

Full Length Review Article

AWARENESS OF MENSTRUATION AND RELATED PROBLEMS AMONG ADOLESCENT GIRLS IN AYDER HIGH SCHOOL, MEKELLE, 2013

Kedir Endris, *Gebre Yitayih and Marta Gebremeskel

^{1,2}CHS Department of Nursing, Ethiopia

³Ayder Referral Hospital, Mekelle University, Ethiopia

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ABSTRACT

Background: Menstruation is the discharge of blood and tissues from the lining of uterus each month. It is often called the menstrual period and is a function of the female body.

Objective: This study was conducted to assess awareness of menstruation and related problems among Ayder high school adolescent girls, 2013.

Methods: The study employed a cross-sectional design involving quantitative methods. The quantitative study was conducted on 259 students selected by simple random sampling technique from Mekelle high schools of Ayder female students. The data was collected using a self-administered questionnaire and analyzed using SPSS 16.0.

Result: A total of 259 Female adolescent student of Ayder secondary school had participated in the study with a response rate of 99.2%. Majority age of the students 78 (30.1%) were 17 years with mean age 16.6±1.28. Most of the participants 254(98.1%) were follower of Orthodox Christianity and the remaining was Muslim.

Conclusion and recommendation: The result indicates more than half of the respondents have awareness towards menstruation. Still the problem is not higher than the other study but in terms of time and severity, there is high problem related to menstruation. Ayder high school needs to form clubs to create awareness regarding menstruation to the female students. And Family to have free discussion before onset of pubertal changes and actions to be taken at its onset especially with menstruation

KEY WORDS: Adolescent, Females, Menstruation, School.

INTRODUCTION

Back ground

Menstruation is the discharge of blood and tissues from the lining of uterus each month. It is often called the menstrual period and is a function of the female body. The age at onset differ from race-to-race; and depending on geographic location. However, the average age has come declining since the dawn of the 20th century in many countries of the world. This age has leveled to 12.5 years in most European and North American countries (Koo *et al.*, 2002; Ulijaszek *et al.*, 1991). Early adolescence is a time of physical, intellectual, emotional, and social development during which young people confront the questions. Here, physical maturation and particularly sexual maturation, has significant effects on self-concept and social relationships during this period. This period is influenced by peer, parents and teachers (counselors if available) (Smith *et al.*, 1983). There are many challenges during this transition period such as the challenge of understanding self, the challenges of family relationship and counseling, the challenges of peer pressure, and the challenges of physical and sexual maturation. Among these challenges the maturation process with parental counseling capacity and devotion can take the lion share in shaping the maturing individual (Koo *et al.*, 2002; Smith *et al.*, 1983). Women will most likely try to ignore their symptoms or take painkillers

(if she has got some education) and some with dubious herbal medicine. The reason is probably that menstruation is a female concern, and deeply personal issues. Females during their menstrual periods don't even wash their sanitary materials, the usual rag made, in public; however, hiding even from their parents and married ones from husbands. In several African societies menstruating women make known their unavailability for the bed (Malawi) or going to bed fully clothed (Nigeria.) (www.google.com, April 2013). Different study globally argues that Young adults do face serious health risks as they mature and become sexually active. Most face these risks with too little factual information, too little guidance about sexual responsibility and too little access to health care. Meeting young adults' diverse needs challenge parents, communities, health care providers, teachers and educators (Smith *et al.*, 1983; Williams, 1983). Study in Northwest Ethiopia argue that Knowledge of the length and variation of the menstrual cycle is necessary for patient education and for identifying deviations from normal to guide clinical evaluation. Among the gynecological problems, menstrual problems are said to be the major ones especially among adolescent females. These disorders are often the source of anxiety for female adolescents and their families at large. (Smith *et al.*, 1983; Williams, 1983; Taffa, 1999). Menstruation is important for public health; especially in the female adolescent student. In addition, while several studies have examined reproductive health service utilization in both developed and developing countries no information is available about awareness of menstruation and menstruation

*Corresponding author: Gebre Yitayih,
CHS Department of Nursing, Ethiopia.

related problems from Ethiopia. This study will also be used as a base line for policy makers, researchers, nurse educators, NGOs other concerned bodies and for further studies regarding awareness of menstruation and related problems.

METHODS AND MATERIALS

The study was conducted in Ayder secondary school, Mekelle town. The total population of Mekelle town is around 264,907 (2011-2012) According to the current education policy schools are divided in to two primary school and high school. There are five high schools in Mekelle city. Ayder high school is found in Ayder kifle ketema and the total number of students in Ayder high school is 1543, from those students the 713 is females and 830 is males. The study was conducted from April to June and the data collection was from June 10 2013 to June 11 2013.

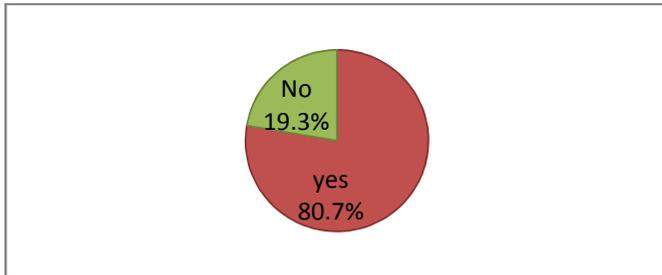


Figure 2. Overall awareness of Female adolescent students, Ayder secondary schools, 2013. (n=259)



Figure 3. Overall menstruation related problems of Female adolescent students, Ayder secondary schools, 2013. (n=259)

The study design was community based cross-sectional study design. The source populations were all mothers having less than three months old infant during the study period. The study population was all pregnant women who visit the hospital's Antennal clinic unit at the time of data collection period and fulfilling the inclusion criteria. The sample size for the study was determined using single population proportion and correction formulas. Data was collected using standardized structured questionnaire and two diploma completed Nurses were recruited. Continuous follow up and supervision was made by the principal investigator throughout the data collection period. Data collection was accomplished within eight weeks with interviewer administered structured questionnaire data collection tool was used. To assure data quality, training and orientation was given for the data collectors by the principal investigator. The questionnaire was initially prepared in English and then translated to Tigrigna version. The Tigrigna version was again translated back to English to check for consistency of meaning. Moreover questionnaire was pre-tested and necessary corrections and amendment was considered.

The collected data was reviewed and checked for completeness and consistency by principal investigator on daily bases at the spot during the data collection time. The data was entered in to EPI-INFO version 3.5.1, exported to SPSS then the data was cleaned and analyzed using SPSS version 16 software statistical packages. Ethical clearance was secured from the Mekelle University College of health science research and community services. Respondents were informed about the purpose of the study then information was collected after obtaining verbal consent from each participant. Respondents were allowed to refuse or discontinue participation at any time they want. Information was recorded anonymously and confidentiality and beneficence was assured throughout the study period. Data collectors had request first for respondents consent orally before starting interviewing and created comfortable environment and keep privacy and confidentiality

RESULTS

A total of 259 Female adolescent student of Ayder secondary school had participated in the study with a response rate of 99.2%. Majority age of the students 78 (30.1%) were 17 years with mean age 16.6 ± 1.28 . Most of the participants 254 (98.1%) were follower of Orthodox Christianity and the remaining was Muslim. Pertaining to educational status of mother 74 (28.6%) was Secondary school and 76 (29.3%) of Father were Primary (1-8 grade) school. Regarding the occupation majority of the parents 133 (51.4%) was employed. Nearly all the girls except three were unmarried. Sixty eight percent of girls live in houses that have got television sets. The mean age at menarche was 13.15 ± 1.22 years.

Related to menstruation awareness

Participant's knowledge about average age at menarche, regular cycle interval, duration of flow and their personal experiences were assessed. Seventy five percent of the respondents answered that the average age at menarche in healthy girls was 12-14 years of age. For 59% of the female students has an average cycle interval of every 28-30 days with flow duration of 3-4 days. In addition to this 97.7% of the female student's reason for initiation of menstruation said it was natural.

Menstruation related problems

Students were asked for different health related problems associated with menstruation. Menstrual problems for 143 (55.2%) of respondents does not interfere with their school performances. At the very early days following menarche they encountered different physical and Psychological symptoms. Around half of the girls, 83 (45.9%) in this study reported having had abdominal/back pain. Besides, 39 (21.5%) of them had irregular menstrual cycles. Around 85 (47%) of the girls had encountered interference with class activities leading to absenteeism by severe pain related with menstruation followed by 44.2 % of girls that had class interference for one day class absenteeism every cycle. 60.8% of the girls used oral medication to relief menstrual related pain and the remaining 30.7% used injection.

Table 1. Socio-demographic characteristics of Female adolescent students, Ayder secondary schools, 2013 (n=259)

Variables	Number	Percent
Age of student		
14	12	4.6%
15	55	21.2%
16	41	15.8%
17	78	30.1%
18	64	24.7%
19	9	3.5%
Grade level		
9	124	47.9%
10	135	52.1%
Marital status		
Single	213	82.2%
Married	3	1.2%
Friend	43	16.6%
Ethnicity		
Tigrian	254	98.1%
Amhara	5	1.9%
Educational statuses of women (n=259)		
No education	58	22.4%
Able to read and write	52	20.1%
Primary(1-8 grade) school	42	16.2%
Secondary school	74	28.6%
Higher education	33	12.7%
Educational statuses of Father (n=259)		
No education	75	29%
Able to read and write	44	17%
Primary(1-8 grade) school	76	29.3%
Secondary school	39	15.1%
Higher education	25	9.7%
Parents job status		
Both employed	133	51.4%
Only father work	91	35.1%
Only mother work	27	10.4%
Other	8	3.1%
Having TV set in your family		
Yes	176	68%
No	83	32%

Table 2. Related to menstruation awareness of female adolescent students, Ayder secondary schools, 2013. (n=259)

Variables	Number	Percent
knowledge before started menstruating		
Yes	235	90.7%
No	24	9.3%
Source of information for menstruation		
Mother	25	9.6%
Sister	43	16.6%
Friends	126	48.6%
Teachers	47	18.1%
Reading	18	6.9%
TV	10	3.8%
Reason for initiation of menstruation		
Natural	253	97.7%
Evil	6	2.3%
Starting age of menstruation		
11	16	6.1
12-14	195	75.4
15	48	18.5
Duration of menstrual flow		
2	3	1.2
3-4	152	58.7
5	104	40.1
Average cycle of menstruation period		
24	28	10.8
25-27	78	30.2
28-30	153	59

DISCUSSION

Menstruation is routine, always occurring, but unspoken. It is associated with psychological, physical, social and educational problems, but not well addressed or given due attention. A total of 259 Female adolescent student of Ayder secondary school had participated in the study with a response rate of 99.2%. In this study the overall awareness of the female students in menstruation was 80.7%. This finding was higher than the study conducted in India (64%). [23] This might be due to time difference. In this study The respondents were asked to reveal the major sources of information about menstruation and it was found that 48.6% of the respondents had received information from friends, while the source of information for others was T.V. (3,8%), mothers (25%), magazines (6.9%), and teachers (6.5%). Study done by Tribal reported that 83% of the respondents had received information from friends, while the source of information for others was T.V. (3%), mothers (5%), magazines (5%), and relatives (6.5%). (Rajni Dhingra and Anil Kumar, 2009; Adolescent, 2009). This finding was higher than the study conducted in Tribal (83%) [(Poureslami and Osati-Ashanti, 2013). This might be due to lack of free discussion with family members. In this study only 1.2% of the female students were married.

This finding was lower than the study conducted in Northwest Ethiopia (7.2%) (Schellenberg, 2001; Poureslami *et al.*, 2013). This might be due to increase awareness on the policy of Ethiopian education that encourages starting education in early age and due to increased perception of the community about negative impact of early marriage on education. In this study the mean age at menarche was 13.15 ± 1.22 years. This finding was consistent with the study conducted in Addis Ababa 13.72 ± 1.31 years (Aytenfisu, 2001;14). The average age at menarche decreased from 15-17 years to about 13-13.5 years between the early 1800s and the mid-1900s, but a further decrease was evident in some (Bagga and Kulkarni, 2000). But higher than Study done in Tribal (Gujjar) 12.5 ± 1.8 years (Rajni Dhingra and Anil Kumar, 2009). The reason for being higher than from the study area was due to the difference of economy which affects the growth of the human being. In this study 21.5% of them had irregular menstrual cycles. This finding is lower than with the study conducted in northwest Ethiopia 42.8% (Desalegn T Zegeye and Berihun Megabiaw, 2009). This might be due to increase health services especially in maternity and due to increase of knowledge on the menstruation. In this study overall menstruation related problems was 69.9%. This finding was more or less similar compared with the study finding in Northwest Ethiopia 72% [24], in Iranian Study 71% (Rajni Dhingra *et al.*, 2009), in Addis Ababa 74% (Aytenfisu, 2001) and in Hong Kong 70.3%. (Adolescent, 2009). In this study (45.9%) reported having had abdominal/back pain. This finding was lower than the study finding in Addis Ababa 54.5% (Aytenfisu, 2001). This reason might be due to life style difference. But higher than the study finding in Honk Kong (24.2%) (Pragya Sharma, 2008). In general there is great difference in life style, genetic makeup, and economy and resource availability. In this study 47% of the girls had interference with class activities leading to absenteeism by menstruation related problems.

Table 3. Problem related menstruation of Female adolescent students, Ayder secondary schools, 2013. (n=259)

Variable	frequency	Percentage
Menstrual problems Interfere with school performance		
Yes	116	44.8%
No	143	55.2%
Have ever experienced health problem during menstruation		
Yes	181	69.9%
No	78	20.1%
Problem during menstruation		
Irregularity	39	21.5
Excess flow	13	7.2
Pain-back pain or abdominal pain	83	45.9
Head ache	21	11.6
Mood change-irritability, depression	25	13.8
Severity of pain		
Doesn't interfere with class activities	84	46.4
Interferes with class activities leading to absenteeism	85	47.0
Relief on using medication	12	6.6
What do you do when have menstrual problems		
Go to family members	63	34.8
Go to doctors, health personnel	75	41.4
Buy medication from drug stores	19	10.5
Use traditional medicine	21	11.6
Others	3	1.7
The medication you often use		
Injection	38	31.7
Oral	73	60.8
Others	9	7.5
How often does menstrual problem Interferes with class attendance		
One day every cycle	76	44.2
Two days every cycle	41	23.8
Three days every cycle	47	27.3
Others	8	4.7

This finding was lower than the study finding in North Ethiopia 50% (Desalegn T Zegeye and Berihun Megabiaw, 2009).

Conclusion and Recommendation

A total of 259 Female adolescent student of Ayder secondary school had participated in the study with response rate of 92.4%. This result indicates that around 80.7% of the respondents have awareness towards menstruation. This result indicates higher knowledge. But there is a problem in average cycle interval of menstruation and duration of menstrual flow. The result indicates more than half of the respondents have awareness towards menstruation. Still the problem is not higher than the other study but in terms of time and severity, there is high problem related to menstruation. The overall menstruation related problems in this study was 69.9%. Still the problem is not higher than the other study but in terms of time and severity, there is high problem related to the menstruation. Ayder high school needs to form clubs to create awareness regarding menstruation to the female students. And Family to have free discussion before onset of pubertal changes and actions to be taken at its onset especially with menstruation

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