



Received: 04-01-2026
Accepted: 14-02-2026

ISSN: 2583-049X

The Barriers Affecting the Limited Usage of Menstrual Cup Among Late Adolescent Girls

¹ Soumya Pankaj, ² Liznie Dennis, ³ Dr. Sr. Ancy Jose, ⁴ Sr. Kala Antony, ⁵ Angel Chintu J

¹ Guide, Assistant Professor, Obstetrics and Gynaecological Nursing, Holy Cross College of Nursing, Kottiyam, Kollam, Kerala, India

² Co Guide, Assistant Professor, Obstetrics and Gynaecological Nursing, Holy Cross College of Nursing, Kottiyam, Kollam, Kerala, India

³ HOD and Professor, Obstetrics and Gynaecological Nursing, Holy Cross College of Nursing, Kottiyam, Kollam, Kerala, India

^{4,5} Assistant Professor, Obstetrics and Gynaecological Nursing, Holy Cross College of Nursing, Kottiyam, Kollam, Kerala, India

DOI: <https://doi.org/10.62225/2583049X.2026.6.1.5891>

Corresponding Author: **Soumya Pankaj**

Abstract

Background: Menstrual cup is an advanced technology alternative to sanitary pads and due to higher adoption barriers. It is offering up to twelve hours of protection and being more eco friendly.

Objectives: To explore the barriers affecting the limited usage of menstrual cup among late adolescent girls in a selected school of nursing at Kollam District.

Methodology: A qualitative general inductive approach employed for the research study. The study was undertaken among 24 samples selected by purposive homogenous sampling technique. Data was collected through focused group discussion. Discussion were recorded, transcribed, coded through thematic analysis.

Result: The result reveals that the barriers affecting the limited usage of menstrual cup among late adolescent girls in the selected nursing school are limited awareness, fear and discomfort, lack of guidance and support, cultural taboos and stigma and also based on the hygiene concerns.

Conclusion: The study concluded that there are many barriers affecting the limited usage of menstrual cup like lack of awareness and cultural taboos. The study recommended that interventions like menstrual health education, demonstration workshops, and open discussions may be effective in addressing misconceptions and encouraging safe adoption of menstrual cups in adolescent populations.

Keywords: Barriers, Menstrual Cup, Focused Group Discussion, Thematic Analysis

Introduction

"Small acts when multiplied by millions of people can transform the world." - Howard Zinn

Menstruation is a natural and essential biological process for female reproductive health, involving the monthly shedding of the uterine lining and resulting in approximately 50-60 ml of blood loss. It is a critical indicator of reproductive health, though its patterns can be confusing for adolescent girls. Late adolescence (18-21 years) is a pivotal period where girls form long-term health habits and become independent.

Menstrual cycle is a recurring series of natural changes in a women's body, preparing it for potential pregnancy each month ^[1]. Menstruation is a sign of reproductive health and plays a key role in the body's preparation for potential pregnancy ^[2]. Menstrual Hygiene Management (MHM) is crucial for their health, dignity, and well-being, it is often influenced by social pressures and misinformation. Ensuring menstrual hygiene among late adolescent girls is crucial for their health, dignity and well being as they become more independent and socially active ^[3]. A menstrual cup is a device made up of silicon for menstrual hygiene. Most are made up of synthetic materials like rayon or SAPs (Super Absorbent Polymers) ^[4]. Its being safe, ecofriendly, cheap, and durable its non-acceptability may be due to higher adoption barriers. Menstrual cup is a reusable, bell shaped container made of medical grade silicone, rubber or latex that is inserted into the vagina to collect menstrual fluid. They

can be worn for up to 6-12 hours, depending upon the amount of menstrual flow, so they require less frequent removal and to be emptied. They possess no or less harm to the environment, which can be easily handled [5]. It is a popular alternative to pads and tampons offering up to twelve hours of protection and being more eco-friendly. Its purpose is to collect menstrual fluid. Reusable menstrual care products like menstrual underwear/pads and menstrual cups are better alternatives to disposables since these have environmental sustainability and cost sustainability. A reusable, cost-effective and environmental friendly alternative remains significantly underutilized especially among the late adolescent girls [6]. Several barriers contribute to the limited usage of menstrual cups among the late adolescent girls.

Material and Method

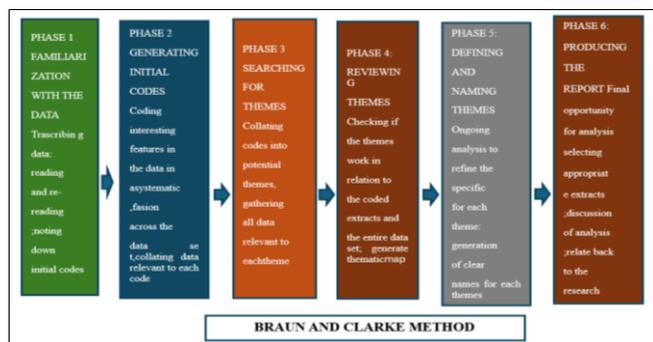


Fig 1: Schematic representation of research methodology

Data collection refers to the identification of subjects and precise, systematic gathering of information relevant to the research purpose or the objectives, questions or hypothesis of the study.

The study was conducted among late adolescent girls in Lourdes School of Nursing at Kollam District on 25/6/2025. Participants were late adolescent girls aged between 18-21. Formal permission was obtained from the Principal of Lourde School Nursing Kottiyam. Informed written consent was collected from all the participants after explaining the purpose of study, confidentiality assurance and voluntary participation rights. Adolescent girls who satisfy inclusion and exclusion criteria were selected by Purposive sampling (homogeneous sampling technique). An in-depth FGD was conducted among late adolescent girls to understand the barriers affecting the limited usage of menstrual cup among twenty-four samples. A total of 3 FGDs were conducted, each consisting of 6-8 participants who met the inclusion criteria. Conducting FGD after special consent for recording, trained assistant to write the note, recording audio and video. In this study the investigator includes moderating, scribing and recording, observer and note taker for qualitative research because they need to have clear understanding of study. Each session lasted approximately 45-60 minutes. The sessions were audio-recorded with participant consent. The FGD guide includes prompts and probes to encourage detailed responses. Discussions continued up to data saturation. Then discussions were transcribed verbatim in the local language (Malayalam) and transcription of data by listening record and visiting through written note. Then translated to English. Thematic analysis

was performed to identify major themes and sub-themes emerging from the data.

Data analysis is the process of systematically applying statistical and logical techniques to describe, summarize and compare data. The obtained data were analysed using descriptive and inferential statistics. Participant characteristics and questionnaire data were analysed using descriptive statistics including frequency and percentage.

In this study, the steps of thematic analysis followed were the following: reading and familiarizing, coding, concepts - codes of similar content that allows data to be grouped, categories-groups of similar concepts were used to generate a theory and Themes-produce report. The analysis followed the six-step approach outlined by Brawn and Clarke.

Result and Discussion

Section I – Description of Demographic Variables

This section deals with the sociodemographic data of 24 samples selected for the study. The demographic data includes age, religion, area of residence, type of family, monthly income of parents per month, age of menarche, monthly menstrual cycle, duration of menstruation, gynaecological symptoms, currently using menstrual products. It was analysed by using descriptive statistics in terms of frequency and percentage.

Fig 1: Frequency and percentage distribution of adolescent girls with reference to age (n=24)

Age	Frequency	Percentage
18-19yrs	5	20.9
20-21yrs	19	79.1

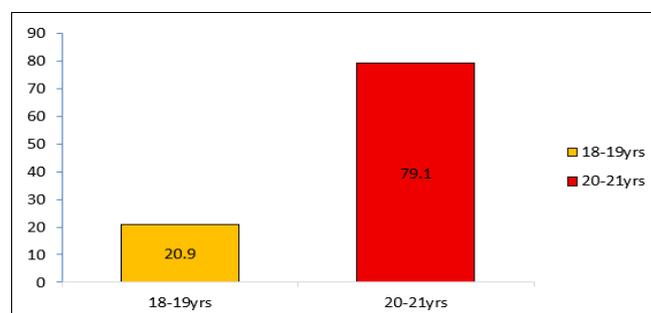


Fig 1: Shows that 20.1% belongs to 18-19yrs age and 79.1% belong to 20-21yrs

Table 2: Frequency and percentage distribution of adolescent girls with reference to religion (n=24)

Religion	Frequency	Percentage
Hindu	2	8.4%
Christian	17	70.8%
Muslim	5	20.8%

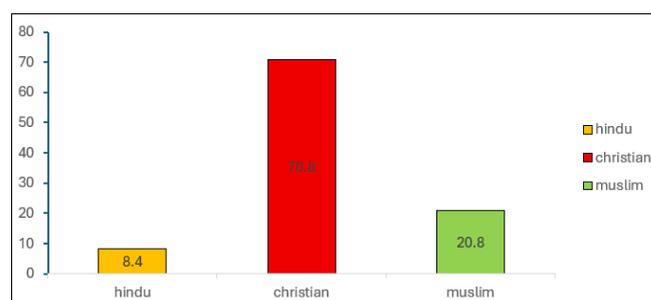


Table 2: Shows that 8.4% belongs to Hindu, 70.8% belongs to Christian and 20.8% belongs to Muslim.

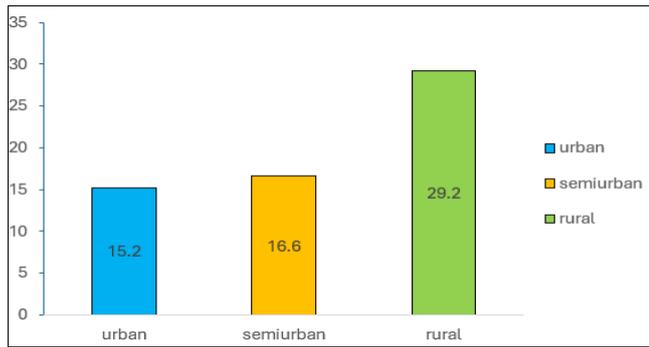


Fig 3: Frequency and distribution of adolescent girls with reference to area of residence (n=24)

Figure 3: Shows 54.2% lives in urban areas, 16.6% in semiurban areas, and 29.2% in rural areas.

Table 3: Frequency and percentage distribution of adolescent girls with reference to type of family

Type of Family	Frequency	Percentage
Nuclear	22	91.6%
Joint	2	8.4%
Extended	0	0
Blended	0	0

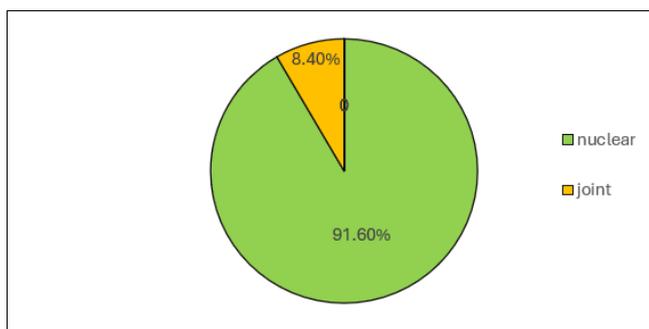


Figure 2: Shows 91.6% belong to the nuclear family, 8.4% belong to the joint family.

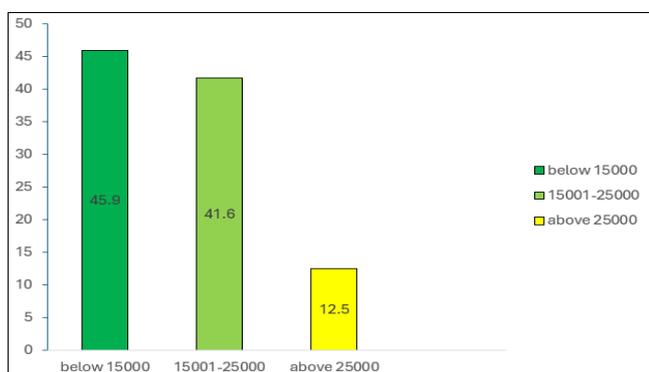


Fig 3: Frequency and percentage distribution of adolescent girls with reference to monthly income of parents per month

Figure 3 shows that 45.9% of parents have a monthly income below 15000, 41.6% of parents have a monthly income between 15001-25000, 12.5% of parents have a monthly income of above 25000.

Table 4: Frequency and percentage distribution of adolescent girls with reference to age of menarche

Age of Menarche	Frequency	Percentage
8-10yrs	2	8.4%
11-13yrs	19	79.1%
14-16yrs	3	12.5%

Table 4. Shows 8.4% belongs to the 8-10yrs age group, 79.1% to the 11-13yrs age group, 12.5% to the 14-16yrs age group.

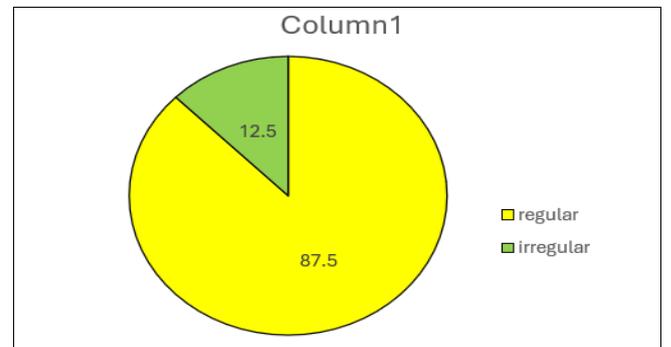


Fig 5: Frequency and percentage of distribution of adolescent girls with reference to monthly menstrual cycle

Figure 5. Shows 87.5% have regular menstrual cycle, 12.5% have irregular menstrual cycle.

Table 4: Frequency and percentage of distribution of adolescent girls with reference to duration of menstruation

Duration of Menstruation	Frequency	Percentage
1-3 days	8	33.3%
4-6 days	15	62.5%
More than 6 days	1	4.2%

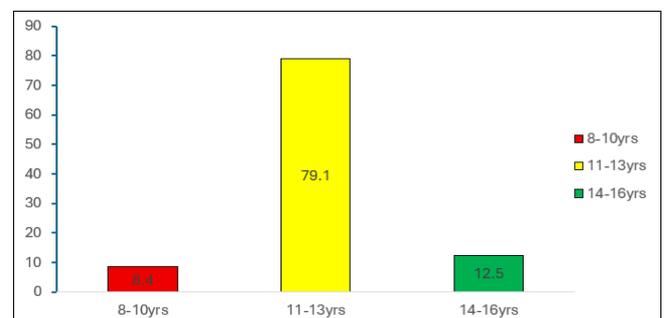


Figure 4. shows that 33.3% reported menstrual cycle duration of 1-3 days, 62.5% reported 4-6 days, 4.2% reported more than 6 days

Table 6: Frequency and percentage of distribution of adolescent girls with reference to gynecological symptoms

Menstrual Cycle	Frequency	Percentage
regular	21	87.5%
irregular	3	12.5%

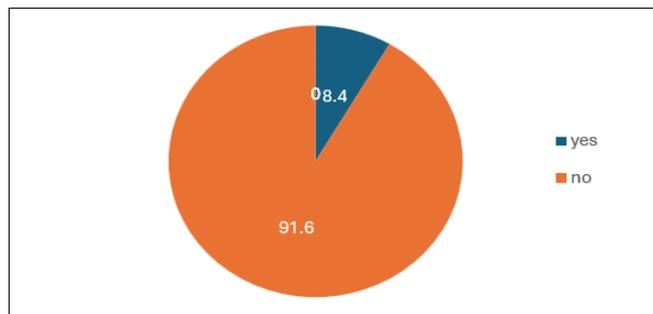


Figure 6. Shows 8.4% have gynecological symptoms, 91.6% have no gynecological symptoms.

Table 5: Frequency and percentage of distribution of adolescent girls with reference to currently using menstrual products

Currently Using Menstrual Product	Frequency	Percentage
Sanitary napkin	24	100%
Cloth pad	0	0
Tampons	0	0
Menstrual cup	0	0

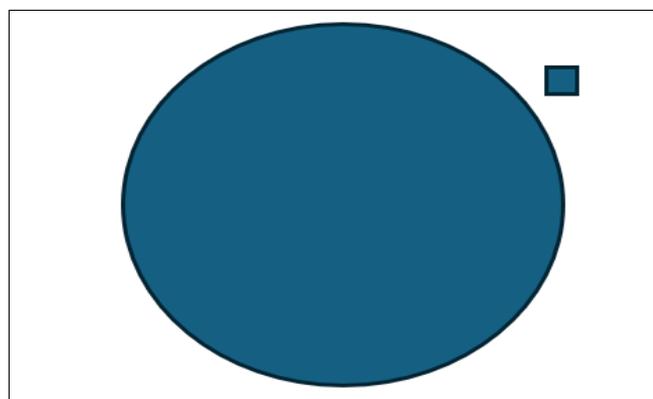


Figure 5. Shows 100% using sanitary napkins.

Section II: Focused Group Discussion

Thematic Analysis

The results show that through thematic analysis of focus group discussion, the study identify 5 key things that explain the barriers in menstrual cup uptake and continued use. These included fear of pain and discomfort during insertion, cultural beliefs linking cup use to loss of virginity, stigma and embarrassment associated with menstruation, practical difficulties such as cleaning and removal—especially in school settings—and a lack of ongoing support and follow-up after distribution. Participants expressed a strong need for more information, demonstration, and reassurance, indicating that without culturally sensitive education and peer or parental guidance, menstrual cup adoption remains a challenge.

Discussion

The present study was conducted to explore the barriers affecting the limited usage of menstrual cup among late adolescent girls at selected School of Nursing at Kollam District. In order to achieve the objectives of the study explorative research was adopted. The sample was selected by purposive sampling. The sample comprised of 28 late adolescent girls who met the inclusion and exclusion criteria. The findings are discussed based on the analysis of

focus group, following objectives to explore the barriers affecting limited usage of menstrual cup among late adolescent girls. The results show that the barriers affecting the menstrual cup including Physical concern, Perception of hygiene, psychological barriers and fear, Lack of knowledge, lack of emotional readiness, social, cultural and family concerns, Lack of peer support.

Conclusion

The present study was conducted to explore the barriers affecting the limited usage of menstrual cup among late adolescent girls. The findings of the study revealed that this study explored the multifaceted barriers that contribute to the limited usage of menstrual cups among late adolescent girls which reveal that a combination of cultural taboos, limited awareness, misinformation, discomfort with bodily autonomy, and lack of access to proper education significantly hinder acceptance and adoption. Despite menstrual cups offering a sustainable, cost-effective, and health-conscious alternative to conventional menstrual products, deep-rooted social norms and misconceptions continue to pose substantial challenges. This include lack of awareness cultural and social stigmas fear or discomfort with insertion, misconceptions regarding virginity and reproductive health, inadequate sexual and reproductive health education. Addressing these barriers requires a holistic approach involving targeted educational interventions, community engagement, and support from healthcare providers and educators. Promoting open conversations about menstruation and enhancing access to accurate, adolescent-friendly information can empower young girls to make informed decisions about their menstrual health, thereby fostering greater acceptance and use of menstrual cups.

Recommendations

Keeping in view of present research study findings, the recommendation have been made

- The study was replicated in different settings.
- A descriptive study can be conducted to assess the barriers affecting the limited menstrual cup among late adolescent girls.

Discussion and conclusion

The study explored barriers to menstrual cup use among late adolescent girls (Nursing School, Kollam District), revealing a comprehensive set of challenges categorized as: Physical concern, Perception of hygiene, Psychological barriers and fear, Lack of knowledge, Lack of emotional readiness, Social, cultural and family concerns, and Lack of peer support.

These findings are strongly supported by similar international research (e.g., in rural Western Kenya), which also identified fear of pain/discomfort, cultural links to loss of virginity, stigma, and practical cleaning difficulties as key barriers. While high awareness of menstrual cups was noted in another comparative study (90.5%), the present study’s core finding is that 100% of participants used sanitary pads, and none used cups, highlighting that awareness often does not translate to adoption due to these deep-rooted barriers.

The key themes identified through selective coding—Lack of Awareness/Knowledge, Cultural Taboos/Stigma, Fear/Discomfort, Lack of Guidance/Support, Accessibility/Availability, and Perceived

Inconvenience/Hygiene—directly address the study's objective and align with the need for culturally sensitive, demonstration-based interventions.

The limited usage of menstrual cups among late adolescent girls stems from a multifaceted combination of factors, including:

- Cultural Taboos and Stigma.
- Limited Awareness and Misinformation.
- Fear and Discomfort (especially concerns about bodily integrity and perceived virginity).
- Lack of Access to proper education and support.

Despite the benefits of menstrual cups, deep-rooted social norms and misconceptions significantly hinder acceptance. Addressing these barriers requires a holistic approach involving targeted educational interventions, demonstration workshops, and promoting open dialogue to empower young girls to make informed decisions about their menstrual health.

References

1. D.C. Dutta's Textbook of Gynecology, Hiralal Konar 8th edition.
2. Bobel C, Winkler IT, Fahs B, Hasson KA, Kissling EA, & Roberts TA. (Eds.). The Palgrave Handbook of Critical Menstruation Studies, 2020.
3. No title [Internet]. Vikaspedia.in. [Cited 2025 Jul 26]. Available from: <https://en.vikaspedia.in/viewcontent/health/women-health/adolescent-health-1/management-of-adolescent-health/adolescent-growth-and-development>
4. World Bank Group. Menstrual Health and hygiene. World Bank Group, 2025.
5. The Palgrave Handbook of Critical Menstruation Studies (eds. Bobel, Winkler et al., 2020)
6. Hussein J, Gobena T, Gashaw T. The practice of menstrual hygiene management and associated factors among secondary school girls in eastern Ethiopia: The need for water, sanitation, and hygiene support. Womens Health (LondEngl) [Internet]. 2022; 18:17455057221087871. Available from: <http://dx.doi.org/10.1177/17455057221087871>