

Menstrual Health Education And Its Psychosocial Impact On Adolescent Girls: A Comprehensive Review

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Abstract— The menstrual cycle is often linked to stigma, misunderstandings, and misleading information, even though it is a natural biological event. Menstrual education has a significant impact on the psychological well-being, confidence, and self-esteem of teenage girls. Since schools are a crucial place for social and emotional development, it's vital to consider how effective menstruation education may be in the classroom. Adolescence is a period of potential and discovery, but for women, menstruation ultimately becomes the primary source of limits and humiliation due to the various societal and psychological structures around it. Due to limited availability to feminine hygiene products and inadequate menstrual hygiene practices, which can lead to a variety of diseases and reproductive tract infections, teenage girls find menstruation to be an unpleasant experience. Through data analysis, this study seeks to provide significant insights into the potential benefits of comprehensive menstruation education programs in promoting teenage girls' confidence, self-worth, and overall psychological well-being. In order to investigate how menstrual health education (MHE) influences teenage girls' psychological health, personality development, and involvement in school, this review combines data from multiple academic sources. It focuses on the differences between public and private school settings. Evidence also highlights the effectiveness of targeted intervention programs and the necessity of an inclusive, culturally sensitive, and school-integrated approach to menstrual education.

Background: Menstrual health and cleanliness are still very important but not talked about enough when it comes to growing up, especially in underdeveloped nations like India. Cultural taboos, ignorance, and insufficient information around menstruation lead to adverse emotional experiences, school absences, and detrimental mental health outcomes among teenage females. The research that was looked at show that false information, stigma, and a lack of support systems make it very hard for young girls to feel good about themselves and their mental health during puberty.

Objectives: The primary objectives extracted from the literature are: To investigate the influence of menstruation education on the psychological health and personality development of teenage females, to evaluate the impact of menstrual hygiene knowledge on diminishing stigma and enhancing self-esteem and confidence, investigate the necessity of integrating

menstruation education into school curricula to cultivate a supportive atmosphere and find loopholes in the present educational and societal systems that deal with menstruation health.

Method: This article serves as a literature review, encompassing research that employed diverse methodologies, including: quantitative surveys: to evaluate knowledge levels, school attendance, and emotional effects. Intervention-based studies assessing the effects of educational programs on menstrual health awareness and cleanliness behaviours, comparative analyses between urban and rural populations, or between public and private school systems.

Keywords— Adolescent Girls, Emotional Health, Menstrual Education, Menstrual Hygiene Management (MHM), Stigma and Taboos.

I. Introduction

Though normal, menstruation is often stigmatized, misunderstood, and misinformed. Menstrual education affects adolescent girls' mental health, self-esteem, and confidence. Public and private schools are the main settings for social and emotional development; hence, menstruation instruction must be thoroughly assessed. This chapter methodically reviews publications, dissertations, and conference papers on adolescent difficulties and counseling. This study examines how menstrual education programs impact girls' emotional, psychological, and social well-being as well as menstruation (Miirio et al., 2018). By collecting data from public and private schools, this study hopes to shed light on how comprehensive menstruation education programs may improve teenage girls' self-esteem, confidence, and mental health. Teenage years are a period of possibility and adventure, but menstruation's societal and psychological conceptions constrain and shame women. Many misconceptions exist about menarche and the menstrual cycle due to ignorance and misunderstanding. People are embarrassed to talk about menstruation. Female peers and seniors spread erroneous knowledge, creating a cycle. Due to limited availability of feminine hygiene products and poor menstrual hygiene habits, adolescent girls find menstruation unpleasant and might get sick or get reproductive tract infections. Teenage females in India face shame and other societal barriers during their periods, resulting in gender disparity and exclusion (Mohammed, Larsen-Reindorf, & Awal, 2020). It is generally known that culturally unique notions and values impact menstruation's meaning, results, and management. In their wide cross-cultural examination of menstruation, anthropologists have written about everything from acute societal restriction to particular respect and privilege for menstruating women. Menstruation is normal for over half the world's population. Menstruation health education is ubiquitous; however, many nations stigmatize and misinform individuals. Poor information can confuse, humiliate, and disgrace young girls; hence this issue must be addressed (Barua, Watson, Plesons, Chandra-Mouli, & Sharma, 2020). Public and private schools must teach accurate, age-appropriate menstrual health. Open and inclusive schools may remove barriers, challenge societal taboos, and encourage healthy menstrual attitudes. Adolescence is a period for future decisions. They deal with issues related to social activities, the creation of suitable social activities, partner selection, and intellectual and physical growth. School-based guidance and counseling is a methodical attempt to raise the standard of options (Van Eijk et al., 2016). Since adolescents will make up the adult population of the future, their health and well-being are extremely important. However, with the exception of adolescent pregnancy, interest in adolescent health and nutrition is relatively new (WHO). Reviews of teenage girls' scholastic, social, psychological,

physiological, nutritional, and physical issues are crucial, as is the effect of counseling. Adolescence is a time of fast development, accounting for 15–25% of adult height and up to 45% of skeletal growth (Critchley et al., 2020). Adolescence's growth spurt may result in the accumulation of up to 37% of total bone mass.

This review evaluates existing literature to understand the implications of menstrual education and hygiene management on adolescent development.

II. Related Works

In their wide cross-cultural examination of menstruation, anthropologists have written about everything from acute societal restriction to particular respect and privilege for menstruating women. Menstruation is normal for over half the world's population. Menstruation health education is ubiquitous; however, many nations stigmatize and misinform individuals. Insufficient knowledge can confuse, humiliate, and disgrace adolescent girls; hence, this issue must be addressed (Abidin, Yudiana, & Fadilah, 2022). Public and private schools must teach accurate, age-appropriate menstrual health. Open and inclusive schools may remove barriers, challenge societal taboos, and encourage healthy menstrual attitudes. Adolescence is a period for future decisions. India has extreme wealth, poverty, and gender disparities. Thus, health and socioeconomic indicators vary greatly between girls and women. Approximately 68 million of the 113 million teenage girls attend 1.4 million schools. Poor maternal and child health and cultural taboos may keep these girls from school. MHM research has been done individually across India. This research examined the social, scholastic, and health issues females with inadequate MHM face (Alekhya et al., 2023). Girls' lack of menstrual guidance, facilities, and resources at school is a neglected public health, social, and educational issue that needs prioritization, coordination, and investment. Global and national efforts to identify important goals to change girls' schooling have not been focused. This is despite mounting evidence that girls in low- and middle-income countries (LMIC) struggle to manage menstruation while in school and initiatives to address these issues. Young women in low-income households may struggle with menstruation. Preparing for a menstrual hygiene intervention to reduce school absenteeism. The few research studies that have been conducted exhibit several limitations. A small study size, inaccuracy of school registers, inability to compare educational outcomes across schools, difficulty identifying dropouts, and different definitions of MHM practices are these limitations (Anbesu & Asgedom, 2023). They address social activities, partner selection, activity creation, and intellectual and physical progress. The goal of school-based guidance and counseling is to improve alternatives. Adolescent health is crucial as they will be the future adult population. Besides adolescent pregnancy, interest in adolescent health and nutrition is emerging (WHO). Counseling and reviews of teenage females' academic, social, psychological, physiological, nutritional, and physical difficulties are vital. Rapid growth occurs throughout adolescence, accounting for 15–25% of adult height and 45% of skeletal growth (Rees and Christine, 1989). The growth surge during adolescence can add 37% of bone mass. Obesity is the abnormal development of adipose tissue caused by an increase in fat cells (hyperplastic obesity), fat cell enlargement (hypertrophic obesity), or both. Obesity is measured by BMI. Fat is the main cause of overweight, although fluid retention and abnormal muscle development can also contribute. The number of overweight and obese children in privileged Indian urban families has grown over the previous decade. Childhood obesity assessment helps identify the problem and

prevent it from worsening (Asgari, Alimoardi, Soleimani, Allen, & Bahrami, 2020). A study on obesity and overweight in Indian schoolchildren: The researchers evaluated socioeconomic status and lifestyle factors, including nutrition, physical activity (exercise, sports), afternoon sleep patterns, eating habits (such as chocolate, junk food, and dining out on weekends), as well as family history of diabetes and obesity. Boys had greater age-adjusted overweight and obesity rates. For boys and girls, the high SES group had more obesity than the middle SES group, whereas the middle SES group had more overweight (Sclar et al., 2018). The low SES group had the lowest obesity and overweight rates. Diet, lack of exercise, and afternoon sleeping patterns affect middle-class to upper-class overweight and obesity (Zulaika et al., 2023). Family history is also closely connected with obesity and diabetes. In the US and Canada, young adult suicide rates quadrupled once television was introduced, according to B. S. Centerwall's (1990) study. Television producers must be careful when presenting and discussing suicide due to the hazards of suicide imitation, especially among youth. School counselors provide academic, psychological, social, and career counseling. Their programs and services help pupils with behavioral, social, and emotional challenges, as well as focus and direction. Good counseling services improve student progress and school culture (Bareghamyan, Petrosyan, Chopikyan, & Beglaryan, 2021). Despite gender differences in reactions, group counseling helped both boys and girls feel less anxious. Adolescence is a unique time for girls as they move from girlhood to adulthood. Menstruation is considered unclean in culture. Family seclusion and restrictions on menstruating girls have fueled an unfavorable view of this issue. Menstruation hygiene has also received little attention. Quantitative and descriptive cross-sectional methods assessed adolescent girls' menstrual hygiene knowledge. We conducted a structured knowledge quiz on menstrual hygiene. The coordinated community transmission of menstrual hygiene information must prioritize both formal and informal communication (Mukherjee et al., 2020). Guidelines and medical, statistical, and nursing experts ensured validity. The test-retest method gave the instrument a high reliability score of 0.80. Teenage girls' menstrual hygiene knowledge was average, according to the poll. Thus, psycho-educational group counseling in the classroom may reduce teen stress. Stress and counseling responses differ between male and female pupils. Classroom psycho-educational group counseling reduces adolescent stress (Barua et al., 2020).

III. Mensrual Education And Awarreness

Menstrual education and awareness are crucial to reducing stigma and improving cleanliness. Provide accurate period information, encourage open talks, and ensure individuals have access to facilities and hygiene supplies. Normalizing menstruation can help women and girls manage their periods safely and confidently. Provide accurate period information, encourage open talks, and ensure individuals have access to facilities and hygiene supplies. Normalizing menstruation can help women and girls manage their periods safely and confidently (McCammon et al., 2020). Social ideas and biology must be considered when explaining menstruation. Women of reproductive age will undergo menstruation, the vaginal shedding of the endometrium, if pregnancy fails. It is controlled by progesterone and estragon (Chandra-Mouli & Patel, 2017). Menstruation lasts 28 days; however, it can typically last 23–35. In Nepal, superstition and restrictions affect this biological process. These include menstruation. Women's views on menstruation routines and limitations are hardly

documented (Yadav, Shukla, Padhi, & Chaudhury, 2021). Menstruation is associated with shame, constraints, and superstitions for many women and girls. People do not view menstruation as a typical biological occurrence that signifies a girl's maturity. Lack of instruction on menstruation management, water disposal, private changing facilities, and sanitary hygiene equipment limits schoolgirls' options for maintaining proper personal hygiene during their monthly menstrual cycles. There have been several observational studies on how school impediments to menstrual hygiene management (MHM) affect girls' dignity, well-being, and school involvement, but more study is needed (Ghimire, 2017). Since schools lacked safe, comfortable, and cheaply priced MHM equipment such as garbage disposal sites or bins and decent bathroom facilities, adolescent girls worried about leakage and others seeing their menstrual blood. Teen girls feared changing their sanitary products in school facilities because they were dirty and unprivate. Teenage girls would prefer to use heavy fabric, paper, handkerchiefs, limited mobility, and open defecation than use the school restroom. The British Medical Journal reports that 24% of women miss school during their periods. Due to stigma, girls learn to handle period pain and concern early on and seldom seek treatment when they are physically or mentally troubled. Bullying, seclusion, and humiliation impair the girls' physical and mental progress. Misinformation and lack of hygiene raise dropout rates. Young girls who drop out of school are occasionally coerced into marriage, irreparably destroying their potential (Charry, Goig, & Martínez, 2020). If we want young girls to live freely and achieve their objectives, we must end period stigma and have honest conversations about menstruation. Practitioners, academics, government officials, and other stakeholders must carefully consider privacy and safety while developing laws or planning and implementing sanitation efforts to benefit users' mental and social well-being. Sanitation stakeholders should consider structural, environmental, and societal factors that may affect user privacy and safety and find ways to mitigate them. Lack of access to sanitary facilities, especially for women and girls, compromised privacy and safety, which in turn influenced anxiety, shame, and embarrassment. Open defecation has been shown to make women and girls uneasy because they risk exposing their bodies to men, which is against social standards and can induce humiliation and shame (Critchley et al., 2020). Lack of privacy or safety when using sanitary facilities or defecating in public might harm mental and social health. The study found that individual and environmental factors, including sanitary facility placement and user gender identity, affect privacy and safety. Privacy and safety must be addressed while designing sanitation initiatives and policies to improve users' emotional and social well-being. The global teen disease burden is largely due to mental health disorders. This study aims to uncover context-specific factors that impact stress and coping in two Indian city schoolchildren and prospective mental health prevention strategies (Okeke et al., 2022). Family, school, peer, and community issues should be considered when devising age-appropriate and culturally relevant psychosocial interventions for problematic adolescents. Problem- and emotion-focused strategies must be enhanced to help teenagers cope with tough social circumstances. Developmental difficulties and contextual factors, including friends, school, family, and sociocultural norms, impact teenagers' stress and coping, according to Indian research. The findings immediately impact adolescent mental health prevention by providing teens with age-appropriate and ecologically sound coping skills for main stressors and stress reactivity (Dars, Sayed, & Yousufzai, 2014). Menstrual hygiene management is

becoming a public health issue. However, most research has focused on teenage girls' educational experiences. According to the survey, women need clean, comfortable, and reliable materials; soap and water for non-bathing purposes; seclusion for all menstruation-related activities, not just changing; and safe, private disposal facilities, not just easily available ones. The study also discovered three needs—pain management, social support, and a conducive sociocultural environment—that exceed existing requirements. Women of all ages discussed menstrual pain, bathing, and washing, drying, and storing cloth. Unmarried and newly married women had the most trouble managing their clothes because they were afraid it would reveal their menstruation and destroy their reputations. They chose throwaway materials wherever feasible (Fennie, Moletsane, & Padmanabhanunni, 2022). Menstrual pain may lower a teenage girl's self-efficacy, according to the relationship. To explore schoolgirl menstrual pain and self-efficacy, the study reviewed 4,974 data points from 2008 to 2022 and 6,681 Web of Science Collection pieces. It was obvious that health education and menstrual hygiene helped teenage girls adopt healthy habits (Lamin-Boima, 2017). Psychosomatic pain and monthly misery have been linked, but teenage girls' self-efficacy and suffering have seldom been investigated.

a. Health Risk Reduction

Menstrual hygiene helps prevent bacterial vaginosis, urinary tract infections, and reproductive tract infections. Change menstruation products regularly, wash hands before and after touching them, and keep your vaginal area clean. Cross-sectional research was undertaken in an urban slum to assess menstruation knowledge, attitudes, and hygiene. The pre-tested proforma was used to collect data from June 1 to August 31, 2017. About 72 percent of the 100 young girls aged 15–19. In 84% of cases, mothers provided information. Only 16% of women said the uterus initiated the bleeding. About 60% of girls used sanitary pads, while the rest used cloth. Some 22% cleansed their hands without soap. Certain restrictions applied. Teenage girls have poor menstruation hygiene, according to studies. Girls should learn about menstruation and hygiene (Gupta & Parimal, 2020). Finally, menstrual hygiene education is vital for giving accurate information and fostering an environment that supports women and girls in managing their periods in a dignified, safe, and hygienic manner. National period Hygiene Day, held on May 28, aims to reduce period stigma and raise awareness. Due to the 28-day menstrual cycle and the five-day period in May, this date was chosen. This day is crucial for ending period poverty, which prevents many women from buying menstruation supplies, promoting menstrual health, and ending period shame. Menstrual stigma can harm women's mobility, health, education, and self-esteem (Heizomi et al., 2021). In nations where menstruation is socially undesirable, women and girls are often prohibited from social activities, causing loneliness and humiliation. Without enough menstrual hygiene products or facilities, they may have to avoid school during their periods, making it harder for them to get an education. Today, two in three women lack safe menstrual absorbents. They use dirt, cloth, and leaves, which might cause repeated infections. This may cause long-term health issues, including infertility. In workplaces and rural locations, there are rarely clean, menstrual-friendly toilets. Because women in our country earn an average of 180 rupees per day and a large section of the population earns even less, sanitary products are hard to get (Hennegan, Shannon, Rubli, Schwab, & Melendez-Torres, 2019).

LMIC women and girls have complex menstruation experiences, yet many share traits. We

synthesized qualitative studies on menstruation experience to build an integrated model and identify key issues. This model outlines key antecedents and interventions to improve women and girls' health. It also provides specific study routes that might inform programs and policy (Hunter et al., 2022). Women and girls in low-resource countries struggle with menstrual product shortages. Development partners are using menstrual product interventions in Malawi, but little is known about how they are disseminated or if consumers like them. Menstruation cups, disposable pads, and locally made reusable pads are promoted. Young girls liked disposable pads, whereas older women chose reusable ones. Any disseminated item was reported to increase cleanliness and minimize girl school absenteeism. Despite the benefits, the study revealed that accessibility, price, used items care and disposal, and intervention management require improvement (Sivagurunathan, Umadevi, Rama, & Gopalakrishnan, 2015). It has focused on the lack of quality requirements for menstruation products, which are widely available in the nation. We need a comprehensive strategy to young adult health to secure social security and good reproductive health for all adolescents. Prioritizing mental health, communicating healthy lifestyle changes, and fostering a supportive social environment for life skills learning are all part of this. So, policymakers should bring together health, education, and youth services to distribute a variety of information sources to reduce unfavorable attitudes about SRH communication with youths. In India, adolescent-friendly clinics must be widely recognized for full coverage. Screening teenagers regularly helps manage pre-existing illnesses and monitor sexually transmitted diseases (Joy & Mathew, 2018). Teachers and community leaders applauded disposable menstruation products but bemoaned the thoughtless disposal of old pads and worried that Malawians cannot afford them. This revealed women and girls' incapacity to wash and dry reusable pads. Service providers highlighted the lack of national guidelines to manage menstrual product quality and poor coordination (Kambala, Chinangwa, Chipeta, Torondel, & Morse, 2020).

b. Removal of Social Taboos

Menstruation embarrassment and hygiene ignorance might hinder girls' schooling. A program that addressed menstrual stigma and barriers to sanitary products and infrastructure in Madagascar was studied for its effects on girls' learning and mental health. Training improves anxiety and academic performance. Schools with peer leaders recruited, trained, and guided to address harmful social norms had lower stigma and better sanitary habits. Effective strategies to remove menstruation stigma and create a good, educated environment for adolescent girls:

- Comprehensive School Menstrual Education, Curriculum Integration
- Community Engagement, Teacher and School Staff Training
- Community Awareness Campaigns
- Government/NGO-Led Programs
- Open Conversations at Home
- Social Media and Influencer Use

Teens sometimes have to choose between possibilities. Individual, cultural, and environmental variables impact ultimate choices in these scenarios due to the variety of options. Teenage students' psychological health and decision-making preferences are the

study's main focus. The data shows that adaptive decision-making improves psychological well-being. Conversely, psychological well-being negatively correlates with maladaptive decision-making (Kochhar & Ghosh, 2022). In Lucknow, Uttar Pradesh's slums, young women struggle with menstruation. The socio-ecological model underpinned the investigation. Life course interviews were conducted with 70 Lucknow slum girls aged 15–24. Thematic analysis revealed menstruation structural, social, and individual themes (Singh, Jain, Singh, Singh, & Singh, 2022). Young women lack individual menstrual knowledge. Young women experience social shame, restricted discussion, and limits on mobility and other activities during menstruation. Since school facilities are unclean and doors are broken, there aren't many institutional resources for menstruating girls. Findings suggest targeting many socio-ecological model levels to improve adolescent girls' and young women's health and make menstruation easier. Our findings show the complex context that affects urban slum girls' menstruation experiences. Menstruation and menstrual management must be normalized to secure laws and resources for MHM and menstruating people's human rights. These regulations and tools should include school-level initiatives to ensure toilet privacy and disposal (Kpodo, Aberese-Ako, Axame, Adjuik, & Gyapong, 2022).

Girls must understand and control their menstrual hygiene during the crucial transition from infancy to puberty. The study investigated teens' menstrual hygiene management methods, information sources, and attitudes in and out of school. We conducted descriptive, cross-sectional research from November 2018 to May 2019. The sample comprised 11–19-year-old girls in upper secondary schools in Khammouane and Champassak and those who were not in school. Of the 433 participants, only 343 were menarche-aged women. Effective MHM is essential for full employment and school participation, but more research is needed to evaluate its immediate economic and educational consequences. Teenage schoolgirls and the public need awareness-raising and advocacy campaigns to assist them in maintaining appropriate hygiene (Kpodo et al., 2022). The study examined how secondary school students in peri-urban Uganda manage their periods, what barriers and facilitators they experience, and how menstruation impacts school attendance. Girls showed shame and worry over period teasing in qualitative interviews (Kshatri et al., 2022). They also blamed monthly pain and a lack of menstrual hygiene services for their school absences. Every policymaker questioned listed menstruation and poverty as the primary school attendance factors. A menstrual management intervention that addresses psychological and physical aspects such as pain treatment, menstrual hygiene items, and water and sanitation facilities must be evaluated (Kumar, Nuken, Datta, & Vyas, 2021). New methods like the reusable menstrual cup and journals to chart the menstrual cycle might also be helpful. From three Kathmandu Valley urban areas, 1342 teenage girls and women aged 15+ completed a clustered random sampling survey on menstrual practices and constraints (Lamisi, 2020). This Nepali cross-sectional survey uses a custom app with pull-down, multiple-choice, and open-ended questions. A self-administered questionnaire included 13 demographic items and 22 regarding menstruation, menstrual hygiene, and sociocultural taboos, attitudes, and practices. The study illuminates gender disparity, women's cultural and religious superstitions, and social bias in Kathmandu Valley metropolitan areas. Education and awareness are needed to reconcile social and cultural practices during menstruation (Majeed, Sharma, Ajmera, & Dalal, 2022). Although most

respondents agree that all menstruating women should have access to all facilities and services, the substantial number of women who experienced menstruation restrictions reveals a significant practice gap.

IV. Psychological Impact of Menstruation

Psychosocial factors affect cultural asset development. One such psychological barrier for women is menstrual stigma. There is a lot of evidence that menstruation-related difficulties might affect girls' health and education due to physical factors such as inadequate school sanitary facilities and products and cultural taboos [4]. Schoolgirls can reduce the stigma and unpleasant physical impacts of menstruation by talking about it more and learning about menstrual hygiene (Sahiledengle et al., 2022). However, few interventions have been discovered to reduce menstrual stigma. Can young leaders' open communication about menstrual hygiene and access to information, infrastructure, and hygiene products improve societal norms and behaviors, improving girls' psychosocial outcomes and human capital? Safe and hygienic period handling is essential (Miirio et al., 2018). However, shame and secrecy impede individuals from discussing and understanding periods. Menstruation is poorly understood by many girls, according to the UN. World Vision found that just 50% of Indian girls know about menstruation before their first period. Women need menstrual hygiene health education to control their periods. Girls must be able to learn about menstruation and control their period when they start their first period. Poor period management can cause long-term health problems, such as pain and edema (Mohammed et al., 2020). Infections like UTIs can be serious. Generations may inherit dangerous and inappropriate habits. Girls may use filthy cloths or keep sanitary pads in for too long, among other unhygienic management methods. Even if safe, cloth must be washed and laundered (Mukherjee et al., 2020). Due to the stigma and secrecy of menstruation, females are reluctant to wash and hang them properly; hence, they are often used in dirty places. These health conditions may increase infertility risk in these women. Without adequate menstrual hygiene education, menstruators may be injured. Authoritarian parenting promotes emotional intelligence growth, while permissive parenting does not. Positive correlations exist between emotional intelligence, psychological well-being, and authoritative parenting. The lenient parent indulges the child by not demanding respect for others and oneself, obedience with authority figures, or confronting unhelpful and maladaptive behaviours (Páez-Gallego, Gallardo-López, López-Noguero, & Rodrigo-Moriche, 2020). Emotional intelligence and writing style predict teenage mental health. Early teens may have mental health issues related to aggressive conduct, which can distress others. This study identified characteristics connected to aggressiveness in young adolescent girls. A cross-sectional study was conducted on 707 female middle school pupils in Tabriz, Iran, using multistage random sampling. Aggression, health, happiness, social acceptance, and loneliness were considered. We utilized structural equation modelling to analyse the data. Poor social acceptability, loneliness, parental support, and body image satisfaction affected aggressiveness. The statistics show that continuous aggressiveness harms teenage mental health and relationships. Finding favourable factors may reduce aggressiveness and enhance the mental health of early teenage girls and adolescents (Parikh et al., 2019). The study examined how a cognitive-behavioural group psychoeducation program affected teens' subjective well-being, irrational beliefs, and psychological resilience. The results showed that teens who participated in a cognitive-

behavioural group psycho-education program had considerably higher psychological resilience. External factors like education boost psychological resilience. Schools have a variety of important roles in boosting students' psychological resilience. An important environmental factor in psychological resilience is education. A good school atmosphere protects against community and family hazards (Phillips-Howard et al., 2016). The Kenya Child and Adolescent Mental Health study included Kiambu and Nyeri County parents and teens (Rajaselvi & Kumar, 2024). After selecting 576 teens and 1068 parents, 46 (8.0% of the target sample) and their parents (4.3% of the target sample) were unable to be reached because their parents were either away or in boarding schools. After post hoc comparisons, boys aged 12 to 18 had significantly greater emotional, social, psychological, and overall functioning ratings than younger boys. Older girls also scored higher on social functioning (Gedefaw, 2019). The study found that parental QoL ratings were higher than US parents', while adolescent females' self-reports were lower. People with borderline or clinical EBP reported considerably worse QoL, especially those with attention deficits and somatic complaints. Kenyan children and teenagers may benefit from mental health therapies that reduce EBP and improve quality of life.

V. Intervention Programs And Their Effectiveness

Teens sometimes have to choose between possibilities. Individual, cultural, and environmental variables impact ultimate choices in these scenarios due to the variety of options. Psychological well-being components vary by personality and development (Spinhoven et al., 2022). Remember that social variables that determine gender roles also affect relationship building, life objectives, and autonomy. Thus, gender may considerably impact psychological well-being and its components (Sommer et al., 2016). These initiatives boost self-esteem, reduce absenteeism, reduce social stigma, and promote menstrual knowledge.

- The National Health Mission (NHM) launched the Menstrual Hygiene Scheme (MHS) to improve menstrual hygiene among rural teenage females aged 10-19. Rural girls used more sanitary pads (42% to 57% in some locations).
- The Menstrupedia program teaches menstruation in a pleasant, culturally appropriate approach using digital and comic-based education. Engages urban and rural students (Reaches rural girls and women with low-cost education (<https://www.menstrupedia.com/>)).
- UNICEF's WASH in Schools initiative promotes menstruation health by enhancing sanitary infrastructure and distributing menstrual education in schools. School retention for teenage females in intervention schools increased by 20-30% (<https://www.unicef.org/>).
- Goonj's "Not Just a Piece of Cloth" Campaign: A grassroots awareness campaign that delivers clean cotton cloth-based reusable sanitary pads. Offers rural girls and women low-cost education and alternatives (<https://goonj.org/>).

Table 1. Impact of Menstrual Education on Adolescent Girls

Parameter	Private Schools (%)	Public Schools (%)	Source / Study
Girls aware of menstruation before menarche	78%	43%	Dasgupta & Sarkar, 2008
Availability of menstrual education at school	72%	38%	UNICEF (India MHM 2015 Report)
Use of sanitary pads	89%	54%	NFHS-5, 2020–21 (India)
Regular school attendance during menstruation	81%	59%	WASH in Schools for Girls (UNESCO, 2014)
Reported high self-esteem related to body image	70%	45%	Sommer et al., 2016
Psychological distress reported (anxiety/depression)	22%	41%	Garg et al., 2015; Indian Journal of Psychiatry
Teachers trained to address menstruation topics	65%	30%	Ministry of Education, India (2018)
Peer support system for menstruating girls	58%	29%	Chandra-Mouli et al., 2017

VI. Conclusion

The research examined highlights the diverse influence of menstruation education on the personality development and psychological health of teenage females. A recurrent topic in several research is the significance of menstruation awareness and hygiene education in cultivating confidence, emotional resilience, and self-esteem in young girls, particularly in culturally sensitive and socioeconomically varied contexts. The findings underline the necessity for systematic, school-based menstruation education programs that not only address biological elements but also demolish taboos and social stigmas.

Even while more people are aware of the problem, there are still big gaps, such as not enough teacher training, not enough inclusive curriculum design, and not enough outreach in rural and impoverished regions. The research indicate that when teenage females get appropriate information and emotional support, they exhibit greater academic achievement, improved interpersonal connections, and superior coping abilities. Consequently, there is a significant demand for legislators, educators, and mental health specialists to work together to provide thorough and contextually appropriate frameworks for menstruation education. This will enable teenage females grow up in a well-rounded way, which will lead to a generation that is more knowledgeable, self-assured, and emotionally stable..

VII. References

- Abidin, F. A., Yudiana, W., & Fadilah, S. H. (2022). Parenting Style and Emotional Well-Being Among Adolescents: The Role of Basic Psychological Needs Satisfaction and Frustration. *Frontiers in Psychology*, 13(June), 1–10. <https://doi.org/10.3389/fpsyg.2022.901646>
- Alekhy, G., Parida, S. P., Giri, P. P., Begum, J., Patra, S., & Sahu, D. P. (2023). Effectiveness of school-based sexual and reproductive health education among adolescent girls in Urban areas of Odisha, India: a cluster randomized trial. *Reproductive Health*, 20(1), 1–12. <https://doi.org/10.1186/s12978-023-01643-7>
- Anbesu, E. W., & Asgedom, D. K. (2023). Menstrual hygiene practice and associated factors among adolescent girls in sub-Saharan Africa: a systematic review and meta-analysis. *BMC Public Health*, 23(1), 1–14. <https://doi.org/10.1186/s12889-022-14942-8>
- Asgari, S., Alimoardi, Z., Soleimani, M. A., Allen, K., & Bahrami, N. (2020). The effect of psychoeducational intervention , based on a self-regulation model on menstrual distress in adolescents : a protocol of a randomized controlled trial. *Trials*, 1–8.
- Bareghamyan, H. H., Petrosyan, M. K., Chopikyan, A. S., & Beglaryan, G. A. (2021). Sexual and reproductive health of adolescent girls. *Akusherstvo i Ginekologiya (Russian Federation)*, 2021(9), 127–136. <https://doi.org/10.18565/aig.2021.9.164-173>
- Barua, A., Watson, K., Plesons, M., Chandra-Mouli, V., & Sharma, K. (2020). Adolescent health programming in India: A rapid review. *Reproductive Health*, 17(1), 1–10. <https://doi.org/10.1186/s12978-020-00929-4>
- Chandra-Mouli, V., & Patel, S. V. (2017). Mapping the knowledge and understanding of menarche, menstrual hygiene and menstrual health among adolescent girls in low- and middle-income countries. *Reproductive Health*, 14(1), 1–16. <https://doi.org/10.1186/s12978-017-0293-6>
- Charry, C., Goig, R., & Martínez, I. (2020). Psychological Well-Being and Youth Autonomy: Comparative Analysis of Spain and Colombia. *Frontiers in Psychology*, 11(September), 1–11. <https://doi.org/10.3389/fpsyg.2020.564232>
- Critchley, H. O. D., Babayev, E., Bulun, S. E., Clark, S., Garcia-Grau, I., Gregersen, P. K., ... Griffith, L. G. (2020). Menstruation: science and society. *American Journal of Obstetrics and Gynecology*, 223(5), 624–664. <https://doi.org/10.1016/j.ajog.2020.06.004>
- Dars, S., Sayed, K., & Yousufzai, Z. (2014). Relationship of menstrual irregularities to BMI and nutritional status in adolescent girls. *Pakistan Journal of Medical Sciences*, 30(1), 140–144. <https://doi.org/10.12669/pjms.301.3949>
- Fennie, T., Moletsane, M., & Padmanabhanunni, A. (2022). Adolescent girls' perceptions and cultural beliefs about menstruation and menstrual practices: A scoping review. *African Journal of Reproductive Health*, 26(2), 88–105. <https://doi.org/10.29063/ajrh2022/v26i2.9>
- Gedefaw, G. (2019). Knowledge, Attitude, Practice and its associated factors on menstrual hygiene among high school students of North Wollo Zone, Ethiopia, 2019: A cross-sectional. *Research Square*, 4(1), 1–17.
- Ghimire, S. (2017). Knowledge regarding menstrual hygiene among adolescent girls.

- International Journal of Research in Medical Sciences, 5(8), 3426.
<https://doi.org/10.18203/2320-6012.ijrms20173534>
- Gupta, K., & Parimal, B. S. (2020). Relationship Between Personality Dimensions and Psychological Well-Being Among University Students During Pandemic Lockdown. *Journal of Global Resources*, 06(s11), 10–19.
<https://doi.org/10.46587/jgr.2020.v06si01.002>
- Heizomi, H., Jafarabadi, M. A., Kouzekanani, K., Matlabi, H., Bayrami, M., Kumar Chattu, V., & Allahverdipour, H. (2021). Factors affecting aggressiveness among young teenage girls: A structural equation modeling approach. *European Journal of Investigation in Health, Psychology and Education*, 11(4), 1350–1362.
<https://doi.org/10.3390/ejihpe11040098>
- Hennegan, J., Shannon, A. K., Rubli, J., Schwab, K. J., & Melendez-Torres, G. J. (2019). Women's and girls' experiences of menstruation in low-and middle-income countries: A systematic review and qualitative metasynthesis. In *PLoS Medicine* (Vol. 16). <https://doi.org/10.1371/journal.pmed.1002803>
- Hunter, E. C., Murray, S. M., Sultana, F., Alam, M. U., Sarker, S., Rahman, M., ... Winch, P. J. (2022). Development and validation of the Self-Efficacy in Addressing Menstrual Needs Scale (SAMNS-26) in Bangladeshi schools: A measure of girls' menstrual care confidence. *PLoS ONE*, 17(10 October), 1–22.
<https://doi.org/10.1371/journal.pone.0275736>
- Joy, M., & Mathew, A. (2018). Emotional Maturity and General Well-Being of Adolescents. *IOSR Journal Of Pharmacy*, 8(5), 2250–3013. Retrieved from www.iosrphr.org
- Kambala, C., Chinangwa, A., Chipeta, E., Torondel, B., & Morse, T. (2020). Acceptability of menstrual products interventions for menstrual hygiene management among women and girls in Malawi. *Reproductive Health*, 17(1), 1–12.
<https://doi.org/10.1186/s12978-020-01045-z>
- Kochhar, S., & Ghosh, S. (2022). Impact of menstruation on physical and mental health of young adolescent girls. *International Journal of Health Sciences*, 6(March), 6693–6713. <https://doi.org/10.53730/ijhs.v6ns2.6627>
- Kpodo, L., Aberese-Ako, M., Axame, W. K., Adjuik, M., & Gyapong, M. (2022). Socio-cultural factors associated with knowledge, attitudes and menstrual hygiene practices among Junior High School adolescent girls in the Kpando district of Ghana: A mixed method study. *PLoS ONE*, 17(10 October), 1–19.
<https://doi.org/10.1371/journal.pone.0275583>
- Kshatri, J. S., Satpathy, P., Sharma, S., Bhoi, T., Mishra, S. P., & Sahoo, S. S. (2022). Health research in the state of Odisha, India: A decadal bibliometric analysis (2011–2020). *Journal of Family Medicine and Primary Care*, 6(2), 169–170.
<https://doi.org/10.4103/jfmpe.jfmpe>
- Kumar, P., Nuken, A., Datta, N., & Vyas, A. (2021). Impact of an Empowerment and Employability Program for Adolescent Girls: Evidence From India. *Journal of Youth Development*, 16(2–3), 255–277. <https://doi.org/10.5195/JYD.2021.1048>
- Lamin-Boima, P. T. (2017). Knowledge, Attitude And Practice Of Street Food Vendors In Selected Schools Within Bo City Southern Sierra Leone. *International Journal of*

- Scientific & Technology Research, 6(12). Retrieved from www.ijstr.org
- Lamisi, K. L. (2020). Assessing the Impact of Menstrual Hygiene Management on the Health and School Attendance of Adolescent Girls in Junior High Schools in the Kumbungu District of the Northern Region of Ghana. 1–50. Retrieved from www.udsspace.uds.edu.gh
- Majeed, J., Sharma, P., Ajmera, P., & Dalal, K. (2022). Menstrual hygiene practices and associated factors among Indian adolescent girls: a meta-analysis. *Reproductive Health*, 19(1), 1–13. <https://doi.org/10.1186/s12978-022-01453-3>
- McCammon, E., Bansal, S., Hebert, L. E., Yan, S., Menendez, A., & Gilliam, M. (2020). Exploring young women's menstruation-related challenges in Uttar Pradesh, India, using the socio-ecological framework. *Sexual and Reproductive Health Matters*, 28(1). <https://doi.org/10.1080/26410397.2020.1749342>
- Miir, G., Rutakumwa, R., Nakiyingi-Miir, J., Nakuya, K., Musoke, S., Namakula, J., ... Weiss, H. A. (2018). Menstrual health and school absenteeism among adolescent girls in Uganda (MENISCUS): A feasibility study. *BMC Women's Health*, 18(1), 1–13. <https://doi.org/10.1186/s12905-017-0502-z>
- Mohammed, S., Larsen-Reindorf, R. E., & Awal, I. (2020). Menstrual Hygiene Management and School Absenteeism among Adolescents in Ghana: Results from a School-Based Cross-Sectional Study in a Rural Community. *International Journal of Reproductive Medicine*, 2020, 1–9. <https://doi.org/10.1155/2020/6872491>
- Mukherjee, A., Lama, M., Khakurel, U., Jha, A. N., Ajose, F., Acharya, S., ... Shrestha, S. (2020). Perception and practices of menstruation restrictions among urban adolescent girls and women in Nepal: A cross-sectional survey. *Reproductive Health*, 17(1), 1–10. <https://doi.org/10.1186/s12978-020-00935-6>
- Okeke, C. C., Mbachu, C. O., Agu, I. C., Ezenwaka, U., Arize, I., Agu, C., ... Onwujekwe, O. (2022). Stakeholders' perceptions of adolescents' sexual and reproductive health needs in Southeast Nigeria: a qualitative study. *BMJ Open*, 12(6). <https://doi.org/10.1136/bmjopen-2021-051389>
- Páez-Gallego, J., Gallardo-López, J. A., López-Noguero, F., & Rodrigo-Moriche, M. P. (2020). Analysis of the Relationship Between Psychological Well-Being and Decision Making in Adolescent Students. *Frontiers in Psychology*, 11(July). <https://doi.org/10.3389/fpsyg.2020.01195>
- Parikh, R., Sapru, M., Krishna, M., Cuijpers, P., Patel, V., & Michelson, D. (2019). "it is like a mind attack": Stress and coping among urban school-going adolescents in India. *BMC Psychology*, 7(1), 1–9. <https://doi.org/10.1186/s40359-019-0306-z>
- Phillips-Howard, P. A., Caruso, B., Torondel, B., Zulaika, G., Sahin, M., & Sommer, M. (2016). Menstrual hygiene management among adolescent schoolgirls in low- and middle-income countries: Research priorities. *Global Health Action*, 9(1), 1–7. <https://doi.org/10.3402/GHA.V9.33032>
- Rajaselvi, J. J., & Kumar, N. (2024). Trends in Research Studies on Menstrual Distress and Self-efficacy Among Adolescent Girls: A Bibliometric Analysis. *International Research Journal of Multidisciplinary Scope*, 5(4), 629–640. <https://doi.org/10.47857/irjms.2024.v05i04.01193>
- Sahiledengle, B., Atlaw, D., Kumie, A., Tekalegn, Y., Woldeyohannes, D., & Agho, K.

- E. (2022). Menstrual hygiene practice among adolescent girls in Ethiopia: A systematic review and meta-analysis. *PLoS ONE*, 17(1 January), 1–26. <https://doi.org/10.1371/journal.pone.0262295>
- Sclar, G. D., Penakalapati, G., Caruso, B. A., Rehfuess, E. A., Garn, J. V., Alexander, K. T., ... Clasen, T. (2018). Exploring the relationship between sanitation and mental and social well-being: A systematic review and qualitative synthesis. *Social Science and Medicine*, 217(September), 121–134. <https://doi.org/10.1016/j.socscimed.2018.09.016>
- Singh, P. K., Jain, P., Singh, N., Singh, L., & Singh, S. (2022). Smokeless Tobacco Use among Pregnant Women in India: The Tale of Two Nationally Representative Surveys. *Asian Pacific Journal of Cancer Prevention*, 23(2), 389–392. <https://doi.org/10.31557/APJCP.2022.23.2.389>
- Sivagurunathan, C., Umadevi, R., Rama, R., & Gopalakrishnan, S. (2015). Adolescent health: Present status and its related programmes in India. Are we in the right direction? *Journal of Clinical and Diagnostic Research*, 9(3), LE01–LE06. <https://doi.org/10.7860/JCDR/2015/11199.5649>
- Sommer, M., Caruso, B. A., Sahin, M., Calderon, T., Cavill, S., Mahon, T., & Phillips-Howard, P. A. (2016). A Time for Global Action: Addressing Girls' Menstrual Hygiene Management Needs in Schools. *PLoS Medicine*, 13(2), 1–9. <https://doi.org/10.1371/journal.pmed.1001962>
- Spinhoven, P., Zulaika, G., Nyothach, E., van Eijk, A. M., Obor, D., Fwaya, E., ... Phillips-Howard, P. A. (2022). Quality of life and well-being problems in secondary schoolgirls in Kenya: Prevalence, associated characteristics, and course predictors. *PLOS Global Public Health*, 2(12), 1–17. <https://doi.org/10.1371/journal.pgph.0001338>
- Van Eijk, A. M., Sivakami, M., Thakkar, M. B., Bauman, A., Laserson, K. F., Coates, S., & Phillips-Howard, P. A. (2016). Menstrual hygiene management among adolescent girls in India: A Systematic review and meta-analysis. *BMJ Open*, 6(3). <https://doi.org/10.1136/bmjopen-2015-010290>
- Yadav, P., Shukla, P., Padhi, D., & Chaudhury, S. (2021). A correlational study between perceived parenting style, psychological well-being, and emotional intelligence among adolescents. *Industrial Psychiatry Journal*, 30(Suppl 1), S108–S114. <https://doi.org/10.4103/0972-6748.328798>
- Zulaika, G., Nyothach, E., van Eijk, A. M., Wang, D., Opollo, V., Obor, D., ... Phillips-Howard, P. A. (2023). Menstrual cups and cash transfer to reduce sexual and reproductive harm and school dropout in adolescent schoolgirls in western Kenya: a cluster randomised controlled trial. *EClinicalMedicine*, 65, 1–14. <https://doi.org/10.1016/j.eclinm.2023.102261>