FEMALE STUDENTS’ KNOWLEDGE ON MENSTRUAL HYGIENE IN SELECTED SENIOR HIGH SCHOOLS GHANA

Janet Dansoah Oppong¹, Henrietta Appiah², Endurance Serwaa Lah¹, Rose Agyei¹

¹Department of Pre-Vocational, SDA College of education, Koforidua-Asokore, Ghana
²Department of Pre-Vocational, Enchi College of education, Enchi, Ghana

Abstract

The study focused on investigating the knowledge level of Senior High School female students on menstrual hygiene and management practices in the Koforidua New Juaben Municipality in the Eastern Region of Ghana. Purposive and random sampling techniques were used to select respondents for the study. The purpose of the study was to find out whether students' knowledge on menstruation in senior high schools in Koforidua New Juaben Municipality can be rated high or low. The study adopted descriptive survey design. Two hundred and forty-one (241) were sampled for the study. Data Collection was facilitated through the administration of questionnaire. The quantitative data entry and analysis was done by using the SPSS software package. The data was edited, coded and analysed into frequencies, percentages and organized bearing in mind the research questions for which the instrument was designed. The study revealed that a large majority of adolescent school girls’ knowledge about menstruation was insufficient, due to some cultural and religious restrictions. It is therefore recommended for formal channels of communication to assist female student to acquire relevant knowledge about menstrual hygiene in their life cycles.

Keywords: Menstruation, Hygiene, Female, Knowledge, Students’, Senior High Schools, Ghana

Introduction and Background

Early adolescence is a time of physical, intellectual, emotional, and social development during which young people need solutions to certain questions like physical and sexual maturation that bother their mind. Here, physical maturation and particularly sexual maturation has a significant effect on self-concept and social relationships during this period. Adolescents at this
stage need more questions answered to help develop their self-esteem and also to usher them into womanhood. This period is influenced by peers, parents and teachers. When a child is between the ages of 9 and 16 years, then it means she has entered into puberty. Puberty refers to the onset of sexual maturation. It is the period under the influence of hormones when the child experiences physical and sexual changes. Adolescence is the period of transition between puberty and adulthood. The onset of menstruation (menarche) is one of the most visible signs that a girl is entering puberty [39] [16].

Menstruation is seen as part of the female reproductive cycle which starts when girls become sexually mature at the time of puberty. It is a natural phenomenon unique to females and occurs in all adolescent girls and adult women who have not reached menopause [2]. Menstruation in several cultures has been considered with fear and wonder. However, this menstrual blood is a regular flow that every woman experiences usually once in a month. Only special situations like pregnancy, the use of contraceptives, diseases and special preventive measures can serve as a barrier to the flow of menstrual blood. Menstrual blood connotes a variety of symbols from birth to sexuality. Menstruation symbolizes the female identity. It is the external manifestation of an internal process. It is a subject with numerous myths. Currently, menstruation is still a taboo subject because of the influence of our cultural inheritance. Womanhood, feminity and menstruation are sophisticated and mythic issues created by our own civilization. It is interesting to stress that, menstruation splits the woman in different ways depending on the culture of the people which shows how powerful and important menstruation is [21].

A report on menstrual hygiene and management issues by [42] stated that, menstruation though a natural process has often been dealt with secrecy in schools, in homes and many parts of the Nepal, hence the adolescent poor knowledge and lack of information about reproductive functioning and reproductive health problems. There are different misconceptions and misunderstanding of the subject because of the deep rooted culturally and religiously influenced established and accepted perceived facts related to menstruation. Mothers at times are the closest ones to their daughters when it comes to female matters especially related to sexuality and its related facts. Nonetheless it is hardly a common scene in most male dominated societies to have daughters talking about female things like menstruation with parents. The subject is strangely and intriguingly a taboo. This is not only a case developing in cultural, religious and male dominated society in Africa but, even in the developed western countries the problem is seen not uncommonly [25]. Menstruation has a long history as a taboo topic, according to [12], the connection between menstruation and taboo was based on the idea that menstruating women are dangerous. They could contaminate crops, bring bad luck to hunters, and spoil the fish. As such, during menstruation women are considered as a threat to the economy of farming societies and needed to be secluded from social and sexual activities to reduce the danger. The most striking event in the whole process of female puberty is
undoubtedly the menarche. It is a different point marking the borderline between men and women. It is an emotionally packed moment with fear, anxiety and femininity contentment packed with untold emotional attachment which thereafter creates discomfort and some anxiety when it does not occur, as it would be expected.

On the other hand, most secondary school students as a result of these problems seek information about menstruation from their peers who do not know anything better and this has also contributed to women and high school girls’ scanty or lack of knowledge about menstrual management and its hygienic practices [36]. A research findings on Length and variation in the menstrual cycles by [28] emphasized that, menstrual hygiene promotion is a neglected subject in the domain of hygiene for poor schools in developing countries since people do not feel interested to talk about it due to social reasons like taboos and superstitions.

It is clear that, one’s reaction to menstruation depends upon the awareness and knowledge about the subject. The manner in which a girl learns about menstruation and its associated changes may have an impact on her response to the event of menstruation. However, the attention on this is far from sufficient. Even the literature on gender mainstreaming in sanitation sector is silent on the issue of menstrual hygiene and management practices. Menstruation, although often not acknowledged, it is clear that measures to adequately address it will directly contribute to the Millennium Development Goal-7 [MDG] which talks about environmental sustainability. This therefore implies that, students’ lack of knowledge on menstrual hygiene will lead to improper disposal of sanitary pads, (poor waste management) and this will affect the achievement of MDG-7 on environmental sustainability. Additionally, its effect on school absenteeism and gender discrepancy may seriously hamper the realization of MDG-2 on universal education and MDG-3 on gender inequalities and women empowerment, and lastly all the MDG goals which aim at quality of life of an individual as a whole [43].

The above issues raised with supported evidence are not quite different from what obtains in Ghana. A recent report on strategies for Advancing Girls, Ghana Education Service [GES] by [32], which highlighted on girls education in Ghana, concludes that, barriers to girls’ education are multifaceted and interrelated and affect girls disproportionately. According to the report, a common denominator to many of these factors is inadequate reproductive health education given to the girl-child at home and in schools as to what menstruation is and how they should prepare for the event to avoid teenage pregnancy, and inadequate sanitary facilities like washroom and clean water in schools which make female students feel uncomfortable, unhappy and lack privacy during menstruation leading to low level performance, absenteeism and school drop-outs.
Menstruation, though a natural process, has often been dealt with in secrecy in many parts of Ghana, hence, the adolescent girl’s poor knowledge and information about the reproductive functioning and reproductive health problems [42]. A great deal of women and girls’ scant knowledge is informed by peers and female family members. Young girls are generally being told nothing about menstruation until at times, their first experience [29]. Several traditional norms and beliefs, socio-economic conditions, and physical infrastructure also influence the practices related to menstruation. This implies that, female students in Senior High Schools therefore need to be educated about the facts of menstruation and its physiological implications. The purpose of this study was to investigate the knowledge of menstrual hygiene among Senior High School female students in Koforidua municipality in Ghana. The study sought to answer the research question - What is the knowledge level of Senior High School girls on menstruation?

**Literature Review on the Concept of Menstruation**

Menstruation is the first period of the reproductive cycle of females and the most essential biological function which distinguishes females from males. However, menstruation is invested with many cultural meanings and contextualized socially and culturally. Therefore, the development of experiences associated with menstruation is a complex interplay of cultural beliefs, socialization factors and actual experiences [24]. Menstruation has been looked at in different perspectives by many authors and researchers. The biological perspective views menstruation as a crucial function of women’s fertility. It is one of the natural differences between the sexes and perhaps the most special distinctive one between men and women and also women's most biological fate. While discussion on menstruation and puberty from doctors and people who produce sanitary products focuses on hygiene and fertility, discussion on this same issue from members in some communities try to abolish discussion on menstruation and these trends exert excruciating pressure on those body parts that the world can see [9].

A study on this research question does physical exercise influence frequency of menstrual bleeding/postmenopausal hot flushes? by [19] also continued that, menstruation and menopause are terms used to describe the beginning and end of a woman’s fertile years which is signaled by the flow and cessation of menstrual blood. The universality of reproductive scenes among most women lends itself to the belief that, girls at this stage are more fertile, and is universal in all women. Therefore more care is needed about how women should carry themselves during menstruation, like hygienic material they should use, number of times they should bath and whom they should consult when they encounter difficulties, since it is seen as most beneficial to both females and males when it comes to childbearing. Findings on Eskimo about being straight by [30] confirm that, menstruation is a woman’s monthly bleeding or...
period. Menstrual blood flows from the uterus through the small opening in the cervix, and passes out of the body through the vagina and most of the periods last from 3 to 5 days. In a study done by [2], around 78.5% of the adolescent girls surveyed knew menstrual blood originates from the uterus.

According to Nectracare Schools Programmes [NSP] menstruation is also known as a period, the final proof that a girl is becoming a woman. When a female becomes a teenager usually between the ages of 12 to 15, the blood that comes out from her vagina on fixed bases is known as menstruation or period. It usually lasts between 2 to 5 days or 3 to 6 days but may be a day or two days longer and once in a month [34]. Menstrual period is a natural phenomenon that occurs throughout the reproductive years of every woman and lasts till menopause. It starts between the ages of 10-12 years [4]. Menstruation is a normal phenomenon among matured females who experience shedding of blood for 1-7 days every month from the age of maturity until menopause. Various aspects such as physiology, pathology and psychology of menstruation have been found to be associated with health and well-being of women; hence it is an important issue concerning morbidity and mortality of female population [11]. Menarche is a milestone in female puberty that signifies the maturation of reproductive, potential and physiological growth. It starts between the ages of 11 and 14 years in 95% of girls depending on race, ethnicity, socioeconomic and nutritional status of the individual. Menstrual flow lasts between 2 and 7 days [40].

Menstruation is the cyclical shedding of the lining of the uterus, the endometrium, under the control of hormones of the hypothalamus-pituitary axis. Menarche or the onset of menstruation is a landmark feature of female puberty and signals reproductive maturity. Anxiety, fear, confusion and even depression are frequently reported experiences of menarche [13]. Though menstruation is a normal physiological process, it is a topic that is often not discussed openly in our society. Some women, even in the developed countries considered menstruation to be inconvenient or embarrassing. But there are plenty of misbelieves and superstitions that surround menstruation. This has given birth to ignorance which has led to many kinds of practices which are harmful especially among illiterate women [45]. Menstruation is therefore seen as a normal natural process which occurs in all adolescent and adult women who have not reached their menopause. Even though menstruation is a natural process, [40] contended that the onset is largely based on people’s diet as well as their socio-economic background. This implies that for a woman to function optimally within her reproductive years, she has to pass through the menstrual process for her to be recognized as a woman. It is therefore pertinent for women and adolescent girls to have knowledge about certain practices with regards to menstruation and its associated health issues to help improve and prove for their fertility.
On students' knowledge about menstruation, [33] said that, information about menstrual problems and their impact on the Chinese adolescent girl is limited and largely unknown due to cultural beliefs which affect students' attitudes towards menstruation and in turn influence the views of the adolescent girl. There is little knowledge on adolescent girls seeking behaviour due to lack of knowledge and unavailability of information. Menstrual practice and reproductive problems: A study of adolescent girls in Rajasthan by [22] indicates that, several misconceptions and traditional beliefs regarding menstruation influence adolescent girls to practice unsafe menstrual hygiene in India in Rajasthan due to lack of knowledge. This however, affects them during their first menstruation since they find it very difficult to mention the word menstruation let alone to ask for information about how to take care of it.

A book published by [20] titled what we do and do not know about the menstrual cycles: Question scientists could be asking reported that, in Gambia there is a gross lack of information on menstrual management among secondary school girls, a situation made worse by the secrecy and embarrassment with which discussions about menstruation are treated. In a study by [28] on Length and variation in the menstrual cycles emphasized on the importance and the need to observe menstrual hygiene practices at all times, the need for more attention to personal cleanliness in relation to menstruation and how it contributes to girls’ comfort and confidence. Unfortunately, this information is seldom included in health related courses and also not discussed at homes or in schools, hence the adolescent girl's scant knowledge about menstruation. The report showed that about 59% of school students were not aware of menstrual hygiene management and 71% did not know the disease they would contract due to the re-use of unclean sanitary towels/ pads. Preparing girls for menstruation findings the researchers [24] observed that, most adolescent school girls are either ignorant or misinformed about menstruation. They added that there is therefore a great need to prepare adolescent girls adequately for menstruation to prevent them from looking for sources of information which may be unreliable and misleading. They also emphasized that [24] issues of psychological or emotional changes and the significance on the word menstruation was lacking. This is probably due to parents’ carefulness to avoid the introduction of the subject of sex and its related characteristics.

Due to lack of formal education about menstruation in schools, many of the young female students learn little in school and view the initial bloodstain as a total surprise. Problems with menstrual-related education were described as perceptions of unwillingness by teachers to discuss menstruation, insufficient time for education, unclear instruction leading to misconceptions and the presence of peers in group learning situations that lead to embarrassment [31] [7]. In the opinion [31] pointed out that, young women's own needs appear to be concentrated on three areas, firstly, the need to know if they are normal likes
anybody else. Secondly, the urgent need of practical knowledge about everyday management of menstruation, and thirdly, the need for public health education to be focused not only on the physical body but also the psychological and emotional changing needs as well. Young women’s reflections on the changing body and identity revolve round puberty and womanhood as an object of male heterosexuality and women’s right to be a subject of their own and not to be suppressed or controlled all the time by somebody.

Menstrual disorders studies by [35] added that, little is known about the role of situation in determining reactions to menstruation because of women's lack of information on the experience of menstruation and its menstrual symptoms. A common belief among the Gujars (a semi-nomadic tribal group in Jammu and Kashmir) girls was that, menstruation is the removal of bad blood from the body necessary to prevent infection. This portrays how ignorant the adolescent child is [14]. Is menstrual hygiene an issue for adolescent girls? studies by [43] brought out that, 92% out of 204 adolescent girls surveyed in Nepal had heard about menstruation, but majority of them reported that they were not prepared in any way for their first period because they had no idea about it. This situation will encourage them to practice poor menstrual management which might end up in poor health. Menstrual hygiene: How hygienic is the adolescent girl in Indian findings by [11] conducted a survey in West Bengal using 160 adolescent girls. It was found in their report that, 67.5% were aware about menstruation prior to menarche, but 97% did not know the source of menstrual bleeding. This presupposes that those without the knowledge of menstruation form majority of the population.

Williams, a nurse educator, on the other hand, found more positive attitudes towards menstruation in a group of 9-12 years old girls, most of whom were in their menarche. They equated menstruation with growing and therefore see it as normal. This makes them go along with their daily routine as scheduled [46]. This means that if girls are prepared for menarche, then the chances of depression or low self-esteem after experiencing menarche will be reduced [41]. In a study of 95 women from 23 foreign countries, 28% complained of not having enough information about menstruation and those who have had often felt unprepared for the event. According to the respondents surveyed, menstruation is a taboo to talk about to the hearing of men in the community they live in and men too form majority of the population there. Most of the important topics like reproduction and reproductive health are often not discussed in school due to this. [27]. Also, studies on Menstruation and body awareness: Critical issues for girls. Education Newsletters for beyond Access by [23] reported that, secondary school girls and women in many developing countries have a worrying lack of knowledge of the biological function of menstruation because of the preconception and behavior rules that remain which prevent mothers from discussing menstruation and disclosing certain important facts about it to their wards. In a similar study conducted by [22] in Rajasthan in the Indian society, came out
with the findings that, nearly 70% of the adolescent school girls believed that menstruation was not a natural process and nearly 92% of the girls were not aware about the natural phenomenon of menstruation during menarche as a result of myths and superstition that guide the content of menstruation.

Menstrual hygiene promotion is now seen as a neglected issue or subject in the domain of hygiene for poor schoolgirls since people especially men do not feel interested to hear or talk about it for social taboos, traditions and cultural reasons, hence students’ scant knowledge and bad menstrual practices. Situations where such topics are included and it has to be handled by male teachers worsen the case [37]. But menstrual hygiene practices are important at all times, the need for more careful attention to personal cleanliness before and during menstruation will contribute to girls comfort, confidence and ease from certain disease, however, this cannot be achieved when information regarding menstruation is seldom included in other health-related issues or is not being discussed adequately in schools and homes. Then also, pubertal changes among adolescent girls are an important stage in everybody's life. Adolescent girls undergo significant physical and cognitive changes during their pubertal development. These changes contribute to an impact on their future development. Educating adolescent girls at an early age about their expected development especially on menstruation decreases the possible anxiety which is associated with this period of life and also helps adolescent girls to make better choices with regards to menstrual absorbent materials, sexuality, reproduction and reproductive health. Adolescent health problems are a growing concern all over the world. The health behavior of the adolescents may be risky and perverted not only to their own health and well-being but also to the society as a whole [5].

Majority of girls learn about menstruation from their mothers, sisters and girlfriends. [11] and [17] emphasized that, regardless of the school education on menstruation, families have a fundamental role in educating girls about menstruation since fears and doubts are relieved when mothers speak with them about menstruation. According to [36] many females gain information and knowledge about menstruation mainly from mothers, school teachers, peers and advertising of sanitary products. Menstrual taboos embarrass mothers and school teachers so peer discussions about menstruation ultimately fill the void in adequate menstrual preparation given to girls. Although modern science has led to a greater understanding of how the female menstruates, existing research results show that, majority of women from different areas experienced their menstruation as generally negative due to cultural taboos, superstitions and myths which contribute a lot to the misinformation surrounding menstruation.
One other way through which Chinese students get information about menstruation is through the mass media. Most students are exposed to information about menstruation from commercial advertisement of sanitary product in newspapers, television and radios in school more than when they are in their homes. Students are therefore, influenced by the negative portrayals of menstruation embodied in many of the menstrual product advertisement. This makes many of the students develop negative attitude to their bodily changes [26]. Similar studies by [13] confirmed that, students get information about menstruation from their parents. Examples include mothers, grandmothers, friends, other relatives and books. They added that, teachers in the schools especially the male teachers do not want to talk about menstruation, let alone to teach it. A study by [6] at Enugu in Nigeria confirmed that, Mothers forming (74.7%) followed by other relatives also representing (13.2%) were the main source of menstrual information for the adolescent girls.

However, Studies on Perceptions and practices on menstruation among Nigerian secondary school girls by [3] also concluded that, information on menstruation given by mothers; friends and grandparents are often incomplete and incorrect due to their low level of education. It is usually based on cultural myths and taboos and therefore probably perpetuating negative and distorted perceptions and practices about menstruation to the adolescent girl. Although, a variety of sources of information about menstruation is available, mothers are typically seen as the primary source of menstrual socialization. How mothers relate to their daughters concerning the issue of menarche may influence the girl's future experiences. If mothers are able to communicate a positive view of menstruation to their daughters, they will also present themselves in a positive way to menstruation. But if mothers behave on the contrary, then daughters are likely to hold a similar view [17]. A research study on menstrual knowledge and practices amongst secondary school girls in Ile Ife, Nigeria by [1] showed that, parental education has a positive influence on girls' knowledge on menstruation. He carried out a study on pre-menarcheal training of the adolescent girls and the results proved to be significantly related to the high educational attainment of the respondent’s parents. In that, most of the students cited their mothers as their main source of information on menstruation and their responses to what they knew about pre-menarcheal training too was highly appreciable.

It is believed that, most girls can learn about menstrual information and practices from their mothers but most of their parents have poor education or are semiliterate so they find it difficult to give suitable knowledge and pay attention to their daughters' bodily changes. Though they can get information about menstruation from their family members, they normally have stress and negative meaning about menstruation which affects their normal life. However, for reasons that include embarrassment, lack of knowledge or poor mother-daughter relation, mothers do not feel comfortable and competent when they teach their daughters about
menstruation because they think they may not be of better position to provide adequate
information about menstruation to their wards [10]. Also findings on this question Is menstrual
hygiene an issue for adolescent girls? by [43] revealed that, teachers generally avoid teaching
reproductive health. Evidence from one girl reported that, according to her teacher, the topic of
menstruation need not to be taught, and one can self-study at home. It is like knowing to go to

In a study conducted among 664 adolescent school girls aged between 14 and 18 in Mansoura in
Egypt by [15], it was brought to light that, most of the main sources of information on
menstruation for the girls were mass media and other sources being the parent. However, a
similar study by [13] in the same Egypt community also confirmed that most of the girls' main
source of information happened to be their parents in the urban setting whilst it was teachers
among their rural counterparts. And other sources too were friends, relatives and books.
Women having better, reliable source of knowledge and information regarding menstrual
hygiene and safe practices are less vulnerable to reproductive tract infection and its
consequences. Therefore, increased source of knowledge about menstruation right from
childhood may escalate safe practices and help in mitigating suffering of millions of women on
menstrual hygiene and health-related issues.

methodology

The study adopted descriptive survey design. The study included all senior high school female
students in the six mixed schools in Koforidua, New Juaben Municipality in the Eastern Region
of Ghana. Two hundred and forty-one (241) students females were sampled out of four
thousand eight hundred and twenty (4,820) females from the six mixed senior high schools in
Koforidua, New Juaben Municipality (50 female students were sampled out of 1000 females
from Ghana Senior High School; 35 female students were sampled out of 700 females from
Seventh Day Adventist Senior High School; 42 female students were sampled out of 840
females from New Juaben Senior High School; 37 female students were sampled out of 740
females from Koforidua Senior High Technical School; 35 female students were sampled out of
700 females from Koforidua Senior high School and 42 female students were sampled out of
840 females from Oyoko Methodist Senior High School). Purposive and random sampling
techniques were used to select the mixed senior high schools and the female students as
respondents for the study. In all there are seven (7) assisted government senior high schools in
Koforidua, New Juaben Municipality of which one of them was a boys' school.

Data Collection was facilitated through the administration of questionnaire. All two hundred
and forty one female sampled were made to answer the closed-ended seven (7) items
questionnaire made by the researchers. This questionnaire was designed by to help the researchers to find the level of cognition of Menstrual Hygiene by the female students. The quantitative data entry and analysis was done by using the SPSS software package. The data was edited, coded and analysed into frequencies, percentages and organized bearing in mind the research questions for which the instrument was designed.

4. Findings and Discussions on Knowledge of Students Menstrual Hygiene Practices

What do Senior High School girls know about menstruation? With this question, the researchers wanted to know the knowledge level of students regarding the average flow of information on menstruation as well as the meaning, causes and where menstrual blood comes from. Question items 1-7 in the questionnaire were answered by the respondents to reveal the necessary information needed by the researchers. Table 1 below depicts the questions asked and responses given by respondents shown in frequencies and percentages.

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you been taught about menstrual hygiene before?</td>
<td>Yes</td>
<td>222</td>
<td>93.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>16</td>
<td>6.7</td>
</tr>
<tr>
<td>From whom did you first learn about menstrual hygiene practices</td>
<td>Mothers</td>
<td>106</td>
<td>45.5</td>
</tr>
<tr>
<td></td>
<td>Fathers</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>20</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>30</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>Radio/TV</td>
<td>35</td>
<td>14.7</td>
</tr>
<tr>
<td></td>
<td>Other relations</td>
<td>18.9</td>
<td></td>
</tr>
<tr>
<td>What is menstruation is</td>
<td>Physiological process</td>
<td>64</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Pathological process</td>
<td>17</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>Shedding of blood</td>
<td>157</td>
<td>66</td>
</tr>
</tbody>
</table>
From Table 1, the survey identified that, about 222(93.3%) of the students had been taught about menstrual hygiene before menarche or during menstruation. Very few constituting 16(6.7) said they had no idea about what menstruation is. But when they were asked about where menstrual blood comes from, about 84% forming majority of the survey respondents had it wrong. Only 15.5% got it right by saying that it comes from the uterus. This means that the knowledge they had about menstruation from their mothers as the main source of information was often not appropriate and had influenced the respondents in a negative way as confirmed by other researchers in the study. For example, [1] did a similar study and it was confirmed in the study that, the source of information for adolescent girls can influence them either negatively or positively. And this reason could also be attributed to the mothers’ low level of education or ignorance as identified in the study. The survey also revealed that, 106(45.5%) learned about menstruation from their mother, two (.8%) said they got their
information from the father and those who said teachers constituted 20(8.4%). Those who mentioned friends were 30(12.6%), radio / TV 35(14.7%) and others too mentioned grandmother 45(18.9%) as the main source of information about menstruation. The results however, are fairly consistent with student’s source of information about menstrual hygiene and management practices in the study conducted by [13]. According to that study, most of the Egyptians girls’ main source of information happened to be their parents followed by friends, books and other relatives. [15] in their reports made it clear that, the source of information to the girl-child makes her unknowledgeable leading to poor menstrual practices.

Two hundred and twenty one (92%) recognized menstruation as either the shedding of the uterine lining in the absence of fertilization or as a pathological process. Only 17(7.1%) of the respondents expressed their views on menstruation as a physiological process. A large number of respondents in this study did not see menstruation as a natural process. A similar study by [43] also revealed that, about 81% recognized menstruation as normal physiological process. But in another similar study conducted by [22] nearly 70% believed that menstruation is not a natural phenomenon.

The normal age that respondents expressed as the beginning of menstruation ranged from 8-12 years representing 113(47.5%) and 13-16 years and above representing 125(52.6%). According to [40], many of the girls start menstruating between the ages of 11 to 14 years (95%), and 15 to 16 years (5.5%). This range according to them is influenced by factors like race, ethnicity, socio-economic and nutritional status of most individuals.

In the [40] survey results, only (42.9%) reported hormonal influence as the cause of menstruation. Thirty seven percent of the respondents said, menstruation is caused by aging, curse / sin (10%) followed by enzymes (8%) and disease constituting (3.4%). In [11] studies too, 6.25% of the survey respondents believed that menstruation is a curse, 5% said it is a disease and 2.5% added that it is sin. And in this study too, 102(43%) of the respondents surveyed agreed to hormonal influence as the cause of menstruation but majority of the respondents representing 136(57%) said it is either a curse, a disease, caused by aging or an enzyme.

It is obvious from the results that, students’ knowledge on where menstrual blood comes from is low. Two hundred and one (84.5%) of the respondents said menstrual blood comes from either the vagina, the fallopian tubes or from the urinary bladder and lastly 37(15.5%) who had it correct said it comes from the uterus. It was evidenced in [2] studies that; student's
knowledge on where menstrual blood comes from was high. About 78.5% of the respondents knew menstrual blood comes from the uterus. But it was the other way round in this study.

For the number of days that menstruation lasts is also influenced by factors such as, nutritional practices, health status and genetics among others as observed by [44]. Menstruation can therefore last for 2-3 days, 4-5 days, and 6-7 days as a result of this. This is not quite different from the results found in this study. The results show that, 25(10.5%) of the respondents said it lasts for 2-3 days, 60(25.2) said 4-5 days, 151(60%) said 6-7 days and 1(0.4%) said 8 days which seems quite similar in a way. One person mentioned 10 days and above. According to [46], menstrual flow can be heavy or light depending on how the individual started it, the type of food the individual took during that particular month, the activities the person engaged herself in, her life style or some medicine the person took. [8] in their studies brought to light that some people believe that, women who experience heavy menstrual flow have a strong nature whereas those who have a light flow have a weak nature. Women with light flow normally take in medicine to secure more blood flow due to the strong nature associated with it. One can therefore analyze this condition as normal or abnormal base on the above mentioned factors.

With respondents reaction to whether they knew any other name for menstruation, only 101(42.4%) mentioned names like menstrual period, period menses and menstrual course which in a way relates to [9] which stated that, menstruation is also called monthly bleeding, menses, menstrual period and period. One hundred and thirty seven (57.6) of the respondents surveyed answered they did not know any other name for menstruation. This shows that, students do not make any effort to learn more about menstruation and its hygiene practices which could be due to shame, culture, taboo, superstition and myth that embody menstruation.

5. Conclusions and Recommendation

Knowledge about menstruation that a large majority of adolescent school girls who participated in this study had about menstruation was insufficient. Mothers were identified as the highest source of information on menstruation for the adolescent school girls in this study. However, information on menstruation given by mothers was often incomplete and incorrect which is usually based on cultural myths, low level of education and ignorance. Due to some cultural and religious restrictions as well as social taboos, many young girls in the study area lacked appropriate and sufficient information regarding knowledge and management of menstrual hygiene practices. The study has highlighted the need of the adolescent girl to have accurate and adequate knowledge about menstruation, formal channels of communication such as
trained teachers in schools, community health workers and nurses found in homes and at the work place need to be well educated to arm them with the correct knowledge for delivery of accurate information, particularly linking instructions on menstrual hygiene knowledge to expanded programmes on health education in schools, homes and work places since information from mothers, grandmothers, peers and fathers were found to be unreliable.

REFERENCES


