

**MENSTRUAL HYGIENE MANAGEMENT AND SCHOOL DROPOUT
AMONG FEMALE ADOLESCENT STUDENTS OF JIGJIGA SENIOR
SECONDARY SCHOOL, IN JIGJIGA CITY ADMINISTRATION.
SOMALI REGIONAL STATE**

MA THESIS

BY

AHMEDNUR YUSUF ABDILAH

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**Menstrual Hygiene Management and School Dropout Among Female
Adolescent Students of Jigjiga Senior Secondary School, In Jigjiga City
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**MASTER OF ART IN EDUCATIONAL LEADERSHIP AND
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Ahmednur Yusuf Abdulahi

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APPROVAL SHEET

HARAMAYA UNIVERSITY

POSTGRADUATE PROGRAM DIRECTORATE

We hereby certify that we have read and evaluated this Thesis entitled: *“Menstrual Hygiene Management and School Dropout Among Female Adolescent Students of Jigjiga Senior Secondary School, In Jigjiga City Administration, Somali Regional State* prepared under our guidance by Ahmednur Yusuf Abdilahi. We recommend that it be submitted as fulfilling the thesis requirement.

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|---------------------------------|-----------|-------|
| 1. Tadesse H. (PhD) | _____ | _____ |
| Name of Major Advisor | Signature | Date |
| 2. Birhanu S. (Assistant Prof.) | _____ | _____ |
| Name of Co-Advisor | Signature | Date |

As a member of the Board of Examiners of the MA Thesis Open Defense Examination. We certify that we have read and evaluated the Thesis prepared by Ahmednur Yusuf Abdilahi and examined the candidate. We recommend that the thesis be accepted as fulfilling the Thesis requirements for the degree of Master of Art *in* Educational Leadership and Management.

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Chairperson	Signature	Date
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DEDICATION

This thesis is dedicated to my lovely Mother Kamar Guddi Ashur for her committed partnership in the success of my life. And to all of my siblings and loved ones for keeping me with affection and care.

STATEMENT OF THE AUTHOR

By my signature below, I declare and affirm that this thesis is a result of my own work. I have followed all ethical and technical principles of scholarship in the preparation, data collection, data analysis, and compilation of this thesis. Any scholarly matter that is included in the thesis has been given recognition through citation. This thesis is submitted to Haramaya University in partial fulfillment of the requirements for the degree of Master of Arts in Educational Leadership and Management. The Thesis will be deposited at the library of the University and be made available to borrowers under the rules of the library. I declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma, or certificate.

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Name: **AHMEDNUR YUSUF**

Signature: _____

Date of Submission: _____

Department: Educational planning and management

BIOGRAPHICAL SKETCH

The author was born in 1989 E.C in Fafan zone, Somali Regional State Ethiopia. He attended his primary and secondary education in Jijiga. He completed his secondary school in Jijiga Secondary School and first degree in Dire Dawa University. He works as a governmental staff in Somali Regional Educational Bureau.

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ACRONYMS AND ABBREVIATIONS

HEW	Health Extension Workers
MHM	Menstrual Hygiene Management
PSU	Primary Sampling Unit
SPS	Statistical Package for Social Sciences
SRH	Sexual and Reproductive Health
SSU	Secondary Sampling Unit
TSU	Tertiary Sampling Unit
TV	Television
UNICEF	United Nations Children's Fund
WHO	World Health Organization

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MENSTRUAL HYGIENE MANAGEMENT AND SCHOOL DROPOUT AMONG FEMALE ADOLESCENT STUDENTS OF JIGJIGA SENIOR SECONDARY SCHOOL, IN JIGJIGA CITY ADMINISTRATION. SOMALI REGIONAL STATE

Ahmednur Yusuf Abdilahi

ABSTRACT

This study examines the menstrual hygiene management (MHM) on the education of adolescent girls at Jigjiga Senior Secondary School, Ethiopia. A mixed-methods approach was used to reveal a critical convergence of knowledge gaps, socio-economic constraints, and inadequate infrastructure that severely disrupts schooling. Findings show significant knowledge deficits, with 49% of girls lacking understanding of menstruation and 67.5% unaware of hygienic practices. School Water, Sanitation, and Hygiene (WASH) facilities were overwhelmingly deficient, fostering an environment of fear and anxiety. These challenges directly contributed to universal absenteeism. The study concludes that poor MHM, driven by structural, educational, and economic barriers, creates a direct pathway to school absenteeism, academic under-performance, and elevated dropout risk. Recommendations include implementing school-based MHM education, providing free sanitary products, urgently improving WASH infrastructure, training teachers, and exploring pain management solutions. Addressing these issues is essential for advancing gender equality and improving educational outcomes for girls in similar contexts

1. INTRODUCTION

This chapter provides the introductory part of the study, which consists of the background of the study, statement of the problem, research questions, objectives of the study, significance of the study, and scope of the study

1.1. Background of the Study

The concept of Menstrual Hygiene Management (MHM) was formally defined by UNICEF and WHO (2014) as the capacity of women and adolescent girls to use a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used materials. Inadequate MHM is not merely an inconvenience; it is a profound public health issue. The use of unhygienic materials, such as old rags, leaves, or newspaper, can lead to reproductive and urinary tract infections (RTIs/UTIs), with studies by Dasgupta and Sarkar (2008) showing a significantly higher prevalence of such infections among women with poor menstrual hygiene practices. Beyond physical health, the psychological impact is severe, often fostering feelings of shame, anxiety, and embarrassment.

The implications of poor MHM extend far beyond the health sector, creating a formidable barrier to education and gender equality—cornerstones of sustainable development. Globally, cultural norms and practical constraints force countless girls to miss school during their periods. In rural Nepal and India, for example, practices such as *chaupadi* or seclusion in menstrual huts, though increasingly outlawed, persist and isolate girls, impacting their safety and educational continuity (Crawford et al., 2014). In rural Peru, cultural taboos and a lack of facilities have been directly linked to high rates of school absenteeism and dropout among adolescent girls (Carmela et al., 2001). UNICEF's seminal 2005 report estimated that one in ten school-aged African girls will miss school during their menstruation, a figure that spikes to over 50% in some regions due to inadequate sanitation facilities and a lack of sanitary products (UNICEF, 2005; Sommer et al., 2015). This systemic failure constitutes a major obstacle to achieving the Sustainable Development Goals (SDGs), particularly SDG 4 (Inclusive and Equitable Quality Education), SDG 5 (Gender Equality), and SDG 6 (Clean Water and Sanitation).

The challenge is particularly acute in sub-Saharan Africa, where a confluence of poverty, weak infrastructure, and deep-seated cultural stigma creates a perfect storm. A comprehensive multi-country review by Miiro et al. (2018) identified three universal barriers across the continent: (1) inadequate Water, Sanitation, and Hygiene (WASH) infrastructure in schools and homes; (2) limited access to affordable, high-quality sanitary products; and (3) a pervasive culture of silence and stigma that prevents open discussion and education. The effectiveness of addressing these barriers was demonstrated in a large-scale study in Kenya by Montgomery et al. (2016), which found that providing girls with sanitary pads and complementary reproductive health education significantly reduced school absence rates, highlighting the tangible returns on targeted investment.

In Ethiopia, the situation reflects this troubling regional panorama. National data reveals a stark paradox: while 92.1% of girls are reportedly aware of menstruation before menarche, only 37.6% use commercially produced sanitary pads (Fehr, 2011). The vast majority are forced to rely on unhygienic alternatives, primarily old pieces of cloth (*gabi* or *netela*), which are often washed without soap and dried in dark, hidden places due to associated stigma, thereby failing to achieve hygienic dryness (Tegegne & Sisay, 2014). This failure in proper menstrual management has a direct and devastating impact on education. Studies by Abera (2004) and others have consistently found school absenteeism rates among menstruating girls in Ethiopia to range between 43% and 50.7%. The impact is not limited to physical absence. Even when present at school, girls report immense difficulty concentrating on their lessons due to the constant fear of leakage, odour, and the associated teasing from male peers, leading to significant psychological distress and diminished academic performance (Baylor et al., 2020).

The problem is exponentially worsened by the dire state of school infrastructure. National data indicates that a staggering 90% of schools lack separate, functional, and private sanitation facilities for girls (Fehr, 2011). This deficiency, as detailed by Alexander et al. (2014), means that school toilets, where they exist, often lack locking doors, adequate lighting, a reliable water supply, soap, and discrete disposal mechanisms for used menstrual materials. This environment of insecurity and indignity is a primary driver in a girl's decision to simply stay home during her period.

Within the diverse Ethiopian context, the Somali Regional State presents a unique and critically under-researched scenario. The region's predominantly pastoralist and Muslim society, combined with its acute vulnerability to climate-induced droughts, creates a context where MHM challenges

are intensified. Cultural and religious norms emphasizing modesty (*haya*) can heighten the stigma associated with menstruation, making it an even more taboo subject for discussion (Caruso et al., 2017). Furthermore, chronic water scarcity, a defining feature of life in the region (Lo et al., 2020), renders the core MHM requirement of washing whether of materials, hands, or the body nearly impossible for a vast majority of girls and families. These intersecting vulnerabilities, cultural, economic, and ecological, create a complex web of barriers that hinder progress towards national and international goals on education and gender equality, underscoring the urgent need for context-specific research and interventions.

1.2. Statement of the Problem

Menstruation-related challenges present a significant global barrier to education, health, and gender equality. Inadequate menstrual hygiene management (MHM), defined as a lack of access to products, facilities, education, and a supportive environment, affects millions of girls, leading to school absenteeism, diminished academic performance, and increased dropout rates (UNICEF & WHO, 2014). In sub-Saharan Africa, this issue is particularly acute. A multi-country review by Miiro et al. (2018) confirmed that the inaccessibility of affordable sanitary products, inadequate Water, Sanitation, and Hygiene (WASH) infrastructure in schools, and pervasive socio-cultural stigma are universal barriers that severely disrupt the education of adolescent girls across the continent.

The situation in Ethiopia mirrors this troubling continental trend. The Ethiopia Young Adult Survey (2010) revealed a critical gap in the use of hygienic menstrual materials, with 61.4% of girls relying on improvised rags and 24.5% using no protection at all. A stark urban-rural disparity exists, where only 1.6% of rural girls use commercial sanitary pads compared to 37.1% in urban areas, highlighting the profound impact of poverty and limited market access (EYAS, 2010). Beyond product access, the school environment itself is often non-conducive. Studies have found that schools lack private latrines with locking doors, water, and soap, and teachers are rarely involved in providing menstrual education or support, leaving girls to manage alone (Desalegn et al., 2009). The direct educational consequence is severe: an estimated 43% of girls miss school during their menstruation, which contributes to high academic attrition, with dropout rates linked to these challenges reaching 65% in some regions (Fehr, 2011; Nekatibeb, 2002).

The Somali Regional State, with its unique socio-cultural, economic, and environmental characteristics, likely faces compounded MHM challenges. The region is highly vulnerable to climate-induced droughts, leading to chronic water scarcity (Lo et al., 2020). This water insecurity directly cripples the ability to practice MHM, even when clothes are used, as they cannot be washed and dried hygienically. Despite these known contextual vulnerabilities, there is a critical scarcity of research focused specifically on MHM and its educational impact within the Somali Region, particularly in an urban setting like Jigjiga City.

There is a lack of specific, evidence-based research that investigates the complex interplay between MHM practices, socio-cultural norms, water scarcity, and educational outcomes in the Somali Regional State. To overcome the problems, the following basic research question has been developed by the researcher

1.3. Basic Research Question

1. What is the current level of knowledge about female hygiene management among adolescent girls in the Senior Secondary School of Jigjiga City Administration?
2. What key factors affect female hygiene management in the Senior Secondary School of Jigjiga city administration?
3. How are menstruation-related challenges associated with school attendance among adolescent girls at Jigjiga Senior Secondary School?
4. What is the influence of female hygiene management practices on school dropout rates among adolescent girls at Jigjiga Senior Secondary School?

1.4. Objectives of the study

The study has the following objectives:

1.4.1. General objective

This study aims to assess the female hygiene management and their effect on school attendance and dropout rates among adolescent girls at Jigjiga Senior Secondary School in Jigjiga City, Somali Region, Ethiopia.

1.4.2. Specific objectives

The specific objectives of this study are to:

1. Assesses the current knowledge of female hygiene management in the Senior Secondary School of Jigjiga city administration
2. Identify the key factors affecting female hygiene management in senior secondary schools of Jigjiga City Administration.
3. Examine the association between menstruation-related challenges and school attendance among adolescent schoolgirls.
4. Analyze the influence of female hygiene management practices on school dropout rates in the target population.

1.5. Delimitation of The Study

This study is delimited to Jigjiga Senior Secondary School in Jigjiga City Administration, Somali Regional State, Ethiopia, and focuses exclusively on female adolescent students enrolled in this school. Methodologically, it employs a cross-sectional descriptive design using both quantitative and qualitative approaches, with data collected through questionnaires, interviews, and focus group discussions, without longitudinal tracking across multiple years. The independent variables considered include knowledge of menstrual hygiene management, availability of sanitary facilities and materials, cultural beliefs and taboos, and school support systems, while the dependent variable is school dropout and absenteeism among adolescent girls. Other factors such as socioeconomic status, parental education, and rural/urban background are treated only as background information. The scope is limited to school-based factors and the relationship between menstrual hygiene management and dropout, without extending to broader community interventions or national policy evaluations.

1.6. Significance of the Study

This study may serve as a pointer in directing the attention of researchers towards factors of female hygiene management and its associated consequences on school attendance and dropout among Jigjiga Senior Secondary School adolescent girls in Jigjiga City, Somali Region, Ethiopia. Since

the study encompasses comprehensive information on the factors of female hygiene management and its associated consequences on school attendance and dropout among Jijiga Senior Secondary School adolescent girls in Jigjiga City, it can provide government, non-government organizations, policy makers, and researchers with relevant information that can help them to make appropriate decisions towards the female school girls at secondary schools.

1.7. Operational Definitions of Key Terms

Disposable sanitary pads/napkins refer to commercially available materials used for absorbing or catching menstrual flow.

Heavy menstrual bleeding refers to more than the usual menstrual flow or using ≥ 3 soak-ups per day.

Knowledge on menstruation refers to the awareness of girls before and after menarche to the twelve knowledge questions regarding menstruation and its management.

Menstrual hygiene refers to a healthy practice during menstruation to frequently change menstrual soak-ups (at least twice a day) and underclothes; and at least once a day, washing.

School absenteeism refers to not being in class and/or in school for regular attendance because of menstruation-related problems.

School dropout refers to a student who leaves school before graduation/completion without transferring to another school because of menstruation-related problems

2. REVIEW OF RELATED LITERATURE

This chapter will provide a comprehensive literature review on different aspect of the definition of menarche related Knowledge about menstruation and hygienic management; menstrual hygiene and management practice, The effect of menstruation related problems on girl's Education.

2.1. Definition of Menarche and Influencing Factors

Menarche is the period at which menstruation begins. Menstruation is the discharge of blood and tissues from the lining of the uterus each month. It is often called the menstrual period and is a function of the female body (Adhikari P, Kadel B, et al 2007). The menstrual rhythm depends on the hypothalamus-pituitary- ovarian function. The menstrual period varies; may last from three to seven days, and each period comes approximately every 28 days if the woman does not become pregnant during a given cycle (Adhikari P, Kadel B, et al 2007).

The mean age at menarche has been declining globally, a phenomenon known as the secular trend. While it traditionally ranges from 13-14 years, recent studies indicate a shift towards earlier onset. For instance, a large-scale study in China found a decline from 13.5 to 12.3 years between 1985 and 2010 (Song et al., 2016). This trend is often attributed to improved nutrition and overall health, supporting the critical fat hypothesis which posits that a certain level of body fat is necessary for the onset of menstruation (Frisch, 1984).

The mean age at menarche in most girls ranges from 13-14 years old and it was slightly lower for urban girls (Abera Y.2003/04). 12-17 Ages of menarche could be affected by genetic factors, racial factors, nutritional standards, socio-economic conditions and indulgence in strenuous physical activity (F. Roche, et al, 2003). Food insecurity was associated with delay of age at menarche by one year among adolescent girls with a median age of 15 years (secured) and 14 years (unsecured). Stunted girls had menarche one year later than their non-stunted peers (Tefera B., et al, 2011). This is corroborated by a study in Bangladesh, which found that girls from households with higher food insecurity and lower dietary diversity experienced menarche significantly later (Houghton et al., 2020).

Controlled for familial environment (i.e. family structure, parental employment and socio-economic status), life drunkenness with episodes of ≥ 2 , sexual initiation before 15 years and BMI (overweight or obese) were significantly and independently associated with early menarche ($p < 0.01$) (Adrien G., Virginie E, 2010). Girls who reached menarche were significantly heavier and taller with higher BMIs than those of their pre-monarchial peers. And thus BMI was an important factor in the onset of menstruation even though some other unmeasured environmental variables may be implicated (Goon, et al, 2010). Beyond BMI, endocrine-disrupting chemicals (EDCs) found in plastics, pesticides, and personal care products are an emerging area of research. Exposure to these chemicals may interfere with hormonal regulation, potentially leading to earlier or delayed pubertal timing (Berger et al., 2019).

The psychological impact of early or late menarche is also significant. Early-maturing girls are at a higher risk for psychological distress, depression, and risky behaviors, as they may be psychologically unprepared for the physical and social changes, they experience (Mendle et al., 2018). Conversely, late menarche can also be a source of anxiety and social isolation, as girls may feel left behind their peers.

2.2. Concept of Menstruation and Hygienic Management

The main sources of information regarding menstruation and its management to adolescent girls were their mothers, friends and teachers (Thakre, S. et al. 2011). During the first time of menstruation girls experience it differently; they were frightened, scared, felt irritated and disgusted, fear and shame (Reddy P., et al.2005). This initial experience often sets the tone for a girl's lifelong relationship with her menstrual cycle.

Adolescent girls gave different meanings to menstruation and perceived it as physiological (natural) process, as an assurance of fertility (i.e. fecundity), as release of 'bad blood' (. B. Adinma, Echendu D, 2008). Even though the main sources of information were mothers, majority of the mothers (70.4%) had perceived menstruation as dirty and polluting and which results in the same perception among girls (Khanna A., et al, 2006). This intergenerational transmission of taboo and shame is a major barrier to effective health education. In another study it was viewed as an event that happens to the girl during puberty; occurring monthly and spoiled blood had got rid of the body, however,

those individuals who had informed of it before menarche had positive attitude (Abeer E., Houaida H., E.Wafaa, 2012).

Knowledge regarding menstruation was significantly associated with the age group of respondents ($\chi^2 = 19.96$, $p < 0.05$) as early adolescents had poor knowledge than middle and late adolescents but not the type of school they attended or their religion (Lawan Um, Nafisa W., Musa A, 2010). A study done in India indicated that among study participants who were educated secondary or higher level, 85.5% did not know which organ produces the menstrual blood. This suggests that most of the teachers are not talking about reproductive system in schools. The same study also showed that sixty nine percent of subjects were aware that poor hygiene predisposes to infection but still cleaning of external genitalia was found to be unsatisfactory in 32.8% subjects (Prateek S., Saurabh R 2011).

Gaps in Formal Education: A critical issue is the inadequacy of school-based curricula. Many education systems treat menstruation within a narrow biological framework of reproduction, omitting crucial practical information on management, pain relief, and emotional well-being (Chandra-Mouli & Patel, 2017). Teachers, often under-trained and embarrassed, may skip these chapters entirely, reinforcing the silence. A study in Kenya found that even when teachers were willing to teach MHM, they lacked the necessary training and resources to do so effectively (Alexander et al., 2021).

The Role of Digital Media: In the digital age, the internet and social media are becoming increasingly important sources of information for adolescents. While this can provide access to accurate information and destigmatizing conversations, it also poses risks of misinformation. A study in the United States found that adolescents frequently turned to online platforms like YouTube and TikTok for menstrual information, but the quality of this information was highly variable (Thomas & Wood, 2022). This presents a new challenge and opportunity for public health professionals to engage with digital spaces.

2.3. Menstrual Hygiene and Management Practice

A comparative study in urban and rural adolescent girls in India revealed that the majority of urban as well as rural girls preferred cloth pieces to manage their menstrual flow over sanitary pads (.S.

Deo, Ghattargi H, 2005). There was a variation in menstrual hygiene practice which was highly influenced by economic status and residential areas (urban and rural) to use sanitary pads (B. Thakre, S. et al, 2011). Even though girls had a preference of using commercially available pads for managing their periods, a lack of money inhibits them from purchasing pads (McMahon, Peter J, et al, 2011). This economic barrier is often termed "period poverty" – the inability to afford menstrual products.

Usage of disposable sanitary pads were affected by high cost of pads, lack of knowledge how to use, embarrassment to buy or using cloth was a tradition for them since their mothers were using cloth. Generally good menstrual hygiene was practiced among students whose mothers were literate, grade 10 students, those who have had prior knowledge about menstruation before menarche, those who had proper sanitary latrine at home and exposed to advertisements promoting usage of sanitary towels in mass media (Dasgupta A., Ray S. 2012).

The prevalence of RTI/STI was found to be highest among those who were using old washed cloth (64.86 %) and least in those using sanitary pads (33.60 %) ($P < 0.001$) (Chowdhary, Safoora B., et al. 2011). Another study done in India indicated that amongst those who used cloth, 65.70% were found to be suffering from genital infections as compared to 12.30% in those who used sanitary napkins (Abhay B., Naveeta K. A, 2010). It is important to note, however, that the use of cloth itself is not inherently unhygienic; the critical factor is the ability to wash and dry it properly with soap and water and in sunlight, which has disinfectant properties (Hennegan et al., 2019).

After the use of clothes girls washed the clothes and reused it to manage the next menstrual flow. However they used to wash the cloth with water only and/or with soap and water; there was a problem of drying it since some of them dried it by direct sun light where as others hide it under other clothes, inside the house where the sun rays are coming or put in a secret place far from the eyes of humans which might be unhygienic and be a source of infection (Khanna A., et al .2012). The issue of drying is a crucial but often overlooked aspect of MHM. Lack of private, safe, and well-ventilated spaces for drying cloths is a major structural barrier to hygienic practice.

There was a variation regarding taking bath as well cleaning of external genitalia during menstruation. However, girls are aware of the fact that that poor hygiene predisposes to infection

but still cleaning of external genitalia was found to be unsatisfactory. Some of them cleaned the genitalia with toilet tissue paper while others used to wash the genitalia with water only and/or with soap and water. The practice of taking bath during menstruation was very low as most of the girls didn't take bath while others 1 – 2 times a day (Prateek S., et al.2012).

Regarding use of disposable sanitary pads above 50% of girls had used it and they change the pads with a frequency of 1 – 5 pads per day. The practice of changing pads was very low at night time and during school or college hours than during the day and out of school days. Up to 80% of students didn't change pads during school hours and their main reason was the water supply of schools was erratic. Hygienic practices, like washing of external genitalia, were also affected by religion, maternal occupation and education, age group of girls and knowledge of girls about menstruation and its management (15-17, Reddy P., Usha R., et al.2005).

Concerning disposal system of the materials used for management of menstruation most of them disposed with domestic wastes. Others disposed it by flushing into toilet leading blockage of tubes, by burning, burial or in pond water in which the water might be used for another purpose (Dasgupta A., et al S.2012). Delivery of health education regarding toilet and genital organ hygiene as well as bathing during menstruation led to a noticeable change in the behavior, awareness, and toilet-menstruation hygiene practices of the high school students as compared to the control groups (36-38).

Beyond Sanitary Pads: A Spectrum of Products: The discourse on MHM has moved beyond a simple binary of "cloth vs. pads." A wider range of products is now available and discussed, including: Tampons: Less common in many low- and middle-income countries due to cultural taboos about vaginal insertion, myths about virginity, and lack of availability, Menstrual Cups: Medical-grade silicone cups that collect rather than absorb flow. They are reusable, cost-effective over time, environmentally friendly, and can be worn for up to 12 hours. Studies in Kenya and Nepal have shown high acceptability and reduced rates of urogenital infections among cup users (Phillips-Howard et al., 2016), Reusable Pads: Cloth pads that are professionally designed, often with waterproof layers, and can be washed and reused. They are a more hygienic and reliable alternative to improvised cloth, The Environmental Impact: The environmental cost of disposable sanitary products is substantial. It is estimated that a single user will generate between 125-150 kg

of non-biodegradable waste in their lifetime (Kaur et al., 2018). This has spurred interest in sustainable MHM solutions (cups, reusable pads) and the development of biodegradable disposable pads, though their cost and availability remain challenges.

2.4. The Effect of Menstruation-Related Problems on Girls' Education

Due to menstruation, girls' social as well as spiritual health is affected. Ninety percent of the girls had faced restrictions during menstruation to attend religious occasions, while 29.9% of them faced restrictions from household work (Prateek S., Saurabh R. 2011,). In rural areas of Rajasthan, during menstruation, girls were instructed not to pass through crossroads, not to be caught by evil spirits, and not to become mad. These beliefs and practices make their life more miserable and embarrassing (Khanna A., Goyal SR., R.Bhawsar 2005). Eighty percent and 75.6% of the girls were restricted from sour food and not visiting the temple, respectively (Dasgupta A., Ray S.2012). These restrictions reinforce the notion of menstruation as a state of impurity, directly impacting a girl's social participation and self-esteem.

In northwest Ethiopia, in 2007, the overall prevalence of dysmenorrhea was 72%, and the menstrual cycle was irregular in 43% of study participants. Among those with dysmenorrhea, only 11.4% of them consulted a health worker. Premenstrual symptoms were present in 75.4% of study participants, and the most common symptom was abdominal cramp (76.2%) of those with PMS (Desalegn T., Berihun M., M. Abay 2009).

Dysmenorrhea is a common health problem among school girls where 94.4% of girls in EL- Minia Governorate of Egypt done in 2009 had it (Neamat A., Maher S., et al.2011). The overall prevalence of dysmenorrhea was 44.3% and 59.8% of the subject experienced premenstrual symptoms Nearly 57% of adolescent girls reported that they had bad odor of menstrual blood, followed by profuse discharge of menstrual blood (30.6%) and lower abdominal pain (27.5%) (Reddy P., Usha R., et al.2005). Abdominal pain/discomfort (66.2%) was the commonest medical problem encountered, followed by waist pain (38.5%), depression (24.4%) and vomiting (6.9%) amongst school girls (B. Adinma, Echendu D.2008).

However, students faced different health problems related to menstruation, but their health-seeking behavior for treatment was generally low. The measures taken to manage dysmenorrhea were

intake of certain types of domestic hot drinks, taking analgesics and perform physical activities. Others treated themselves with prostaglandin inhibitors; like Ibuprofen (Abeer E., et al 2008). The low rate of seeking medical help is often due to normalization of pain, lack of access to healthcare, and embarrassment to discuss the issue.

During menstruation days girls were absent from school (17%) and their reasons for absenteeism were pain/discomfort (69%), fear of sudden leakage (19%), embarrassment (15%) and having no material to manage menstrual flow (12%). School absenteeism was higher among those who didn't use disposable sanitary pad (76.1%) and were teased by students (35%) (Ethiopia Young Adult Survey 2010).

Due to dysmenorrhea students' class concentration (53.5%), class participation (49.9%), socializing with friends (45.3%), test-taking skills (35.6%), and homework tasks performance (35.6%) had affected. And it was significantly associated with school absenteeism and decreased academic performance, sports participation, and socialization with peers (Neamat A., et al.2011). This highlights that the impact is not just on attendance but also on engagement and performance while at school, a phenomenon termed "presenteeism.

A study conducted in Saudi Arabia revealed that, premenstrual syndrome was diagnosed in 35.6% of study participants and it was associated with limited class concentration (48.3%). Severe PMS was associated with impairment of daily activities and psychological distress symptoms like anxiety (Magdy H., Mostafa A 2010).

Water supply in most toilets was erratic and under these circumstances, 80% of students didn't change their pads during school hours. Majority (73.7%) of girls reported that they were not in favor of attending school during menstruation, especially when menstrual flow was heavy (Reddy P., et al.2005). Girls reported that there was difficulty managing their periods in school due to lack of adequate privacy and sanitation of toilets, lack of water and an inability to bathe, which was a preferred practice if a girl had menstruating while at home. For schools that didn't have disposal facility for materials used for menstruation some of the students even carried the absorbents back to home (McMahon., et al.2011).

Thirty eight percent of girls were absent from school during menstruation which was due to lack

of sanitary facility of schools for disposing sanitary pads (75%), lack of water for washing (67.5%), abdominal pain/discomfort (65%), fear of sudden leakage (23.7%) and socially withdrawn during menstruation (5.4%) and some of them even carried the absorbents back to home (Dasgupta A., Ray S.2012).

Girls are less likely to attend school (2.4 percentage points) on days they had their period as compared with other days. The average girl had a period about 8% of school which translates to 0.19% school missed due to the period, or about 0.35 days in a 180-day school year. However, providing better sanitary products (a menstrual cup) had no impact on closing this small attendance gap (Emily O., Rebecca T 2011). This important finding suggests that providing products alone is insufficient. If pain, shame, and poor school sanitation facilities are not addressed concurrently, absenteeism will persist.

The Role of School Water, Sanitation, and Hygiene (WASH) Facilities: The state of school WASH facilities is perhaps the most critical infrastructural factor. The UNICEF/WHO Joint Monitoring Programme defines a *girls-friendly toilet* as one that is Private: With functional locks, full doors, and cubicles that reach the floor and ceiling, Safe: Well-lit, located in a safe area of the school compound, Equipped: With water and soap available inside or near the toilet for washing hands and menstrual materials, Has a reliable disposal mechanism: Such as a dedicated bin with a lid and liner inside each cubicle, which is emptied regularly. A systematic review confirmed that inadequate WASH facilities are strongly associated with increased school absenteeism during menstruation (Sivakami et al., 2019).

Broader Educational Impacts: Beyond absenteeism, menstruation can affect a girl's educational trajectory. Anxiety and distraction can lead to lower grades. Repeated absences may cause girls to fall behind in the curriculum, leading to demotivation and ultimately increasing the risk of dropping out of school altogether, especially in contexts where their education is not highly valued (Sommer et al., 2015).

2.5. Emerging Themes and Interventions in Menstrual Health

2.5.1. The Role of Policy and Advocacy

The global movement to address period poverty and stigma has gained significant momentum. Countries like Scotland and New Zealand have made menstrual products free in all schools and public buildings. Several U.S. states have eliminated the "tampon tax" (sales tax on menstrual products), classifying them as essential items. In Kenya, the government has a policy to provide free sanitary pads to schoolgirls, though implementation challenges remain. These policy shifts signal a growing recognition of menstruation as a matter of equity and public health, not just a personal issue for women (Bobel, 2019).

2.5.2. Engaging Boys and Men

Traditionally, MHM programs have focused exclusively on girls. However, there is a growing consensus that engaging boys, men, teachers, and male school administrators is crucial for changing social norms and reducing stigma. Educating boys about puberty can foster empathy, reduce teasing, and promote a more supportive school environment (Hennegan & Montgomery, 2016). Programs that include boys have shown promising results in shifting attitudes.

2.5.3. A Holistic Framework: Menstrual Health Literacy

The concept is expanding from basic "hygiene management" to comprehensive "menstrual health," defined by WHO/UNICEF as not just the ability to manage menstruation with dignity, but also the access to information, healthcare, and supportive environments. This holistic approach includes: Biological Literacy: Understanding the cycle and what is normal, Practical Literacy: Knowing how to use and access products, Emotional Literacy: Managing moods and feelings without shame, and Social Literacy: Navigating cultural norms and restrictions.

Conclusion of the Literature Review: Hygienic management of menstruation is a multifaceted issue, influenced by a complex interplay of individual knowledge, socio-cultural norms, economic constraints, and environmental factors. The literature consistently demonstrates that a lack of adequate MHM directly and indirectly impacts girls' education through absenteeism, reduced participation, and lower academic performance. While providing menstrual products is a necessary

intervention, it is insufficient alone. Effective solutions require a multi-component approach that combines:

- Comprehensive Education:** For girls *and* boys, before menarche, improvement of
- School WASH Infrastructure:** Ensuring privacy, safety, water, soap, and disposal, access to a
- Choice of Affordable Products:** Including sustainable options, engagement with Communities and
- Policymakers:** To address deep-seated stigma and create supportive policies and training for
- Healthcare Workers and Teachers:** To provide accurate information and support.

2.6. Conceptual Framework

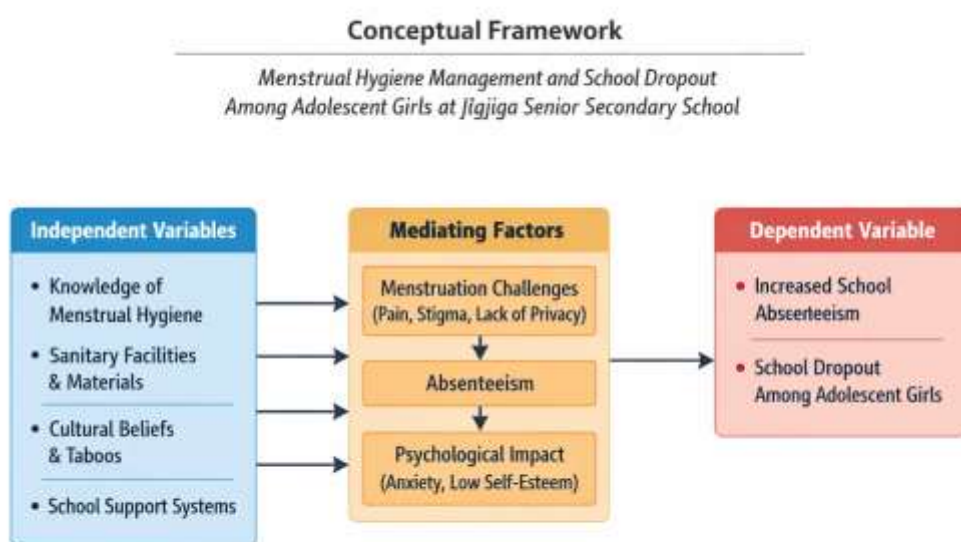


Figure 1: Conceptual Framework

The conceptual framework illustrates how menstrual hygiene management influences school dropout among female adolescent students at Jigjiga Senior Secondary School. It shows that inadequate knowledge of menstrual hygiene, poor access to sanitary materials and facilities, cultural taboos, and limited school support systems serve as independent variables that lead to menstruation-related challenges such as pain, stigma, and lack of privacy. These challenges, in turn, cause absenteeism and psychological effects like anxiety and low self-esteem, which mediate the relationship between hygiene management and educational outcomes. Ultimately, these factors contribute to increased absenteeism and school dropout among adolescent girls, highlighting the

need for improved menstrual hygiene education, supportive school environments, and accessible sanitary facilities to enhance girls' retention and participation in education.

3. RESEARCH DESIGN AND METHODOLOGY

This chapter elaborates on the methods of research utilized in conducting this study. The approaches, research design, sources of data, study population, exclusion criteria, sample size, sampling procedures, variables, data collection tools, data procedures, methods of analysis, and ethical considerations are discussed.

3.1. Description of the Study Area

The study was conducted in Jigjiga City, the capital of the Somali Regional State of Ethiopia, situated in the Faafan Zone about 60 kilometers west of the Somalia border at an elevation of 1,609 meters above sea level. The city is predominantly Muslim and serves as an educational and administrative hub for the region. The research focused on randomly selected primary and secondary school students within the city to assess menstrual hygiene management and its relationship to school dropout among adolescent girls. Jigjiga has a total of 28 government-owned primary schools, 16 offering grades 1-4 and 12 offering grades 1-8, with an overall enrollment of 31,361 students in the 2022/23 academic year, comprising 15,642 males and 15,719 females. This setting provided a diverse and representative sample for examining how menstrual hygiene knowledge, practices, and school facilities influence girls' educational participation and retention.

3.2. Research Design

The study employed a cross-sectional design using a concurrent mixed-method approach that integrated both quantitative and qualitative research techniques. The quantitative component provided measurable data on menstrual hygiene management and school dropout patterns among adolescent girls, while the qualitative component, through interviews and focus group discussions, was used to supplement and enrich the quantitative findings by capturing personal experiences, cultural perspectives, and contextual challenges. This design allowed the researchers to obtain a comprehensive understanding of the issue within a single time frame, ensuring that statistical trends were supported by deeper insights into the lived realities of female students in Jigjiga City.

3.3. Sources of Data

Data were collected from both primary and secondary sources. The primary data were obtained from female students, female teachers, and school leaders who were familiar with female hygiene

management. Secondary data were collected from published and unpublished materials such as books, articles, journals, and theses.

3.4. Population, Sample Size, and Sampling Technique

The study population for the quantitative component consisted of female adolescent students in grades 9 and 10 attending regular daytime classes in randomly selected schools in Jijiga. For the qualitative component, participants included female students who had experienced menarche and were enrolled in grades 9 and 10, female teachers from the respective schools, and adolescent girls who had dropped out of school within the past four years. Female students not attending regular daytime classes and girls who had dropped out without experiencing menarche were excluded.

The quantitative sample size was calculated using the single population proportion formula, with $Z = 1.96$, $p = 0.376$, and $d = 0.05$, yielding an initial sample of 361. After applying a design effect of 1.5 and adding 10% for non-response, the final sample size was 200.

For the qualitative study, five in-depth interviews were conducted with dropout girls (adjusted from six based on data saturation), four in-depth interviews with female teachers, and four focus group discussions with female adolescent students, ensuring both breadth and depth of perspectives.

A multistage sampling technique was used to select students for the quantitative study. First, a list of all secondary school female students in grades 9 and 10 was compiled. Three sections were randomly chosen from the total of 28 sections using simple random sampling. From these, 100 students were selected by snowball sampling with proportionate allocation to size, using the list of female students for each grade and section as the sampling frame.

3.5. Methods of Data Collection

The study collected data using a pre-tested, self-administered, closed-ended questionnaire for the quantitative component, which addressed socio-demographic characteristics, parental factors, knowledge of menstrual hygiene management, and menstruation-related problems. To ensure validity, the questionnaire was pre-tested in a comparable setting outside the selected schools to avoid contamination. For the qualitative component, data were gathered through Key Informant Interviews (KII) with purposively selected respondents, including female teachers, dropout girls,

and adolescent students, allowing for deeper insights that complemented and enriched the quantitative findings.

3.6. Data Quality Control and Management

Data quality was maintained through careful design of the questionnaire, translation from English to Somali and back-translation to English, and pre-testing. Data collectors and supervisors were thoroughly trained. The principal investigator and supervisor closely monitored the process, and questionnaires were checked for completeness immediately after collection.

3.7. Methods of Analysis

3.7.1. Quantitative Data Analysis

After data collection, the researcher performed data cleaning to address inconsistencies and missing values using Excel before proceeding with analysis. The quantitative data were analyzed using **R Studio statistical software**, where frequencies and proportions were computed to describe the study population, and results were presented in tables and figures for clarity. To examine relationships between variables, **Pearson correlation analysis** was applied to assess the association between the dependent variable (school dropout/attendance) and independent variables such as knowledge of menstrual hygiene, availability of sanitary facilities, and socio-demographic factors. This systematic approach ensured both accuracy and meaningful interpretation of the findings.

3.7.2. Qualitative Data Analysis

In addition to the quantitative analysis, the qualitative data collected through Key Informant Interviews (KII) with purposively selected respondents were analyzed using a narrative summary approach. This method allowed the researcher to organize and interpret participants' experiences, perceptions, and challenges related to menstrual hygiene management and school dropout descriptively and thematically. By presenting the findings in narrative form, the qualitative analysis provided deeper insights into the cultural, social, and personal contexts that complemented the statistical results, thereby enriching the overall understanding of the study.

3.8. Ethical Considerations

Ethical clearance was obtained from the College of Education and Behavioral Studies Stream of Educational Leadership and Management, Haramaya University Research Ethics Committee, and

the Jigjiga City Education Office. School directors were briefed on the study objectives. Written informed consent was obtained from all participants. For students under the age of consent, assent was obtained from parents/guardians. Confidentiality was maintained by omitting names from the questionnaires. Participants were informed of their right to skip questions or withdraw from the study at any time. They were assured that there was no harm or direct benefit from participating.

4. DATA ANALYSIS AND INTERPRETATION

This chapter presents the results of the study, mixing both quantitative and qualitative data. The findings are presented thematically and interpreted in direct relation to the study's objectives: to assess the factors influencing female hygiene management and their impact on school attendance and dropout rates among adolescent girls at Jigjiga Senior Secondary School.

4.1. Socio-Demographic and Economic Characteristics

The study focuses on adolescent school girls aged 14–19, primarily enrolled in grades 9 and 10. Most participants come from diverse family backgrounds, with variations in parental education, occupation, and household income. Economic conditions range from low- to middle-income, influencing access to sanitary materials and school resources. Socio-demographic factors such as age, grade level, family size, and residence (urban vs. rural) are considered in relation to menstrual hygiene practices and school attendance.

Table 1: Demographic Characteristics

As indicated in Table 1, the data show an extremely low level of formal education among the

Educational Status	Mothers Educ Status		Fathers Educ Status	
	Respondents	Respondents %	Respondents	Respondents %
No Formal	121	61%	41	21%
Primary	60	30%	72	36%
Secondary	13	7%	79	40%
Tertiary	6	3%	8	4%
Total	200	100%	200	100%

respondents' mothers. An overwhelming majority **91%** have a primary education or less. Only a very small fraction has achieved secondary which is (7%) and tertiary (3%) education. This indicates that for this sample, having a mother with any form of higher education is a rare exception.

The data presents the distribution of educational status among a group of 200 respondents. The largest group has a Secondary education (40%), followed by Primary (36%). Those with No Formal education make up 21% of the sample, and only a very small minority (4%) have reached the Tertiary level.

Table 2: Respondents' Rating of their Family's Level of Income

s/n	Family Income	Respondents	Percent
1	High	39	20%
2	Low	83	42%
3	Middle	78	39%
4	Total	200	100%

As its depicted in Table 2 above, the family income background of the students provides a crucial context for understanding their access to menstrual resources. A significant majority of the respondents come from low-income families (42%), with another 39% from middle-income backgrounds. This suggests that over 80% of the students likely face financial constraints that could limit their ability to purchase commercial sanitary products. This economic vulnerability is further highlighted by the educational attainment of their parents.

4.2. Adolescent School Girls' Knowledge about Menstruation and its Hygienic Management

Most adolescent girls possess limited knowledge about menstruation, often relying on mothers or peers as their primary sources of information. Formal education and school-based guidance remain inadequate, leaving many with misconceptions and an incomplete understanding of menstrual health. Awareness of hygienic practices, such as the use of sanitary pads, proper washing, and safe disposal, is generally low, with economic barriers further restricting access to appropriate materials. This knowledge gap contributes to poor menstrual management, heightened anxiety, and increased absenteeism during menstruation.

Table 3: The Living Situation of the respondents

Live with	Respondents	Respondents %
Other	3	2%
Parents	104	52%
Relatives	93	47%
Total	200	100%

As is indicated in Table 3 above, the living situation of the girls shows that nearly half (47%) live with relatives, and only 52% live with their parents. This could imply a lack of consistent and direct parental guidance, potentially making these girls more reliant on schools and peers for information on menstruation, which may not always be accurate or comprehensive.

4.3. Poor Knowledge about Menstruation

The study revealed that many adolescent girls have an inadequate understanding of menstruation, its biological basis, and hygienic management. Misconceptions are widespread, with menstruation often perceived as shameful or mysterious due to limited parental and school-based education. The lack of accurate information leaves girls unprepared for menarche, contributing to fear, anxiety, and poor practices. This knowledge gap directly affects their confidence, health, and school participation.

Table 4: Respondents' rating of their Understanding of Menstruation

Understanding Menstruation	Respondents	Respondents %
Agree	44	22%
Strongly agree	36	18%
Neutral	46	23%
disagree	38	19%
Strongly disagree	36	18%
Total	200	100%

The results in Table 4 show that adolescent school girls' understanding of menstruation is generally poor. Only 44(22%) and 36 (18%) agree and strongly agree reported having a good understanding, while 38(19%) disagree and 36(18%) strongly disagree admitted to lacking knowledge. A further 23% remained neutral, indicating uncertainty or incomplete awareness. This pattern highlights a critical knowledge gap, where the majority of girls either lack confidence or hold misconceptions about menstruation. The implications are significant: inadequate knowledge can lead to poor hygienic practices, feelings of shame and anxiety, and ultimately affect school attendance. Such gaps in understanding may contribute to absenteeism and even dropout, underscoring the urgent need for targeted education and awareness programs to empower girls with accurate information and practical skills for managing menstruation.

4.4. Menstruation and Its Hygienic Management

The study revealed that hygienic management of menstruation among adolescent school girls remains inadequate. Many rely on improvised materials such as cloths due to limited access to sanitary pads, while proper washing and safe disposal practices are often neglected. Cultural taboos and a lack of privacy in school facilities further restrict effective management. These challenges expose girls to health risks, including reproductive tract infections, and contribute to feelings of shame and discomfort. Poor hygienic management also affects school attendance, as girls

frequently miss classes during menstruation. Addressing these issues through improved awareness, affordable sanitary products, and adequate WASH facilities is essential to ensure both health and educational participation.

Table 5: Menstruation and Hygiene Management of Respondents.

Menstruation and Hygiene Management	Respondents	Respondents %
Agree	36	18%
Strongly agree	4	2%
Neutral	21	10.5%
Disagree	135	67.5%
Strongly disagree	4	2%
Total	200	100%

The data shows in the above table 5, that only (18%) and (2%) of adolescent school girls reported practicing proper menstrual hygiene, which is agree and strongly agree, while the majority (67.5%) and (2%) disagreed or strongly disagreed. A small proportion (10.5%) remained neutral, indicating uncertainty or inconsistency in their practices. This distribution highlights a serious gap in menstrual hygiene management. The overwhelming majority of girls lack adequate knowledge, resources, or confidence to manage menstruation hygienically. The low percentage of agreement suggests that hygienic practices are not widely adopted, likely due to limited access to sanitary products, poor school facilities, and cultural taboos. The neutral responses further reflect confusion or incomplete awareness. This implies that the poor level of menstrual hygiene management has critical health and educational consequences. Girls are at risk of reproductive tract infections and other health complications. Psychologically, inadequate hygiene fosters shame, anxiety, and low self-esteem. Educationally, these challenges contribute to absenteeism, reduced participation, and even dropout, undermining their academic progress.

Table 6: Respondents' Response on Menstrual Education in Schools.

Rank	Respondents	Respondents %
Agree	72	36%
Strongly agree	33	17%
Neutral	27	14%
Disagree	58	29%
Strongly disagree	10	5%
Total	200	100%

As it's shown in the above table 6, 72(36%) and 33(17) of the respondents agreed and strongly agreed that menstrual education is provided in schools. However, a considerable proportion, 58(29%) and 10(5%) of respondents indicated that they disagreed and strongly disagreed, while

14% remained neutral. This indicates that although menstrual education is present in some schools, its coverage and consistency are limited, leaving many girls without adequate support. The mixed responses highlight gaps in school-based menstrual education. While some girls benefit from awareness programs, others remain uninformed, which can perpetuate misconceptions, poor hygiene practices, and stigma. This inconsistency undermines girls' confidence and health, and may negatively affect school attendance. Strengthening menstrual education through structured curricula, trained teachers, and open discussions is essential to ensure all girls receive accurate knowledge and support.

4.5. Predictors of Disposable Sanitary Pad Utilization

The study identified several socio-demographic and economic factors that influence the use of disposable sanitary pads among adolescent school girls. Household income and parental occupation emerged as strong predictors, as girls from better-off families were more likely to afford and consistently use sanitary pads. Parental education, particularly mothers' awareness, also played a significant role in shaping attitudes toward hygienic practices.

Table 7: The Type of sanitary Pad Respondents use

Type of sanitary Pad	Respondents	Respondents %
Able cloth	1	1%
Disposable pads	91	46%
Reusable cloth	108	54%
Total	200	100%

As is indicated in Table 7 above, the use of reusable cloth (54%) is more prevalent than disposable pads (46%). This practice is likely driven by the economic factors identified in table 7, as cloth is a cheaper, more accessible option. However, the use of cloth requires adequate facilities for washing and drying discreetly, which, if not available, can pose a significant hygiene challenge. The reliance on less reliable materials is a key factor influencing management practices and, by extension, comfort and security at school.

Table 8: Access to product Frequency of respondents

Access frequency	Respondents	Respondents %
Always	34	17%
Never	11	6%
Rarely	126	63%
Sometimes	29	15%
Total	200	100%

The findings in Table 8 reveal that respondents' access to menstrual products is highly inconsistent and largely inadequate. A significant majority, 63%, reported that they rarely have access, while 15% indicated they sometimes have access. Only 17% of respondents reported always having access, indicating that consistent availability is limited to a small fraction of the population. Alarming, 6% reported that they never have access at all, highlighting a vulnerable group completely excluded from essential resources. This distribution demonstrates that most respondents face barriers in obtaining menstrual products, with nearly four out of five experiencing irregular or no access.

The analysis suggests that the dominant “rarely” category reflects systemic challenges such as affordability, supply chain limitations, or lack of prioritization of menstrual health needs. The low percentage of those with consistent access points to inequities in distribution, while the presence of respondents with no access at all, underscores the severity of exclusion.

4.6. Wash Facilities and Primary Reason for Absenteeism

Research shows that inadequate WASH (Water, Sanitation, and Hygiene) facilities are a major factor behind school absenteeism, especially among adolescent girls during menstruation. Lack of private toilets, water supply, and disposal facilities often forces girls to miss classes due to discomfort, fear of stigma, or inability to manage menstruation hygienically. Studies in Ethiopia and other low-resource settings confirm that poor WASH services directly contribute to menstrual-related absenteeism, which in turn affects academic performance and increases dropout risk (Adane et al., 2025; Kasali et al., 2025; Betsu et al., 2024)

Table 9: Toilet cleanness Rating of the respondents

S/n	Toilet cleanness	Respondents	Respondents %
1	Average	53	26.5%
2	Good	35	17.5%
3	Poor	83	41.5%
4	Very poor	29	14.5%
	Total	200	100.0%

The results from Table 9 indicate that the majority of respondents rated toilet cleanliness negatively. Specifically, 41.5% described the toilets as *poor* and 14.5% as *very poor*, together accounting for more than half (56%) of the responses. In contrast, only 17.5% rated them as *good*,

while 26.5% considered them *average*. This distribution shows that most students perceive the toilet facilities as unhygienic and inadequate, with only a small proportion expressing satisfaction.

The analysis suggests that poor toilet cleanliness is a critical issue in the school environment, directly affecting students' comfort, health, and dignity. Unclean toilets discourage regular use, particularly among adolescent girls during menstruation, leading to absenteeism, stress, and potential health risks such as infections.

This implies that, without clean and safe sanitation facilities, schools fail to provide a supportive learning environment, which undermines both attendance and academic performance.

Table 10: Toilet privacy Rating of the respondents.

s/n	Toilet Privacy	Respondents	Respondents %
1	Average	21	10.5%
2	Good	31	15.5%
3	Poor	116	58.0%
4	Very Poor	32	16.0%
5	Total	200	100.0%

The results from Table 10 show that toilet privacy is a major concern among respondents. More than half (58%) rated the toilets as *poor* in terms of privacy, while an additional 16% described them as *very poor*. Together, this means nearly three-quarters of respondents perceive toilet privacy as inadequate. Only 15.5% rated privacy as *good*, and 10.5% considered it *average*, indicating that very few students feel the facilities provide sufficient privacy. This analysis highlights that lack of privacy in school toilets is a critical barrier to proper usage, particularly for adolescent girls during menstruation. Inadequate privacy can lead to embarrassment, fear of stigma, and reluctance to use the facilities, which in turn contributes to absenteeism and poor menstrual hygiene management. This implies that, without private and secure sanitation facilities, schools fail to create a supportive environment for students' health and dignity.

Table 11: Respondents' Response Availability of Water Disposal Rating

S/n	Availability of Disposal	Respondents	Respondents %
1	Average	24	12.0%
2	Poor	127	63.5%
3	Very poor	49	24.5%
4	Total	200	100.0%

The results from Table 11 clearly show that the availability of water disposal facilities is highly inadequate. A majority of respondents, 63.5%, rated disposal facilities as *poor*, while another

24.5% described them as *very poor*. Only 12% considered them *average*. The analysis suggests that the absence of proper disposal systems poses a serious challenge to menstrual hygiene management in schools. Without adequate disposal facilities, students, particularly adolescent girls, face difficulties in managing menstruation safely and discreetly. This situation can lead to unhygienic practices, embarrassment, and reluctance to attend school during menstruation. This implies that poor disposal facilities not only compromise health by increasing the risk of infections but also contribute to absenteeism and reinforce stigma around menstruation.

4.7. Menstruation-Related Absenteeism and Dropout

Studies consistently show that menstruation is a major cause of school absenteeism and, in some cases, dropout among adolescent girls. Research in Ethiopia and other low-resource settings indicates that lack of sanitary products, inadequate WASH facilities, and severe menstrual pain force many girls to miss classes, often for several days each month. Stigma and embarrassment when menstrual blood stains clothing further discourage attendance, sometimes leading to permanent withdrawal from school. Overall, the literature highlights that menstruation-related absenteeism undermines academic performance and contributes to gender inequality in education, making improved WASH infrastructure, affordable sanitary products, and stigma reduction essential to prevent dropout (Tegegne & Sisay, 2014; Pan African Medical Journal, 2023; The Open Nursing Journal, 2025).

Table 12: Respondents Rating on reason for absentee

s/n	Reason For Absentee	Respondents	Respondents %
1	Fear of leaks/stigma	89	44.5%
2	Lack of products	30	15.0%
3	No toilets	12	6.0%
4	Severe pain	69	34.5%
5	Total	200	100.0%

The results from Table 12 show that the main reasons for absenteeism among respondents are strongly linked to menstruation-related challenges. The largest proportion, 44.5%, reported *fear of leaks and stigma* as the primary reason for missing school, highlighting the impact of social embarrassment and lack of supportive environments. Severe menstrual pain was the second most common reason, affecting 34.5% of respondents, which underscores the role of health-related factors in absenteeism. Meanwhile, 15% cited *lack of products* as a barrier, and 6% mentioned

absence of toilets, pointing to infrastructural and resource-related challenges. This analysis suggests that absenteeism is driven by both psychosocial and practical factors, with stigma and pain being the most dominant. The implications are significant: without addressing menstrual stigma, improving access to sanitary products, and ensuring adequate WASH facilities, schools will continue to face high absenteeism rates among girls.

Table 13: Respondents' Response on considering quitting school

s/n	Quitting School	Respondents	Respondents %
1	Agree	31	15.5%
2	Disagree	127	63.5%
3	Neutral	21	10.5%
4	Strongly Agree	4	2.0%
5	Strongly Disagree	17	8.5%

The results from Table 13 reveal that most respondents do not consider quitting school due to menstruation-related challenges. Specifically, 63.5% disagreed, and 8.5% strongly disagreed with the idea of quitting, showing that nearly three-quarters are determined to continue their education despite difficulties. However, 15.5% agreed, and 2% strongly agreed, while 10.5% remained neutral, indicating that a notable minority of students have contemplated leaving school.

This analysis suggests that while the majority of girls are resilient, a significant proportion still face challenges severe enough to make them consider dropping out. The implications are critical: fear of leaks, stigma, lack of products, poor WASH facilities, and severe pain (as highlighted in earlier tables) can push vulnerable students toward disengagement and eventual dropout.

Table 14 : Respondents' Rating on challenge-related pain.

S/n	Challenge of Pain	Respondents	Respondents %
1	Agree	138	69.0%
2	Disagree	3	1.5%
3	Neutral	7	3.5%
4	Strongly Agree	44	22.0%
5	Strongly Disagree	8	4.0%
6	Total	200	100.0%

As it's depicted in Table 14 of the above, pain is a dominant challenge affecting respondents during menstruation. A large majority, 69%, agreed that pain is a significant issue, while an additional 22% strongly agreed. Only a very small proportion disagreed (1.5%) and strongly disagreed (4%), and 3.5% remained neutral. This analysis indicates that menstrual pain is not only common but

also severe enough to disrupt daily activities, including school attendance. This indicates that, without adequate support for pain management, many girls are likely to miss classes, experience reduced concentration, and face long-term educational disadvantages.

Table 15: Respondents' Rating on the Challenge of Stigma.

S/n	Challenge of Stigma	Respondents	Respondents %
1	Agree	140	70.0%
2	Disagree	5	2.5%
3	Neutral	13	6.5%
4	Strongly Agree	40	20.0%
5	Strongly Disagree	2	1.0%
	Total	200	100.0%

As it's indicated in Table 15 above, stigma is a major challenge faced by respondents during menstruation. A large majority, 70%, agreed that stigma is a significant issue, while an additional 20% strongly agreed, meaning that 90% of respondents acknowledged stigma as a serious barrier. Only a very small proportion disagreed (2.5%) or strongly disagreed (1%), and 6.5% remained neutral. This analysis highlights that stigma is not only widespread but also deeply entrenched, affecting girls' confidence, dignity, and willingness to attend school during menstruation. The implications are critical: stigma contributes to absenteeism, social isolation, and even dropout, as girls may avoid school to escape embarrassment or teasing.

Table 16: Respondents' Response on School Attendance During Menstruation.

Days of Absence	Respondents	Respondents %
3	73	37%
4	20	10%
6	2	1%
7	105	53%
Total	200	100%

The results from Table 16 show that menstruation-related absenteeism is prolonged and highly disruptive. More than half of the respondents (53%) reported being absent for **seven days**, while 37% missed **three days**. Smaller proportions indicated absences of **four days (10%)** and **six days (1%)**. This means that the majority of girls are missing several consecutive school days during menstruation, with over half absent for an entire week.

This analysis highlights that absenteeism is not only frequent but also extended, which has serious consequences for learning continuity and academic achievement. Missing multiple days each month accumulates into significant educational gaps, reduced participation, and increased risk of dropout. The findings also connect with earlier results showing that stigma, pain, lack of products, and poor WASH facilities are key drivers of absenteeism, which together prolong the number of days missed. This indicates that prolonged absence undermines educational equity and widens gender disparities in schooling.

4.8. Influence of Menstruation on Girls' Academic Performance

Literature shows that menstruation has a significant influence on girls' academic performance, primarily through its impact on attendance, concentration, and participation. Studies highlight that menstrual pain, stigma, and lack of sanitary products often force girls to miss several school days each month, leading to cumulative learning gaps and reduced classroom engagement. Poor WASH facilities and inadequate disposal systems further exacerbate the problem, as girls may avoid school altogether to prevent embarrassment or discomfort. Research from Ethiopia and other low-resource settings confirms that absenteeism due to menstruation directly undermines academic achievement, with affected girls reporting lower grades, decreased confidence, and in some cases, eventual dropout. The evidence underscores that menstruation is not only a health issue but also an educational equity challenge, requiring interventions such as improved school infrastructure, access to affordable sanitary products, pain management support, and stigma reduction programs to safeguard girls' academic performance and ensure equal opportunities in education.

Table 17: Respondents' rating on how Menstruation affects grade.

Menstruation Affects Grade	Respondents	Respondents %
Agree	138	69%
Disagree	5	3%
Neutral	11	6%
Strongly Agree	42	21%
Strongly Disagree	4	2%
Total	200	100%

As is indicated in Table 17, above, menstruation is perceived to have a direct and negative impact on their academic performance. Overwhelming Majority Perception of, the most striking finding is that a combined 90% of respondents either Agree (69%) or Strongly Agree (21%) that their grades are affected by their menstrual cycle. This near-unanimous opinion highlights that this

is not an isolated issue but a pervasive challenge faced by almost every girl in the study. In stark contrast, a mere 5% of students (Disagree 3% + Strongly Disagree 2%) believe their grades are unaffected. This small minority underscores that the negative impact is the overwhelming lived experience of the vast majority. The 6% who were "Neutral" may represent unsure girls, who experience a variable impact each month, or whose performance is affected in ways they find difficult to attribute directly to menstruation.

Table 18: Respondents' Response on the Reason for Dropout

Reason for Dropout	Respondents	Respondents %
Family/social pressures	34	17%
Lack of menstrual products	8	4%
Pain or health issues	110	55%
Poor school facilities	35	18%
Shame or stigma	13	7%
Total	200	100%

The results from Table 18 show that pain or health issues are the leading reason for dropout, reported by 55% of respondents. Poor school facilities were the second most cited factor at 18%, followed by family or social pressures at 17%. Shame or stigma accounted for 7%, while lack of menstrual products was mentioned by only 4%. This analysis highlights that health-related challenges, particularly severe menstrual pain, are the most significant drivers of dropout among girls. Poor school facilities and family/social pressures also play a considerable role, reflecting both structural and cultural barriers. Although fewer respondents cited stigma and lack of products, these factors remain important as they compound the difficulties faced by girls. The findings emphasize that dropout is influenced by a combination of health, infrastructure, and socio-cultural issues.

4.9. Preferred Interventions

Literature consistently shows that menstruation significantly influences girls' education, with absenteeism and dropout linked to pain, stigma, lack of sanitary products, and inadequate WASH facilities. Studies in Ethiopia and across Africa report that many girls miss several school days each month due to severe dysmenorrhea, fear of leaks, and embarrassment, which cumulatively undermines academic performance and confidence. Poor toilet cleanliness, lack of privacy, and absence of disposal facilities further discourage attendance, while stigma and teasing intensify the

problem, sometimes leading to permanent withdrawal from school. Research highlights that addressing these barriers through improved infrastructure, access to affordable products, pain management, and awareness programs is essential to reduce absenteeism, prevent dropout, and promote gender equity in education.

Table 19: Respondents' responses on Intervention areas.

Intervention Area	Respondents	Respondents %
Free Products	19	10%
Improved Toilets	179	90%
Pain Relief	2	1%
Total	200	100%

The results from Table 19 show that the overwhelming majority of respondents (90%) identified improved toilets as the most important intervention area. Only 10% preferred free products, while a very small proportion (1%) mentioned pain relief.

This analysis highlights that infrastructural challenges, particularly toilet cleanliness, privacy, and disposal facilities, are seen as the most urgent priority by students. While access to products and pain management are important, the data suggest that without adequate WASH facilities, other interventions may have limited impact. This indicates that schools must prioritize investment in clean, private, and well-equipped toilets to create a supportive environment for menstrual hygiene management.

5. SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1. Summary of Major Findings

This chapter provides a comprehensive discussion and interpretation of the study's findings, situating them within the broader context of existing literature and the specific socio-cultural environment of Jigjiga, Ethiopia. The study aimed to assess the factors influencing female hygiene management and their impact on school attendance and dropout rates among adolescent girls. The results reveal a complex, interlinked web of challenges spanning knowledge deficits, economic constraints, infrastructural inadequacies, and cultural stigma that collectively undermine the educational engagement and health of adolescent girls. Each of these factors is discussed in detail below, with reference to the study's objectives and supporting evidence from similar settings. The summary of major findings was conducted based on the objective of the study.

The study identified a profound lack of knowledge regarding menstruation and its hygienic management among a significant proportion of respondents. This finding aligns with earlier studies conducted in similar low-resource settings, such as those in Northeast Ethiopia, which also highlighted significant gaps in menstrual health literacy. The role of mothers as primary sources of information is critically important, yet the limited formal education among many mothers. Financial constraints meant that a majority of girls relied on reusable cloth, a finding consistent with other studies, which note that economic barriers often force girls to use improvised materials that may be unhygienic if not properly cleaned. The use of such materials, without the support of functional water, sanitation, and hygiene (WASH) infrastructure, amplifies the risk of infections and reinforces feelings of shame and anxiety.

One of the most striking findings of this study pertains to the inadequate state of school WASH facilities, which emerged as a central factor affecting girls' ability to manage menstruation comfortably and with dignity. An overwhelming majority of respondents reported poor toilet privacy, inadequate disposal facilities, and concerns over cleanliness. These conditions are not merely inconvenient; they create an environment where menstruating girls are unable to change, clean, or dispose of menstrual materials safely and privately. This finding is strongly supported by existing literature, which emphasizes that the absence of supportive WASH infrastructure is a key driver of menstrual-related absenteeism in resource-limited settings.

The scale of school absenteeism documented in this study is both alarming and illustrative of the profound educational disruption caused by menstruation. A very high proportion of the girls

reported missing multiple days of school per month, with a substantial number missing an entire week. This level of recurrent absence translates to a significant loss of learning time over the academic year, creating considerable gaps in learning and putting girls at a severe disadvantage compared to their male peers. The reasons for absenteeism were multifaceted: fear of leaks and stigma was the most commonly cited reason, followed by severe pain and lack of menstrual products. This demonstrates that the barriers are not only practical but also deeply psychosocial. The high prevalence of dysmenorrhea is a particularly critical and often overlooked health issue that intersects with educational participation.

Perhaps the most concerning outcome revealed by this study is the direct link between menstrual challenges and the risk of school dropout. A notable minority of respondents reported having considered quitting school, with physical pain and poor school facilities cited as the primary reasons. This finding underscores the fact that menstrual hygiene management is not merely a matter of health or comfort but a significant educational equity issue. The pathway from menstrual mismanagement to dropout is mediated by chronic absenteeism and its academic consequences: the vast majority of the girls believed that their grades suffered due to menstruation. This perception is entirely plausible given the cumulative impact of missed classroom instruction, reduced concentration due to pain or anxiety, and the general stress of managing menstruation in an unsupported environment.

5.2. Conclusions

Based on the summary of major findings, the following conclusions were forwarded

The study concludes that there is a significant lack of knowledge about menstruation and its hygienic management among adolescent girls in Jigjiga, which mirrors findings from other low-resource settings. Mothers remain the primary source of information, but their limited formal education constrains the quality of guidance provided.

Economic barriers further exacerbate the problem, as many girls rely on reusable cloths and improvised materials that are often unhygienic without proper cleaning facilities. The absence of functional WASH infrastructure in schools amplifies these challenges, exposing girls to health risks and reinforcing feelings of shame and anxiety.

The study also highlights the inadequate state of school WASH facilities, poor toilet privacy, lack of disposal systems, and concerns over cleanliness, which directly hinder girls' ability to manage

menstruation with dignity. These conditions contribute to widespread absenteeism, consistent with evidence from similar contexts.

Absenteeism was found to be alarmingly high, with many girls missing several days or even a full week of school each month due to fear of leaks, stigma, severe pain, and lack of menstrual products. This recurrent absence results in substantial learning gaps and disadvantages compared to male peers.

Finally, the study establishes a direct link between menstrual challenges and school dropout risk. Chronic absenteeism, compounded by poor academic performance and psychosocial stress, pushes some girls to consider leaving school altogether. This underscores that menstrual hygiene management is not only a health issue but a critical educational equity concern, demanding urgent interventions in knowledge, resources, and school infrastructure.

5.3. Recommendations

To address the significant lack of knowledge about menstruation and its hygienic management, the study recommends the introduction of comprehensive menstrual health education programs within schools. These should be integrated into the curriculum and supported by trained teachers, while also engaging mothers and community leaders to strengthen awareness and break cultural taboos.

Given the economic barriers faced by many girls, it is recommended that affordable and hygienic menstrual products be made accessible through school-based distribution schemes or community initiatives. Partnerships with NGOs and government agencies could help subsidize costs and ensure that girls are not forced to rely on unsafe, improvised materials.

Improving school WASH facilities is a critical priority. Schools should be equipped with private, clean toilets, adequate disposal systems, and a reliable water supply to enable girls to manage menstruation with dignity. Investment in infrastructure must be accompanied by maintenance and monitoring to ensure sustainability.

To reduce absenteeism, schools should establish supportive environments that address both practical and psychosocial barriers. This includes providing pain management support, counseling services, and peer education programs to reduce stigma and fear of leaks. Teachers should be trained to respond empathetically to menstruation-related challenges.

Finally, to prevent dropout, the study recommends multi-sectoral interventions that link education, health, and community support. By tackling absenteeism, improving academic support for affected girls, and creating safe spaces for dialogue, schools can mitigate the risk of dropout and promote educational equity. These measures collectively emphasize that menstrual hygiene management is not only a health issue but a fundamental component of girls' right to education.

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7. APPENDICES

HARAMAYA UNIVERSITY
COLLEGE OF EDUCATION SCHOOL OF GRADUATE
DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Questionnaire to be filled by Jijiga Secondary School

A Study on the “Menstrual Hygiene Management and School Dropout Among Female Adolescent Students of Jigjiga Senior Secondary School, In Jigjiga City Administration. Somali Regional State

The purpose of this questionnaire is to collect relevant data regarding the Menstrual Hygiene Management and School Dropout Among Female Adolescent Students of Jigjiga Senior Secondary School, In Jigjiga City Administration. Somali Regional State

The Findings of this study and the recommendations to be forwarded are valuable in suggesting possible solutions for the problems identified. Therefore, your sincere cooperation and objectivity in answering each of the question items is of great importance, and your responses would be kept strictly confidential.

General Direction:

- ✓ You are to required to write your name
- ✓ Please put (✓) mark in the space provided for your answer
- ✓ Please circle the appropriate choice
- ✓ Please give short answer(s) in the space provided.

Thank you for filling out the questionnaire in time

Survey Questionnaire

Title: Female Hygiene Management & Its Impact on School Attendance

Instructions: Please answer honestly. All responses are confidential.

Section 1: Demographic Information

1. Age: _____ years
2. Grade Level: _____
3. Family Income Level:
 - ☐ Low ☐ Middle ☐ High
4. Parental Education:
 - Mother's highest education: _____
 - Father's highest education: _____
5. Household Characteristics:
 - ☐ Live with parents ☐ Live with relatives ☐ Other: _____
6. Access to Basic Amenities:
 - Does your home have:
 - ☐ Running water
 - ☐ Electricity
 - ☐ Private toilet

Section 2: Menstrual Knowledge & Practices (*Objective 1*)

5. Menstrual Awareness:

Rate your agreement (1=Strongly Disagree → 5=Strongly Agree)

- I understand the biological process of menstruation

☐ Strongly Disagree

☐ Disagree

☐ Neutral/Undecided

☐ Agree

☐ Strongly Agree

- I know how to maintain hygiene during menstruation

☐ Strongly Disagree

☐ Disagree

☐ Neutral/Undecided

☐ Agree

☐ Strongly Agree

- ✓ My school provides adequate menstrual education

☐ Strongly Disagree

☐ Disagree

☐ Neutral/Undecided

☐ Agree

☐ Strongly Agree

6. Product Use & Access:

Primary menstrual product used:

☐ Disposable pads

☐ Reusable cloth

☐ Tampons

☐ Nothing

How often can you access these products?

☐ Always ☐ Sometimes ☐ Rarely ☐ Never

7. Hygiene Challenges:

Select top 3 difficulties:

☐ Affording products

☐ Disposal facilities

☐ Stigma

☐ Pain management

Section 3: School Attendance & Barriers (*Objectives 2 & 3*)

8. Absenteeism Patterns:

Days missed per menstrual cycle: _____

Primary reason for absence:

- ☐ Severe pain ☐ Lack of products ☐ Fear of leaks/stigma
- ☐ No toilets

9. School Environment:

Rate your school's facilities (1=Very Poor → 5=Excellent)

9.1. Toilet cleanliness

- ☐ 1 - Very Poor
- ☐ 2 - Poor
- ☐ 3 - Average
- ☐ 4 - Good
- ☐ 5 - Excellent

9.2. Privacy in toilets

- ☐ 1 - Very Poor
- ☐ 2 - Poor
- ☐ 3 - Average
- ☐ 4 - Good
- ☐ 5 - Excellent

9.3. Availability of water/disposal bins

- ☐ 1 - Very Poor
- ☐ 2 - Poor
- ☐ 3 - Average
- ☐ 4 - Good
- ☐ 5 - Excellent

10. Academic Impact:

10.1. Has menstruation affected your grades? ☐ Yes ☐ No

10.2. If yes, how?

☐ Difficulty concentrating

☐ Missed exams ☐ Other: _____

Section 4: Dropout Risks & Support Systems (Objective 4)

11. Dropout Considerations:

11.1. Have you ever considered quitting school due to menstruation?

☐ Yes ☐ No

12. 11.2 If you have considered quitting school due to menstruation, what are the main reasons?

(Select all that apply)

☐ Family/social pressures (e.g., parents prioritizing marriage over education)

☐ Shame or stigma about menstruation at school

☐ Difficulty keeping up with studies due to frequent absences

☐ Lack of menstrual products making school attendance hard

☐ Pain or health issues during periods affecting concentration

☐ Poor school facilities (no clean toilets, water, or disposal bins)

☐ Teasing or harassment from peers about menstruation

☐ Other (please specify): _____

13. Support Networks:

Who do you confide in about menstrual issues?

☐ Mother ☐ Friends ☐ Teachers ☐ No one

14. Ideal Interventions:

Rank by priority (1=Most Needed)

A. Free sanitary products

B. School health education

C. Pain relief medication

D. Improved toilet facilities

Section 5: Open-Ended Insights

14. What one change would most help you manage menstruation better at school?

15. Additional comments about your experiences:

PART TWO

Interview Questions for Teachers on Female Hygiene and School Dropout

Introduction Script:

"Thank you for your time. We are conducting a study to understand the challenges female students face regarding personal hygiene management, particularly during menstruation, and how these challenges might impact their education and potentially lead to school dropout. Your insights as a teacher are invaluable, as you observe these students daily. This interview is confidential, and your honesty is greatly appreciated."

Section A: General Awareness and Observation (Links to Objective 1)

1. In your role as a teacher, how aware are you of the specific hygiene management needs of your adolescent female students?
2. From your observation, do you think most female students in this school have the necessary knowledge and resources to manage their menstruation hygienically and with dignity?
3. Can you describe any general patterns you've noticed in female students' attendance? (e.g., absences that are periodic or regular).
4. Have you ever had a female student openly discuss a menstruation-related issue with you or another teacher? If so, what was the nature of that discussion?

Section B: Identifying Key Factors and Challenges (Links to Objective 2)

5. In your opinion, what are the biggest challenges girls in this school face when managing their menstruation? (Probe for: lack of sanitary products, poor water/sanitation facilities, pain/discomfort, lack of privacy, fear of stigma/embarrassment, cultural taboos).
6. How do you think the school's physical environment (e.g., condition of toilets, availability of water, disposal systems) supports or hinders girls during their periods?
7. What role do you think socio-cultural factors (e.g., myths, silence, shame) play in how girls experience and manage menstruation here?

8. From your experience, how do these hygiene-related challenges affect a girl's participation in class? (e.g., hesitancy to answer questions, inability to concentrate, inability to participate in PE).

Section C: Menstruation, Attendance, and Dropout (Links to Objectives 3 & 4)

9. Have you noticed a connection between female students missing school and their menstrual cycles? Can you provide an example?
10. On average, how many school days do you think a female student might miss per term due to menstruation-related issues?
11. This is a key question: In your teaching career here, have you known any female students who dropped out of school? Based on your understanding, to what extent were challenges with hygiene and menstruation a factor in that decision?
12. Beyond dropping out, what other long-term educational consequences (e.g., falling behind in class, lower grades, losing confidence) have you seen result from these recurring challenges?

Section D: The Role of the School and Solutions

13. What, if anything, does the school currently do to support female students in managing their hygiene? (e.g., health education, providing supplies, supportive policies).
14. What more do you think the school or teachers could do to better support these students and help ensure they don't miss school?
15. How comfortable do you feel as a teacher (regardless of gender) in addressing these topics with students, and what kind of training or resources would help you feel more equipped?

Closing:

"Those are all the questions I have. Is there anything else you think is important for us to know about this issue that we haven't discussed? Thank you again for your valuable time and insights."

. Appendix B

Haramaya university , College of Education and Behavioral Sciences

Educational Planning and Management

Interview Items for Student and Teachers

The purpose of this interview is to gather information on Menstrual Hygiene Management and School Dropout Among Female Adolescent Students of Jigjiga Senior Secondary School, In Jigjiga City Administration. Somali Regional State

In so doing program current. In so doing Menstrual Hygiene Management and School Dropout Among Female Adolescent Students of Jigjiga Senior Secondary School, In Jigjiga City Administration. Somali Regional State factors will be thoroughly discussed. The success of this study, thus, depends on the honesty and frankness of your response. The researcher would like to assure you that your responses are strictly confidential

The Findings of this study and the recommendations for worded are valuable in suggesting possible solution for the problems identified. Therefore, your sincere cooperation and objectivity in answering each of the question items is of great importance, and your responses would be kept strictly confidential⁴. Is there adequate resources (Human and financial) allocated to Menstrual Hygiene Management and School Dropout Among Female Adolescent Students of Jigjiga Senior Secondary School, In Jigjiga City Administration. Somali Regional State

1. What is the current level of knowledge about female hygiene management and its **relationship to school dropout** among adolescent female students at Jigjiga Senior Secondary School in Jigjiga City Administration?
2. What are the key factors influencing female hygiene management and school dropout among adolescent female students at Jigjiga Senior Secondary School?
3. What is the association between menstruation-related problems (e.g., pain, lack of facilities, stigma) and school attendance among adolescent girls?
4. How does female hygiene management influence school dropout rates among adolescent female students in Jigjiga Senior Secondary School??