

## Socio Economic Determinants and Effective Menstrual Management among Primary School Girls in Rural Schools in Nyatike Sub County

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### ABSTRACT

*Access to menstrual hygiene products is a major challenge facing women and girls in developing countries, including Kenya. This study is about the socioeconomic determinants of menstrual management among girls in Nyatike Sub County. The study was guided by the following specific objectives: to establish the effects of traditional practices on menstrual management among primary school girls, examine the effects of knowledge and awareness of hygiene on menstrual management, analyze the effects of family income on the menstrual management of girls, and assess the current measures that are in place to enhance menstrual health management of girls in rural primary schools in Nyatike Sub County. A descriptive survey design was used, and cluster sampling coupled with simple random sampling was used to select 689 respondents for the questionnaire, who were mainly primary school girls, head teachers and teachers, and the female heads of households. Descriptive analysis showed that 59.3% of the girls have encountered traditional restrictions during their menstruation. About 74.4% of the respondents believe that knowledge about menstrual hygiene has improved their overall confidence and comfort during menstruation. Additionally, 53.2% of the girls always have access to the menstrual hygiene products they need. However, 46.8% still have difficulties obtaining the necessary products. Consequently, 76.8% of the respondents revealed that their schools are sensitizing students about menstrual health and hygiene. The inferential analysis showed that traditional practices have various effects on menstrual management among primary school girls. In conclusion, there is a positive effect of knowledge and awareness of hygiene on menstrual management among primary school girls. It is also clear that most primary schools have implemented some menstrual health management strategies for girls. The study recommends regular awareness and sensitization programs for students, teachers, parents, and the community to eliminate stigma, myths, and misconceptions around menstruation.*

**Keywords:** Family Income, Menstrual Management, Nyatike Sub County, Primary School Girls, Socio Economic Determinant, Traditional Factors.

### I. INTRODUCTION

Menstrual hygiene management (MHM) is an essential aspect of hygiene for women and girls. The lack of safe, private spaces with water for changing, washing, bathing, and laundering reusable pads, menstrual cloths, and pads, as well as the lack of access to culturally appropriate, adequate disposal mechanisms for used menstrual materials, make women and adolescent girls in rural areas particularly vulnerable to menstrual experiences. In rural settings, taboos and shame surrounding menstruation are likely to make these problems worse (Goddard & Sommer, 2020).

It is estimated that about 3.5 million girls miss learning days per month because of the challenges related to menstruation management (Maharaj & Winkler, 2020). In countries such as the US and the UK, significant strides have been made in ensuring that the issue of menstrual management is not shrouded in mystery. Alphas (2019) states that these issues are discussed openly, and as a result, the girls do not find it hard to share their experiences with parents and teachers. This makes it easy for them to be assisted, and hence, menstrual management cannot in any way hinder their educational achievement.

In Africa, there are not enough sanitary towels and absorbents for women. For instance, women and girls in Ghana have been coerced into working in wage occupations in order to support their menstrual needs (Muriel, Lena,

& Jonathan, 2019). In certain dire situations, some women have been compelled to get into partnerships where they provide sex in exchange for money in order to pay their menstrual cycle expenses.

According to studies in Kenya (Korir et al., 2018; Fialkov et al., 2021), girls in Kenya have a difficult time managing their periods because of the inadequate conditions of WASH facilities. Menstrual management is a significant challenge for many girls, particularly those in rural areas, despite the policies in place (Korir et al., 2018). According to a survey conducted in Kenya, 95 percent of menstrual girls missed one to three school days, 70 percent said their grades suffered, and more than 50 percent said they fell behind in their studies as a result of their period (Mucherah & Thomas 2017). The lack of access to appropriate menstrual products and inadequate sanitary facilities in schools is the leading cause of absenteeism among school-going girls during their menstrual cycle (Korir et al., 2018).

There is heavy evidence that links poor menstrual health with the low socioeconomic status of households. This can be seen in the high number of dropout incidents among girls that are related to menstruation (Ogutu, 2020). Furthermore, to compound the challenge, many girls receive inadequate education on menstrual hygiene management while at the same time having limited access to disposable pads. Many girls continue to experience challenges in managing menstrual hygiene, particularly in rural areas where there is still a heavy presence of socio-economic constraints related to menstruation. Being in rural areas, Nyatike Sub County is still under the firm grip of low economic growth and traditional practices relating to menstruation, something that affects these school-going girls. It was therefore against this background that this study sought to determine the socioeconomic determinants of menstrual management among girls in Nyatike Sub County.

### 1.1 Statement of the Problem

Girls are more likely to experience sexual and gender-based abuse as they enter puberty, drop out of school, and get engaged early. According to a number of qualitative studies conducted in Africa, girls' vulnerabilities are exacerbated by their lack of knowledge about their bodies and rights, as well as their inability to efficiently and correctly manage their periods (Wood et al., 2022). When it comes to controlling their menstruation, girls and women in Kenya face a variety of challenges, including limited access to menstrual products and useful information. There are still significant barriers to effective menstrual hygiene management (MHM), and this is particularly true for girls and women from disadvantaged backgrounds. Women face challenges every month, with a high number of Kenyan women and girls unable to buy sanitary pads (Higgins, 2017), according to available reports. Only a few girls say they talk openly about their periods at home. A private space where female students may change their menstrual products is not even present in rural schools. Just a small portion of Kenyan girls would feel safe asking their fathers questions. Further shocking statistics show a connection between menstruation and more basic risks and gender inequality worries (Borgen Project, 2018).

As much as menstrual health has gained attention on the global development agenda, in many countries, it is still considered taboo. This is because of the cultural and social restrictions that have been imposed on women on account of menstruation. This status has negatively affected the attainment of Vision 2030 and the Sustainable Development Goals. For example, Sustainable Development Goal (SDG) number 3 aspires to foster good health and well-being. At the same time, goal number 4, which deals with quality education for all, is also compromised when girls miss school so as to attend to their menstrual periods (United Nations Development Programme [UNDP], 2015). However, the restrictions that are imposed on women as well as the lack of affordability of menstrual products hinder this goal from being attained. During menstruation, many girls are forced to be out of school out of fear of embarrassment, especially because they fail to afford to buy pads, and at the same time, the school environment is not conducive for them during this period (UNDP, 2015). As a result, they fail to get the quality education enshrined in Goal 4 of the SDGs. It thus becomes necessary to contextualize the issue; in so doing, it becomes imperative to establish the determinants of menstrual hygiene from a social and economic perspective.

It is therefore important to state that menstrual management among primary school girls in rural areas of Kenya is a major concern. This is considering that many of them lack access to proper sanitary facilities and products, which negatively affects their education, health, and overall well-being. Despite the government's efforts to provide free sanitary pads, there are still challenges in ensuring effective menstrual management among primary school girls in rural schools in Kenya. Some of the challenges they confront are connected to economic situations, societal standards, and cultural stigmas, all of which continue to impede their access to proper sanitation and menstrual health management.

## 11. EMPIRICAL REVIEW

### 2.1 Theoretical Literature Review

#### 2.1.1. Social Cognitive Theory (SCT)

This theory was put forward by Albert Bandura in 1989. It was developed on the basis of mutual correlation, which insinuates that one's character may be swayed by repeated relationships that consist of individual and communal aspects that are environmentally related through observation, experience, and copying. This theory thus tries to explain that human beings can easily change their character and behavior depending on their exposure to different cultures and the beliefs of the people around them. This theory also explains the idea of some people's belief in their capability and willingness to effectively exhibit a particular trait (Abdullah & Ahmed, 2022).

This theory makes a lot of sense in the scenario of socio-economic elements of effective menstrual management, given that it proposes that one's character is swayed by their immediate surrounding aspects, which may be social in nature or cultural (Stajkovic & Sergent, 2019). In relation to this study, which is on effective menstrual management, individual aspects, for instance, behaviors and beliefs on menstruation such as using traditional means, traditional behavior, or modern ways, are all influenced by the surroundings. Hence, this theory explains ways of learning from different behavioral diversities. Thus, as human beings, we need to come up with ways of knowing and understanding menstrual hygiene behaviors for better forecasting of such behaviors in our different societies.

Thus, we should encourage self-efficacy through education about effective measures concerning menstruation. It provides a theoretical framework for understanding the complex interplay between personal, behavioral, and environmental factors in shaping behavior, including behavior related to effective menstrual management (Rossouw & Ross, 2021). By considering these factors, interventions can be developed that aim to promote positive behavior change and support the adoption of effective menstrual management practices, particularly in communities where socio-economic determinants may pose barriers to such practices.

### 2.2 Empirical Literature Review

Traditional practices can have a significant impact on menstrual management, both positive and negative. In some cultures, menstruating women are expected to seclude themselves from society during their periods. This can limit their ability to attend school, work, or social events and may prevent them from accessing menstrual products or proper hygiene facilities. According to McCammon et al. (2020), the profiling of women who are menstruating frequently has an adverse effect on their menstrual hygiene. Further, the authors assert that the taboos and superstitions about menstruation held by girls and women in India lead to a decline in their sense of self-worth, which has an impact on their ability to learn and advance personally. Maharaj and Winkler (2020) disclose that women and girls were forbidden from laboring in the rice fields, going outside, or even cooking during their menses. If not resolved, this situation might lead to these girls feeling fearful and having low self-esteem, which can increase school dropout rates.

However, Thakuri et al. (2021) report that the case in India is similar to that in Nepal. In Nepal, menstruation is given a religious interpretation. The moment girls begin to menstruate, they are downgraded, and they lose their status as goddesses. Similar scenarios exist in Africa, where menstruation is despised. In Uganda, for example, when a woman begins to menstruate, she is barred from drinking milk because it is believed that in so doing, she will lower the cow's production of milk. In these cultures, menstrual blood is considered impure or dirty and has adverse effects (Sugita, 2022), which can create a negative stigma around menstruation and discourage women from managing their periods effectively.

Deshpande et al. (2018) explain that knowledge of menstrual hygiene is crucial for achieving freedom from these ideas. Because it aids in dispelling these taboos and unhealthy habits, education is a highly important instrument. It gives the girls an accurate understanding of health that is free from the stigma around menstruation. If they are educated, they will have no trouble taking care of their menstrual hygiene. Also, education gives individuals a wide range of alternatives for maintaining their cleanliness (Bhusal et al., 2020). They benefit from having self-confidence and self-esteem as well. All of the civilizations that have been discussed see culture as a barrier to the health of females since it not only denigrates them but also lowers their self-esteem and respect. Education and widespread public education about the need for menstrual hygiene among girls are the only ways to free girls and women from the confines of these oppressive traditions. This will help people understand that having periods is not a sin or something to be despised (Bhusal et al., 2020).

Hygiene and culture are intertwined; according to Uskul and Cross (2019), teenagers need to be oriented to a culture that encourages hygiene early enough to enable them to make the right decisions pertaining to their hygiene. If

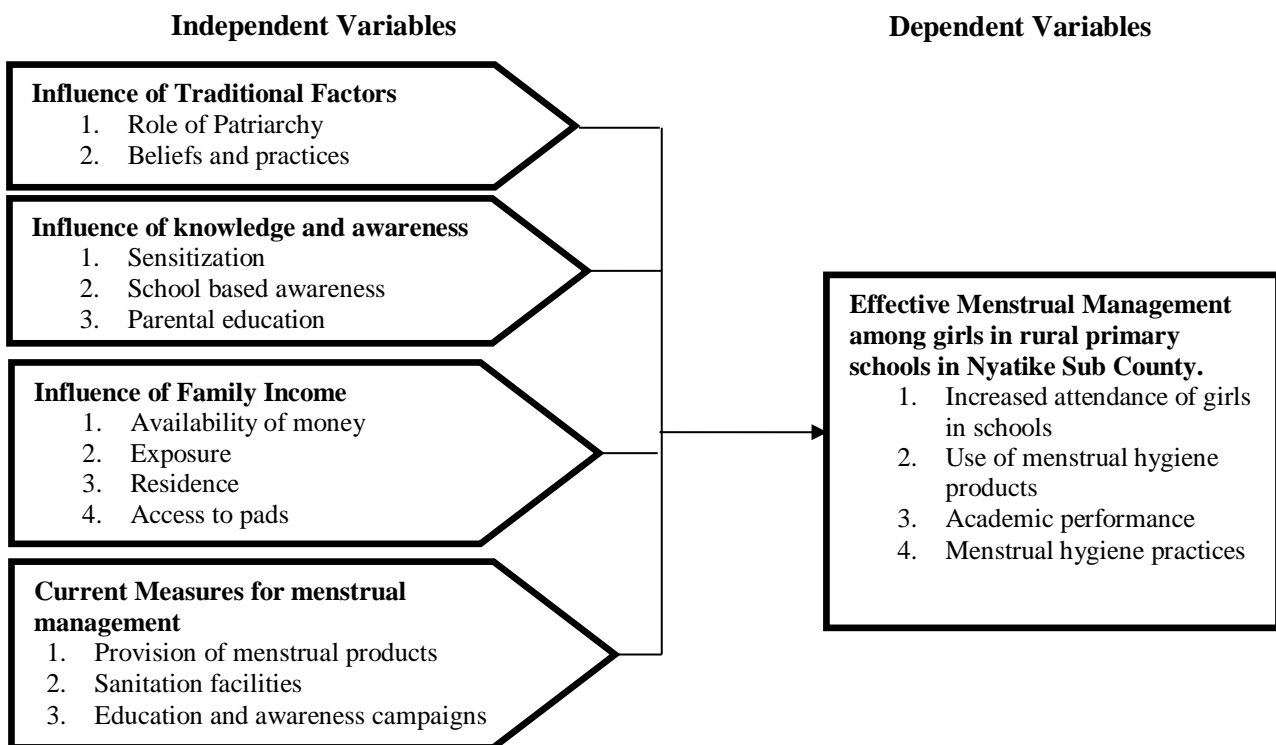
they are not taught properly about menstrual hygiene and entrenched in their cultural outlook, it ends up posing a challenge to them later in their lives. Therefore, the level of parental education becomes a very important tool that ensures that they adequately coach their children on issues to do with menstrual hygiene. Education also helps to package the information in a proper way so that the parents are able to discharge the correct information that will not only make the girls perceive the issue positively but also that will make the child appreciate the developmental stages that she is undergoing without viewing it as an unpleasant experience (Bulto, 2021).

Women and girls from lower-income homes are less likely than women and girls from higher-income households to have access to soap and water, as well as clean, private, secure, and lockable rooms for managing menstruation hygiene (Bhusal et al., 2020). Ethiopia, Rajasthan, and Nigeria are the countries where these discrepancies are most noticeable. Women and girls who have fewer access to resources like money and education, who live in rural regions, or who are older than 35 regularly have less access to sanitary pads. Moreover, married and divorced women are less likely to have access to sanitary pads, although only in Ethiopia, Kenya, and Nigeria are these findings statistically significant. Interestingly, the main cause of the overall income-related discrepancy in access to sanitary pads in the majority of nations is wealth itself (Rossouw & Ross, 2021).

Products used during the menstrual period are considered expensive by people from poor households who cannot even afford a single sanitary pad, but high- and middle-income families can easily afford to buy pads in any amount during the menstrual period. This makes the poor families use traditional ways that are not good hygienically (Asumah et al., 2022). Rich families can also easily afford clean water for house chores and drinking, and this water can be used in cleaning their toilets as well as taking a shower, but the poor family cannot (Budhathoki et al., 2018). This makes it difficult for a lady to clean during her menstruation period. Many local African communities treat girls and women during this period as dirty. This often leads to social stigma, which leads to absenteeism from school and other events due to fear of shame and embarrassment from their male counterparts. This makes ladies during this period shy and afraid to ask for help during this period (Rossouw & Ross, 2021).

### 2.2.2 Conceptual Framework

This conceptual framework highlights the complex interplay between traditional factors, knowledge and awareness, family income, and current measures in place to improve menstrual management among girls in rural schools.



**Figure 1**  
*Conceptual Framework*  
*Source: Author, 2023*

### III. METHODOLOGY

#### 3.1 Research Design

The research design that is employed in the study is a descriptive survey design, which is a research method that involves collecting data to describe a population, a phenomenon, or a situation. It is suitable for the study because it aims at collecting data on the socio-economic determinants of menstrual hygiene in Nyatike Sub County. Besides, it allows the study to explore the phenomena in both qualitative and quantitative terms (Creswell, 2014). Social and economic factors that influence decision-making are best investigated through this design. This is because it helps collect in-depth information regarding the socio-economic determinants of effective menstrual management among primary school girls.

#### 3.2 Study Site

The study was carried out in Nyatike Sub County, Migori County, situated in the western part of Kenya and approximately 45 kilometers southeast of Kisumu. It lies at latitude 0.0962°S and longitude 34.2102°E. It is bounded to the south by Suba South; to the east by Ndhiwa, Uriri, and Suna East; and to the west by Suna West and a portion of the international line between Kenya and Tanzania. It is divided into seven wards: North Kadem, Kanyasa, Kaler, Macalder/Kanyaruanda, Got Kachola, Muhuru, and Kachieng (NGCDF Nyatike Constituency, n.d.). This area was selected based on its low enrollment of girls in the entire county. According to UNICEF, the county has a lower enrollment of girls when compared with boys. It is also a typical rural setting, associated with unique challenges and limited resources concerning menstrual management.

#### 3.3 Target Population and Sampling Techniques

The study targeted 5,400 primary school girls, 50 head teachers, 450 teachers, and 490 female heads of households as shown in Table 1

**Table 1**  
**Sample size categories**

Category	Target Population	Sample Size	Percentage (%)
Primary School Girls	5,400	540	10
Head Teachers	50	10	20
Teachers	450	45	10
Female Heads of Households	490	98	20
<b>Total</b>	<b>6,390</b>	<b>693</b>	

#### 3.4 Data Analysis and Presentation

A descriptive statistical analysis was done, which involved the calculation of frequencies and percentages and then their tabulation. On the other hand, inferential statistics were carried out to predict the effect on binomial-scale menstrual management. For the qualitative data, thematic analysis was conducted, where the data was analyzed according to the study's objectives, and then the findings were presented in the form of narratives. Quantitative data was presented in the form of graphs, frequencies, percentages, tables, and numbers. Relevant quotes or excerpts from FGDs or interviews were included to support and illustrate the findings. These direct quotes added depth and authenticity to the research outcomes, providing firsthand perspectives from the participants.

### IV. RESULTS & DISCUSSIONS

#### 4.1 Demographic Attributes of the Respondents

##### 4.1.1 Effects of Knowledge and Awareness of Hygiene on Menstrual Management

The section sought to examine the effects of knowledge and awareness of hygiene on menstrual management among primary school girls in rural schools in the Nyatike area. It focused on understanding the impact of menstrual hygiene education on girls' menstrual management practices and their overall confidence and comfort during menstruation. Respondents were asked to answer relevant yes-or-no questions presented to determine the aim. The results in Table 2 provide an overview of the effects of knowledge and awareness of hygiene on menstrual



management among primary school girls in rural schools. The majority of the respondents (79.6%) have received education about menstrual hygiene. Approximately two-thirds of the respondents (63.9%) learned how to take care of themselves during their period at school. A significant majority (86.9%) of the respondents were aware of the importance of maintaining good menstrual hygiene. The majority of respondents (78.2%) had been taught how to use and dispose of menstrual products safely. Most respondents (83.3%) were aware of the various menstrual products available. A significant majority (74.4%) of the respondents believed that knowledge about menstrual hygiene improved their overall confidence and comfort during menstruation.

**Table 2**  
***Knowledge and Awareness of Hygiene on Menstrual Management***

Statement	Yes	No
Received Education about Menstrual Hygiene	395 (79.6%)	101 (20.4%)
Learned about Taking Care During Period at School	317 (63.9%)	179 (36.1%)
Awareness of the Importance of Menstrual Hygiene	431 (86.9%)	65 (13.1%)
Taught about Safe Use and Disposal of Menstrual Products	388 (78.2%)	108 (21.8%)
Awareness of Various Menstrual Products	413 (83.3%)	83 (16.7%)
Effects of Knowledge on Confidence and Comfort	369 (74.4%)	127 (25.6%)

There is a positive effect of knowledge and awareness of hygiene on menstrual management among primary school girls. Knowledge and awareness is promoting effective menstrual management among primary school girls in rural schools just as most of the girls have stated. Because of the knowledge most of the girls have stated that they are aware of the most essential menstrual product. Most of them stated that because of the knowledge, right now they are able to follow the right hygienic channels and they have also overcome the fear of not engaging their fathers.

The above findings are supplemented by interviews with head teachers and teachers, as well as focus group sessions with female heads of households. From the interviews with the head teachers, it was evident that the awareness and understanding of menstrual hygiene among the girls in their schools is very important. When girls are well-informed about proper menstrual hygiene practices and have access to menstrual products, they can manage their periods more effectively, feel confident, and maintain their educational activities without interruptions.

Head teacher from the interview for instance noted that:

*“..... Knowledge and awareness is important, 100%..... with the knowledge there is awareness and when awareness is there, they will first of all refrain from maybe catching the diseases or illnesses or even the discomfort that may come from the use of traditional methods.....”* (Head Teacher, aged 56 years)

Another head teacher explained that:

*“..... there is a very big different between girls who have access to information and those who do not..... The girls who have access to information know how to handle themselves; they can manage their periods with confidence and without disruptions. They even come in to help the others who don't understand what is going in a very polite and humble way..... those lacking access to information face challenges in managing their menstruation effectively.....”* (Head Teacher, aged 47 years)

Similar responses were recorded in the interviews held with the teachers, where interviewees were asked to comment on the effects of knowledge and awareness of hygiene on menstrual management.

One of the interviewees stated that:

*“..... knowledge and awareness play a crucial role in positively impacting menstrual management practices..... with the knowledge they become okay, comfortable, clean and it is not easy to find them messing....”* (Teacher, aged 28 years)

Another one added that:

*“..... girls who are well-informed tend to adopt healthier and more hygienic practices during menstruation. They are more likely to use proper menstrual products and follow hygienic routines, leading to improved overall well-being....”* (Teacher, aged 34 years)

The study also investigated whether knowledge and awareness had an influence on menstruation management among primary school girls through focus group discussions with female heads of households. From the focus group discussions, it is very clear that knowledge and awareness plays a very major role in menstrual management. The



participants shared that they initiate conversations about menstrual hygiene with their girls when they are around 7 years old, just before they are likely to experience their first period. To them early education on menstrual hygiene aims to prepare the girls and equip them with the necessary knowledge required for effective menstruation management.

A member stated that:

*“..... I stated talking to my lastborn daughter when she was around 7 years, this was because what happened to her elder sister. The sister stated experiencing her periods when she was 9 years and by then I was not free with her and she had no knowledge on how she could handle herself. This really affected her..... talking to my little girl really helped and she did not struggle like her sister.....”* (Head of household, aged 47 years)

From the finding, it can be deduced that there is a positive effect of knowledge and awareness of hygiene on menstrual management among primary school girls in Nyatike Sub-County. Knowledge and awareness are promoting effective menstrual management among primary school girls in rural schools. When girls are well-informed about proper menstrual hygiene practices and have access to menstrual products, they can manage their periods more effectively, feel confident, and maintain their educational activities without interruptions. The finding echoes that of Belayneh and Mekuriaw (2019), who observed that knowledge of menstruation has significant associations with the menstrual hygienic practices of girls. Girls with poor knowledge regarding menstrual flow were 1.48 times more likely to practice their menstrual hygiene incorrectly. This means that knowledge and awareness significantly correlate with effective menstrual management.

#### 4.1.2 Effects of Family Income on Menstrual Hygiene

This section's intent was to evaluate how family income affected how primary school girls in rural schools in Nyatike Sub County managed their menstruation. It concentrated on understanding how a family's income affects girls' menstrual management behaviors, as well as their general confidence and comfort during menstruation. In order to ascertain the goal, respondents were asked to respond to pertinent yes or no questions.

**Table 3**

***Family Income on Menstrual Management***

Statement	Yes	No
Family Provides Enough Resources for Menstrual Management	253 (51.0%)	243 (49.0%)
Always Have Access to Menstrual Hygiene Products	264 (53.2%)	232 (46.8%)
Family Affordability of Menstrual Hygiene Products	142 (28.6%)	354 (71.4%)
Ability to Change Menstrual Hygiene Products in School	416 (83.9%)	80 (16.1%)
Use of Alternative Materials Due to Lack of Money	151 (30.4%)	345 (69.6%)
Missed School or Activities Due to Menstruation	215 (43.3%)	281 (56.7%)

Table 3 above shows that only 51.0% of the respondents reported that their family always provides enough resources for menstrual management. Approximately 53.2% of the girls always have access to the menstrual hygiene products they need. However, 46.8% still face issues obtaining the necessary products, indicating potential financial constraints. A considerable number of girls (28.6%) reported that there have been times when their family couldn't afford to buy menstrual hygiene products for them. Most respondents (83.9%) reported being able to change their menstrual hygiene products frequently during school hours. Approximately 30.4% of the girls have resorted to using alternative materials as menstrual hygiene products due to financial constraints. A significant portion (43.3%) of the respondents reported missing school or activities due to their period.

Family income plays a significant role in menstrual management among primary school girls in rural schools. While some girls have sufficient resources and support to manage their menstruation effectively, others face challenges due to financial constraints, leading to inadequate access to menstrual hygiene products and potential impacts on wellbeing. Among the girls who agreed that their parents always provide them with resources to manage their menstruation, approximately half of them stated that they always have enough sanitary pads for the entire month. The other half stated that as much as their parents provide them with pads, it is usually one pack or two packs in a month. This is not enough for them, and they are affected since it acts as a barrier to their regular activities.

The results stated above are supported by head teacher and teacher interviews, as well as focus group discussions with female heads of families. The results highlight the significant role of family income in menstrual management among primary school girls in rural schools.

From the interviews, the head teachers note that there is a correlation between family income and effective menstrual management among the girls in the school. Girls from economically disadvantaged backgrounds may face challenges in accessing menstrual products and proper facilities, impacting their ability to manage their periods hygienically and comfortably. Families with lower incomes may struggle to afford proper menstrual products, leading to the use of unhygienic alternatives. Additionally, limited financial resources can hinder access to facilities like clean toilets and private spaces for changing during menstruation.

An interviewee, head teacher explained that;

*“..... fishing is the main economic activity here and the season when ‘omena’ is not there, the families don’t have enough money to buy pads for their girls which means they will resort to using things like clothes pieces..... so the income affect the situation a lot, low income is a major problem..... families with low income don’t even have toilets for proper disposal.....”* (Head Teacher, aged 42 years)

The next interviewee, head teacher explained the correlation between family income and effective menstrual management;

*“..... there is a correlation between family income and effective menstrual management. Girls from higher-income families generally have better access to menstrual products, sanitation facilities, and information. Actually we experience most absenteeism from the girls during the period when fish is not there. This is because the families can’t afford sanitary towels for the girls....”* (Head Teacher, aged 38 years)

The teachers from the interview also supported that higher-income families could afford proper menstrual products and provide better access to hygiene facilities, while lower-income families faced challenges in affording menstrual products, leading to less hygienic practices.

For instance, one of the teachers explained that:

*“..... if family income is low parents are not able to buy sanitary pads for their girls and due to this they cannot manage their menstrual hygiene.....”* (Teacher, aged 37 years)

Another teacher also explained that:

*“..... family income can significantly impact a girl's menstrual hygiene. Families with high income can afford required sanitary pads for their girls and can also provide hygiene facilities that they need. But low income families usually struggle buy pads for the girls, sometimes they end up giving them cloth pieces to use and you know this is not hygienic.....”* (Teacher, aged 25 years)

The also study probed in a focus group discussion to evaluate how family income affected how primary school girls in rural schools managed their menstruation. The focus group participants pointed out that financial challenge are prevalent in providing menstrual products and managing menstruation. Some families find it difficult to afford menstrual products regularly, leading to potential use of less hygienic alternatives.

A member stated that:

*“..... level of income is not the same, personally, there are times when my girl comes to me that she is on her period and at that time I have nothing, I tell her I don’t have money and you know that period won’t wait.... Sometimes I would give her mine to use but if I also don’t have I just take a piece of blanket and give to her....”* (Head of household, aged 43 years)

As a result of the findings, it can be deduced that family income generally has significant effects on how primary school girls in rural schools manage their periods. While some girls have the tools and assistance they need to manage their periods appropriately, others struggle financially, making it difficult for them to get menstrual hygiene supplies and risking harm to their wellness. Access issues with menstruation products and appropriate facilities may have an impact on girls from economically disadvantaged homes' ability to manage their periods hygienically and comfortably. Families with lower earnings could find it difficult to buy appropriate menstruation products, which could force them to choose less sanitary substitutes. Furthermore, inadequate financial resources might limit access to services such as clean bathrooms and private changing areas during menstruation. This finding is in agreement with Rossouw and Ross (2021), who also found that women and girls with limited access to money are less likely to have access to sanitary pads. This conclusion is consistent with their findings. Unsurprisingly, the main cause of the overall income-related discrepancy in access to sanitary pads in the majority of nations is wealth itself.





### 4.1.3 The Effects of Traditional Practices on Menstrual Management

In this section, the first objective establishes the effects of traditional practices on menstrual management among primary school girls in the study area. To this end, respondents were asked to respond to pertinent questions posed to establish the objective. The results are presented in the table 3 below:

**Table 4**  
**Traditional Practices on Menstrual Management**

Statement	Yes	No
Awareness of Traditional Practices or Beliefs	340 (68.5%)	156 (31.5%)
Personal Encounter with Traditional Practices or Restrictions	294 (59.3%)	202 (40.7%)
Comfortable Discussing Menstruation Openly with Family, Friends, or Teachers	352 (70.9%)	144 (29.1%)
Comfortable Discussing Menstruation Openly with Father, Brothers, or Male Teachers	211 (42.5%)	285 (57.5%)
Feelings of Shame or Stigma Due to Traditional Practices or Beliefs	192 (38.7%)	304 (61.3%)

From Table 4 approximately 68.5% of the girls were aware of traditional practices and beliefs related to menstruation in their community. Approximately 59.3% of the girls reported personally encountering traditional practices or restrictions during their menstruation. While a majority of girls (70.9%) feel comfortable discussing menstruation openly with family members, friends, or teachers, a significant portion (29.1%) do not. Similarly, when it comes to discussing menstruation with male family members or teachers, only 42.5% feel comfortable doing so while 57.5% are not. The results indicate that 27% of the girls have experienced feelings of shame or stigmatization during menstruation due to traditional practices or beliefs.

Most of the girls are aware of traditional practices related to menstruation in their community. Some of the practices or methods that they specified are the use of pieces of clothes or rugs, and use of some traditional medications. They also stated some traditional beliefs which include beliefs around menstruation as being "dirty", isolation or seclusion of girls and women during menstruation, and prohibition of girls to interact with their fathers during menstruation. The girls also explained that they are not comfortable discussing menstruation openly with the males because of fear that exist due to the norms available in the community. The girls explained that the traditional practices make it difficult for them to discuss or seek support for menstrual health needs.

The foregoing results were complemented by interviews from head teachers and teachers, and also focus group discussions from female heads of households. From these it was revealed that there are traditional practices that affect the girls in their menstruation management. From the interviews, the head teachers observed various traditional practices among the girls in their schools. These practices included the use of cloth instead of sanitary pad and cultural restrictions during menstruation. The traditional practices can have various effects on menstrual management. The use of cloth instead of proper menstrual products may lead to hygiene issues and discomfort.

One head teacher from the interview for instance observed and noted that:

*"..... some girls still follow certain traditional practices during their menstruation, such as using cloth and rag instead of the known menstrual pads. There are cases where girls may face restrictions in participating in certain activities such as sports during their periods due to cultural beliefs....."* (Head Teacher Aged 40 years)

Another head teacher went ahead and stated that:

*"..... traditional practices related to menstrual management often lead to a lack of comfort and confidence among the girls during menstruation. The restrictions can prevent them from fully participating in school activities, affecting their overall engagement and well-being. The using of unhygienic materials which are the cloth pieces and rags can pose health risks and increase the chances of infections....."* (Head Teacher aged 39 years)

Similarly, it emerged from interviews with the teachers that there are various traditional practices related to menstrual management among the girls in their school. These practices included adhering to cultural taboos (it is taboo to engage the males on matters menstruation) and restrictions during menstruation and using traditional or unhygienic methods for menstrual hygiene. The teachers acknowledged that traditional and cultural practices can hinder girls from discussing their menstrual hygiene openly. The prevalence of stigma and misconceptions due to the traditions may cause girls to feel ashamed or embarrassed, inhibiting open communication about their experiences.

A teacher, interviewee for instance argued that:



“..... traditionally, they still believe that period topics are a female thing, it is for girls..... the girls are afraid to talk with the males about menstrual issues.... Actually even the boys in class do not participate actively during menstruation lessons, to them that are girls’ thing..... ” (Teacher, aged 31 years)

Another teacher added that:

“..... these traditional beliefs create a lot of shame and discomfort, making it challenging for some girls to openly discuss their menstrual hygiene. Because of the taboos the girls are reluctant to seek guidance or even sharing their experiences.....” (Teacher, aged 29 years)

The study also probed in focus group discussion with the female heads of households to find out whether traditional practices had effect on menstrual management among the primary school girls. During the focus group discussion with female heads of households, several traditional practices related to menstrual management were identified in the community. These practices include the cultural norm that menstruation is a female thing and males should not be involved. They noted that according to cultural norms, girls generally do not talk freely with males about issues of menstrual management, including family members and teachers. The participants noted that there is a sense of embarrassment and hesitation when discussing such topics with males due to prevailing taboos.

A member stated that:

“..... one traditional practice that is partly still there is that when a girl is on her period only that mother should be involved and not the father.... In fact, they should stay away from their fathers during their periods..... ” (Head of household, aged 49 years)

Another member added that:

“..... this norm brings a lot of fear to the girls and they find it very difficult to talk to the males.... It makes them suffer in silence when the mothers are not around hence they can’t get pads to manage their periods.... ” (Head of household, aged 53 years)

It can thus be deduced that overall, traditional practices have various effects on menstrual management among the primary school girls in Nyatike Sub-County. This can be attributed to girls having feelings of shame or stigmatization during menstruation due to traditional practices or beliefs, such as the use of pieces of clothing or rugs, the use of reusable cloth pads that can be washed and reused, and the use of some traditional medications. The girls are also not comfortable discussing menstruation openly with the males because of the fear that exists due to the norms available in the community. It makes it difficult for them to discuss or seek support for their menstrual health needs. The finding agrees with Maulingin-Gumbaketi et al. (2022), who found that managing menstrual health with dignity was challenging for many women and girls because menstruation is associated with menstrual taboos and shame. Restrictive practices are found to affect women socially and psychologically, including their ability to manage menstruation effectively.

## 4.2 Inferential Studies

### 4.2.1 Correlation Analysis

**Table 5**

*Model Parameter Estimates on the Effect of Social Economic Determinants on Menstrual Management*

Parameters	B	df	Sig.	Exp(B)
Traditional Practices	-1.726	1	0.007	0.178
knowledge and Awareness of Hygiene	1.224	1	0.015	3.401
Family Income	1.899	1	0.003	6.679
Constant	1.001	1	0.001	2.721

On the inferential scale in Table 5, traditional practices were found to have a negative effect on binomial scale menstrual management, as indicated by a coefficient of -1.726 and a p-value of 0.007, which is less than 0.05. This suggests that traditional practices were significantly less likely to positively influence effective menstrual management. Conversely, knowledge and awareness of hygiene showed a positive impact, with a coefficient of 1.224 and a p-value of 0.015 (also less than 0.05). This implies that having knowledge and awareness of hygiene is significantly more likely to positively affect effective menstrual management. Similarly, family income had a positive effect, with a coefficient of 1.899 and a p-value of 0.003 (less than 0.05). This indicates that higher family income was significantly more likely to positively impact effective menstrual management. Additionally, a constant value was identified, suggesting that, apart from these socioeconomic determinants, there are other factors at play. This constant

had a coefficient of 1.001 and a p-value of 0.001 (less than 0.05), indicating that these unidentified factors were significantly more likely to positively influence effective menstrual management.

## V. CONCLUSIONS & RECOMMENDATIONS

### 5.1 Conclusion

The study concludes that menstrual management among primary school girls in rural primary schools in Nyatike Sub County is affected by existing traditional practices, income levels, and levels of awareness of menstrual hygiene among primary school girls in rural primary schools in Nyatike Sub County. Therefore, girls are not able to openly discuss their menstruation experiences because of the existing norms. Most girls struggle financially, making it difficult for them to get menstrual hygiene supplies and risking harm to their wellness. Fortunately, most schools have menstrual health management strategies. Other strategies include girls-only toilets and sensitizing pupils about period health.

### 5.2 Recommendations

The research on socioeconomic determinants of effective menstrual management among primary school girls in rural schools in Nyatike Sub County highlights key recommendations for improving menstrual health management and fostering a supportive environment for girls. These suggestions involve incorporating culturally sensitive materials to provide accurate information, conducting regular awareness programs to eradicate stigma and misconceptions around menstruation among students, teachers, parents, and the community. Involving male figures such as teachers, fathers, and brothers in discussions about menstruation is essential to reduce stigma and create a supportive atmosphere. Continuous data collection and research are recommended to evaluate the impact of implemented measures and identify areas for improvement while monitoring the effectiveness of education initiatives and access to menstrual hygiene products. Implementing these recommendations would enable stakeholders to collaborate in nurturing and supporting primary school girls in rural areas, not only ensuring their well-being but also contributing to their educational success, empowerment, and overall improved quality of life.

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