Perception and Practice of Menstrual Sanitation of Female Students at Public Campuses

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Abstract

This paper explores the perception and practice of menstrual activities of female students at the public campuses of Rupandehi district of Nepal. This study aimed to examine female students' understanding of menstrual hygiene in public campuses. It also explores the social cultural beliefs related to the menstruation and their impact on educational activities. This study was quantitative research.120 female students of a public campus of Rupandehi district were selected as sample for the study. This study revealed diverse perspectives on mensuration. Majority 66% of respondents viewed as a natural process but it was found sociocultural beliefs and practices like restriction during mensuration vary among respondents. Mothers appeared as primary source of information about mensuration which underscores the important role of family in educating students about reproductive health. The study also revealed that the influence of family members in imposing restrictions during menstruation is obvious with many female students mentioned the whole family as the source of pressure. The study suggested the need to address menstrual hygiene as a critical factor in female students' educational outcomes and to create supportive campus environments. It recommended targeted actions such as awareness programmes, access to hygiene sanitary products, proper disposal training and support services to improve students' health behavior and well-being.

Introduction

Menstruation is the regular discharge of blood and mucosal tissue from the inner lining of the uterus through the vagina in females. It is the natural process of growing, eating, and excretion. It is one of the normal biological processes and a

sign of growth. Menstruation is the periodic vaginal bleeding that occurs in puberty (Tripathi, 2022). It is inevitable for a female to go through this experience generally between 11 – 15 years of age and in Nepal, the average menarche is 13.5 (Karki et al, 2017). For the duration of menstruation, female students face abundant menstrual hygiene management (MHM) and practice-related issues such as lack of water, sanitation, and hygiene, lack of absorbent and pain killer supply on the campuses. In Nepal, cultural understandings of menstruation as a contaminating process mean that many women and girls face significant challenges during menstruation (Morrison et al., 2018). Menstruation marks a crucial stage for adolescent girls' health and development, yet female students often face significant menstrual hygiene management challenges due to inadequate water, sanitation, and hygiene facilities, as well as limited access to absorbent materials and pain relief on campuses. However, despite the boxes available for the disposing of, many examples have been found of girls throwing sanitary pads in the toilet pan, which caused the blockage. Seeing such incidents made the researcher some insight into the gap between the perception and practice of menstrual hygiene among female students. They are not only unclean but also insecure in many senses. Due to the lack of sanitary pads, change rooms, etc., they need to leave the classes when they feel their mensuration and go home or they have to use the dirty toilet which can be a source of urinary and uterine tracts infection and this has been a case at the campus (Shrestha et al., 2022). Female students and staff frequently face embarrassment from the lack of emergency absorbent supplies and suffer discomfort, skin issues, and pain due to inadequate WASH facilities for timely changing or disposal. Due to persistent cultural taboos and lack of awareness, many rural female students leave classes and face shame, restrictions, and health problems, leading to absenteeism and social isolation (Tshivule et al., 2025). The issues about menstruation are not discussed openly on the campuses and this causes an adverse effect on the health of female students which hampers teaching-learning activities sometimes.

Menstruation is a natural biologic process associated with restrictions and superstitious beliefs in Nepal. Menstrual practices and beliefs usually differ according to the nature of the country which leads diverse influences of gender, religion, and cultural traditions. Menstruation practices face challenges in terms of acceptance and understanding in countries in Asia and Africa (Chaudhary, 2023). Menstruation taken as limitations, embarrassment, and irrational beliefs rather than being acknowledged as a normal biological occurrence symbolizing a girl's transition into womanhood (Mukherjee, et.al 2020). Menstruation is regarded as a period of weakness through which women and girls are expected to stay home, take rest and focus on self-care (Morrison et al., 2016). Female students worry about health risks and shame about menstrual blood, attached with unclean school

restrooms lead girls to avoid changing sanitary products at school, enduring discomfort, restricted movement during menstrual period. Women particularly in rural areas are unable to get sanitary pad so that they use cloths in state of sanitary pad but they are unable to wash properly and dry used menstrual cloths. They reuse unhygienic cotton cloths instead of clean sanitary napkins which is a common practice in low and middle income families. Ghimire (2020) found multiple MHM challenge related to mensuration management including inadequate WASH facilities, lack of emergency sanitary items, absence of pain relief and no proper disposal systems on campuses in the Kathmandu Valley. Menstrual hygiene management is crucial for all female's health behavior and well-being. Healthy mensural practice includes the use of safe and clean menstrual products, correct removal of menstrual waste and maintain genital hygiene during menstruation but only a minority women consistently used sanitary pads, bathed daily or practiced proper hand and genital hygiene during menstruation for the women in Far West Nepal Bista (2020). Menstruation is a natural process involving growth, nutrition and removal but it is considered taboo in many countries of the world continuing various myths. Maintaining menstrual hygiene is fundamental aspect of females' reproductive health. However, religious, cultural taboos and socio-cultural restrictions have been found in Nepal (Adhikari, 2025). These restrictions have harmful for healthy behavior mainly impacting the reproductive health and wellbeing of adolescent girls. Caste did not have any significant role in influencing use of sanitary items while most participants were aware of sanitary pads, a small segment (15%) still relied on old clothes, often reusing them after washing Tripathi (2022).

Menstrual sanitation remains a critical yet stigmatized issue for female students, with limited open discussion and widespread lack of awareness on menstruation and hygiene management. The purpose of the study is to find out the understanding and practice of menstrual hygiene by the female students of a Campus at Rupandehi. The research questions of the study were what are the perception and practices of mensuration and its hygiene among female students of Public Campuses? How are the socio-cultural beliefs associated with menstruation and its impact on female students? And how do socio-cultural beliefs associated with menstruation affect female students' educational activities at public Campuses? On the basis of these research questions the study aimed to examine female students' understanding and practices of menstrual hygiene in public campuses and to explore how socio-cultural beliefs about menstruation affect their education.

Methodology

There are 16 public campuses in Rupandehi district among them one campus was selected through random sampling methods. The systematic random sampling was used to select all the female students of this campus. The quantitative survey research was conducted among menstruating female students of all age groups of the students of selected campus. All the female students enrolled in the Campus were taken as the population of the study. Multi-stage sampling techniques was used. Female students of Master and Bachelor level were selected as their class running at that survey time. Classes or sections were selected randomly. Together 120 sampling units were used for data collection Selected female students of the campus provided the questionnaire and the researcher requested them to fill up the questionnaire. Regarding the tools for data collection questionnaires with structured questions was used. Data were entered, reviewed, and computed using the Statistical Process of Social Science (SPSS) version 20 to calculate the frequency and percentage. The necessary comparison were done with other researchers' findings and conclusions. Due to the different contextual constraints the proposed study had the following limitations. The study was limited to finding out the perception and practice of menstrual hygiene among public Campuses' female students and exploring the socio-cultural beliefs associated with menstruation and their effect on female students' educational activities. The study was limited to the female students of a selected Campus in Rupandehi. The study was based on a quantitative research method. Questionnaires with structured questions were used as tools for data collection.

The researcher assured not use the personal information of the respondents for any other purposes except this research. The information gathered from the respondents did not have any legal status so the informants did not have any kind of problems due to the research. Moreover, the names of the informants were not directly used to quote anything from them. Ethical issues of the research were considered honestly. For that voluntary participation, secrecy, and confidentiality were strictly followed. Each participant were inform about the purpose and value of the study. Informed consent was obtained from each participant. Personal identifiers did not record to keep confidentiality. The information was coded and kept confidential.

Methods and Materials

Demographic Description

The demographic analysis highlights the diversity in social groups, age groups, and faculty affiliations within the studied population.

Table 1

Demographic description of the respondents

		N	***%***
Social group	Brahmin	43	36.0
	Kshetri	12	10.0
	Tharu	23	19.0
	Magar	22	18.0
	Dalit	12	10.0
	Other	8	7.0
Age group	Below 20	61	51.0
	20-25	58	48.0
	26-30	1	1.0
Educational level	Bachelors	104	87.0
	Masters	16	13.0
Faculty	Education	52	43.0
	Management	68	57.0

The data above gives details information about participants' different social groups. The majority 36% of the total sample of respondents belonged to the Brahmin. Comparing to this Tharu groups represented 19% of sample following closely with this group Magar represented 18% the Kshetri 10% similar to Dalit groups 10% and other social groups represented 7% of sample unit. This demographic distribution of samples indicated a diverse representation of various social groups where the Brahmin existence was the most prominent.

The data provides information about age distribution of the samples. This data categorized into three groups: below the age group 20 year, the 20-25 years, and 25-30 years. The majority of respondents 51% fall below the age of 20 of the total sample. The next significant age group was 20-25 years which represent 48% of the sample population. Only a small percentage (1%) fall in the 25-30 year age range. This distribution of age suggests a comparatively young population as below 20 year and 20-25 year age groups. Similarly, the data illustrates the educational level of the respondents where 87% studied bachelor's level 13% students studied at the master's level. Majority distribution of students based on their education levels were from bachelor's degrees.

The data describes the distribution of participants' faculties where they study categorizing into education and management faculties. The majority 57% of the total sample of respondents were affiliated with the management faculty whereas 43% were associated with the education faculty.

The demographic analysis illustrates a comprehensive description of the studied population. This represents the diverse in social groups, age groups, education level and faculty. The data revealed that the majority of respondents 36% belonged to Brahmin social group this group followed by Tharu 19 % and Magar 18% of the population. The age distribution indicated that majority 51% of the

respondents were under the age of 20 year and age 20 year to 25 year constituting 48% of the total samples. In relation to faculty affiliations majority 57% respondents studied management faculty and 43% were studied education faculty.

Perception towards Mensuration

Menstruation is recognized as myth, mystery and superstition. It is not adequately addressed, prominent to prospective challenges for female students in terms of mental, emotional, and physical well-being. Insufficient understanding of menstruation leads to the insufficient adoption of menstrual hygiene practices which results in various social and health related problems.

Table 2

Perception towards mensuration

Respondents		***N***	***%***
Response	natural process	79	66.0
	blessing of god	2	2.0
	physical process	39	32.0

Table 2 outlines the perception towards mensuration of study population. The majority of respondents 66% perceived menstruation as a natural process. This shows that a significant percentage of the respondents considered menstruation as a natural process and took it as normal and essential procedure of the female reproductive system. A few number of respondents 2.0% perceived menstruation as a blessing of God. This perception shows the religious and spiritual understanding of menstruation as a gift of god. Similarly, about one-third of the respondents 32.0% perceived menstruation as a physical process. This perception underlined the physiological aspect of menstruation related to reproductive system of women. The majority of respondents perceived menstruation as a natural process where as minimal percentage associated it with a blessing from God. Additionally, a significant portion of participants viewed it as a physical process highlighting the diverse ways in which students perceive this biological phenomenon. This indicated the diverse perspectives towards mensuration as biological phenomenon a natural process and blessing of god.

The Socio Cultural Beliefs Associated to Mensuration

Socio-cultural practices denotes to the beliefs, rituals, rules, regulation, costumes taboos and norms shaped in society and culture setting that influence menstrual behavior. These activities regularly involve restrictions on daily activities such as cooking, worship, or social interaction during menstruation. Menstruation related socio-cultural and religious practices are serious matters in Nepal.

Table 3

Restriction/Separation at the Time of Mensuration

Response of Respondents		***N***	***%***
	all time	51	43.0
	partially	22	18.0
	when at home	25	21.0
	no	22	18.0

Table 3 shows the socio cultural beliefs associated to mensuration. The majority of respondents 43% shared that there are restrictions or separation practices throughout the entire duration of menstruation. Small percentage 18% respondents reported facing partial restrictions or separation during menstruation. This showed that some limitations which are not continuous during the menstrual cycle. A significant numbers 21% respondents mentioned restrictions or separation only when at home. This shows that cultural or religious practices related to menstruation was observed largely in the home environment. A notable proportion of respondents18% stated that there were no restrictions or separation practices during menstruation. This suggests positive or less traditional approach for managing menstruation the students of public campuses of Nepal. The data revealed diverse perspectives on restrictions and separation during menstruation with differences in the magnitude and context of menstruation practices among the female students. The majority indicates continuous restrictions, but there are also groups that follow partial restrictions, limit practices to home settings, or do not observe any restrictions. This diverse perception about menstruation reveled the different cultural practices and attitudes toward menstruation within the female students of public campuses. In this regard

Table 4

Respondents received the First Informant about Mensuration

Sources of Information	N	%
mother	107	89.0
grandmother	2	2.0
sister	7	6.0
school	4	3.0

Table 4 shows the study results provide information about the first informant about the menstruation among the girls students of the study. The majority of respondents 89% recognized their mothers as the main source of information about menstruation and its practices. This advocated that mothers were the key informants about mensuration practices and they played a dominant role in educating their children about mensuration practices. A small number 2% stated that grandmothers were the first informant about mensuration practices. This indicated minor role of grandmothers compared to mothers in providing information about menstruation and its practices. Similarly, 6% of respondents

learned about menstruation from their sisters. A minimal numbers 3% of respondents stated school as the first source of information about mensuration practices. This could be due to the formal education system where students need to study reproductive system and health and hygiene which played relatively a smaller role compared to family members. The family, particularly mothers seemed to be the main source of information about mensuration for the majority of respondents.

Table 5

Force to be restriction/ separation during mensuration

Family members involved	N	%
parents	16	13.0
sisters	1	1.0
whole family	61	51.0
no body	42	35.0

The above table shows the person who force to be restriction/ separation during mensuration. Majority 51% of respondents stated that family is main component to the force for restriction during menstruation. A small number 13% felt pressure for following restriction and separation from their parents. A few number of respondents 1% perceive stated that their sisters force them to follow restriction activities during mensuration. A substantial number of respondents 35% believed that nobody force them for restriction during menstruation. This data indicated that for a significant portion of respondents believed that family was main agent for imposing them restrictions and pressure during menstruation.

Female Students Practices of Mensuration

Menstruation is a natural biological process, has been associated with various restrictions and superstitions in different cultures around the world, including Nepal. During their menstrual periods, women and girls may be required to stay in a separate rooms, places or away from their homes. This practice is rooted in cultural and religious beliefs that consider menstruating women as impure and potentially harmful.

Table 6

Female Students Practices of Mensuration

Respondents Response		***N***	***%***
Stayed place at first time mensuration	at home with family	48	40.0
	at home but separated from male member	41	34.0
	relative's home in separated room	8	7.0
	neighbors home in separated room	23	19.0
Cook food time of mensuration	Yes	37	31.0
	No	77	64.0
	Partially	6	5.0

Sleeping place during mensuration	usual room and bed	53	44.0
	usual room but separate bed	59	49.0
	usual room but on the floor	1	1.0
	different room and bed	7	6.0
Practice of worshiping at time of mensuration	Yes	1	1.0
	No	119	99.0
Ways female students eat during menstruation	staying with all family members	53	44
	staying separately	60	50.0
	staying with female family members	7	6.0

The above data presents a significant number of female students no 40% stayed at home with their family during their first-time menstruation. A notable number 35% stayed at home but separated from male family members. A smaller number 7% of respondents stayed at a relative's home or a neighbor's home 19% both in separated rooms. This shows that a significant number of participants felt comfortable to stay at home during mensuration.

Next data in table 6 represents the involvement of cooking practices of respondents during menstruation. A significant number of the respondents 64% stated that they do not cook during menstruation. Similarly, 31% respondents said that they cook food in the period of menstruation. Small number 5% stated that the partially cook food at the period of menstruation. The data suggests that cooking practices during menstruation vary among individuals, influenced by cultural factors, personal beliefs, and comfort levels.

Another data above reveals the respondents' place of sleeping during menstruation. A significant number 49% of respondents stated that they have been using a separate bed in the same room during menstruation. Similarly, 44% of respondents said that they have been sleeping in their usual bed and room during menstruation. A small number of respondents 6% mentioned that they have been using a separate and different room as well as bed during menstruation. A minimal figure 1% of respondents revealed that they have been sleeping in their own room but on the floor during menstruation. The data presents the insight into the different sleeping practices during menstruation which reflect the female students' choices, force and cultural influences.

The next data in the table 6 illustrates the practice of worshiping during menstruation by female students. A huge majority of respondents 99% stated that they do not worship during menstruation period. Minimal number 1% of respondents said that they worship in the menstruation period. This data reveals a strong belief against the practice of worshiping at the period of menstruation. The

significant majority 99% of respondents expressed "no" response. The small percentage of respondents who do practice worshiping during menstruation shows a prospective diversity of beliefs or interpretations within female students.

Another data in the table 6 illustrates the ways and sitting places of respondents at time of mensuration. The 44% of respondents stated that the have been eating their food staying with all family members during menstruation. Majority 50% of the respondents' number have been eating food staying separately during menstruation. Minimal number 6% of respondents have been eating their food only staying with female family members at the period of menstruation. This statistics reflects a diverse range of preferences in terms of ways and sitting places of eating during menstruation.

Mensuration Hygiene Activities of Female Students

Mensuration hygiene activities of female students indicates the use of a clean menstrual management material to absorb or collect menstrual blood which can be changed in privacy As needed like using soap and water for washing the body as required and access to safe and convenient facilities to dispose of used menstrual management materials.

Table 7

Mensuration hygiene activities of female students

Respondents Responses for Hygiene		***N***	***%***
Bathing practice on mensuration period	Daily	103	86.0
	Third day	2	2.0
	Third and fourth day	15	12.0
Kinds of sanitary for mensuration	piece old clothes	2	2.0
	piece new clothes	2	2.0
	handmade sanitary pad	4	3.0
	readymade sanitary pad	112	93.0
Changing place of sanitary pad	toilet	101	84.0
	changing room	19	16.0
Availability of sanitary at campus	Yes	120	100.0
	No	0	0.0
Disposal of sanitary pad	Toilet	6	5.0
	Dustbin	39	32.0
	Lonely place	1	1.0
	dedicated place	74	62.00

The data in the table 7 presents the mensuration hygiene activities of female students of the public campuses. The given data represents the bathing practices of female students in mensuration cycle. The significant number 86% of respondents stated that they have been bathing daily during menstruation period. This showed

female students personal hygiene practices and cultural norms during mensuration which emphasize cleanliness. 12% respondents stated that they have been bathing on the third and fourth days of their menstrual period. Minimal number 2% of respondents said that they have been bathing specifically on the third day during mensuration.

Next data on table 7 presents the sanitary items used by respondents during mensuration. The significant number 93% respondents used readymade sanitary pads. This reveled the common and widely accepted practice of using readymade sanitary pad found in the market. Whereas, 4% respondents stated that the have been using a piece of used clothes as a form of sanitary protection at the time of menstruation. Similarly, minimal number 2% of respondents reported that they have been using handmade sanitary pads during mensuration. Likewise, a smaller portion 1% of respondents mentioned that they have been using a piece of new clothes as sanitary material during mensuration.

Next data on the table 7 represents the changing place of sanitary pad of the respondents. The majority 84% of respondents stated that they have been changing their sanitary pad in the toilet whereas 16% of respondents reported that they have been changing their sanitary pad in the changing room provided by the campus. The data on the table shows the availability of sanitary pad when female students needed. All respondents reported that there was availability of sanitary when needed which revealed the preferences and availability of sanitary facilities on campus as per demand. It showed that the campus is well-equipped with the necessary facilities to provide access to sanitary products needy students.

The data on table 7 also represents the respondents' disposal practices of sanitary pads in the campus during mensuration. This reveled that majority of respondents number 62% of respondents have been disposing sanitary pad on dedicated place whereas 32% of the respondents choose dustbin to dispose of sanitary pads. Minimal number 5% of the respondents dispose of sanitary pads in the toilet likewise, only 1% of respondents dispose of sanitary pads in lonely places. This method were the least popular among the options.

Effect of Mensuration on Female Students' Educational Activities

Menstruation has the significant impact of female students' daily lives, mainly in educational activities like attendance, focus, and academic performance of female students in both urban and rural settings.

Table 8

Effect of Mensuration on Female Students' Educational Activities

Respondents	Multiple Response on Effect	*N*	*%*
Effect of mensuration in study	Negative	29	24.0
	Positive	1	1.0
	No effect	88	73.0
	Don't know	2	2.0
Campus attendance	Yes	89	74.0
	No	17	14.0
	Partially	14	12.0
Effect of mensuration in education	strongly agree	26	22.0
	agree	44	37.0
	neutral	5	3.0
	disagree	34	28.0
	strongly disagree	12	10.0

The data in the table 8 illustrates effect of mensuration on female students' educational activities at period of mensuration and their perceptions regarding the impact of menstruation on education. The significant number of respondents 73% reported that menstruation has no effect on their studies however 24% of respondents reported a negative impact of menstruation on their studies whereas 2% respondents stated uncertainty about the effects of menstruation on their education. Likewise only 1% respondents reported positive impact. The data suggests that a significant number of respondents did not perceive a direct correlation between menstruation and their academic performance. However, there is a notable proton of respondents felt that menstruation has a negative impact on their educational activities. In relation to campus attendance the majority 74% of the participants continued attending campus on menstruation period which demonstrated resilience despite potential challenges of educational activities.14% of respondents stated that there was no effect on their campus attendance. 12% of respondents stated that mensuration partially affect the attendance on their campus. Similarly, the respondents' number 37% agreed and 22% respondents strongly agreed that there was an effect of mensuration in education which constitute a total of 59%. A small portion of respondents 4% had a neutral attitude which indicate that they neither agree nor disagree with the statement. The respondents' percent 28% disagreed and 10% strongly disagreed with the statement in which a combined 38% of respondents either disagreed or strongly disagreed with the idea that mensuration has an effect on education. This data indicates that a significant portion of respondents agreed that mensuration has an impact on educational activities.

The findings of the study highlighted that menstruation has a varied impact on female students' educational activities. While 73% of the respondents perceived no effect, 24% reported experiencing negative impacts, indicating the necessity for

increased awareness and supportive measures within educational settings. However, 59% of the respondents agreed or strongly agreed that menstruation affects their education, whereas 36% disagreed or strongly disagreed, suggesting differing perceptions of its influence on academic engagement and performance. The findings reveal diverse perspectives on the relationship between menstruation and education among female students. While menstruation did not significantly hinder educational participation, absenteeism was primarily linked to physical discomfort, fear of staining, and social embarrassment. Therefore, providing adequate facilities and supportive measures in schools is essential to minimize absenteeism and promote girls' educational continuity during menstruation.

Menstrual hygiene is a critical aspect of reproductive health for female students and young women (Jatal & Chaudhary, 2024). The findings of this study revealed a comprehensive understanding of the demographic composition, perceptions, practices, and challenges related to menstruation among female students. Appropriate menstrual hygiene activities are indispensable not only for maintaining physical health but also for stimulating self-esteem and social inclusion among menstruating students in the campus (Ghimire, 2023). The results highlighted the importance of considering diversity in addressing menstruation related issues and advocate for targeted awareness programs and support systems to improve the well-being and educational experiences of female students. Menstruation is a natural bodily function that has been shrouded in myths which is imbued with both good and bad symbolisms, taboos and rituals in all traditional cultures (Tan, Haththotuwa & Fraser, 2017). The majority of respondents viewed menstruation as a natural process however only a small number of respondents perceived it as a blessing of God. A significant percentage of respondents perceived it as a physical process. This diversity in perceptions reflected the multi-layered nature of perception and attitudes towards menstruation among female students of public campuses of Nepal. The data on restriction and separation practices during menstruation demonstrates varying perspectives. The menstrual restrictions and beliefs are often perpetuated by cultural and religious agents, as well as a male dominated society that realizes women's bodies and their natural biological processes (Chrisler, 2011). The majority 43% perceived continuous restrictions while 18% face partial restrictions. Furthermore, 21% respondents noted restrictions only when they were at home and 18% stated no restrictions. These findings reveled the difficulty and diversity of socio-cultural beliefs on menstruation within the female students of public campus. The study revealed that mothers were recognized as the key informants about menstruation. Vinod and Kaimal (2023) stated that the mother emerged as the primary source of information in relation to mensuration period of girls students in most cases in various studies conducted it was reliably found that the mothers were the most prevalent informant about mensuration. Grandmothers, sisters, and schools played lesser roles in providing education about mensuration (Vinod & Kaimal, 2023). A

significant figure of female students including those living in urban areas felt averseness in discussing menstruation with their male members in the family. It was found that the majority 51% of respondents felt the force or restriction during menstruation comes from the whole family which highlighted the family's significant role in imposing restrictions in mensuration period. The data indicates diverse practices among female students during menstruation. It was also found that the majority 40% respondents stay at home with family during their first menstruation. The study also found varies practices in cooking practices, sleeping arrangements and eating habits during menstruation that reflect female students' choices and cultural influences. It was also found that the majority of respondents 86% practiced daily bathing and 93% respondents used readymade sanitary pads. It was also found that the majority 84% respondents gave preferences for changing sanitary pads in toilets that suggested a readiness of campus facilities for menstrual hygiene. Similarly, the study revealed varies practices of sanitary disposal practices where 62% respondents disposed sanitary materials in dedicated places, reflecting a range of approaches to managing menstrual waste. The significant number of respondents believed menstruation has negative impacts in their educational activities that emphasized the need for awareness and support. Karki, (2019) found that the primary reasons for absence from class involved stomach pain during menstruation, fatigue, anxiety about staining clothes and concerns about being teased by friends. Though menstruation didn't pointedly affect education it is crucial for campus to manage facilities and extra support to girl students during menstruation to reduce absence during mensuration. Ahmed and Piro (2012) found that menstruation characteristics and associated physical and psychological discomforts effect on school performance in Pakistan.

The study revealed a picture of perceptions and practices about the menstruation among female students. Mukherjee, et.al (2020) sheds light on the prevalent social prejudices, entrenched cultural and religious beliefs, and gender disparities experienced by women in the urban areas of Kathmandu, Nepal. The study underscored the necessity for targeted education and awareness initiatives to bring about changes and promote a harmonious balance between cultural traditions and social norms concerning menstruation. While a majority of female students view menstruation as a natural process, diverse beliefs exist, indicating the complexity of attitudes. Socio-cultural influences shape restriction practices, with the family playing a pivotal role. Upadhya and Adhikari (2023) explored the natural occurrence of menstruation within the female reproductive system on a monthly basis the found that mensuration is regulated by hormonal fluctuations. Menstruation is a crucial aspect of the reproductive system that closely related to fertility and accompanied by physical and emotional symptoms such as cramps, mood swings, and fatigue. Inadequate access to water, sanitation and hygiene facilities, attached with limited education. Poor menstrual hygiene management

leads female students to perceive menstruation as embarrassing and uncomfortable activities.

In the context of Nepal most of the matured female students lack adequate health education about menstruation that leads negative impact their reproductive health and education. Unhealthy menstrual practices may lead to reproductive and urinary tract infections (Vidhi & Shashwat, 2022).The findings of this study revealed the importance of holistic menstrual health education and the influence of cultural beliefs on female students' practices with menstruation otherwise the lack of knowledge about mensuration affects their daily activities, attendance in college and leads to poor academic performance (Ghimire, 2023). The negative impacts on education are reported by a significant numbers of respondents which highlighted the need for support and awareness initiatives in the context of public campuses in Nepal.

Conclusions

Mensuration refers to the experiences of cyclical phenomenon each month by the matured female reproductive system. It is a natural biological process practiced by every female of reproductive age worldwide. Mensuration is accompanied by physical, mental, social and educational challenges within varied social, cultural setting, attitudes and practices. There are different limitation, restrictions and superstitious beliefs related with menstruation in male dominated societies including Nepal. The study revealed perception and practice of menstrual sanitation of female students at public campuses and found diverse perspectives on relation between menstruation cycle and educational activities. The study found that the socio-cultural beliefs and practices such as restrictions and separations activities during menstruation contrast among female students of public campuses. This study highlighted the necessity to understand the sociocultural norms and values associated with mensuration practices of female students of public campuses. The study findings revealed mothers as the primary source of information and educator about menstruation cycle for their daughters. It is also found that mothers, female family members and teachers played key roles to underscore the central role educating students about reproductive health. The study found the diverse practices adopted by female students during menstruation. Even though, majority of the female students perceived menstruation as the natural physical process, they would still follow restrictions such as cooking food, worshiping god, eating food staying separately, sleeping separately, and bathing practice, going to casmpus and religious events even in absence of any obligation. It was also found that the majority of students maintain good hygiene practices but there were variability in behaviors related to regular activities during menstrual periods. It is also found the impact of menstruation on educational activities like regularity in class with a significant number of students reported negative effects on their educational activities.

Achieving better menstrual practices not only needs additional menstruation products but also needs access to information, education, a supporting environment and sanitation services. There is a need to address menstrual and reproductive hygiene as a determinant of educational outcomes that promote supportive environments for female students of public campuses. It is necessary to encourage female students to make more hygiene during mensuration period such as daily bathe, changing pad in time, disposing of sanitary pads properly. It is also necessary to concern on the cultural beliefs, familial influences, campuses activities and individual practices in determining menstrual hygiene behaviors among female students of public campuses. To address the challenges recognized in the study it is necessary to plan interventions activities including awareness campaigns inside and outside of the campus, access to menstrual hygiene products like sanitary pad and support services that may leads to the well-being of female students of educational institutions especially public Campuses. Female students must get the counseling service from the campus so that they could be managed daily activities along with educational activities properly during menstruation. Further research is essential to create the manifestation of menstrual disorders and explore different factors connected with managing menstruation practices including wellbeing, hygiene practices and their prospective influences on academic performance of female students. Similarly, Reproductive health education and health and maturation hygiene and awareness program should be made mandatory in the public campuses. Content related to menstrual hygiene and reproductive health should include in the curriculum.

References

Adhikari, K. P. (2025). Current Practices and Challenges in Menstrual Hygiene Management (A Case Study of Birenranagar, Surkhet). *NPRC Journal of Multidisciplinary Research*, *2*(4), 224-241. https://doi.org/10.3126/nprcjmr.v2i4.78346

Ahmed, H. M., & Piro, S. S. (2012). Impact of menstruation on school performance in Sarwaran and Shahid Khajabawa high school in Erbil city. *Kufa J Nurs Sci*, *2*, 166-71.

Bista, S. (2020). Knowledge and practices of menstrual hygiene among women in Far West Nepal. *Scholars' Journal*, *3*, 107-121. https://doi.org/10.3126/scholars.v3i0.37133

Chaudhary, A. (2023). The menstrual impurity of women and girls: Chhaupadi practice and resistance. *Asian Journal of Population Sciences*, 90-106. https://doi.org/10.3126/ajps.v2i1.51094

Ghimire, L. D. (2023). Exploring Menstrual Hygiene: A Comprehensive Study of Knowledge, Perceptions, and Practices among Higher Secondary Girl Students at Baneshwor Multiple Campus, Kathmandu, Nepal (2023). *Nepal Journal of Multidisciplinary Research*, *6*(4), 45-58. https://doi.org/10.3126/njmr.v6i4.62007

Ghimire, M. G. (2020). Menstrual hygiene management and practices in campuses. *Journal of Health Promotion, 8,* 73-84. https://doi.org/10.3126/jhp.v8i0.32987

Jatal, M., & Chaudhary, N. (2024). Knowledge, Perceptions and Practices Regarding Menstrual Hygiene among Students. *NPRC Journal of Multidisciplinary Research, 1*(8), 35-49. https://doi.org/10.3126/nprcjmr.v1i8.73026

Karki, K. B., Poudel, P. C., Rothchild, J., Pope, N., Bobin, N. C., Gurung, Y., Sherpa, L. Y. (2017). *A scoping review and preliminary mapping menstrual health and hygiene management in Nepal.* Population Services International Nepal, Krishna Galli, Pulchowk Lalitpur.

Karki, T. B. (2019). Menstrual effect on education of girl student: Cases from secondary level school of Kathmandu, Nepal. *World Wide Journal of Multidisciplinary Research and Development*, *5*(1), 66-69.

Morrison, J., Basnet, M., Bhatta, A., Khimbanjar, S., & Baral, S. (2018). *Analysis of menstrual hygiene practices in Nepal: The role of WASH in Schools programme for Girls Education 2016.* UNICEF Nepal.

Morrison, J., Basnet, M., Bhatta, A., Khimbanjar, S., Joshi, D., & Baral, S. (2016). Menstrual hygiene management in Udaypur and Sindhuli districts of Nepal. *WaterAid. URL https://www. Research gate. Net/profile/Joanna_Morrison/publication/312377297_Menstrual_hygiene management_in_Udaypur_and_Sindhuli_districts_of_Nepal/links/587c881308aed3826aec 1efb/Menstrual-hygiene-management-in-Udaypur-and-Sindhuli-districts-of-Nepal. pdf (accessed 3.27. 20).*

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*, 1-10. https://doi.org/10.1186/s12978-020-00935-6

Shrestha, S., Shrestha, S., Ito, Y., Kobayashi, Y., Nishida, K., Futaba, K., & Malla, R. (2022). Situation of menstrual management facilities in schools of peri-urban areas of Nepal: WASH, privacy, and healthcare. *Journal of Water, Sanitation and Hygiene for Development*, *12*(1), 41-51. https://doi.org/10.2166/washdev.2021.100

Tan, D. A., Haththotuwa, R., & Fraser, I. S. (2017). Cultural aspects and mythologies surrounding menstruation and abnormal uterine bleeding. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *40*, 121-133. https://doi.org/10.1016/j.bpobgyn.2016.09.015

Tripathi, K. P. (2022). Knowledge and practice of menstrual hygiene among the girls in Janapriya Multiple Campus, Pokhara. *Asian Journal of Population Sciences*, 66-76. https://doi.org/10.3126/ajps.v1i1.43597

Tshivule, M. Z., Rasweswe, M. M., Mothiba, T. M., & Bopape, M. A. (2025). Factors influencing menstrual hygiene knowledge, attitudes, and practices among adolescent girls in African rural schools: scoping review. *Frontiers in Reproductive Health*, *7*, 1553101. https://doi.org/10.3389/frph.2025.1553101

Upadhya, S., & Adhikari, A. (2023). Menstruation Hygiene Practices Among Girl Students in Kathmandu Valley. *Pragyaratna प्रज्ञारत्न*, *5*(1), 89-98. https://doi.org/10.3126/pragyaratna.v5i1.59275

Vidhi, P., & Shashwat, N. (2022). Menstrual hygiene among adolescent girls studying in a university of Gujarat. 11(7), 3607-3612. https://doi.org/10.4103/jfmpc.jfmpc_2303_21

Vinod, A., & Kaimal, R. S. (2023). Perceptions and practices related to menstruation and reproductive health in adolescent girls in an urban population-A cross sectional study. *Journal of Family Medicine and Primary Care*, *12*(4), 717-721. https://doi.org/10.4103/jfmpc.jfmpc_1752_22