



A Critical Study of Female Students' Knowledge, Attitudes, and Practices (KAP) toward Menstrual Health Management (MHM) at Maulana Azad National Urdu University, India

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Abstract: Menstrual Health Management (MHM) remains a crucial determinant of public health and gender equality within higher education. Despite increasing policy related to menstrual health, persistent barriers such as stigma, misinformation, and inadequate facilities continue to constrain effective management of menstruation among students in India. This study critically examines the knowledge, attitudes, and practices (KAP) of female students toward MHM at Maulana Azad National Urdu University (MANUU), Hyderabad. Employing a structured KAP framework and a descriptive cross-sectional design, data were collected from 200 students across diverse academic programmes and analyzed using descriptive and thematic methods. Findings reveal that while 78% of respondents demonstrated moderate knowledge of menstruation, 15% were highly informed, and 7% low. Although 79% perceived it as a natural biological process, misconceptions regarding diet, exercise, and social participation persist. Approximately 68% used sanitary pads, 8% menstrual cups, and 5% tampons, whereas 41% reported absenteeism linked to pain, stigma, or lack of facilities. The study underscores institutional inadequacies, gender-sensitive policies, awareness initiatives, and improved infrastructure to enhance menstrual dignity, reproductive rights, and gender equality.

Keywords: Menstrual Health Management (MHM); Knowledge, Attitudes, and Practices (KAP); Social Stigma and Taboos; Reproductive Rights; Gender Equality; Public Health

I. INTRODUCTION

Menstrual Health and Hygiene (MHH) is a part of public health and reproductive rights to the well-being and empowerment of women and adolescent girls. Over 300 million women all over the world are on their menstrual cycles on a single day. In total, an estimated 500 million people do not have access to menstrual products and proper facilities for MHM. To effectively implement MHM requires access to water, sanitation, and hygiene (WASH) facilities, availability of affordable and suitable menstrual products, the right information on menstrual care, as well as a conducive environment where menstrual processes can be handled with dignity and a lack of stigma (World Bank, 2025).

According to the WHO/UNICEF Joint Monitoring Programme (2012) defines MHM is defined as: “Women and adolescent girls who use clean menstrual management materials, change them in privacy when required, wash with soap and water, and have access to safe disposal facilities and who are knowledgeable about the menstrual cycle and manage it without discomfort and fear.”

Menstruation is a natural and healthy process life of women and girls. But in many societies, the experience of menstruators continues to be constrained by cultural taboos and discriminatory social patterns. These limitations contribute to misinformation, unhygienic and unhealthy menstrual practices, negative attitudes, and feelings of shaming, bullying, and even gender-based violence. Their education, health, safety, and human development are being affected adversely by the inequalities in social and economic disparities (World Bank, 2025).

1.1 Background of the Study

Menstrual health is an important component of the reproductive health of females as it affects physical, psychological, and social health and well-being. In India, menstruation is stigmatized and poorly understood as it is a universal biological process (Kaur et al., 2018). There are cultural taboos that tend to make menstruation impure, restricting mobility, participation, and activities, and undermining self-esteem during menstrual cycles. Feminist scholars interpret such stigmas as structural tools that discipline female bodies and exclude them from full participation in education and public life (Kumar & Srivastava, 2011). Globally, menstrual health is increasingly recognized as a human rights and gender equality concern rather than solely a hygiene problem (Hennegan & Montgomery, 2016; Sood et al., 2022).

1.2 Significance of MHM in Higher Education

Universities play a critical role in shaping gender sensitive attitudes and health behaviors. They have the potential to challenge taboos, promote menstrual literacy, and normalize the open discussion of female health. However, menstruation remains marginalized even among educated people; menstruation is maintained at the periphery. A literature review in India and South Asia indicates that while awareness among students of higher education institutions is greater than with school students, misperceptions and limiting attitudes persist.

II. REVIEW OF LITERATURE

Menstrual health management (MHM) has been recognized as an important element of public health, education, and gender equality. Within the past twenty years, the problems of biological knowledge, as well as social stigma and institutional neglect, have been researched. This review synthesizes global, South Asian, and Indian literature; the multi-dimensional problems that menstruators face require multi-sectoral interventions. WASH professionals alone cannot come up with all of the solutions to tackle the intersecting issues and challenges of insufficient sanitary facilities, lack of information and knowledge, lack of access to affordable and quality menstrual hygiene products, and the social norms associated with menstruation cannot be solved by WASH professionals alone (World Bank, 2025). Various studies highlight the need for institutional focus in higher education settings like MANUU.

2.1 Global Perspectives on Menstrual Health and Hygiene

One half a billion women in the world do not have access to menstrual hygiene. Studies indicate that strategies combining information, education, appropriate infrastructure, and menstrual products within a supportive policy environment are most effective in reducing the negative impacts of poor menstrual health and hygiene (MHH). In short, a holistic multi-dimensional approach requiring collaborative action is essential (World Bank, 2025).

Menstrual health is determined by cultural, educational, and infrastructural factors across the world. In high-income nations, stigma influences self-esteem and attendance (Kalio, 2023). The ones in low and middle-income countries LMICs are the insufficient facilities, misinformation, and harmful social norms (Sommer et al., 2021). Ineffective MHM contributes to absenteeism and reduced participation, especially in poorly resource-constrained settings (Hennegan & Montgomery, 2016).

Regional interventions, such as pad distribution programs and menstrual education in Kenya, Uganda, and Ghana, have a positive effect on attendance and reduced stigma. Menstrual inequality is closely linked to gender norms and socio-economic status (Crankshaw et al., 2020; Kalio, 2023; Van Eijk et al., 2016).

2.2 Regional Trends: Menstrual Health in South Asia

Menstrual health issues in South Asian countries are compounded by traditional taboos, gender inequality, and insufficient institutional support (Kani Kolil & Achuthan, 2024). There are a few schools in which the WASH facilities are inadequate, which is one of the causes of poor menstrual management (World Bank, 2025). The studies concerning India, Bangladesh, Nepal, Bhutan, and Pakistan highlight the lack of awareness, the negative cultural practices, and the insufficient access to hygienic products and deep-rooted stigma against menstruation (M. S. Ahmed et al., 2021; Hassan et al., 2023; Method et al., 2024; Yadav et al., 2018).

M. S. Ahmed et al., (2021) discovered in Bangladesh that two in five girls had previously heard about menstruation before menstruation onset, and only one in five schools taught menstrual education. A similar case is reported in Nepal, as according to Yadav et al., (2018), girls are prohibited during menstruation, with many of them not allowed to enter kitchens or temples. In rural western Nepal, the Chhaupadi custom of isolating menstruating women in sheds persists even after it was outlawed as illegal (Hennegan & Montgomery, 2016; Van Eijk et al., 2016). These traditions underpin gender discrimination and negatively impact the mental and physical well-being of girls.

South Asian governments and NGOs have initiated several awareness campaigns and programs in the schools. Interventions and awareness campaigns on education have shown that there are improvements in attendance, self-esteem, and menstrual literacy, though structural barriers such as poverty and gender bias exist. Policy changes, including the inclusion of MHH into broader comprehensive sanitation and education frameworks, indicate growing recognition of menstrual inclusion, but stigma is one of the primary factors hindering women's empowerment and their involvement in education and work.

2.3 National Studies: Menstrual Health in India

In India, Menstrual health is a social equity and communal health issue. According to the NFHS-5 (2022), 64% of the women aged 15-24 use hygienic menstrual products, of which the urban 78% and rural 48% groups vary significantly. Cultural taboos, lack of proper sanitation, and awareness (particularly in rural and marginalized societies) are also present. In low-income countries, half of the schools lack adequate water, sanitation, and hygiene services crucial to enable girls and female teachers to manage menstruation (Singh et al., 2022). Many studies argue that inadequate sanitary facilities affect girls' experiences at school, causing them to miss classes during their menstruation or even drop out.

A meta-analysis provided by Sharma et al., (2020) revealed that half of Indian girls had heard about menstruation before their menarche, and most of them are scared and confused during their first period. Van Eijk et al., (2016) also discovered that one out of every three girls in India misses school during menstruation due to poor facilities and lack of privacy. Studies by (Kumar & Srivastava, 2011; Tshomo et al., 2021; Van Eijk et al., 2016) highlight that socio-cultural beliefs that restrictions on bathing, cooking, or visits to the temple are still prevalent in various areas, which not only influence the hygiene practice but also influence the psychological welfare of girls.

Gender-sensitive facilities, counseling, and curricular integration are used in educational institutions to create a level of awareness and positive attitude towards menstruation. Such interventions often neglect intersectional inequalities like caste, religion, and economic precarity that shape women's menstrual experiences (Deepa et al., 2019; Mishra, 2024). Absenteeism, dropout, and reproductive and urinary tract problems are among the health problems associated with poor MHM (Ghimire, 2023; Method et al., 2024; Shrestha et al., 2025). Despite government schemes and initiatives such as the Menstrual Hygiene Scheme (MHS), National Health Mission (NHM), and Rashtriya Kishor Swasthya Karyakram (RKSK), structural and cultural factors persist, highlighting the need for a long-term and comprehensive intervention (Ghimire, 2023; Method et al., 2024; Shrestha et al., 2025; World Bank, 2025).

III. RESEARCH OBJECTIVES

This study aims to critically examine situations of menstrual health management among female students at MANUU, Hyderabad, with the following aspects:

- To assess the female students' knowledge of menstrual health and hygiene.
- To analyze the female students' attitudes and perceptions toward menstruation
- To examine menstrual hygiene management practices among students.
- To identify issues and challenges in menstrual health management, such as social stigma, access, and support.

IV. METHODOLOGY

This study employed a quantitative descriptive cross-sectional design by using the Knowledge, Attitude, and Practice (KAP) framework to measure menstrual health management (MHM) among female students at the Maulana Azad National Urdu University (MANUU), Hyderabad, in a systematic manner. Data were collected from participants and supplemented by secondary sources from academic databases, including JSTOR, Google Scholar, PubMed, Academia, Web of Science, and Scopus. This approach provides a snapshot of participants' knowledge, attitudes, and behavior practices among the participants, as well as identifying gaps in awareness and practice. Data collection was conducted from August 1 to September 30, 2025.

4.1 Theoretical Framework

The study is guided by the Knowledge, Attitude, and Practice (KAP) model, which was created in the 1950s to undertake family planning and population studies (Shrestha et al., 2025; Tshomo et al., 2021). The KAP surveys focus on knowledge (what the participants know), attitudes (how they feel), and practices (how they behave), due to providing health behaviors are investigated in a structured way. Gradually, the model has been widely applied to diverse health-related matters to identify gaps in knowledge, attitudinal obstacles, and patterns of behavior (Kalio, 2023; N. Sharma et al., 2013; Shrestha et al., 2025; Tshomo et al., 2021; Yadav et al., 2018).

In this study, the KAP survey systematically measures three interrelated dimensions: knowledge (what participants know about a topic), attitude (how they feel about it), and practice (how they act or behave) in a systematic manner. This approach enables researchers to identify knowledge gaps, attitudinal barriers, and behavioral patterns that influence health-related decision-making.

4.2 Area of the Study

The study was conducted at Maulana Azad National Urdu University (MANUU), a central university in Hyderabad, India. It was founded in 1998 through an Act of Parliament, whose goals are to promote Urdu, offer vocational and technical education, expand access to higher education, and focus on women's education to empower the marginalized communities through regular and distance education (MANUU, 2025).

4.3 Population and Sampling

In the 2025–26 academic year, MANUU Hyderabad has about 7,000 students, including 24% women students' count with about 1680 in eight Academic Schools of Study and various departments (MANUU, 2025).

The target population of the study included female students of the different academic levels: first, second, and final years. The random sampling technique was used to represent the whole department. Standard statistical computation, 95% level of confidence, and 5% margin of error were used to compute the 200 sample size in order to represent the overall population of female students.

4.4 Tools of Data Collection and Validation

The collection of the Data was conducted with the help of the Google Form questionnaire based on the KAP model to measure the knowledge, attitudes, and practices in terms of menstrual hygiene. To ensure validity and reliability, the tool was pretested on 20 students who had similar demographics.

4.5 Data Analysis

The data was imported into IBM Statistical Package for the Social Sciences (SPSS) Statistics for Windows, Version 23.0, to enter data and analyze them. The knowledge, attitudes, and practices of the

participants were summarized using descriptive statistics such as frequencies, percentages, means, and standard deviations. The analysis has provided major patterns, gaps, and trends applicable in MHM at MANUU.

4.6 Ethical Considerations

The study adhered to strict ethical protocols. Participation was voluntary, and informed consent was obtained from each study participant. Confidentiality and anonymity of the respondents were maintained. Students' break time and/or vacant slots were utilized for completing the survey. Students who were absent or could not be reached despite three attempts were excluded from the study.

4.7 Scope and Limitations

The research involved the knowledge, attitude, and practices of female students towards MHM in MANUU. This study looked at the accessibility of sanitary facilities, disposal systems, and the effectiveness of the awareness programs. It has such limitations as the use of self-reported data, a cross-sectional study, and a moderate sample ($n = 200$). Despite these limitations, this study provides meaningful information regarding menstrual health challenges and opportunities for possible institutional interventions in the higher education setting.

V. MAJOR FINDINGS

The research on the Knowledge, Attitudes, and Practices (KAP) framework of the female students on Menstrual Health Management (MHM) identifies five thematic dimensions of knowledge, attitudes, practices, institutional support, and comparative insights. The findings are represented with the assistance of not only the descriptive statistics but also some exemplifying qualitative quotes, which help to contextualize the numeric data.

5.1 Demographic Profile of Respondents

The study comprised 200 female students of Maulana Azad National Urdu University (MANUU) in Hyderabad. It represented a diverse range of academic standards and socio-economic backgrounds. The majority of respondents were between 19-22 years of age, with 20 years having the largest percentage. In terms of academic enrolment, 48.4% were post-graduates, next came undergraduates, Ph.D. scholars, and diploma or certificate holders, and 59.4% currently in their second year of their studies. The highest percentage of departmental representation was in the Zoology (13.8%), Education and Training (10.8%), and Commerce and Business Management (9.2).

A substantial percentage of the students, 93.8% stayed in the university hostels, and only a small percentage of them lived with families and in private accommodations. In terms of family structure, 73.4% of them were nuclear families and 26.6% joint families. The monthly pocket money that was given to the respondents varied between INR 1,000 and INR 15,000, with the most frequent 46.2% one of INR 5,000 as pocket money allowance.

In general, this demographic profile reflects predominantly young, highly educated female students residing in a hostel, which gives a good background to the analysis of menstrual health management practices, issues, and challenges at higher institutions.

5.2 Knowledge Levels: Awareness and Understanding of Menstruation

The findings indicate that a high percentage of the respondents had knowledge and skills with basic to moderate knowledge of menstruation and hygiene. Approximately 78% of respondents expressed a moderate level of knowledge, 15% exhibited a high level of knowledge, and 7% displayed inadequate understanding of menstrual physiology and hygiene. About 84% of the respondents correctly recognized menstruation as a natural and biological process associated with reproductive health, while 21% of the respondents still linked it to impurity or uncleanliness. This means that even after being exposed to education, cultural and religious beliefs continued to influence people. Only 68% of participants had basic biological knowledge that menstrual bleeding originates from the uterus.

The information sources were enlightening. The primary sources of menstruation knowledge were peers (34%), mothers (29%), school teachers (20%), social media (9%), and health professionals (8%). Only 46% of the respondents reported having menstrual health education at school, with less than a quarter of them saying they had not attended any awareness program. This dependency on informal sources and social media aligns with the findings of (M. S. Ahmed et al., 2021; S. Ahmed et al., 2024; Kakwani et al., 2021; Kani

Kolil & Achuthan, 2024), noted that in India, many young women learn about menstruation not in the formal educational system, but through their friends and family.

The qualitative insights (open-ended question) indicated that a large proportion of students with rural or minority backgrounds were embarrassed about utilizing the services of teachers/health staff: *"In my school, menstruation was never discussed openly. Even here, we don't have sessions or counseling about it. We depend mostly on friends for advice."*

5.3 Attitudes: Cultural Beliefs, Stigma, and Perceptions

Even though the literacy level is high, the attitudes toward menstruation are still in traditional beliefs and perspectives. In the question of whether they feel comfortable when discussing their menstruation in a public setting, 61% of the respondents of respondents gave their answer on the level of uncomfortable or unwilling to discuss their menstruation in a social setting. About 47% respondents said that they do not visit social or religious gatherings during their menstrual cycle, and the reason is mainly because they are on cultural taboos or family demands.

Almost 42% agreed with the statement that menstruation is a "private matter that should not be discussed," while 36% described menstruation as a "natural and empowering" process. Such a two-sided perception emphasizes the co-existence of the progressive and conservative attitudes of the student population. Cultural change in the direction of openness, only 29% of the respondents said that they had become more confident about discussing menstruation with peers or health professionals after joining the university.

These findings reflect a co-existence of the progressive and conservative attitudes, consistent with earlier research by Kumar & Srivastava, (2011), which discovered that menstruation in Indian culture is highly acted upon through the prism of impurity, resulting in behavioral restrictions. Similarly, (Olson et al., 2022; Richa & Cristina, 2018; Singh et al., 2022) have highlighted that the lack of stigmatization and silence around menstruation spreads gender inequality and health misinformation.

5.4 Practices: Hygiene, Product Usage, Disposal, and Absenteeism

The hygiene standards of MANUU female students varied depending on the accessibility, affordability, and personal philosophy. The majority 68% used disposable sanitary pads, 8% used menstrual cups, and 5% used tampons. Only 7% of the participants switched between two or more alternating items. Frequency of product change was generally satisfactory: 71% of the respondents changed their pads after 4-6 hours, 19% changed after 6-8 hours, with 10% staying with them longer than 8 hours because of class schedules or lack of facilities. Mostly of 82% of the respondents practice their personal hygiene during the menstrual cycle, such as washing with clean water and soap. This indicates that there was moderate adherence to the health requirement.

Disposal practices, however, were problematic. Although 59% reported using dustbins, 19% flushed pads in toilets due to a lack of disposal bins, and 22% resorted to wrapping and discarding them in general waste. The problem of absenteeism during menstruation became extremely important. About 41% of students said that they had missed classes during menstruation 61% because of dysmenorrhea, 22% because of stigma or facilities, and 17% because of psychological discomfort. These patterns of absenteeism are in line with the reports of Vashisht et al., (2018) in Delhi, Deepa et al., (2019) in Bangalore, and M. S. Ahmed et al., (2021) in Bangladesh, which highlight that menstrual pains and institutional constraints remain factors that influence participation in education.

The qualitative responses indicated that some students did not attend the long sessions or lab sessions due to unlined washrooms or a lack of water. A few students commented: *"We have to plan our schedule around our periods because the washrooms are not always clean, and there are no bins for disposal."*

5.5 Institutional Support: Facilities, Awareness, and Access

Institutional support for menstrual health at MANUU was found to be inadequate. 63% of respondents stated that their university lacked sanitary pad vending machines and emergency pad stocks in the restrooms. In terms of awareness programs, 72% of all students indicated that there were no official MHM workshops and counseling services on the campus. The participants of the awareness initiatives stated that they were mostly student-initiated or organized informally by the faculty members rather than part of an institutional policy.

The students in the hostel setting were appreciative of cleanliness and access to water, but they did not like the absence of privacy and disposal bins. Approximately 54% of the residents of the hostels reported facing difficulties managing their menstrual cycles discreetly because of shared washrooms. Besides, the psychological support provision was low, and no special counseling services on menstrual or reproductive health issues. This gap indicates the lack of a well-established institutional framework for menstrual well-being. A few participants summarized: *“We need not just pads or bins, but open discussions so we stop feeling embarrassed about something natural.”*

Table 1: Key Statistical Findings on Menstrual Health Management (MHM) among MANUU Female Students

Indicator	Percentage (%)	Comparison / Interpretation	Supporting Source
Students with moderate to high menstrual knowledge	93%	Reflects substantial awareness and literacy levels among university students.	(S. Ahmed et al., 2024; Kakwani et al., 2021; Sommer et al., 2021)
Perception of menstruation as a natural biological process	84%	Indicates a positive shift in understanding, though some stigma persists.	(Ghimire, 2023; Kumar & Srivastava, 2011)
Peers and mothers as main information sources	63%	Shows continued dependence on informal networks for menstrual knowledge.	(Deepa et al., 2019; N. Sharma, 2019; Tshomo et al., 2021)
Use of disposable sanitary pads	68%	Demonstrates a preference for hygienic products, similar to national urban trends.	(Ghimire, 2023; Kaur et al., 2018; Singh et al., 2022)
Students reporting absenteeism during menstruation	41%	Highlights ongoing barriers due to pain, stigma, or inadequate campus facilities.	(2021; S. Ahmed et al., 2024; Crankshaw et al., 2020; Vashisht et al., 2018)
Participation in menstrual health awareness sessions	28%	Suggests limited institutional initiatives toward menstrual education.	(Boden et al., 2023; S. Sharma et al., 2020; Vashisht et al., 2018)

The results indicate that high awareness is not sufficient; cultural attitudes and institutional deficiencies continue to hinder menstrual dignity.

VI. DISCUSSION

The findings show that the situation is not only complex in growing awareness, but there is a persistence of stigma, poor institutional infrastructure, and sociocultural norms that still influence the experience of menstruation in educated women.

6.1 Interpretation of Knowledge Findings

The findings indicate that 93% of the moderate to high knowledge was demonstrated by the MANUU students. This knowledge awareness is mostly theoretical rather than transformative. Although 84% of respondents acknowledged that menstruation was a natural process, they still harbored cultural beliefs of impurity or secrecy. The dependency on the unofficial sources of knowledge highlights the absence of institutionalized menstrual education, which assumes the KAP model: “Knowledge-Practice Gap.” Knowledge alone does not ensure healthy practices.

6.2 Attitudinal Constraints: Persistence of Stigma and Cultural Norms

More than 50 percent of the students perceived menstruation as a taboo. Attitudes mediate the relationship between knowledge and behavior because shame, fear, or secrecy might be an obstacle to the adoption of the appropriate practices. The findings also reveal a generational tension that younger students were more open to discussing menstruation than older peers, suggesting gradual shifts in perception due to exposure to social media, health education, and peer-based advocacy. The deep cultural roots of menstrual shame in Indian society, the fact that these taboos are still there even among educated women, demonstrate the idea that it is impossible to break the gender beliefs with the help of education only. This persistence of menstrual shame reflects structural patriarchy rather than individual ignorance. The findings are in line with (Kumar & Srivastava, 2011; Olson et al., 2022; Van Eijk et al., 2016), who state that stigma persists despite educational exposure.

6.3 Practices: Between Awareness and Accessibility

The practical aspect of menstrual management among the students reflects the availability of resources, economic background, and institutional limitations of infrastructure. The fact that only a small fraction of its residents use disposable pads, 68% reflects the national trends. The 41% absenteeism during menstruation by the participants demonstrates that poor MHM affects education. Cultural stigma and institutional silence together sustain gender inequity in higher education. The effective MHM requires not only awareness but also enabling infrastructure. This goes hand in hand with (Boden et al., 2023; Tshomo et al., 2021; Van Eijk et al., 2016) and (Hennegan & Montgomery, 2016).

6.4 Institutional Role: Policy Gaps and Structural Neglect

The support within the MANUU institution is poor, and there are minimal facilities, awareness programs, as well as counseling. Lack of vending machines, disposal bins, and sensitization awareness workshops programs implies a structural neglect of female health in the university system. Lack of specific areas, counseling, and access to resources not only obstructs the physical hygiene, but also the emotional and psychological well-being.

6.5 Comparative Insights with Indian and Global Studies

The findings of MANUU align with national and regional trends and patterns reported in other studies of India, like (Boden et al., 2023; Crankshaw et al., 2020; Kakwani et al., 2021; Method et al., 2024; Mishra, 2024; Richa & Cristina, 2018; S. Sharma et al., 2020; Tshomo et al., 2021). Van Eijk et al., (2016) and Kaur et al., (2018) found that despite the increase in awareness, safe MHM is currently pushed by the socio-cultural taboos and financial considerations. Similarly, (S. Ahmed et al., 2024) and (Deepa et al., 2019) found that there was an unresolved knowledge-to-practice gap among college-going female students.

As a minority-serving institution, cultural modesty and language diversity affect the way females conversed about and defined menstruation. The level of discomfort was a little higher among the students of MANUU than those of the metropolitan universities (Kalio, 2023; S. Sharma et al., 2020; Shrestha et al., 2025) and (Richa & Cristina, 2018; Singh et al., 2022; Van Eijk et al., 2016) found that It is a manifestation of the interplay of religion and culture, and gender. These comparative lessons affirm that education will not be sufficient to reduce menstrual stigma. Institutional intervention, adequate facilities, and cultural environment are required in good menstrual health management (MHM in higher institutions of learning.

VII. CONCLUSION

The study found that female minority university students had moderate to high awareness of menstrual health management (MHM), but considerable gaps exist in attitudes, practices, and institutional support. Although 93% indicated moderate to high understanding, 21% still considered menstruation impure, demonstrating long-standing socio-cultural taboos. While 68% used sanitary pads, only a small minority switched to menstrual cups or tampons due to expense, cultural stigma, and limited availability. Institutional shortcomings were evident, with 63% of respondents having insufficient access to sanitary items at campus and 41% absent due to pain, stigma, or a lack of facilities. True menstrual equity requires dismantling patriarchal norms within higher education systems and reframing menstrual dignity as a matter of reproductive rights and gender justice.

These findings highlight a continual knowledge-practice gap, where awareness does not necessarily convert into healthy behaviors or participation. Cultural norms, peer influence, and inadequate infrastructure persist in shaping menstrual experiences, even in higher education. The findings align with prior national and international research that regards menstrual health as a collective cultural, educational, and institutional responsibility. To promote menstrual dignity and gender equality, institutions must tackle both behavioral and structural barriers via awareness campaigns, gender-inclusive policies, and improved infrastructure. The KAP framework confirms that knowledge must be supported by enabling attitudes and institutional procedures for effective menstrual health management MHM at a primary minority-serving university.

VIII. RECOMMENDATIONS

The findings of the study have led to the following recommendations that are suggested to reinforce the management of menstrual health in MANUU and other institutions of higher learning:

- **Menstrual Literacy Programs:** Menstrual education should be provided regularly and with comprehension, including biological, psychosocial, and hygienic issues relating to menstruation through regular workshops and seminars, as well as integrated into the curriculum.
- **Infrastructure Improvement:** Ensure all campus restrooms have clean facilities, with disposal bins of menstrual waste, and sanitary pad vending machines or emergency kits.
- **Policy Integration:** MHM must be specifically introduced into the university's gendering, health policy, and student **welfare system to make menstrual support institutionalized.**
- **Counseling and Support Systems:** Establish dedicated menstrual and reproductive health counseling services in the university health centers to provide confidential guidance.
- **Gender Sensitization:** Conduct awareness and sensitization of all students and employees, in order to destigmatize menstruation, and make it acceptable to talk openly about this health and well-being in the academic setting.
- **Cultural and Pedagogical Transformation:** Promote menstrual literacy through critical gender pedagogy, and open dialogues that deconstruct social taboos and normalize menstruation.
- **Research and Monitoring:** Promote continuous campus-based research and regular surveys to evaluate MHM practices, interventions, and make policy decisions.
- **Community Engagement:** Coordinate with local health professionals, non-governmental organizations (NGOs), and government initiatives programs to enhance the outreach and accessibility of resources by the students (particularly rural or minority students).

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