectional survey among primary school girls in Kajiado County. Moderate menstrual knowledge was observed in 51.6%. However, 45.5% reported diverse perceptions of menstruation. The study recommended more research in rural settings and campaigns via various media including school curricula to ensure parents and children are well versed in management practices (Korir, Okwara, & Okumbe, 2018).

Similar studies by Mbula (2013) in Kangundo Machakos County in the neighbourhood of Kitui County report inadequate knowledge on the menstrual subject, a fact that provides good grounds for a similar study. Inadequate menstrual knowledge in the neighbouring Counties spurred this research in Kitui County, Mulundi sub-Location where the information on the

subject is scanty.

2. Methods and Materials

2.1 Study Site and Population

The research was done in all four primary schools namely; Kalawa, Mulundi, Makutano and Kwa-Ngindu Primary School all within Mulundi sub-location. Three secondary schools within the same sub-location were also involved in the study. The area studied spans an area of 16 km². The area borders Kyangwithya to the South and Ngiini to the North. The sub-location has a population of 6235. Most of the residents are subsistence farmers despite the challenges of sporadic rainfall. Small business enterprises such as butcheries, selling food staples and vegetables are practised to eke their living. All the primary and secondary schools within Mulundi sub location were selected for the study. The study population of 984-school going girls within the seven-academia institutions was obtained from the ministry of education county offices at Kitui town. The sample includes adolescent girls studying in standard six, seven, and eight and forms 1-4. The sample size of 280 school-going girls was composed of girls aged 10-19 years, which was arrived at using Slovin 2013 model.

The 10-19 age bracket was appropriate in this study as knowledge status by girls who had not yet experienced menarche was needed. Seven (7) female teachers were purposively selected for the study as key informants. Figure 1 shows the physical map of Kitui County, with Kitui Central sub-County and Mulundi sub-location well marked. Mulundi sub-Location was suitable for the study as it is a good representation of many sub Locations in Kitui County due to its perfect match in many aspects like economic endowment, the literacy level of the residents and a variety of religious affiliations, all of which are factors that may influence menstrual knowledge status.

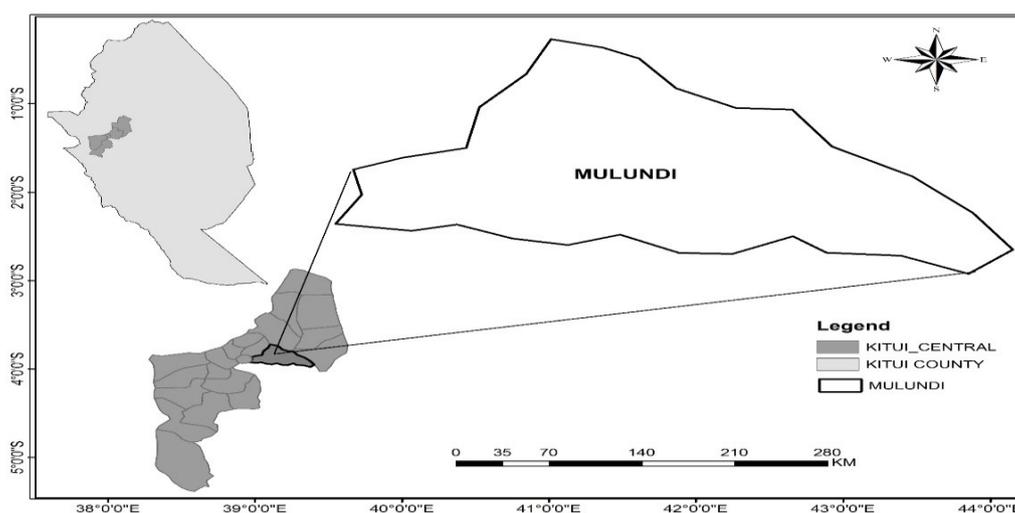


Figure 1. Mulundi sub-Location, Kyangwithya East Ward in Kitui County

2.2 Sampling Techniques and Data Collection Methods

The target population from the seven schools encompassed 934 school-going girls. A sample size of two hundred and eighty (280) school girls was chosen using the equation suggested by Slovin, 2013. Of the 280 school-going girls, 140 were girls aged (10-19) years. Stratified random sampling was applied followed by systematic random sampling. Stratified sampling involved assigning numerals 1-5 repeatedly as the research used five strata in each school. Similar numerals were grouped to form strata. Systematic random sampling on each stratum involved writing yes and no in small pieces of paper, folding them and then mixing them thoroughly so that the chance of picking yes or no is equal.

Whoever picked yes meant she would participate in filling the questionnaire study while no meant pre-exclusion. The maximum number of yes per strata was four to make 20 participants per school.

Another sample constituting 140 girls aged between (15–19) years participated in filling FGDs. This sample was purposively selected due to their practical experiences with menstrual issues specifically knowledge, attitude, and menstrual hygiene management practices. Further, one female teacher who acts as matron in each school responded to the key informant guides. –The sampled 280 school-going girls computed using equation 3.1 represent 30% of the target population. The sample size is appropriate as further suggested by Mugenda and Mugenda (2003) that 10 - 30% of the sample size is good enough to obtain favourable results in a descriptive study as long as the target population does not exceed 10,000. To get diversified views on MHM, the sampled schools were well spread within the sub-Location.

3. Results

Table 1. Sources of Menstrual Information for Teenage Girls

Source	Frequency	Percentage (%)
Teachers	94	33.2
Parents	109	39.1
An individual	15	5.1
Peer educators	43	15.7
Religious individuals/groups	11	3.7
Others (specify)	9	3.2
TOTAL	280	100

Source: Primary data (2021)

This was a descriptive cross-sectional study in which quantitative and qualitative methods were applied. The research sought to establish menstrual knowledge status among school-going girls. The study further probed the advantages of correct management practices and the consequences

of the poor menstrual hygiene management. The learners aged between 10 - 19 years, were probed on menarche and pre-menarche information they could be having. Respondents were probed on the sources of the information they were having on MHM and their responses are tabulated in Table 1.

Generally, most of the learners cited multiple sources of information. Table 1 reveals that most of the information (39.1%) on menarche and menstruation came from parents. Teachers were also reported to incorporate a lot of mentorship on menstrual hygiene management during peer counselling lessons as their information cumulatively contributed (33.2 %). Peer educators contributed 15.7 %, and individual exploration stood at 5.1 %. Religious groupings contributed 3.7% and other sources 3.2 % of the information with teenagers from these sub Locations. Some girls reported that most of their family members shy off talking about the topic of menstruation. No teenage girls mentioned media like television, Daily Nation or Facebook as a source of information on menstruation. Slightly more than half, (95) 68% of the girls could define menstruation accurately as a physiological process. Approximately a quarter, (19) 14% of the respondents who filled out individual questionnaires defined menstruation as a disease while 9% (13) thought it was a curse. Another percentage of less than a quarter 9% (13) had no idea. The majority of students who could accurately define menstruation were from secondary schools. Qualitative data expressed as verbatim quotes revealed inaccuracies in menstrual knowledge.

Over half, 64% (90) of the knowledgeable girls were well versed with the menstrual cycle quoting 2 - 5 days as the average number of days it takes. However, 36% of the girls were not well versed in the menstrual cycle. The majority of the girls constituting over (82) 59 % were aware of disposable sanitary pads, while (11) 8% had heard of and used tampons. The smaller number of (3) 2 % had heard of menstrual cups while (20) 14%, (18) 13% and (6) 4 % of the girl's respondents had heard and used reusable pads, cloths and mattresses respectively. Slightly over three quarters, (78) 56% of the girls were knowledgeable about menstrual hygiene management while 62 (44%) did not know proper ways of managing menstruation. The majority of girls who did not know hygienic ways of managing menstruation were from the Primary section

4. Discussion

Parents contributed up to 39.1% of the total knowledge of girls on menstrual hygiene. The girls attested that from their parents they knew menstruation is a normal physiological process. Girls hinted that the bit their parents did not prepare them was other than the expected changes in the body during puberty. Girl respondents ranked their mothers highly as far as mentorship on pre-menarche and menstrual issues are concerned. Most learners whose parents have at least attained tertiary qualifications were well inclined to menstrual issues including the best absorbent materials to use during menstruation flow even when they could not afford to buy some. The findings of this research are in total agreement with data reported in a study by Carlson and Wilson (1996) who reported that 52.5% of life learning is done by the mother. This helps to maintain a healthy reproductive tract for girls who cascade the same information

to their offspring.

The revelations of the girls in the FGDs are well in line with what studies on the same issue have disclosed as relevant to girls in other developing countries, amongst others: Lawan, Nafisa, and Musa (2010) in their study of a similar target group in Kano/Nigeria, and Dasgupta and Sarkar (2008) in a study of West Bengal/India. The Lawan et al. (2010) study reported that girls' levels of knowledge of reproductive health differed because of the varied information they received, whilst the (Dasgupta & Sarkar, 2008) study disclosed a widespread lack of knowledge of the physical process of menstruation among girls at the age of adolescence. Lack of knowledge and poor perception of the menstrual process were also reported in other studies and seem to be a general problem, see, for example, the study of adolescents girls in secondary government schools in Nepal by WaterAid (2009), and the two cross-sectional studies by (Adinma & Adinma, 2008) undertaken in Southern Nigeria. The WaterAid (2009) study emphasized the limitations of formal education in reproductive health issues.

Religious groups contributed 3.7% of the knowledge on menstruation in girls. The girls' respondents urged that they have had some discussions on the topic when they go to the holiday camps. Peers reported 15.7% of the information. From the data analysis, it was noted that the information from peers was shallow and inaccurate.

5. Conclusion

The study findings reveal that the current level of knowledge of teenage girls on menstrual hygiene management is generally low and unsatisfactory. A percentage lower than half of the girls lacked pre-menarche information. Much of the information to the school-going girls came from their parents (39.1%). A greater part of 39.1% was from mothers as much of the family setups, fathers were barred from discussing issues affecting girls. The study data is in agreement with study by Carlson 2014 who reports mother as the first informant to their girls on many matters of life (Carlson & Wilson, 1996).

The teacher's contribution of 33.2% to knowledge on MHM was still low and the culture lowered its precision. A percentage of 32% could not accurately define menstruation and MHM. Peers, religious groups and other sources had insignificant contributions to knowledge of MHM by school-going adolescents and the reported information was inaccurate. The information gaps were attributed to high illiteracy index among mothers.

Competing interests

The authors declare no competing interests

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