

# **Approval by the Board of Examiners**

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Figure-1

MAP OF THE RESEARCH AREA

HAIK, SOUTHREN WOLLO, ETHIOPIA

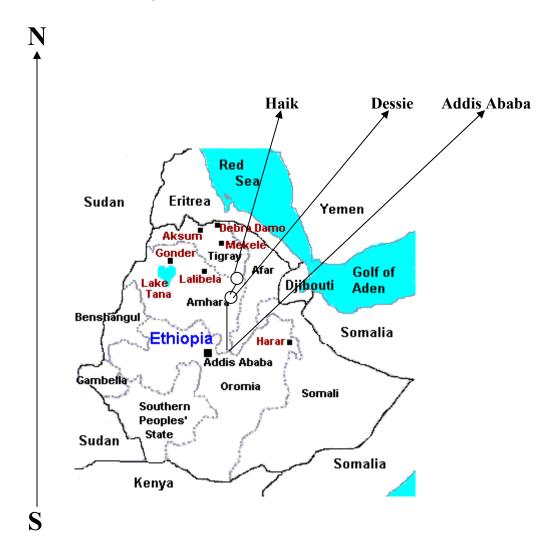


Figure-2

MAP OF THE RESEARCH AREA

SOUTHREN WOLLO ZONAL ADMINISTRATIVE REGION,

STUDY AREA – HAIK TOWN



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# LIST OF ABBREVATIONS

PMS	Premenstrual Syndrome			
SPSS	Statistical Package for Social Science			
USA	United States of America			

# **OPERATIONAL DEFINITIONS**

# **TERMS**

# **DEFINITIONS**

Accessibility of resourcesAvailability and ease of access of assigned health professionals,			
	treatment drugs, and sanitary pad in school campus to help		
	female students whenever they get menstrual problems.		
Attitude	.Feelings of female students to inquire help as they get menstrual		
	problems.		
Dysmenorrhea	.Painful menstrual flow		
Knowledge	.The awareness of female students for seeking help as they get		
	menstrual problems and of school teachers to help female		
	students whenever they get menstrual problems.		
Menstruation	.A natural human females periodic bleeding from their uterus as		
	a result of uterine lining shedding that flows through the vagina.		
Menorrhagia	Heavy menstrual bleeding		
Practice	.The behavior of female students in seeking help as they get		
	menstrual problems and the responsiveness of school teachers to		
	help them.		
Sanitary pads or napkins	Protections used for the safety care of menstrual flow.		
Sex-linked menstrual problems	Biological Health problems of female students occurring during		
	their menstrual periods.		
Sociocultural pressure/inhibition.	Cultural tensions that can make female students to hold back their		
	menstrual problems from informing openly and ask for help.		

# **ABSTRACT**

A cross-sectional study was conducted from 24, November to 12, December, 2007 to assess the knowledge, attitudes, and practices of female students' challenges in seeking help when facing menstrual problems in Southern Wollo at Haik General Secondary and Preparatory School.

The study showed the existence of place in the school to change sanitary pad were 1.2% (n=5) yes it has; 64.2% (n=271) does not have; and 34.6% (n=146) I don't know. The responses for a question asked if the school has assigned person for treatment of menstrual problems and supply of sanitary pad were 0.5% (n=2) yes; 73.9% (n=312) no; and 25.6% (n=108) I don't know. Measures needed to be taken on teachers for students' menstrual problems were 39.3% (n=166) to provide training; 58.3% (n=246) notify them as the right of the students; 1.9% (n=8) no need of measure; and 0.5% (n=2) other types of measures. Existence of shyness to ask teachers to seek out help and family for money to buy sanitary pad as female students have menstrual problems were 72.7% (n=307) shy to ask teachers, and 27.3% (n=115) not shy to ask teachers where as to ask parents for money to buy sanitary pad were 33.2% (n=140) courage to ask; and 66.2% (n=282) absence of courage. Suggestions given to solve menstrual problems if it occur during working or training times were 64.7% (n=273) include in the policy; 32.5% (n=137) include in schools' rules and regulations; 2.6% (n=11) no measures to be taken; and 0.2% (n=1) other types of measures.

Finally, training teachers on the cultural barriers that make female students not to speak out about menstrual problems; Inclusion in schools' rules and regulations and in the policy as the right of females to get permission whenever they have menstrual problems; Assignment health professionals for treatment of menstrual problems and supply of sanitary pad; and preparation of places in schools for female students privately change their menstrual pads are recommended.

# **CHAPTER I**

# 1.1. Introduction

In developing countries many literatures on females' educational problems mostly focused on identifying constraints about their accessing and succeeding in education related to their workload, gender inequality, and cultural practice-related problems (1). However, what is lacking is to investigate and find out solutions imposed by their sex-linked menstrual health problems that can be a factor to affect females from succeeding in their education.

The results of recent studies showed that nearly ten percent of females with dysmenorrhea experienced an absenteeism rate of 1 to 3 days per month from work or were unable to do their regular/daily tasks due to their severe pain (2, 3). It has been also shown that dysmenorrhea is considered as the main cause of absenteeism from school among young girl students (4, 5).

One study conducted to assess the knowledge, attitudes, and behaviors of adolescent girls in suburban districts of Tehran about dysmenorrhea and menstrual hygiene, out of 250 student girls selected at random indicates that the effectiveness of personal hygiene practice on reduction of menstruation pain only 79 girls (32%) said that they take a bath on the first days of their menstrual period. Furthermore, 162 girls (65%) reported not taking a bath at the beginning days of their period, from which 85 girls (51.5%) reported not taking a bath even after eight days from the beginning of their menstrual period (6).

Therefore, the unhealthy behaviors of student girls, along with their erroneous perceptions and attitudes about the menstrual period could increase their chances of getting certain infections, as well

as discomforts of secondary dysmenorrhea, which were also shown by other recent studies (7, 8, 9,). These results indicate that there is lack of sufficient information among the subjects of the studies, and that health education using special methods should be developed to empower female students to shift their knowledge to appropriate health-taking behaviors (10, 11, 12). On the other hand, Surveys have shown that in the U.S.A many parents approve of some type of public school sex education, but in practice there has always been opposition to such programs (13).

In Ethiopia, it is known that some studies are available on females' educational constraints identified as poverty, school distance, cultural practices such as female genital mutilation, gender imbalance, early marriage and marriage by abduction, and workloads that can determine how much intimidating beliefs can hinder females education not to succeed as desired (1, 14). There are also a lot of sex-linked constraints such as caused by menstrual problem that discourage female students from attending their classes properly and succeed in their education (1, 15).

In one study done on females educational problems in rural Ethiopia, it has been recommended to improve quality and gender equality such as abolish school fees, provide incentives for girls in rural areas, establish school-feeding programs, introduce flexible time tabling, provide for child-care facilities, sensitize the community, involve parents in school activities, lower the entry-age, have adult education programs, raise the age of marriage for girls, increase the number of female teachers and school managers, give gender sensitization programs for the education community, establish quotas for girls at all levels of education, improve physical facilities and provide health facilities within schools. However, in these researches there is no even one recommended statement that can point out solutions about female students' biological linked menstrual problems (14, 16).

It may be true that due to sociocultural pressure and poverty most of the rural Ethiopian high school female students can not afford to buy sanitary protections (pads or napkins) to protect their menstrual flow and as a result some of girl students may have been seen blood-stained clothes or legs because of unprotected menstrual blood flow (16).

The constitutional rights of Ethiopian women in article 35 number 9 states that to prevent harm arising from pregnancy and childbirth and in order to safeguard their health, women have the right of access to family planning, education, information and capacity (16). This article does not also clearly show the rights of females in relation to their sex-linked menstrual problems if occurs wherever females are working or training such as in teaching or training institutions or industries or offices etc.

On the other hand, if teachers do not get adequate training how to deal with their school female students' reproductive health problems, they can ignore or do not understand about their female students' health problems that can arise especially during their menstrual periods. As a result of teachers' unawareness or due to cultural taboo hindrances, female students can keep secret or afraid to talk about discomforts or pain felt during their menstruation to ask and get help from their teachers.

The researcher has found that there are no adequate studies done in the country about the importance of supporting high school female students' whenever they get discomforts or pain arise from their menstruation. Therefore, the researcher hypothesized that due to feeling of humiliation, sociocultural pressures, lack of resource allocation in high schools, and ignorance or unawareness of teachers to

help female students during their menstrual discomforts, the great majority of female students in Ethiopia may have serious problems that can result in absenteeism and low class attendance or participations. On the other hand, these problems may have not get chance to be seen by higher educational officials and as a result there is little or no emphasis given to help female students for the problems imposed by menstruation.

In the light of these, the researcher wanted to find out factors on the knowledge, practices, and attitudes of high school female students whenever they inquire help as they get menstrual problems.

As a result, the study posed questions as:

- 1. Do high school female students have adequate knowledge for the care of their menstrual problems?
- 2. Does culture inhibit the attitudes of high school female students not to speak openly to inquire help whenever they have menstrual problems?
- 3. What practices do high school female students use to protect their menstrual problems?
- 4. Do high school female students have accessibility of resources to protect their menstrual problems?

#### 1.2. SIGNIFICANCE OF THE STUDY

The significance of the study was to address policy issue formation for females' rights that should be considered in their learning/training and working areas. Moreover, it can be used by public health nurses, reproductive health nurses, and other health professionals to provide health education for the community about menstrual problems imposed by cultural hindrances.

# 1.3. LITERATURE REVIEW

As reported by the National Institute of Child Health and Human Development and the National Institute of Health in USA, 2003, many women experience premenstrual discomfort, tenderness of the breasts and a tendency to retain fluid (bloat) are common one to seven days before each period. Some women also experience a condition called premenstrual syndrome (PMS), which is characterized by headaches, irritability, nervousness, fatigue, crying spells, and depression with no apparent cause. A few women also experience menstrual cramps (dysmenorrheal) during the first day or two of the period. Although premenstrual symptoms and discomfort during menstruation were once thought to be of psychological origin, however, research now indicates that hormonal and chemical changes are responsible (7, 9).

The menstrual period is a natural phenomenon that occurs throughout the reproductive years of every woman (7, 9). Most females experience some degree of pain and discomfort in their menstruation period (dysmenorrhea) (7, 8), which could have important impacts on their daily activities, and disturb their productivity at home or at their work place (4, 17). In these instances, they should consult a doctor to relieve their pain and other relevant symptoms of dysmenorrhea (7, 18). By this definition, dysmenorrhea is a painful period or menstruation cramps, which may be accompanied by some other symptoms and complications such as nausea, vomiting, diarrhea, headache, weakness, and/or fainting and is reported as the most common reason for females to visit a health professional (2,19, 20, 21, 22, 23). There are probably few women who can truthfully claim that they have never had dysmenorrhea but a majority of them are thought to experience some degree of menstruation cramps (17, 18, 24).

According to some international reports, the prevalence of dysmenorrhea is very high, and at least 50 percent of women experience this problem throughout their reproductive years (5, 17, 25). This problem not only causes fear in approximately one-fifth of the female population, but also causes many social, physical, psychological, and economic problems for women around the world (3, 5). The results of recent studies showed that nearly ten percent of females with dysmenorrhea experienced an absence rate of 1 to 3 days per month from work or were unable to do their regular/daily tasks due to their severe pain (2, 3). It has been also shown that dysmenorrhea is considered as the main cause of absence from school among young girl students (4, 5).

Some girls get their first period (menarche) as early as at 11 years of age; while some get it as late as at 16 years. Age of menarche varies depending upon general health of the girl, her heredity, living conditions, climate, etc. The average age is 13 years. Some girls experience emotional changes before and during menstruation. Most girls feel only little discomfort. These symptoms are due to the changes in the hormonal levels. Pain is due to the contractions of the muscles of the uterus and difficulty in opening of the mouth of the uterus to allow the blood flow out (26).

The incidence of menstrual pain is greatest in women in their late teens and 20s, then declines with age. Some women experience increased menstrual pain in their late 30s and 40s as their endocrine systems prepare for menopause by decreasing hormone levels and thus fertility. It does not appear to be affected by childbearing. An estimated 10 percent to 15 percent of women experience monthly menstrual pain severe enough to prevent normal daily function at school, work, or home (27).

Some women and girls experience cramping and pain during their periods (dysmenorrheal). This cramping may be caused by an oversupply of the hormone prostaglandin that causes the uterus to

contract. If they have pain during their period, they may relieve the pain by body stretches, exercise or by placing a hot water bottle over the abdomen (28).

A menstrual disorder is a physical or emotional problem that interferes with the normal menstrual cycle, causing pain, unusually heavy or light bleeding, delayed menarche, or missed periods. Typically, a woman of childbearing age should menstruate every 28 days or so unless she's pregnant or moving into menopause. But numerous things can be mistaken with the normal menstrual cycle; some are as the result of physical causes and others are due to emotional causes. These include amenorrhea (the cessation of menstruation) or menorrhagia (heavy bleeding), or dysmenorrhea (severe menstrual cramps). Nearly every woman will experience one or more of these menstrual irregularities at some time in her life. Dysmenorrhea is characterized by menstrual cramps or painful periods, dysmenorrhea, which comes from the Greek words for "painful flow," affects nearly every woman at some point in her life. It is the most common reproductive problem in women, resulting in numerous days absent from school, work and other activities. There are two types. These are the primary and secondary. The primary or normal cramps, affects up to 90 percent of all women, usually occurring in women about three years after they start menstruating and continuing through their mid-twenties or until they have a child. About 10 percent of women who have this type of dysmenorrhea can't work, attend school, or participate in their normal activities. It may be accompanied by backache, dizziness, headache, nausea, vomiting, diarrhea and tenseness. The symptoms typically start a day or two before menstruation, usually ending when menstruation actually begins. Secondary dysmenorrhea has an underlying physical cause and primarily affects older women, although it may also occur immediately after a woman begins menstruation (29).

For the protection of females menstrual flows they should choose their sanitary pads worn externally, or tampons inserted inside the vagina. The adhesive pads worn inside the usual pants are comfortable, reliable and not at all bulky. Tampons are popular with many girls. They are comfortable and convenient, and allow them to do everything that they do normally - even swimming or such as going to school. There is a big range to choose from so they should choose the sanitary protection that is comfortable for them. Whatever sanitary protection they use, change it frequently - every three to four hours. Menstrual flow has no odor until it meets the air, but a pad or tampon left in place too long could begin to smell and may encourage infection (28).

In the late 19th century, some attempts were done by educators and social workers to supplement parental sex instruction concentrated on what was then known as "social hygiene"—basically, biological and medical information about human reproduction and venereal disease. In the post-World War II era, however, the relaxation of traditional social norms governing sexual activity, as well as the torrent of sex-related information available to children via the mass media, made a more sophisticated and comprehensive program of sex education seem desirable to many. The obvious forum for such an effort was the public schools (13).

In the mid-20th century, many U.S.A school districts established sex-education programs that ranged from a few lectures given to secondary school students to integrated and comprehensive lessons beginning in kindergarten and extending through 12th grade or junior college. The variety of subjects covered include the physical processes of human reproduction; the workings of male and female sex organs; the origin, dissemination, and effects of venereal disease; family roles and structures; and the emotional and psychological causes and consequences of sex, marriage, and

parenting. Frequently, however, the larger societal and ethical questions stemming from sexual behavior, being highly subjective in nature, are not regarded as appropriate to a strictly factual approach. At all levels of instruction, teaching methods may include visual aids, lectures, and moderated discussions (13).

In developing countries many literatures on girls' educational problems mostly focused on identifying constraints in terms of their accessing and succeeding in education related to their workload, gender inequality, and cultural practice-related problems. However, what is lacking is to investigate and find solutions on the problems imposed by sex-linked menstrual health problems that can encounter female girls' education (1).

Although menstruation is a natural, reproductive process, it bears a strong cultural taboo that commands and is it not be seen, discussed, or in most ways, acknowledged. This desire to keep menstruation secret is often paired with an attitude that menstruation is dirty and disgusting. Many girls report shame about being seen with a menstrual product or, worse yet, about bleeding through clothing, and some adolescent girls report that they are embarrassed simply by the fact that they menstruate. These feelings are likely compounded by media portrayals of menstruation as a hygienic crisis (30).

Shame about menstruation is often extended to the vagina and its surrounding areas, which are considered by many women to be unspeakable and unpleasant. In one qualitative study it has found that menarche is seen as an experience that can contaminate girls' bodies and their genitals in particular. In spite of celebrating the menarche to be the form and function of women's anatomy, it is

still common for women to feel shame about their bodies, to use euphemisms so as to avoid even to name their genitals, or to experience confusion about the makeup of their external genitalia (30, 31).

Sex Education, broadly defined, any instruction in the processes and consequences of sexual activity, ordinarily given to children and adolescents. Today the term usually refers to classroom lessons about sex taught in primary and secondary schools (13).

Historically, the task of instructing adolescents about sex has been seen as the responsibility of the parents. But parent-child communication in sexual matters may be hindered by parental inhibitions or by various intergenerational tensions, and studies have shown that children rarely receive their first information on sexual matters from their parents (13).

Surveys have shown that in the USA. many parents approve of some type of public school sex education, but in practice there has always been opposition to such programs. Questions about the state's usurpation of parental rights and responsibilities, the adequacy of ethical instruction, and the wisdom of imparting sexual information to immature minds have been raised by concerned opponents (13).

Because menstruation and sexual activity often share the same intimate location on women's bodies, shame regarding menstruation might influence a woman's general approach to her sexuality. Furthermore, girls are often socialized to connect menstruation with sexuality. Many girls first learn about menstruation in sex education classes, where cessation of menstruation is presented at last to end with procreation. At the same time, little of mother-daughter communication about sex focuses on menstruation and likewise, that focuses much on the emerging sexual potential inherent in a

developing woman's body. Because of these connections, girls' and women's attitudes about menstruation might shape their developing beliefs about sexuality and the sexual decisions they make, even when they are not menstruating (30).

Despite these conceptual connections, little research has explored connections between sex and menstruation. Previous research linking these phenomena found that girls who reach menarche early are more sexually active and sexually risky than girls who mature later (31).

However, this finding is generally attributed to a tendency for early matures to socialize in older peer circles. Recent work has found a specific link between menstrual attitudes and both sexual attitudes and sexual behavior. In one study, undergraduate women who reported more comfort with menstruation also reported more comfort with sexuality and were more likely to engage in intercourse while menstruating. In a second study, undergraduate women who reported more shame about menstruation also reported engaging in less sexual activity overall and, if sexually active, reported engaging in more sexual risk-taking. Evidence also indicates that undergraduate women who perceived their genitals as dirty, smelly, and shameful reported lower levels of participation in and enjoyment of sexual activity (30, 32, 33).

Accordingly, in considering body shame as a potential mediator between menstrual shame and sexual decision-making, it is first necessary to establish a link between menstrual shame and the sexual outcomes variables. As a second step, one must demonstrate the presence of association between menstrual shame and body shame. Next, it must be shown that body shame relates to the outcome variable, sexual decision-making. Lastly, to establish that body shame completely mediates the relationship between menstrual shame and sexual decision-making, it is necessary to show that once controlling for the mediating path, the direct relationship between menstrual shame and sexual

decision making becomes non-significant. Previous research suggested the presence of an association between menstrual attitudes and sexual decision-making. Additionally, empirical and theoretical work lends support to each of the remaining pathways in our model (34, 35).

In one study done on females educational problems in rural Ethiopia, it has been recommended that in order to improve quality and gender equality; abolish school fees, provide incentives for girls in rural areas, establish school-feeding programs, introduce flexible timetabling, provide for child-care facilities, sensitize the community, involve parents in school activities, lower the entry-age, have adult education programs, raise the age of marriage for girls, increase the number of female teachers and school managers, give gender sensitization programs for the education community, establish quotas for girls at all levels of education, improve physical facilities and provide health facilities within schools. In this research, there is no even one statement that can indicate female girls educational problems related to their sex-linked menstrual problems. However, there are also a lot of sex-linked constraints such as caused by menstrual problem that discourage the girls from attending their classes properly and actively (1, 15, 36).

Only in one cross-sectional study conducted in January 2002 among a randomly selected 242 female students to determine the prevalence of premenstrual syndrome (PMS) and its effect on academic and social performances of students of Jimma University it has been found that about 14% of the study participants frequently missed classes and 15% missed examinations or scored a lower grade at least once because of PMS symptoms (36).

Therefore, we can say that even if so much has been said on other issues concerning females' educational problems but little studies are available about their sex-linked menstrual problems that can also be a great problem which can affect female students to participate in their active learning.

# **CHAPTER II**

# **OBJECTIVES**

# 2.1. GENERAL OBJECTIVE

To identify high school female students their current knowledge, practice, and attitudes and supports they obtain whenever they are affected by menstrual problems.

# 2.2. SPECIFIC OBJECTIVES

- 1. To identify the knowledge of high school female students about menstrual problems.
- 2. To assess high school female students' attitudes imposed by their culture towards verbalizing openly to inquire help whenever they have menstrual problems.
- 3. To identify high school female students' practices on the protection of their menstrual problems.
- 4. To identify accessibility of resources that high school female students can get whenever they have menstrual problems.

# **CHAPTER III**

#### RESEARCH METHODOLOGY

#### 3.1. THE STUDY AREA

Southern Wollo at Haik General Secondary and Preparatory School. Haik is a small rural town found in Southern Wollo Administrative Region 28 and 428 kms far from Dessie and Addis Ababa to the north side, respectively. Dessie is the capital city of the zonal administrative region in the Amhara Administrative region. This small town is divided into 2 kebeles. The majority of the students learning in Haik General Secondary and Preparatory School are coming from three woredas known as Worebabo, Tehuledere, and Ambassel. Farmers are the greatest number of the population existing in the three woredas (Figure 1 and 2).

The area was conveniently selected because firstly, it is a rural small town of which most of the students' families are farmers that may not have access to sanitary pads to protect their menstrual flows. Secondly, it was assumed that the greatest number of population existing in the three woredas as described above might not have awareness of females' menstrual problems as a result of illiteracy, sociocultural pressures or inhibitions. As a result of these, the study area was selected to provide generalization for other communities with similar sociocultural pressures or inhibitions in Ethiopia.

As a result of these factors, the researcher selected this town in terms of access of sanitary pads, sociocultural pressure and low awareness of the community and female students' about their sex-linked menstrual problems.

# 3.2. THE STUDY DESIGN

A cross-sectional descriptive study was used to attain the objectives of the research for evaluating high school female students' knowledge, practices, and attitudes when inquiring help in their school whenever they get menstrual problems. The sample size was obtained using systematic random sampling technique from the list of total female students learning in the high school during the data collection period. Proportions were then calculated according to the number of female students learning in each grade to achieve the required sample size.

The questionnaire was developed by a total of 39 questions and broken into the following categories:

- a) 10 = Questions for assessing background information of the social, economical, geographical, and educational characteristics of the study population.
- b) 14 = knowledge questions.
- c) 3 = Attitude questions.
- d) 12 = Practice questions.

# 3.3. THE STUDY POPULATION

Study sample was taken from female students learning in Haik General Secondary and Preparatory School learning in 9<sup>th</sup>, 10<sup>th</sup>, and preparatory 10+1 and 10+2 during the study period. The 422 study participants were selected by ratio from the list of total number of female students learning in each grade. All respondents were allowed to fill confidentially in the prepared questionnaires.

# 3.4. VARIABLES

- 3.4.1. Independent Variable
  - **Place of residence**
- 3.4.2. Dependent Variables
  - **Knowledge**
  - > Attitudes
  - > Practices

# 3.5. PLAN FOR DATA COLLECTION

The plans for the research data collection were as follow:

- Clarify the purpose of the research to the authorities of Addis Ababa University, Faculty of Medicine, Centralized School of Nursing and get consent to do the research.
- 2. Submission of the research proposal for the Faculty of Medicine, Addis Ababa University.
- 3. Get permission from South Wollo Zonal Educational Bureau and Haik General Secondary and Preparatory School for the collection of data.
- 4. Do pretest
- 5. Train data collectors
- 6. Explain the purpose of the research to the respondents.
- 7. Use questionnaires by the trained data collectors to collect data during data collection period.

# **3.6. PRETEST**

Before 5 days of the training of data collectors, test for the completeness of the questionnaires was done by the principal investigator on ten respondents selected by the researcher from Haik General and Preparatory School female students. Prior to the actual data collection period, the questionnaires were prepared and checked for its consistency. This had helped the principal investigator to estimate the time that had taken for the data collection and make the necessary adjustments.

# 3.7. SAMPLE SIZE DERERMINATION

The sample size had been estimated using sample size determination formula for a single population proportion formula. Since there were no previous studies done in that area which can estimate the problems of high school girls enquiring help whenever they have menstrual problems, a prevalence level that can estimate maximum sample size (50%), marginal error (d) 0.05, non response rate of 0.1, design effect of two with 95% confidence certainty and alpha 0.05 were considered.

Based on these assumptions, a total sample size was calculated using the formula as indicated below:

n = 
$$(Z\partial)^2$$
 . p (1-P)  
d<sup>2</sup>  
n =  $(1.96)^2$  x  $0.5(0.5)$  n = 384  
 $(0.05)^2$   
 $384 \times 10 = 38$  (non response rate)  
100

When 10% non response rate (38) was added: 384 + 38 = 422

Therefore, the total sample size was =  $\underline{422}$ 

The respondents were selected using systematic random sampling technique and applied on every grade from the sample frame that the school has provided to the principal investigator.

# 3.8. DATA COLLECTION TECHNIQUE

The technique to collect the data from the study population was by providing prepared questionnaires for female students in Southern Wollo at Haik General Secondary and Preparatory School present during the study period.

Training of data collectors had been done for 2 days from 29 - 30, November 2007 for a total of 4 data collectors. The data collectors were divided in to four groups according to the students' grade level categories. Training of data collectors had consisted of classroom teaching followed by pretest of field practices using the structured questionnaires.

All data collections had been conducted over 9 days from 4 - 12, December 2007. One class female students' questionnaire filling had lasted approximately 3 to 5 days. All questionnaires were evaluated by the principal investigator each day for their completeness and correctness just after data collection.

#### 3.9. DATA ENTRY AND ANALYSIS

All the results in the survey questionnaires were first categorized, cross-checked, and coded manually then entered and analyzed by using SPSS Version 10. Secondly, tables, percentages, P-value, confidence intervals and odds ratio were used. Finally, all the results were reported in a written form.

# 3.10. ETHICAL CONSIDERATIONS

Ethical clearance had been obtained from Faculty of Medicine, Research Ethical Committee, Addis Ababa University.

In order to reduce the risk possibility of psychological harm or misinterpretation of the study and get willingness and trust from study group clarification about the purpose of the research had been given that the whole community will be benefited out of the results in the future.

Moreover, the questionnaire was prepared without indicating the names of respondents and greater attention concerning the privacy of each respondent was given while filling the questionnaire to keep secret, respect autonomy, and confidentiality.

The plan for considering ethics was for those who are voluntary to participate in answering will be allowed to fill the questionnaire where as those who refuse will not obliged and have the right to withdraw at any time during the data collection period. However, the researcher had found that all of the research participants were volunteer to respond by filling the prepared questionnaire.

# 3.11. COMMUNICATION

The results of the study can be disseminated by the use of media or local journals such as Ethiopian Nurses Association journal or kept in the Centralized School of Nursing library for reference. Important significant governmental and other relevant supporter organizations can have the access to get the results for their health care activities.

#### **CHAPTER IV**

# **RESULT**

#### 4.1. Bivariate Result

Bivariate analysis were used to know the effect of age, marital status, religion, educational level, income, and occupation on the knowledge, attitudes, and practices of the study group of female students by employing P-value and Odds Ratio test. However, statistically significant levels were not found in any of the mentioned variables. This may be due to strong similarity of their sociodemographic characteristics. This means the distribution of menstrual problems can equally affect all the sociodemographic characteristics of the study group.

However, knowledge of the respondents about the availability of sanitary pad in their current living area and presence of shyness for asking teachers for permission to seek out help whenever they get menstrual problems were found to have likelihood of direct association to their living areas (tables 1 and 2). Moreover, the study participants' experiences of pain during their menstrual periods as they were in the school and the presence of penalty by teachers for absenteeism because of menstrual problems were compared in relation to their places of residence, Haik town and out of Haik town and these were found to be statistically significant (tables 3 and 4).

Places of residence of the study group were found to be 32.2% (n=136) in Haik town, and 67.8% (n=286) out of Haik town. Of those who are found to live in Haik town 23.9% (n=101) from the total respondents where found to know where menstrual flow protection sanitary pad is easily available where as 8.3% (n=35) did not know the availability of menstrual flow protection sanitary pad in their

current living area. Of those whose living area is out of Haik town 37% (n=156) from the total respondents know where menstrual flow sanitary pad is available where as 30.8% (n=130) did not know. From the total study group 61% (n=257) from both Haik town and out of Haik town know where menstruation flow protection sanitary pad is easily available where as 39% (n=165) did not know its availability. The respondents knowledge about availability of sanitary pad in their current living area was found to be non significant (0.125), Odds Ratio (2.405) with 95% Confidence Interval for Exp (B) (lower Boundary 1.534, and upper boundary 3.768) (Table 1).

The study subjects' places of residence were compared with their attitudes for existence of shyness to ask their teachers for permission to seek out help whenever they have menstrual problems. From the total respondents those who are living in Haik town and found to have shyness were 22.5% (n=95) and 9.7% (n=41) were not shy where as those whose living area is out of town Haik were found to be 50.2% (n=212) shy and 17.6% (n=74) not shy. 72.7% (n=307) from the total study group were found to have shyness to ask teachers for permission to seek out help whenever they get menstrual problems where as 27.3% (n=115) not shy This is also found to have statistical non significance level of 0.357, and Odds Ratio 0.809 with 95% Confidence Interval for Exp (B) (lower Boundary 0.515, and upper boundary 1.271) (Table 2).

The respondents' experience of pain just before and during menstrual periods as they were in the school was compared with their residence areas. Out of the total respondents those who are living in Haik town and found to have pain during their menstrual period as they were in the school campus were 28.4% (n=120) where as 3.8% (n=16) did not experience menstrual pain. Those respondents whose living area is found to be out of Haik town found to have pain during their menstrual period

as they were in the school campus were 60.7% (n=256) where as 7.1% (n=30) did not experience pain. 89.1% (n=376) out of the total study group living in both Haik town and out of Haik town have experience of pain before and during their menstrual periods as they were in the school campus where as 10.9% (n=46) did not experience menstrual pain. This was found to have statistical significance with the level of 0.000, and Odds Ratio 0.879 of 95% Confidence Interval for Exp (B) (lower Boundary 0.461, and upper boundary 1.674) (Table 3).

The presence of penalty on the respondents by their teachers for absenteeism because of menstrual problems was compared with their place of residences. Out of the total respondents those who are living in Haik town 32.2% (n=136) have responded that 20.4% (n=86) have been penalized where as 11.8% (n=50) where not penalized. Those who are out of Haik town 48.8% (n=206) were found to have penalty where as 19% (n=80) where not penalized. Out of the total study group, it is found that 69.2% (n=292) the respondents have experiences of getting penalty for absenteeism from the teachers because of their menstrual problems where as 30.8% (n=130) were not penalized. This was found to have statistical significance with level of 0.000, and Odds Ratio 0.668 of 95% Confidence Interval for Exp (B) (lower Boundary 0.433, and upper boundary 1.031) (Table 4).

**Table 1** - Presentation of the study participants' place of residence compared with their knowledge about sanitary pad availability in their current living area; Southern Wollo at Haik General Secondary and Preparatory School, December 2007

Do you know any place in your current living area where sanitary pad is easily available?  $95\% \ Confidence \ Interval \ for \\ Exp(B)$ 

		Yes I	I do not				
Place of 1	esidence	know	know	Sig.	Exp(B)	<b>Lower Bound</b>	<b>Upper Bound</b>
Haik	32.2%	23.9%	8.3%				
town	(n=136)	(n=101)	(n=35)				
				0.125	2.405	1.534	3.769
Out of	67.8%	37%	30.8%				
Haik	(n=286)	(n=156)	(n=130)				
		61%	39%				
Total		(n=257)	(n=165)				

**Table 2** - Presentation of the study participants' place of residence compared with existence of shyness to speak out openly for asking their teachers permission to seek out help whenever they have got menstrual problems; Southern Wollo at Haik General Secondary and Preparatory School, December 2007.

Are you shy enough to ask teachers for permission to seek out help whenever you have menstrual problems?

95% Confidence Interval for Exp(B)

Place of residence		Yes	No	Sig.	Exp(B)	Lower Bound	<b>Upper Bound</b>
Haik	32.2%	22.5%	9.7%				
town	(n=136)	(n=95)	(n=41)				
				0.357	0.809	0.515	1.271
Out of	67.8%	50.2%	17.6%				
Haik	(n=286)	(n=212)	(n=74)				
		72.7%	27.3%				
	Total	(n=307)	(n=115)				

**Table 3** - Presentation of the study participants' place of residence compared with their experience of pain just before and during menstrual periods as they are in the school campus; Southern Wollo at Haik General Secondary and Preparatory School, December 2007.

Did you have experienced pain just before and during your menstrual periods as you were in the school?

95% Confidence Interval for Exp(B)

Place of resid	lence					<b>Lower Bound</b>	<b>Upper Bound</b>
		Yes	No	Sig.	Exp(B)		
Haik town	32.2%	28.4%	3.8%				
	(n=136)	(n=120)	(n=16)				
				0.000	0.879	0.461	1.674
	67.8%	60.7%	7.1%				
Out of Haik	(n=286)	(n=256)	(n=30)				
•	Γotal	89.1%	10.9%				
		(n=376)	(n=46)				

**Table 4** - Presentation of the study participants' place of residence compared with their experiences of penalty for absenteeism because of menstrual problems; Southern Wollo at Haik General Secondary and Preparatory School, December 2007.

Have you been penalized by your teachers for your absenteeism because of your menstrual problems?

95% Confidence Interval for

Exp(B)

Place of resi	dence	Yes	No	Sig.	Exp(B)	<b>Lower Bound</b>	<b>Upper Bound</b>
Haik town	32.2%	20.4%	11.8%				
	(n=136)	(n=86)	(n=50)				
Out of	67.8%	48.8%	19%	0.000	0.668	0.433	1.031
Haik	(n=286)	(n=206)	(n=80)				
To	tal	69.2%	30.8%				
		(n=292)	(n=130)				

## 4.2. Knowledge of the study participants whenever they are affected by menstrual problems

Knowledge of the study subjects if menstrual pain or flow problems did have negative contribution to their class participation was identified to be 64.5% (n=272) yes, 26.8% (n=113) no, and 8.8% (n=37) I do not know. Those who were asked whether menstrual pain or flow has harmful contributing effect to their grade results were found to be 64.0% (n=270) yes, 28.2% (n=119) no, and 7.8% (n=33) I do not know. In addition, for a question asked to know if they have ever been taught about sex-linked menstrual problems the responses were 56.6% (n=239) yes, and 43.4% (n=183) no (Table 5).

The study participants gave their own reasons for the question to know if they have ever asked and did not get permission form teachers to go out of class to seek help whenever they have menstrual flow or pain. Out of 422 respondents 35.6% (n=150) have reported that the teachers did not understand my problems, 12.3% (n=52) said the teachers understand me but not volunteer to give permission, 30.3% (n=128) said they did not get permission because of no rules and regulations stated about female students' menstrual problems in the school, and 21.8% (n=92) have no response because they didn't ask teachers for permission (Table 5).

The study subjects were also asked if the school has special prepared place to be used by female students whenever they want to change their sanitary pad privately. Out of the total 422 respondents 1.2% (n=5) responded yes, for the presence of a special prepared place; 64.2% (n=271) responded no, for the absence of prepared place; and 34.6% (n=146) said I do not know whether or not the school has special prepared place to be used for changing menstrual flow protection sanitary pad (Table 5).

Study participants have given response for the question if they know the presence of assigned person in the school for the treatment of female students' menstrual pain and supply of sanitary pad. Based on this question the responses were 0.5% (n=2) responded yes it has, 73.9% (n=312) no assigned person, and 25.6% (n=108) I do not know (Table 5).

The responses for a question asked if they know any place around their current living area where sanitary pad is easily available were 60.9% (n=257) yes I know, and 39.1% (n=165) I do not know. Suggestions given about asking teachers for permission to seek out help whenever menstrual problems occur were 96.7% (n=408) it should be the right of female students where as 3.3% (n=14) it should not be the right of female students. Ideas given for the types of measures to be taken on school teachers concerning female students' menstrual problems were found to be 39.3% (n=166) to provide training; 58.3% (n=246) only notify them that it is the right of female students; 1.9% (n=8) no need of measures to be taken; and 0.5% (n=2) other type of measures. For a question asked to provide their suggestions about what measures should be taken to solve females' menstrual problems if it occurs and they need help during working or training times the responses were 64.7% (n=273) it should be included in the policy; 32.5% (n=137) include only in schools' rules and regulations; 2.6% (n=11) no need of measures to be taken, and 0.2% (n=1) other type of measures (Table 5).

**Table 5** - Presentation about the knowledge of the study participants whenever they are affected by menstrual problems; Southern Wollo at Haik General Secondary and Preparatory School, December 2007.

Responden (%) (n = 42
(%) (n = 42)
Does your menstrual pain or flow can be one of the problem to have your low
class participation?
Yes 272 (64.5%
No 113 (26.8%
I do not know 37 (8.8%)
Do your menstrual pain or flow has negative contributing factor to your grade?
Yes 270 (64.0%)
No 119 (28.2%
I do not know 33 (7.8%)
Have you ever been taught about sex-linked menstrual problems in your school?
Yes 239 (56.6%
No 183 (43.4%
What do you think about the reason that they did not give permission?
They did not understand my problem 150 (35.6%
Understand me but not volunteer to give permission 52 (12.3%)
No permission b/c no rule & regulation in the school 128 (30.3%)
No response because of not asking permission 92 (21.8%)
Does your school have especial prepared place for changing sanitary pad?
Yes it has 5 (1.2%)
No it does not have 271 (64.2%
I do not know 146 (34.6%
Does your school has assigned person for the treatment of female students'
menstrual pain and supply of sanitary pad?
Yes 2 (0.5%)
No 312 (73.9%
I do not know 108 (25.6%

**Table 5** - Presentation about the knowledge of the study participants whenever they are affected by menstrual problems; Southern Wollo at Haik General Secondary and Preparatory School, December

# 2007. **Continued - - -**

Variables	Number of Respondents
	(%) (n = 422)
Do you know any place in your current living area where sanitary pad is	
easily available?	
Yes I know	257 (60.9%)
I do not know	165 (39.1%)
Do you think asking teachers for permission whenever menstrual	
problems occur must be the right of female students?	
Yes, it should be.	408 (96.7%)
No, it should not be.	14 (3.3%)
What do you think about the measure that should be taken on school	
teachers concerning female students' menstrual problems?	
Provide training	166 (39.3%)
Only notify them as the right of female students	246 (58.3%)
No need of action to be taken	8 (1.9%)
Other	2 (0.5%)
What do you think about the measure to be taken to solve females'	
menstrual problems if it occurs & they need help during work or training	
times?	
Should be included in the policy	273 (64.7%)
Include only in schools' rules and regulations	137 (32.5%)
No need of action to be taken	11 (2.6%)
Other	1 (0.2%)

## 4.3. Attitudes of the study participants whenever they are affected by menstrual problems

Attitudes of the study participants for existence of shyness to ask teachers for help whenever they have menstrual problems was assessed. Out of 422 respondents 72.7% (n=307) have reported that they are shy enough to ask teachers, and 27.3% (n=115) have reported that they are courage to ask teachers (Table 6).

The study subjects were asked whether they are courage or not for asking their parents for money to buy sanitary pad. Their response were 33.2% (n=140) yes I am courage to ask my parents for money to buy my sanitary pad; and 66.2% (n=282) reported no, I am not dare to ask my parents for asking money to buy sanitary pad. Their preferences from family members to ask for money to buy sanitary pad were 26.1% (n=110) their mother, 0.7% (n=3) their father, 2.6% (n=11) mother or father, 3.8% (n=16) other family members, and 66.8% (n=282) do not ask their family member for money to buy sanitary pad because of their shyness (Table 6).

**Table 6** - Presentation about the attitudes of the study participants whenever they are affected by menstrual problems; Southern Wollo at Haik General Secondary and Preparatory School, December 2007.

	Number of
Variables	Respondents
	(%) $(n = 422)$
Are you shy enough to ask teachers for help whenever you have menstrual	
problems?	
Yes	307 (72.7%)
No	115 (27.3%)
Do you have the courage to ask your parents to give you money to buy sanitary	
pad?	
Yes	140 (33.2%)
No	282 (66.8%)
Whom do you prefer to ask frequently from family members for money to buy	
sanitary pad?	
Mother	110 (26.1%)
Father	3 (0.7%)
Either mother or father	11 (2.6%)
Other from family members	16 (3.8%)
No response, because of shyness to ask	282 (66.8%)

## 4.4. Practices of the study participants whenever they are affected by menstrual problems

The study subjects were asked for their experiences of pain before and during menstrual period as they were in the school campus. Out of 422 study subjects 89.1% (n=376) reported that they have experienced pain where as 10.9% (n=46) reported nonexistence of pain. Moreover, for a question presented for being unsuccessful to participate on classes or exams because of menstrual related problems were found to be 6.2% (n=26) always, 37.7% (n=159) sometimes, and 56.2 ( n=237) no (Table 7).

The study participants were also asked for their practices of asking teachers for permission to go out of class for seeking out help whenever they have menstrual problems. 74.9% (n=316) have reported yes, for their practice of asking teachers for permission to go out of class for seeking out help whenever they have menstrual problems; 19.7% (n=83) reported no, even if they have such problems; and 4.5% (n=19) reported that they have no menstrual related problems during class that can urge them to ask teachers for permission and to seek out help. In addition, participants of the study were asked if they have ways of asking teachers for permission whenever they have menstrual problems during class. 24.6% (n=104) have reported telling directly about their menstrual problems, 53.6% (n=226) telling some other problems rather than their menstrual problems, and 21.8% (n=92) have no response since they did not ask permission before for such problems. The students were also asked about the teachers' responses if they have ever asked for permission to seek help out of class whenever they get menstrual problems. Their responses were 25.1% (n=106) they did not get permission, 53.1% (n=224) they have got permission form some teachers, and 21.8% (n=92) have no response because of they did not ask any teachers for permission. They gave their own reasons for the question if they have had asked and did not get permission form teachers to go out of class and seek help whenever they have menstrual flow or pain as 35.6% (n=150) did not understand my problems, 12.3% (n=52) understood my problems but were not volunteer to give me permission, 30.3% (n=128) did not get permission because of no rules and regulations stated about female students menstrual problems in the school, and 21.8% (n=92) have no response because they did not have practice of asking their teachers for permission (Table 7).

For existence of penalties by teachers for absenteeism because of menstrual problems the responses were 69.2% (n=292) they have been penalized by teachers, and 30.8% (n=130) did not get any penalty by teachers. The types of penalties because of absenteeism they received form teachers were 23.5% (n=99) to bring medical certificate, 22.7% (n=96) to bring family members, 5.7% (n=24) insulting, 0.5% (n=2) beating, 9.7% (n=41) given work or sport, 8.8% (n=37) other types of penalties, and 29.1% (n=123) no response for presence of penalties. Respondents were also asked for the sex of teachers who can understand menstrual problems more whenever they ask for permission to seek help out of the school campus and the responses were 11.1% (n=47) male teachers, 40.3% (n=170) female teachers, 10.7% (n=45) both male and female teachers, 16.1% (n=68) none of the teachers understand me, and 21.8% (n=92) have no response because they did not ask any teacher for permission. The responses to indicate the type of protections used if they have experiences of sudden menstrual flow as they were in the school campus were 36.7% (n=155) I am always ready and have pad for such problem, 13.7% (n=58) I used pieces of paper, 7.6% (n=32) I asked friends to give me whatever they have, 13.7% (n=58) I have used by tearing my own clothes for protection, 24.6% (n=104) my clothes were seen stained with blood because of lack of menstrual flow protection pad, and 3.6% (n=15) I have used other types of protection (Table 7).

For the question asked to indicate the place where they have changed their sanitary pad whenever they want to change it as they were in the school campus, their responses were 43.6% (n=184) in the toilet, 3.6% (n=15) in the class room, 16.1% (n=68) other place in the school campus, 35.5% (n=150) by going home to change my used sanitary pad, and 1.2% (n=5) other place (Table 7).

**Table 7** - Presentation about the practices of the study participants whenever they are affected by menstrual problems; Southern Wollo at Haik General Secondary and Preparatory School, December 2007.

	Number of
Variables	Respondents
	(%) (n = 422)
Have you experienced pain just before and during your menstrual periods as you are	
in the school?	
Yes	376 (89.1%)
No	46 (10.9%)
Did you frequently miss classes or exams because of your menstrual problems?	
Always	26 (6.2%)
Sometimes	159 (37.7%)
No	237 (56.2%)
Have you ever asked your teachers for permission to go out of class for seeking help	
whenever you have menstrual flow or pain?	
Yes	316 (74.9%)
No	83 (19.7%)
I have no problem during class	19 (4.5%)
How did you ask your teacher permission as you feel menstrual flow or pain?	
Telling directly about my menstruation problems	104 (24.6%)
Telling some other problems	226 (53.6%)
No response, since I did not ask permission	92 (21.8%)
What was the response of your teachers if you have ever asked for permission?	
They did not give me permission	106 (25.1%)
Some gave me permission	224 (53.1)
No response because I did not ask permission	92 (21.8%)
Have you been penalized by your teachers for about your absenteeism because of	
your menstrual problems?	
Yes	292 (69.2%)
No	130 (30.8%)

**Table 7** – Presentation about the practices of the study participants whenever they are affected by menstrual problems; Southern Wollo at Haik General Secondary and Preparatory School, December

# 2007. **Continued...**

What was the most common type of penalty taken up you for your	Number of Respondents (%)
absenteeism from class because of your menstrual problems?	(n=422)
Bring medical certificate	99 (23.5%)
Bring family	96 (22.7%)
Insulting	24 (5.7%)
Beating	2 (0.5%)
Giving work or sport	41 (9.7%)
Other	37 (8.8%)
No response since no punishment	123 (29.1%)
If you have ever asked permission, which of the following teachers	
understands your menstrual problems more?	
Male teachers	47 (11.1%)
Female teachers	170 (40.3%)
Both male and female teachers	45 (10.7%)
Non of them understand me	68 (16.1%)
No response since not asking permission	92 (21.8%)

**Table 7** – Presentation about the practices of the study participants whenever they are affected by menstrual problems; Southern Wollo at Haik General Secondary and Preparatory School, December

# 2007. **Continued...**

If you have ever seen suddenly your menses flow when ever you are in	Number of Respondents (%)		
your school campus, how do you protect its flow?	(n=422)		
I always have pad	155 (36.7%)		
I used pieces of paper	58 (13.7%)		
I asked friend to give me what they have	32 (7.6%)		
Torn and use my clothes	58 (13.7%)		
My clothes are stained with blood	104 (24.6%)		
Other	15 (3.6%)		
Where did you change your sanitary pad in the school?			
Toilet	184 (43.6%)		
Class room	15 (3.6%)		
Other place in the school campus	68 (16.1%)		
Going home to change pad	150 (35.5%)		
Other	5 (1.2%)		

#### **CHAPTER V**

#### **Discussion**

The objectives of this study were to investigate high school female students' current knowledge, practice, attitudes and supports they obtain whenever they are affected by menstrual problems.

Based on these objectives, the study might provide important information regarding the knowledge, attitudes, practices and types of supports of high school female students' challenges when seeking help as they face menstrual problems. It might also help to contribute significant information for curriculum developers to enhance the knowledge of students by including sex education programs as well as training of teachers concerning female students' sex-linked menstrual problems in relation to the soiciocultural pressures. Moreover, it may give ideas for higher governmental officials and for those who are interested to work on the allocation of resources for helping high schools, colleges, and universities' female students whenever they face menstrual related health problems.

Furthermore, in the view of the fact that since high school female students are also the segment of the major society, the result might provide imperative contribution for ground works of policy makers to include issues regarding the right of females when they face menstrual related health problems at work or at training sites and to work against the sociocultural pressures or inhibitions that cause ignorance and hindrance of females not to speak openly to get help whenever and wherever they face menstrual problems. It might also provide considerable contributions for non governmental organizations and interested individuals who have the desire to work against the cultural barriers in the society which hold back females not to speak openly to get help whenever

they face with menstrual problems. Moreover, this research finding might provide significant contributions for community health nurses, reproductive health nurses, and other health professionals to provide health education based on the cultural problems which can hold back females from speaking openly for inquiring help whenever they have menstrual problems.

In this study the knowledge of the female students about the availability of sanitary pad in their current living areas as in town and out of town was found to have statistically non significant as indicated by (0.125), Odds Ratio (2.405) with 95% Confidence Interval for Exp (B) (lower Boundary 1.534, and upper boundary 3.768) (Table 1). This indicates that a student who came from the urban town Haik have 2.405 times the odds of being aware about the availability of sanitary pad in her current living area compared to a student came from out of Haik from the rural areas.

As indicated by the Information on Natural Menstruation; Web site period.com, although menstruation is a natural, reproductive process, it bears a strong cultural taboo that commands and is it not be seen, discussed, or in most ways, acknowledged. This desire to keep menstruation secret is often paired with an attitude that menstruation is dirty and disgusting. Many girls report shame about being seen with a menstrual product or, worse yet, about bleeding through clothing, and some adolescent girls report that they are embarrassed simply by the fact that they menstruate. (30).

Again as Barun & Wilkison of qualitative study about spoke of menarche as an experience that contaminated body & genitals. 2001, pp 12 - 30, indicates shame about menstruation is often extended to the vagina and its surrounding areas, which are considered by many women to be unspeakable and unpleasant. This qualitative study also has found that menarche is seen as an experience that can contaminate girls' bodies and their genitals in particular (31).

In the light of this, the study reveals the attitudes of the study participant to speak openly to get help from teachers whenever they face menstrual problems. The respondents' place of residence 32.2% (n=136) Haik town, and 67.8% (n=286) out of Haik town was compared with their attitudes for presence of shyness to ask teachers for permission to seek help whenever they have got menstrual problems and was found to have non significance level of 0.357, and Odds Ratio 0.809 with 95% Confidence Interval for Exp (B) (lower Boundary 0.515, and upper boundary 1.271) (Table 2). This indicates that a student who came from the urban town Haik have 0.809 times the odds of being shy to ask her teachers permission to seek help whenever she has menstrual problems compared to a student came from out of Haik from the rural areas.

In addition, the respondents' experiences of pain just before and during menstrual periods as they are in the school was compared with place of residence 32.2% (n=136) from Haik town, and 67.8% (n=286) out of Haik town. It is found to have a significance level of 0.000, and Odds Ratio 0.879 with 95% Confidence Interval for Exp (B) (lower Boundary 0.461, and upper boundary 1.674) (Table 3). This can point out also there is strong association between the students' experiences of pain just before and during their menstrual periods as they are in the school when compared with their residence areas. In addition, the result showed that a student who came from the urban town Haik have 0.879 times the odds of experiencing pain just before and during menstrual periods as she was in the school campus compared to a student came from outside the Haik town.

Concerning to the presence of penalty by teachers for absenteeism because of menstrual problems has been compared with the respondents' residence areas (32.2% (n=136) Haik town, and 67.8% (n=286) out of Haik town. It was found to have a significance level of 0.000, and Odds Ratio 0.668

with 95% Confidence Interval for Exp (B) (lower Boundary 0.433, and upper boundary 1.031) (Table 4). The result points out for the presence of strong association between their presence of penalty for absenteeism from class because of menstrual problems and residential areas. In addition, the result showed that a student who came from out of Haik town has 0.668 times the odds of being penalized by her teacher compared to a student came from Haik town.

## 5.1. Knowledge of the study participants whenever they are affected by menstrual problems

As suggested by many researchers, most females experience some degree of pain and discomfort in their menstruation period (dysmenorrhea) (7, 8), which could have important impacts on their daily activities, and disturb their productivity at home or at their work place (4, 18). Dysmenorrhea is a painful period or menstruation cramps, which may be accompanied by some other symptoms and complications such as nausea, vomiting, diarrhea, headache, weakness, and/or fainting and was reported as the most common reason for females to visit a health professional (2, 12, 20, 21, 22, 23). There are probably few women who can truthfully claim that they have never had dysmenorrhea but a majority of them are thought to experience some degree of menstruation cramps (17, 18, 24).

Again, on one cross-sectional study conducted in January 2002 among a randomly selected 242 female students to determine the prevalence of premenstrual syndrome (PMS) and its effect on academic and social performances of students of Jimma University it has been found that about 14% of the study participants frequently missed classes and 15% missed examinations or scored a lower grade at least once because of PMS symptoms (36).

Based on this information, the study groups were asked if menstrual pain or flow could affect their class participation. 64.5% (n=272), 26.8% (n=113), and 8.8% (n=37) have answered yes, no, and I do not know, respectively. Again, for a question presented to ask if their menstrual pain or flow had negative contributing factor for grade results, the respondents have answered 64.0% (n=270) yes; 28.2% (n=119) no; and 7.8% (n=33) I do not know (Table 5). This can be concluded that the great majority of the study group is affected by menstrual pain or flow itself to have low class participation and as a result to have a negative contributing factor for grade results.

Concerning about the students' knowledge, for a question presented to know whether they have been taught or not about sex-linked menstrual problems, 56.6% (n=239) answered yes where as 43.4% (n=183) responded no (Table 5). This result shows that more number of female students have learned about menstruation. However, study participants gave their own reasons if they have had asked and did not get permission form teachers to go out of class and seek help whenever they have menstrual flow or pain. Out of 422 respondents 35.6% (n=150) have reported that the teachers did not understand my problems, 12.3% (n=52) said the teachers understand me but not volunteer to give permission, 30.3% (n=128) have reported that they did not get permission because of no rules and regulations stated about female students menstrual problems in the school, and 21.8% (n=92) have no response because of not asked their teachers for permission before (Table 5). The results of this study indicate that there is higher percentage of teachers who did not give permission for female students whenever they have got menstrual problems because of lack of awareness for students' menstrual problems which might be due to sociocultural pressure that has hindered the students not to speak openly about their menstrual related problems. Other cause might be because of no rules

and regulation stated at school level for female students' menstrual problems to enable teachers to give permission for the students to seek help outside the school campus.

The study participants have been also asked if the school has special prepared place to enable female students change their sanitary pad. 1.2% (n=5) answered yes; 64.2% (n=271) answered it does not have; and 34.6% (n=146) answered I do not know. Again, they have been asked if the school has assigned person for the treatment of female students' menstrual pain and supply of sanitary pad. 0.5% (n=2), 73.9% (n=312), and 25.6% (n=108) have answered yes, no, and I do not know, respectively. Further more, participants were asked if they know any place in their current living area where sanitary pad is easily available. Out of the total 422 study participants, 60.9% (n=257), and 39.1% (n=165) have replied yes I know, and I do not know, respectively (Table 5). These results showed the greatest number of the study participants responded that the school has not special prepared place to enable female students change their sanitary pad. On the other hand, more number of the study participants have pointed out that there is no assigned person in the school for the treatment of female students' menstrual pain and supply of sanitary pad. However, the other side to the study result showed that some number of female students has knowledge where sanitary pad is easily available in their current living areas. These indicate that the school did not have isolated prepared place used for only by female students for changing their menstruation pad and no assigned health professional to supply menstruation sanitary pad as well as for the treatment of pain related to menstruation.

The constitutional rights of Ethiopian women in article 35 number 9 states that to prevent harm arising from pregnancy and childbirth and in order to safeguard their health, women have the right of

access to family planning, education, information and capacity. This article does not clearly show the rights of females in relation to their sex-linked menstrual health problems if it occurs wherever they are working at school or employment areas to safeguard the health problems imposed by their menstruation. (16)

Based on this information, the respondents were asked to give suggestion about asking teachers for permission whenever menstrual problems occur must be the right of female students and the responses were 96.7% (n=408) should be the right of female students where as 3.3% (n=14) answered as it should not be the right of female students. In addition, the study group has been asked to give suggestion about what measure should be taken on school teachers concerning female students' menstrual problems. The responses were 39.3% (n=166) provide training; 58.3% (n=246) only notify them as to be the right of female students; 1.9% (n=8) no need of measure to be taken; and 0.5% (n=2) other type of measure. Moreover, participants of the study were also asked to provide ideas about the measures to be taken to solve females' menstrual problems if it occurs and they need help during work or training times. Their responses for this question were 64.7% (n=273) it should be included in the policy; 32.5% (n=137) include only in schools' rules and regulations; 2.6% (n=11) no need of measures to be taken; and 0.2% (n=1) other type of measures (Table 5). This result showed that most of the study participants have given their suggestion there must be female students right to ask teachers for permission whenever they get menstrual problems. In addition, higher percentage of students have suggested about the need of training for school teachers on female students' menstrual problems and other higher percentages of students suggested only notifying teachers as to be the right of female students is enough. As higher percentage of the study participants have also reported that the need of including in the policy for the right of females to enable them ask and get permission whenever the problem occurs during working or training times.

### 5.2. Attitudes of the study participants whenever they are affected by menstrual problems

As studied by Emebet Mulugeta, E. (2004). Swimming Against the Tide: Educational Problems and Coping Strategies of Rural Female Students in Ethiopia. Eastern Africa Social Science Research Review [Online], 20(2). pp 71-97 Available: http://www.ajol.info/viewarticle.php?id=14562 reveals that in developing countries many literatures on girls' educational problems mostly focused on identifying constraints in terms of their accessing and succeeding in education related to their workload, gender inequality, and cultural practice-related problems(1). However, what is lacking is to investigate and find solutions on the problems imposed by sex-linked menstrual health problems that can encounter female girls' education.

In addition, a qualitative study by Barun & Wilkison. Spoke of menarche as an experience that contaminated body and genitals. 2001, pp 12 – 30, indicates that shame about menstruation is often extended to the vagina and its surrounding areas, which are considered by many women to be unspeakable and unpleasant. The study has also found that menarche is seen as an experience that can contaminate girls' bodies and their genitals in particular (31). Yet again, as indicated in the Information on Natural Menstruation; Web site: period.com, In spite of celebrating the menarche to be the form and function of women's anatomy, it is still common for women to feel shame about their bodies, to use euphemisms so as to avoid even to name their genitals, or to experience confusion about the makeup of their external genitalia (30).

Based on these information, the attitudes of the study participants for presence or absence of shyness of asking teachers for help whenever they have menstrual problems was asked and 72.7% (n=307) have reported that they are shy enough to ask and 27.3% (n=115) have responded that they do not afraid teachers to ask for help as they get menstrual problems. Students were also asked whether they are courage or not to ask their parents for money to buy sanitary pad. The responses were 33.2% (n=140) yes, I am courage to ask my parents for money to buy sanitary pad; and 66.2% (n=282) no, I am not courage to ask my parents for money to buy sanitary pad. In addition, participants of the study group were asked about their preferences from family members to ask for money to buy sanitary pad. Their responses were 26.1% (n=110) mother; 0.7% (n=3) father; 2.6% (n=11) mother or father; 3.8% (n=16) other form family members; and 66.8% (n=282) no response because of shyness to ask for money form family members (Table 6). These results showed that higher percentage female students were shy enough to ask teachers for permission to seek out help whenever they have menstrual problems or afraid their family members to inform and ask for money to buy sanitary pad because of their shyness.

## 5.3. Practices of the study participants whenever they are affected by menstrual problems

According to some international reports, the prevalence of dysmenorrhea is very high, and at least 50 percent of women experience this problem throughout their reproductive years (5, 17, 25). This problem not only causes fear in approximately one-fifth of the female population, but also causes many social, physical, psychological, and economic problems for women around the world (3, 5). The results of recent studies showed that nearly ten percent of females with dysmenorrhea experienced an absence rate of 1 to 3 days per month from work or were unable to do their

regular/daily tasks due to their severe pain (2, 3). It has been also shown that dysmenorrhea is considered as the main cause of absence from school among young girl students (4, 5).

In the light of this information, the study participants were asked for the experiences of pain before and during their menstrual periods as they were in the school. 89.1% (n=376) responded, yes, where as 10.9% (n=46) answered, no. Again, they have been asked for presence of missed classes or exams because of their menstrual related problems and were found to be 6.2% (n=26) always; 37.7% (n=159) sometimes; and 56.2 (n=237) no. Yet again, participants were asked for their practice of asking teachers for permission to go out of class for seeking help whenever they have menstrual problems. 74.9% (n=316) have reported yes for their practice of asking teachers for permission to go out of class for seeking help whenever they have menstrual problems; 19.7% (n=83) reported no even if they have such problems; and 4.5% (n=19) reported that they have no menstrual related problems during class that can oblige them to ask teachers for permission and seek out help. On the other hand, study participants were asked for their methods of asking teachers for permission whenever they get menstrual problems during class. 24.6% (n=104) have reported telling directly about their menstrual problems; 53.6% (n=226) telling some other problems rather than their menstruation; and 21.8% (n=92) have no response since they did not have practice of asking permission before for such problems. The students were also asked about their teachers' responses if they have ever asked for permission to seek help out of class whenever they get menstrual problems. 25.1% (n=106) reported as they did not get permission; 53.1% (n=224) reported they have got permission from some teachers; and 21.8% (n=92) have no response because of they did not ask their teachers for permission before. Concerning about the question presented for the study participants for the presence of penalty by teachers for absenteeism because of menstrual related

problems, out of the 422 respondents 69.2% (n=292) have said that they have been penalized, and 30.8% (n=130) reported they did not get any penalty by teachers for absenteeism because of menstrual problems. For a question asked to respond about the type of penalties they have received form teachers for their absenteeism because of menstrual related problems, the respondents have reported as 23.5% (n=99) to bring medical certificate; 22.7% (n=96) to bring family members; 5.7% (n=24) insulting; 0.5% (n=2) beating; 9.7% (n=41) by giving work or sport; 8.8% (n=37) other types of punishment; and 29.1% (n=123) no response for punishment since they were not penalized for absenteeism because of menstrual problems. Respondents were also asked about which teachers understand them more on menstrual problems if they have asked for permission to go out of class and seek out help. Out of the total respondents 11.1% (n=47) reported male teachers; 40.3% (n=170) female teachers; 10.7% (n=45) both male and female teachers; 16.1% (n=68) none of them understand me; and 21.8% (n=92) no response since they did not have practice of asking for permission. In addition, respondents were asked about the type of protection used for menstrual flow if it appears as they are in the school campus. They have reported as 36.7% (n=155) I am always have pad; 13.7% (n=58) I used pieces of paper; 7.6% (n=32) I asked friends to give me what they have; 13.7% (n=58) I used tearing my own clothes; 24.6% (n=104) my clothes were stained with blood because of lack of menstrual protection pad; and 3.6% (n=15) I used other types of protection. Further more, the respondents were asked where they have changed their sanitary pad as they were in the school campus. Based on this question they reported as 43.6% (n=184) in the toilet; 3.6% (n=15) in the class room; 16.1% (n=68) other place in the school campus; 35.5% (n=150) going home to change my used sanitary pad; and 1.2% (n=5) other place (Table 7).

The results of the study signifies that even if more female students do not miss class or exam because of menstruation related problems, most of the female students have experiences of pain before and during their menstrual periods as they were in their school campus. In addition, higher numbers of students have practices of asking and got permission form teachers by directly telling the problem itself or indirectly telling some other problems which is not related to their menstruation and went out of class for seeking help whenever they have menstrual problems. However, the study indicates most of the students have been penalized by different types of penalties by teachers for their absenteeism because of menstrual problems. The result also showed that female teachers have more understanding for the presence of menstrual problems than male teachers whenever students are approaching them to ask for permission to seek help for their menstrual problems out of the school campus. In contrary, the results indicate the types of protection that the female students have used for their menstrual flow when it occurs in the school campus were largely not the usual types of protection. They have rather used pieces of paper, asking their friends to give them whatever they have, torn their own clothes, use other extraordinary type of protection, and their clothes were seen instead blood stained because of lack of menstrual flow protection pad. Further more, the results indicate that since there is lack of place in the school campus to enable female students change their menstrual flow protection sanitary pad, most of them use toilet, class room, other places in the school campus and small percentages go home with the problem without changing their pads.

#### **CHAPTER VI**

## **Strength and Limitation**

## 6.1. Strength

The principal investigator had estimated that the duration for data collection will take more time. However, because of the cooperativeness and willingness of the school's administrative staffs, teachers and the students themselves the long time that would take for the data collection became limited and finished within short period of time.

#### 6.2. Limitations

Since the study might be compromised by cultural norms of the society to inform about menstrual related problems, respondents might not report their genuine attitudes. The investigator also could not be sure weather the responses given to the variables are heartily and realistic to the real situation. The study therefore, could be confounded by social cultural & desirability biases. Moreover, absence of similar studies in the area also might made compression of the result difficult.

#### **CHAPTER VII**

#### Conclusion and recommendation

## 7.1. Conclusion

The study showed that the majority of the study group of female students have experienced pain during their menstrual periods as they were in the school. As a result of this, their responses indicate that menstrual pain or the blood flow itself can affect female students' class participation and grade results. In addition, higher percentages of the study participants have reported that they have been absent form class or exams because of menstrual problems. Most of the female students were also penalized for absenteeism from class because of menstrual related problems such as to bring medical certificate, bring family members, insulting, beating, giving works or sport and by some other types of penalties.

Moreover, the study showed that most of the study participants are shy enough to speak openly to ask their teachers for permission to seek out help whenever they have menstrual problems. As the study indicates, even if more number of female students have the knowledge where sanitary pad is available, the greatest number of the study participants are found to be shy enough to ask their parents for money to buy menstrual sanitary pad for menstrual blood flow protection. Again, it is found that the higher percentages of teachers are deficient in responsiveness to give permission for menstrual problems as they were indirectly asked by female students because of their shyness. Additionally, other more numbers of teachers were found not to agree to give permission for female students to seek out help whenever they face menstrual problems during classes or exams because of no rules and regulation stated at school level for female students' menstrual problems.

On the other hand, the study showed that the types of protection that the female students used for their menstrual flows when it appeared as they were in the school campus were pieces of paper, torn and use their clothes, or rather their clothes were seen stained with menstrual blood because of lack of menstrual sanitary pad. Further more; the results of the study have indicated that there is lack of place in the school campus that enable female students privately change their menstruation protection sanitary pad. Whenever female students want to change their sanitary pad higher percentages of the respondents have used toilet, class room and other places in the school campus where as small percentages go home with their problems. Yet again, more numbers of the study participants have indicated that there is no assigned person in the school for the treatment of female students' menstrual pain and supply of menstrual blood flow protection sanitary pad.

The results of the study also indicate that most of the study participants have strongly suggested that asking teachers and getting permission whenever menstrual problems occur should be the right of female students. More numbers of the study participants have also given their ideas about the need of training for school teachers on female students' menstrual problems in relation to the cultural barriers which can withhold female students from speaking and asking openly about their menstrual problems to get aid inside or out of their school campus. The other small number of participants suggested that notifying teachers only as the right of female students is enough.

In addition, the greatest majority of the study participants have recommended about the need of inclusion in the policy as the right of females to get permission to seek out help for their menstrual related problems wherever they are found at working or training sites.

## 7.2. Recommendation

The study showed that menstrual pain or flow is found to affect female students' class participation, causes to have low grade results, and to have higher rate of absenteeism from classes and examinations.

The study has also indicated that there were unresponsiveness of teachers due to lack of awareness to respond for female students' menstrual problems as a result of cultural barriers which make the students to be shy enough to inform teachers about menstrual related problems to get permission and seeking out help. Teachers could not also give female students permission whenever they face menstrual related problems because of no rules and regulations stated at school levels. More over, the results show that there is lack of assigned health professional in the school to treat menstrual imposed pain or for supply of sanitary pad. The school was also found have lack of isolated prepared places to enable female students privately change their menstrual protection sanitary pad.

In addition, the results of the study indicate that higher number of female students have problems of asking for money form their family members to buy sanitary pad because of shyness imposed by the culture.

The greatest majority of the study participants have also suggested about the need of inclusion in the policy to be the right of females to get permission to seek out help for their menstrual related problems wherever they are found at working or training sites.

Therefore, in order to solve menstrual problems, the researcher recommends that there should be: -

- Training of teachers regarding the cultural barriers that hold back female students not to speak about their menstrual problems and seek out help.
- Inclusion in any school's rules and regulations to enable female students to have the right to ask permission and be free from classes and examinations during their menstrual problems.
- Prepared isolated places in schools campuses to enable female students privately change their menstrual sanitary pad.
- Train female students on self prepared clean, accessible, affordable, acceptable, and technologically sound sanitary pads.
- Assignment of health professionals in schools for the treatment of menstrual pain and supply of sanitary pad as well as for the treatment of other illnesses that can appear in the total students of every school.
- Inclusion in the policy to be the right of females to enable them gets permission for their menstrual related problems wherever they are found at working or training sites.
- Sustainable works against cultural barriers at the family, school and community levels that make females not to speak openly about menstrual related problems and get help.
- More studies are needed on other segments of the community to recognize the sociocultural pressures regarding races, ethnicity, and geographical areas where females are training or employed to verify the presence of similar problems.
- Further studies may be needed that can possibly affect females' behavior and may be the cause of conflict between them and family members especially with their male partner's due to lack of knowledge about the mood changes of females during their menstrual periods.

#### REFERENCES

- 1. Emebet Mulugeta, E. (2004). Swimming Against the Tide: Educational Problems and Coping Strategies of Rural Female Students in Ethiopia. Eastern Africa Social Science Research Review [Online], 20(2). pp 71-97 Available: http://www.ajol.info/viewarticle.php?id=14562.
- 2. Jarrett M.et al. "Symptoms and Self care Strategies in Women With and Without Dysmenorrhea". 1995, 16(2): PP: 167 178.
- 3. Pedron N. et al. "Incidence of Dysmenorrhea and Associated Symptoms in Women Aged 15 24 Years". Ginecol Obster Mex. 1998, 66. PP: 492 494.
- 4. Drank Shayani D.K. and Uenkafa RP. "A Study on Menstrual Hygiene among Rural Adolescent Girls". India Journal of Medical Sciences. 1995, 45; PP: 139 143.
- 5. Nafstad P. et al. "Memarcje and Menstruation Problems among Teenagers in Oslo". Tidsskr Nor Laegeforen. 1995, 115(5). PP: 604 606.
- 6. Mohammed Poureslami and Farzaneh sati-Ashtiani. "Assessing Knowledge, Attitudes, and Behavior of Adolescent Girls in Suburban Districts of Tehran about Dysmenorrhea and Menstrual Hygiene". 2003, PP: 1-4.
- 7. Beek J.S. et al. "Puberty and Dysmenorrhea Treatment". Novice's Gynecology. Williams and Wilkins Publication, Inc. 1996, PP: 771 780.
- 8. Dagwood M.Y. "Dysmenorrhea". J.repod. Med. 1995, 30(3); PP: 154 167.
- 9. Secerino SK and Moline M.E. "Premenstrual Syndrome Identification and Management". Drugs. 1995, PP: 71 82.
- 10. The Barnard College Student Health Service Bulletin. "The New Our Bodies-Ourselves". New York, Simon and Schmster, 1998, pp 12- 30.

- 11. The American College of Obstetricians and Gynecologists. "Gynecologic Problems: Dysmenorrhea". Washington, D.C.: ACOG. 1995, pp 31-60.
- 12. Westhoff CL. and Davis AR, "Primary Dysmenorrhea in Adolescent Girls and Treatment with Oral Contraceptives". J.Pediatr Adolescent Gynecology. 2001, 14(1); PP: 3 8.
- 13. Planned Parenthood Federation of America. "Centers for Disease Control and Prevention". Encarta Encyclopedia, 2004, Microsoft Corporation.
- 14. Jean Davison, Benson Honig, Karen Tietjen, Tassew Zewdie and Tenagne Tadesse (USAID).
  Educational demand in rural Ethiopia. December 1993 January 1999.
- 15. Office of the Senior Coordinator for International Women's Issues, Office of the Under Secretary for Global Affairs, U.S. Department of State, June 2001.
- 16. Constitutional Rights of Ethiopia Women, Article 35 number 9. 21 August, 1995. pp 92 94.
- 17. American Institute of Preventive Medicine. "Menstrual Cramps". 1996, pp 55 -71.
- 18. Dechemcy A.H. and Pernall M.L. "Treatment of Dysmenorrhea, Current Obstetric and Gynecology Diagnostic and Treatment". Prentice Hall International Inc. 1994, PP: 664 665.
- 19. Andersch B. & Milson I. "An Epidemiological Study of Young Women with Dysmenorrhea". AM.J. Obster Gynecol. 1982, Nov. 15, 144(6); PP: 655 660.
- 20. Fakeye O.and Egade A. "The Characteristics of the Menstrual Cycle in Nigerial School Girls and the Implications for School Health Programs". Alrica Journal of Medical Sciences. 1994, 23; PP: 13 14.
- 21. Johnson J. "J. Adolescent Health Care". 1988, 9(5); PP: 398 420.
- 22. Katznng B.G. "Treatment of Dysmenorrhea". Basic and Clinical Pharmacology. Appleton and Lang Publication, Inc. 1998. PP: 304 319.
- 23. Klein JR. "Epidemiology of Adolescent Dysmenorrhea". Pediatrics. 1998.

- 24. Ojeda L. "Menopause without Medicine: Menstrual Cramps". Hunter House Inc.1995. pp 72 120.
- 25. Mijanovi D. "Correlation between Certain Factors in Maturation and Primary Dysmenorrhea in Adolescents" J. Cinekol Perinatol. 1990, 30(3). PP: 79 82.
- 26. Dr. Vithal Prabhu. "Sex Education to Adolescents; Problems of Adolescents" website: http://www.the bestmedicalcare.com.
- 27. Wikipedia Encyclopedia, 16 December 2006. Website www.wikipedia.org.
- 28. UNESCO "Biology Sexuality education for schools". Filename: UNBiology5.html Updated: 2005-12-01, PP: 123 130.
- 29. Gale Encyclopedia of Medicine, Published December, 2002 and updated on 04/22/2004 by the Gale Group. Website www.gale.com/preww\_room/2006\_06\_23\_EncylopediaMedicine.htm.
- 30. Information on Natural Menstruation; Web site: period.com.
- 31. Barun & Wilkison. Qualitative study Spoke of menarche as an experience that contaminated body & genitals. 2001, pp 12 30
- 32. Marin et al. "Connection between sex and menstruation". 2000, pp 25 44.
- 33. Rampel & Baumgarter. "Link between menstrual attitudes and both sexal attitudes & sexual behavior". 2006, pp 13 24
- 34. Baron & Kenny. "Criteria for establishing the occurrence of mediation". 1986. pp 12 -20.
- 35. Jean Davison, Benson Honig, Karen Tietjen, Tassew Zewdie and Tenagne Tadesse (USAID).

  "Educational demand in rural Ethiopia". December 1993 January 1994. pp 10 25.
- 36. Addis Tenker, Nebreed Fisseha, Biniyam Ayele. "Premenstrual syndrome: prevalence and effect on academic and social performances of students in Jimma University". Ethiopia. January 2002. P 181.

#### **Annex**

## **Questionnaire**

## **Addis Ababa University**

## **Faculty of Medicine**

## **Centralized School of Nursing**

Questionnaire on female students challenges in seeking help when facing menstrual problems in Southern Wollo at Haik General Secondary and Preparatory School.

#### Note:

- ➤ This questionnaire has intended to measure the knowledge, attitudes, and practices of female students' challenges in seeking help when facing menstrual problems in their school.
- The respondents would be requested voluntarily to respond for the structured questionnaire only if, after all the social, cultural, legal, and ethical issues have to be considered and fulfilled and questionnaire has well clarified.
- The respondents of this questionnaire are all selected female students for the study who are currently learning in Southern Wollo at Haik General and Preparatory School.

## **Instruction:**

- 1. There is no need of writing your name on this questionnaire paper for the purpose of confidentiality. Therefore, feel at ease when feeling this questionnaire
- 2. This questionnaire has two parts. Under each part, there are options listed in which case the respondent chooses only one.

**Part - I---**Respondent's background information.

Part - II--Respondents knowledge, attitudes, and practices questions.

- 3. This is a scientific research, therefore, the respondent should feel confident and any modification is not needed when feeling the questionnaire.
- 4. For questions which have alternatives, mark ( $\sqrt{}$ ) in the **space** given according to your choice and if you want to answer and fill the given open ended questions write your response exactly in the space provided according to what has been asked.

#### Part - I - Back ground Information of the student

1.	1.	A	ge

### 1. 2. Marital Status of the student

1.2.	1	Single	P.
1.4.	1.	OHER	

- 1.2.3. Divorced
- 1.2.4. Widowed
- 1.2.5. Cohabitant

#### 1.3. Religion of the student

1.3.1.	Orthodox	
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1.3.2. Muslim\_\_\_\_\_

1.3.3.	Catholic
1.3.4.	Protestant
1.3.5.	Other, specify
1.4. Educationa	al Level of the student
1.4.1.	Ninth grade
1.4.2.	Tenth grade
1.4.3.	Ten plus 1
1.4.4	Ten plus 2
1.5. Occupation	rather than student
1.5.1. Ho	use wife
1.5.2. Go	vernment employee
1.5.3. Pri	vate employee
1.5.4. Sel	f-employed
1.5.5. Fai	rmer
1.5.6. Do	not have work
1.6. Average mon	nthly income if you have occupation rather than being a student
1.6.1. No	income
1.6.2. ≤ 1	05 Birr/month

- 1.6.3.  $\geq$  106  $\leq$  200 Birr/month \_\_\_\_\_
- 1.6.4.  $\geq$  201  $\leq$  500 Birr/month \_\_\_\_\_
- 1.6.5.  $\geq 501 \leq 1,000/\text{month}$
- 1.6.6. > 1,000 Birr\_\_\_\_\_

### 1.7. Family Head Educational level

- 1.7.1. Not reading and writing
- 1.7.2. Reading\_\_\_\_\_
- 1.7.3. Reading & writing
- 1.7.4. Grade 1 6\_\_\_\_\_
- 1.7.5. Grade 7 8 \_\_\_\_\_
- 1.7.6. Grade 9 10\_\_\_\_\_
- 1.7.7. Grade 11 12\_\_\_\_\_
- 1.7.8. College diploma\_\_\_\_\_
- 1.7.9. College degree\_\_\_\_\_
- 1.7.10. Others, specify\_\_\_\_\_

## 1. 8. Average monthly income of the Family

- 1.8.1. ≤ 105 Birr/month \_\_\_\_\_
- 1.8.2.  $\geq$  106  $\leq$  200 Birr/month \_\_\_\_\_

1.8.3.	$\geq$ 201 - $\leq$ 500 Birr/month
--------	------------------------------------

1.8.4. 
$$\geq 501 - \leq 1,000/\text{month}$$

### 1.9. Occupation of the head of the family

#### 1.10. Place of residence:

## Part II - Knowledge, attitudes, and practices questions

2.1. Are you pregnant now?

b) Always
c) No
2.6. Do you think that your menstrual pain or flow can be one of the problems to have your low
class participation?
a) Yes
b) No
c) I do not know
2.7. Do you think that your menstrual pain or flow has negative contributing factor to your grade
results?
a) Yes
b) No
c) I do not know
2.8. Have you ever been taught about sex-linked menstrual problems in your school?
a) Yes
b) No
2.9. If your answer for question number 2.8 is yes, do you think the class given is adequate to gair
basic knowledge?
a) Yes

U)	They understand my problems but were not volunteer to give me
	permission
c)	They understand my problems but did not give me permission because there are no
	stated rules and regulations in the school to consider as the right of school
	girls
2.15. Have yo	ou ever been penalized by your teachers for about your absenteeism from classes
because	of your menstrual problems?
a)	Yes
b)	No
2.16. If you ha	ave been penalized by your teachers for about your absenteeism from classes because
of your i	menstrual problems, what was the most common type of penalty taken up on you?
a)	To bring medical certificate
b)	To bring family members
c)	Insulting
d)	Beating
e)	Giving works or sports
f)	Other punishments, specify
2.17. If you ha	ave ever asked permission to go out of class to seek help for your menstrual
problem	s, which of the following teachers understands your problems more?
a)	Male teachers
b)	Female teachers
c)	Both male and female teachers
d)	Non of them understand me

2.18. If you have ever seen suddenly your menses flow when ever you are in your school campus,
how do you protect its flow?
a) I am always ready for such problem and to use sanitary pad
b) I have used my piece paper
c) I have asked my friends to give me whatever they have to protect the flow
d) I have torn my own clothe and use it
e) I have asked the school to give me sanitary pad
f) My clothes were stained with blood because of lack of sanitary pad
g) Other, specify
2.19. If you want to change your sanitary pad as you are in your school campus, does your school
have a special prepared place for this purpose?
a) Yes
b) No
c) I do not know
2.20. If your want to change your sanitary pad as you are in your school campus, where did you
change it?
a) In the toilet
b) In the class room
c) Some other place in the campus out of class
d) I have to go out of campus to home change it

e) Other, specify
2.21. Does your school has assigned person for the treatment of female students' menstrual pain
and supply of sanitary pad?
a) Yes
b) No
c) I do not know
2.22. If your answer for question number 2.21 is "Yes", what is the name of the organization that is
helping for treatment of female students' menstrual pain and supply of sanitary pad?
a) Ministry of health
b) Ministry of Education
c) NGOs
d) Youth associations
e) Women's' association
f) The school it self
g) Other, specify
h) I don't know who has assigned
2.23. Do you have the courage to asked your parents to give you money to buy sanitary pad for
protecting of your menstrual flows?
a) Yes, I have the courage
b) No, I am shy to ask
2.24. If your answer for question number 2.23 is "Yes", whom do you prefer to ask frequently for
money to buy your sanitary pad?

a) Mother
b) Father
c) Either mother or father
d) Others from my family members
2.25. Do you know any place around your current living area where sanitary pad is easily
available?
a) Yes, I know
b) I don't know
2.26. If your answer to question number 2.25 is "Yes, I know", where is it easily available?
a) In governmental health Organizations
b) In private health organization
c) In the shops
d) In other, specify
2.27. Do you think that to ask teachers for permission and to seek help in the school or out of the
school whenever menstrual problems occur must be the right of female students?
a) Yes, it should be
b) No, it should not be
2.28. What do you think about the majors to be taken in the future to solve females' menstrual
problems as they need help when it occurs during their work or learning or training?
a) Should be included in the policy as the right of females
b) Include only in every school's rules and regulation
c) No need of majors to be taken
d) Other, specify

2.29.	2.29. What do you think about the majors to be taken in the future on school teachers concerning			
	student girls' menstrual problems?			
	a)	Provide training		
	b)	Only notify them that it is the right of female students' to ask permission		
	c)	No need majors to be taken		
	d)	Other, specify		

## **Declaration**

I, the undersigned that this thesis is my original work and has never been presented in any other university and that all resources of material have been appropriately acknowledged.

NameBalcha Berhanu Abera
Signature:
PlaceAddis Ababa, Ethiopia
Date of submission

This thesis has been submitted for examination with my approval as a university advisor.

Name---- S/r Tekebash Araya (RN, BSc, MPH)

Signature:

# **Note**

Anyone who read my thesis and feels the problem to be serious and want to help the Ethiopian girls who are suffering from menstruation related problem imposed by cultural barriers, poverty, lack of awareness, access to sanitary pad etc are welcome to change the thesis into project communicating first with me.

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