

PERCEPTION ON MENSTRUAL CUP AMONG MENSTRUATING STUDENTS OF KATHMANDU UNIVERSITY

Sonika Kunwar^{1,2} and Suveckshya Shah³

Abstract

Menstruation, a globally prevalent phenomenon, often faces cultural barriers hindering proper hygiene practices, particularly in Nepal. This study investigates the perceptions of menstrual cup users and non-users among menstruating students at Kathmandu University, employing the Theory of Planned Behavior as a framework. Through mixed methods, both quantitative and qualitative data were collected and analyzed. Findings reveal no significant relationship between menstrual cup use and financial factors but a meaningful association with sexual activity status. Additionally, significant differences were observed in attitudes and subjective norms between users and non-users. This study underscores the importance of promoting menstrual cup awareness and addressing cultural barriers to enhance menstrual hygiene practices among menstruating individuals in Nepal.

Keywords : Menstruating Students, Menstrual Cup, Subjective norms, attitude

1.1 Background

Menstruation is a natural bodily process experienced by individuals who menstruate, including girls, women, transgender, and non-binary persons (UNICEF, 2019). It involves the shedding of the uterine lining and discharge of blood and other substances through the vagina (World Bank, 2022). With approximately 1.8 billion people menstruating worldwide, accounting for 26% of the global population, menstruation is a prevalent phenomenon (Rohatgi & Dash, 2023). Despite its widespread occurrence, accurate information and research on menstruation have often been overlooked (Bobel, 2008; Buchanan et al., 2001).

In Nepal, where an estimated 290,000 women and adolescent girls menstruate daily, cultural taboos and societal norms often hinder healthy menstrual hygiene practices (Adhikari et al., 2006). Challenges such as limited access to modern hygiene products and sanitation facilities contribute to menstrual health disparities, particularly among schoolgirls, impacting their attendance and performance in educational settings (Oster & Thornton, 2009; Mason et al., 2013)

There are many challenges when it comes to menstruation.

One of the challenges is managing menstrual blood without modern hygiene products. Women typically use cloth during their menstrual cycle, which means they need to wash it frequently. According to Oster and Thornton (2009), young schoolgirls may find it difficult and embarrassing to take care of themselves during their menstruation due to limited access to toilets, water, and privacy. This could lead to decreased rates of attendance or performance at school. Replacing pads or tampons with unsanitary clothing can lead to urogenital infections, skin irritation, mobility restriction, leak, and odor concerns, and more (Mason et al., 2013). Menstrual hygiene management was rated as the sixth highest overall need by study participants in the Central Development Region, where this study was conducted, in the aftermath of the 2015 earthquake (after food, shelter, water, clothes and information about family members) (Sharma, 2018).

Amidst these challenges, menstrual cups emerge as a sustainable and cost-effective menstrual hygiene product, offering advantages such as environmental friendliness, affordability, and reduced risk of health complications compared to traditional options like pads and tampons (The Washington Post, 2021; Weatherspoon & Scaccia, 2019). Menstrual cups, first produced in 1860, faced

1. Graduate, Bachelor in Development Studies (BDevS) 2023, sonikakunwar.files@gmail.com
2. Recipient of Kaushila Foundation Grant 2023
3. Public Health expert

material and social acceptance challenges. The forced halt in production during World War II due to rubber shortages hindered their adoption. Access to medical-grade silicone in the 21st century led to product redesigning (North and Oldham, 2011). Menstrual cups were first patented in the USA and presently almost 100 brands are available globally that marketed this product. Previously, few of the studies conducted in low and middle-income countries have shown that among schoolgirls menstrual cups have received positive responses (Bhandary, A. K., & S. B., 2020). Despite their potential benefits, research on menstrual cup perception among reproductive women/menstruators in Nepal remains limited.

To address this gap, this study aims to explore the perceptions of menstrual cup users and non-users among menstruating student at Kathmandu University.

The study has the following objectives:

- To identify the factors that influence the perception of menstrual cups among menstruating students at Kathmandu University, based on the constructs of the Theory of Planned Behavior (TPB): attitude, subjective norms, and perceived behavioral control.
- To examine the relationship of the constructs of TPB among the menstrual cup user and non-user at Kathmandu University.
- To find out relationship between financial aspect and menstrual cup use.
- To find out relationship between sexually active status and menstrual cup use.

1.2 Methodology

The study uses mixed methods to analyze the objectives. Both quantitative and qualitative data were collected to provide a comprehensive understanding of the study. The study utilizes a combination of primary and secondary data to achieve its objectives. Primary data was collected through semi-structured interviews using questionnaires, while secondary data were gathered from magazines, newspapers, reports, and other published sources of information. Convenience sampling is employed as the sampling technique for this study. Participants were selected based on their availability and accessibility. A total of 60 individuals were included in the research, with 30 being current users of menstrual cups and 30 being non-users. The interviewees represented various colleges under Kathmandu University, including National College, Kathmandu University School of Arts, Kathmandu University School of Management, Kathmandu University School of Law, St. Xavier's College (BSW), and Nepal College of Management.

1.3 Theoretical Framework

The Theory of Planned Behavior (TPB) of Icek Ajzen

is used as a theoretical framework for the study (Peru, A.2012). According to TPB, an individual's behavior is influenced by their intention to perform that behavior, which is determined by three factors: attitudes, subjective norms, and perceived behavioral control (Ajzen, 2019).. Attitude refers to the belief and feeling towards a product or service. Subjective norms refer to the perceived social pressure to perform or not perform a behavior. Perceived behavioral control refers to an individual's belief in their ability to perform a behavior.

1.4 Results and Discussion

1.4.1 Descriptive Analysis

The age composition of menstrual cup (MC) users and non-users, primarily university students, ranged from 18 to 26 years old. Among MC users, 31.67% were aged 18-22, 10% were aged 23-26, and 8.33% were above 26. Similarly, among non-users, 28.33% were aged 18-22, 16.67% were aged 23-26, and 5% were above 26. Educationally, 86.67% were pursuing bachelor's degrees, and 13.33% were pursuing master's degrees at Kathmandu University. Regarding employment status, among MC users, 60% were engaged in economic activities, while 40% were not. Among MC non-users, 40% were involved in economic activities, and 60% were not.

1.4.2 Awareness and Knowledge of Menstrual Cups

Awareness about MC primarily came from social media for 50%, friends and family for 25%, online sources for 21.67%, health professionals for 1.67%, and alternative sources for another 1.67%.

1.4.3 Subjective Norms among Users and Non-users of MC:

Among MC users, 16.7% felt friends and peers were not supportive, while 20% mentioned lack of family support, mainly due to cultural concerns. However, after receiving extensive information, 80% of users reported family support. Conversely, among non-users, 36.7% felt friends were unsupportive, and none received family encouragement due to cultural stigmas surrounding MC usage.

One non-user shared, "My family's strict religious rules and beliefs about periods mean I can't go into the kitchen during menstruation. Even though they've recently let me eat in certain areas, I still have to sit away from everyone. Sterilizing a menstrual cup requires boiling, which is challenging given our kitchen restrictions during menstruation. While I'm well-informed and eager to use a cup, these cultural barriers pose significant challenges in my traditional family."

1.4.4 Perceived Behavioral Control among Users and Non-users of MC:

MC users had different levels of confidence, with about

43.33% feeling very confident (rated 5 out of 5). They mentioned factors like learning online and using MCs for a long time. On the other hand, approximately 86.67% of non-users expressed fear as a major obstacle. They mentioned needing clear instructions and support to

overcome this fear and try using MCs.

One MC user mentioned, "For me, the menstrual cup provides privacy and freedom. With pads, everyone would notice, but with the cup, everything happens privately in the bathroom."

1.4.5 Relationship between Menstrual Cup use and financial Aspect:

Table 1: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.400 ^a	1	.121		
Continuity Correction ^b	1.667	1	.197		
Likelihood Ratio	2.416	1	.120		
Fisher's Exact Test				.196	.098
Linear-by-Linear Association	2.360	1	.124		
N of Valid Cases	60				

The p-value of 0.121 is higher than the typical cutoff of 0.05, indicating no significant relationship between Menstrual Cup use and financial factors. The result shows that financial factors do not really affect whether they decide to use Menstrual Cups or not.

1.4.6 Relationship between Menstrual Cup use and sexually active status

Table 2: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.303a	1	.000		
Continuity Correction ^b	11.471	1	.001		
Likelihood Ratio	13.893	1	.000		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	13.081	1	.000		
N of Valid Cases	60				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.00.

b. Computed only for a 2x2 table

In table 2, the p-value is 0.000, which is less than the common significance level of 0.05. This means we have enough evidence to reject the null hypothesis. It suggests that there's a meaningful connection between using Menstrual Cups and being sexually active. To explore this association further, let's examine the correlation between these variables using Pearson Correlation

1.4.6.1 Extent of Relationship between Menstrual Cup use and sexually active status (Pearson Correlation)

Table 3: Correlations

		Sexually Active Status	User and Non-user of Menstrual cup
Sexually Active Status	Pearson Correlation	1	.471**
	Sig. (2-tailed)		.000
	N	60	60
User and Non-user of Menstrual cup	Pearson Correlation	.471**	1
	Sig. (2-tailed)	.000	
	N	60	60

The correlation value is 0.471, indicating a positive correlation. It suggests a significant correlation between the sexually active and inactive groups, implying people who are sexually active may have a lower value in attitudes and those who are sexually inactive might have higher values in attitude.

1.4.7 Relationship between attitude of Menstrual Cup users and non-users

Table 4 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.716	1	14.716	60.442	.000
Within Groups	14.121	58	.243		
Total	28.837	59			

In the table4, the p-value is 0.000, indicating a significant difference in attitudes between Menstrual Cup users and non-users. The mean attitude score for users is 4.4238, compared to 3.4333 for non-users, further confirming this difference. In summary, the analytical interpretation of the one-way ANOVA result indicates that there is a statistically significant difference in attitudes between Menstrual Cup users and non-users.

1.4.8 Relationship between subjective norms of Menstrual Cup users and non-users

Table 5: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.438	1	8.438	9.186	.004
Within Groups	53.275	58	.919		
Total	61.713	59			

In table 5, the p-value is 0.004, indicating a significant difference in subjective norms between Menstrual Cup users and non-users. With user mean at 2.4000 and non-user mean at 3.1500, the disparity is evident. Overall, the analysis highlights a significant contrast in attitudes towards Menstrual Cup usage among the two groups.

1.5 Conclusion

The study sheds light on the perceptions of menstrual cup users and non-users among menstruating students at Kathmandu University. While financial factors may not significantly influence menstrual cup usage, there exists a meaningful association between usage and sexually active

status. Moreover, significant differences were observed in attitudes and subjective norms between users and non-users of menstrual cups. To enhance menstrual hygiene practices, it is crucial to promote menstrual cup awareness and address cultural barriers. Future research should focus on interventions to increase menstrual cup usage and improve menstrual health outcomes among menstruating individuals in Nepal.

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