



(RESEARCH ARTICLE)



Menstrual awareness, beliefs and attitudes among young adults

Rekha Devi Chauhan * and Soumya Simon

Department of Psychology, Kristu Jayanti College (Autonomous), Bengaluru, Karnataka, India.

World Journal of Advanced Research and Reviews, 2025, 25(03), 712-720

Publication history: Received on 30 January 2025; revised on 06 March 2025; accepted on 08 March 2025

Article DOI: <https://doi.org/10.30574/wjarr.2025.25.3.0769>

Abstract

This study investigates the awareness, beliefs and attitudes surrounding menstruation among young adults. A concurrent triangulation mixed-method approach was used, involving both quantitative and qualitative data collection. Quantitative data were gathered from 202 participants (100 females and 102 males) using the Beliefs About and Attitudes Toward Menstruation (BATM) scale, while qualitative data were collected through semi-structured interviews with 10 participants. Findings indicate significant gender differences in beliefs about menstruation: males held stronger beliefs in the need for secrecy, while females had more positive views, viewing menstruation as a natural experience. The qualitative data revealed themes related to societal taboos, family influences, and educational gaps in both genders. Females often used code language for menstruation and also, reported receiving support from males, though cultural taboos hinder open discussion. Males, on the other hand, gained awareness primarily through formal education and relationships with female friends. The study underscores the importance of inclusive education to normalize menstruation discussions, reduce stigma, and enhance empathy and gender equality. Overall, the findings suggest a need for comprehensive educational interventions to foster a supportive environment around menstruation.

Keywords: Menstruation; Awareness; Beliefs; Attitude

1. Introduction

This study explores the awareness, beliefs, and attitudes of both males and females regarding menstruation, examining how these perceptions affect interactions between genders. Previous research suggests that education plays a crucial role in reducing stigma, as informed men can better support menstruators and foster understanding, while a lack of awareness often leads to discomfort and avoidance.

Menstruation is a natural biological process, which often surrounded by stigma and secrecy, rather than being acknowledged openly, menstruation is frequently labelled with descriptors like "dirty" or "shameful," this often creating a sense of embarrassment or the need to hide it [1]. Research reveals that when men are not included in menstrual conversations, it creates lot of misunderstanding and discomfort [2]. This reinforces, both men and women the idea that menstruation should remain a private or hidden matter [1].

Female's perception of menstruation can be influenced by how society views menstruation, which is often negative [3]. Female face restrictions during their periods like limited social, educational, and economic participation which they see as oppressive, however study also found that proscriptions could advantage students by exempting them [4]. The impact of shame and stigma around menstruation is an interwoven issue in Indian society, the taboo around menstruation, discussions and sharing of knowledge on menstrual hygiene management practices are very limited [5]. Most Indian studies on menstruation include only women as participants, making it a 'women's' topic [6].

* Corresponding author: Rekha Devi Chauhan

There is a need for creating menstruation-friendly societies by recognizing the role of boys and men in creating awareness around menstruation [6]. There is need to promote inclusive, learner-centered, participatory and gender transformative teaching and learning on menstruation [7]. Study by Van Lonkhuijzen and et al, highlight the need for better education on menstruation to reduce stigma and to increase cultural openness surrounding menstruation [1].

Young women in Uttar Pradesh lack menstrual knowledge and face stigma, while schools provide inadequate support [8]. Gundi & Subramanyam [6], in 2020 and Oklu et al., 2023 [9] found that schoolboys hold misconceptions due to insufficient education and also male students admitted to shaming girls, influenced by alcohol and lack of reproductive health education [10]. Menstrual education improves self-efficacy, especially for low-income girls [11]. BML Munjal University study linked stronger stigma to rural areas, while Kim, found no clear link between having a sister and improved male attitudes [12,13]. Educated and upper-class women were more informed and prepared [14], stigmatizing beliefs negatively impact women's well-being [1]. Munro et al., linked menstrual stigma and dysmenorrhea to negative academic experiences [4]. Moon et al., noted young adults seek more inclusive menstrual education [15]. Many cis-males feel embarrassed, those with exposure are more open to discussions [16]. Also single fathers treat menstruation as taboo [17] and Indian parents' fell discomfort discussing about menstruation [18].

As adults, many of the participants indicated that their profound feelings of disgust toward menstruation in childhood resulted in them avoiding learning about or encountering menstruation in adulthood. Overall, understanding how male think about menstruation aims to break down societal taboos, reduce stigma, and create an inclusive environment where menstruation is universally understood and supported.

1.1. Aim and Objective of the Study

The aim of the study is to understand male's awareness, beliefs and attitudes about menstruation and its impact on females.

- To understand the source of menstrual awareness of male's and how do these sources influence their beliefs and attitudes
- To examine the impact of male's menstrual awareness, beliefs and attitudes have on females
- To assess the beliefs and attitude towards menstruation among males and females.

1.2. Research questions of the Study

- What are the sources of menstrual awareness for males and how does it affect their beliefs and attitudes?
- How are females impacted by male's menstrual awareness, beliefs and attitudes?

1.3. Research Hypotheses

H1: There is a significant difference between males and females on the BATM subscales, namely Secrecy, Annoyance, Proscriptions and Prescriptions, Disability, and Pleasant.

1.4. Significance of the Study

The study aims to understand both males' and females' awareness, beliefs, and attitude regarding menstruation, as well as how males' awareness, beliefs, and attitude impact females—specifically, how these factors shape the relationships females have with the males around them. Additionally, this study seeks to identify the gap between males' and females' awareness, beliefs, and attitudes, and, through semi-structured interviews, explore why this gap exists and how it impacts relationships between the genders.

2. Material and Methods

2.1. Research Design

A mixed-method approach using a concurrent triangulation research design was employed to understand male's awareness, beliefs and attitudes about menstruation and its impact on females.

2.2. Participants

The study included young adults aged 18 to 25 years, with a sample of 202 participants (100 females and 102 males) for quantitative analysis. For qualitative insights, ten semi-structured interviews were conducted with a subgroup of participants—five males and five females.

2.3. Sampling

2.3.1. Technique Used

A convenience sampling method was used to recruit participants. For quantitative data collection, participants completed an online questionnaire and semi-structured interviews provided qualitative data.

2.3.2. Inclusion Criteria

- The study was conducted on young adults between the age range 18 to 25 years.
- Participants who were able to speak and understand English were included to ensure clear communication during interviews.
- They had to provide informed consent and willing to engage in discussions about their knowledge, beliefs, and attitudes towards menstruation.

2.3.3. Exclusion Criteria

- Professional health care providers who work in healthcare roles specifically related to menstrual or reproductive health was excluded to avoid expert bias.
- Individuals with medical or psychological conditions that significantly impact their ability to discuss or understand menstruation had been excluded to maintain the focus on general perceptions.
- Those who had participated in previous research studies focused on menstruation or menstrual health were excluded to ensure fresh and unbiased perspectives.

2.4. Tools

2.4.1. Beliefs about and Attitudes towards Menstruation Questionnaire (BATM)

Beliefs about and Attitudes towards Menstruation Questionnaire (BATM) developed by S.M Sommers and P.B., Scott. The questionnaire contains 45 items measuring attitudes towards menstruation on five subscales (secrecy, annoyance, proscriptions and prescriptions, disability and pleasantness). Each item was measured on a 5-point Likert scale. The BATM's psychometric properties have been evaluated, suggest that it is standard for reliability to be a Cronbach alpha value, of which .60 to .70 is satisfactory, .70 to .80 is very good, while .80 to .95 is exceptional. [19]

2.5. Procedure

The procedure for this study involves recruiting volunteers through social media, academic networks, and online platforms. Participants completed an electronic questionnaire comprising demographic questions and one standardized measure after providing informed consent and later 5 males and 5 females were interview. Results are analyzed in two parts- quantitative and qualitative. T-test was used to analyze the quantitative data collected through Jamovi 2.3.28 software. Further, the qualitative data was transcribed, thoroughly read, codes, sub-themes and themes were derived.

2.6. Data Analysis

2.6.1. Descriptive Statistics

Descriptive statistics were used to determine participant sociodemographic details (age, gender, religion, education qualification, gender of siblings and parents' qualifications).

2.6.2. T-test

An independent samples t-test was conducted to compare male and female attitudes across five subscales: Secrecy, Annoyance, Proscriptions and Prescriptions, Disability, and Pleasant.

3. Results and Discussion

3.1. Quantitative Analysis

The data was gathered with the help of Google forms from 202 young adults from India, between 18 and 25 years old and analyzed using JAMOVI version 2.3.

Table 1 Indicating the demographic details of males and females

	N=202	M, SD/100%
Gender		
Female	100	49.5 %
Male	102	50.5 %
Age range		
18-25	202	22
Religion		
Agnostic	1	0.5 %
Buddhism	5	2.5 %
Christian	71	35.1 %
Hindu	107	53.0 %
Human	1	0.5 %
Islam	13	6.4 %
Non- Religion	1	0.5 %
Roman Catholic	2	1.0 %
Sikhism	1	0.5 %
Education Qualification		
12th Std	51	25.2 %
Diploma	3	1.5 %
Graduate	105	52.0 %
PhD	2	1.0 %
Post-graduate	41	20.3 %
Gender of Siblings		
Female	63	36.0 %
Male	70	40.0 %
Male, Female	42	24.0 %
Father's Education Qualification:		
10th to 12th std	62	30.7 %
Diploma and other short-term courses	10	5.0 %
Graduate	56	27.7 %
Less than 10th std	46	22.8 %
PhD	4	2.0 %

Post Graduate	24	11.9 %
Mother's Education Qualification		
10th to 12th std	66	32.7 %
Diploma and other short-term courses	5	2.5 %
Graduate	60	29.7 %
Less than 10th std	45	22.3 %
PhD	5	2.5 %
Post Graduate	21	10.4 %

Table 1 indicate that there was almost equal males (50.5%) and females (42.5%) with total of 202 young adults. The mean age was 22. Most of the participants where Hindu (53%), followed by Christians (35.1%). 52% participants are graduates, while parents' education qualification was 10th to 12th std. Most the participant had male siblings (40.0%) followed by female siblings (36.0 %).

Table 2 Indicating T-test on Sub-scale Secrecy, Annoyance, Proscriptions and Prescriptions, Disability and Pleasant

	Male		Female		t (202)	p	Cohen's d
	M	SD	M	SD			
Secrecy	2.09	0.682	1.67	0.396	-5.36	<.001	-0.754
Annoyance	3.43	0.526	3.47	0.451	0.616	0.539	0.0866
Proscriptions and Prescriptions	3.25	0.511	3.11	0.554	-1.832	0.068	-0.2578
Disability	3.11	0.610	3.01	0.688	-1.091	0.277	-0.1535
Pleasant	2.89	0.528	3.06	0.597	2.159	0.032	0.3039

Table 2 indicate an independent samples t-test was conducted to compare male and female attitudes across five subscales: Secrecy, Annoyance, Proscriptions and Prescriptions, Disability, and Pleasant. Results indicated males tend to hold stronger beliefs regarding the need for secrecy about menstruation. (M = 2.09, SD = 0.682) then females (M = 1.67, SD = 0.396), t (202) = -5.36, p < .001. In Annoyance, Proscriptions and Prescriptions, and Disability no significant gender differences were found. Lastly, results indicated that females hold more positive views on menstruation (M = 3.06, SD = 0.597) than males (M = 2.89, SD = 0.528), t (202) = 2.159, p = .032.

3.1.1. Qualitative analysis

5 Themes where derived from the male data: Menstrual Knowledge, Societal and Family taboos, Changing Attitudes and Support, Barriers to Communication and Education on menstruation. 4 Themes where derived from the female data: Cultural and Social Taboos, Emotional Impact of Male Attitudes, Support Systems and Education and Awareness

Explain of themes, sub-themes, and codes derived from semi-structured interview of male participants

- Menstrual knowledge

All participants had basic knowledge of menstruation, understanding it as a monthly cycle involving shedding of uterine lining also symptoms like pain, cramps, mood swings, and cravings. Participant 1 stated, "Girls get the period cycle every month; one thing I know is it goes on for a few days and sometimes it's delayed and sometimes it's late, sometimes it's on time, and I have heard people go through a lot of pain and might have more swings because of it." Similarly, others mentioned about mood swings and cravings. Participants reported that they first learned about menstruation through school while some through family or close friends. This finding align with the study done by Gundi & Subramanyam,[6] and Deepa et al., [20] found that males receive less menstruation education and have significantly lower awareness levels about menstruation compared to females.

- Societal and family taboos

Four participants indicated that menstruation was never discussed at home, like participant 1 shared, "At home, my family is a little conservative, and they never thought because they have two kids who are sons, they never thought it's important to give us a talk or something on it." All participants initially perceived menstruation as a taboo topic, often considered as a girls' topic. Quantitative data also indicate that males hold more negative beliefs and secrecy around menstruation. The limited discussion at home strengthens this, also a study by Oklu et al., [9] showed that boys had poor perception and attitudes towards menstruation.

- Changing attitudes and support

Participants' understanding of menstruation deepened between ages of 16 and 19, often due to closer female friendships. Participant 2 shared, "In the beginning, when I first got to know, I didn't know about the pain, or, you know, when the teacher said cramps, so I didn't know what cramps. And then later on, only in, I think I would say 11th grade, was when I was really close with some female friends of mine. So, they only told me that it hurts a lot, that's when I knew that it's actually that bad." A similar expression was shared by participants 2 and 5. These experiences led male participants to become concerned for women's well-being and openness to discussing menstruation if the women felt comfortable. This aligns with Prince & Annison, [16] found that experienced males were more open for menstruation discussion.

- Barriers to communication

While participants felt comfortable talking about menstruation, they were cautious about making women uncomfortable. Participant 2 mentioned that, "I wouldn't say I'm not that comfortable because I don't know how they would feel by me talking about it. I am comfortable about them talking to me." Participant 1 observed that women tend to use indirect language when referring to menstruations and participant 3 highlighted how he offered support, saying, "My friend, she told me she is having cramps; she needs to go. She was in my flat, and I told her you want a hot bag or something. She said it's fine." Studies by Van Lonkhuijzen et al., found that both men and women hold stigmatizing attitudes towards menstruation [1].

3.2. Education on menstruation

Participant 2 stressed the importance of early education on menstruation for both genders to encourage open conversations. Participant 1 noted, "At home, my family is a little conservative, and they never thought because they have two kids who are sons, it's important to give us a talk or something on it." Three participants learned about menstruation partly from seeing sisters or female friends in pain, which helped foster empathy and understanding. The studies in Wall et al., highlighted the importance of education around menstruation to reduce stigma and improve gender equity [21].

Explain of themes, sub-themes, and codes derived from semi-structured interview of female participants

- Cultural and social taboos

All five participants agreed that menstruation is still a taboo topic, rarely discussed openly. They mentioned that males view menstruation as "impure," leading women to avoid religious festivals. Participant 1 described a family member's reaction: "I have an incident, in our family only, there was an uncle, so meaning we were just randomly talking about periods and all, and one of my family members had got periods. So, his opinion was that period is something very impure, and you should stay away from God, you know, those traditional systems in Indian society." Participant 5 shared, "Like my mom, they are a bit more like, oh, you shouldn't talk about this with your male" Many participants use coded language, like "aunties," to discuss menstruation. Prince & Annison, found that females were uncomfortable while explaining their reason of limited participation in activities to males [16].

- Emotional impact of male attitudes

Three participants reveal that negative male attitudes impact their views toward menstruation. Participant 5 recalled how her cousin reacted with disgust to menstrual blood, making her feel embarrassed about her own period: "When I was younger, my older cousins were on their period, and she had stained on her bed. And then one of my other cousin brothers saw it, and he was like, really disgusted." Other participants shared that they avoid discussing menstruation with males due to early teachings that it's a "women's topic." Van Lonkhuijzen et al., found that both genders were discouraged to talk about menstruation [1].

- Support systems

All five participants mentioned receiving support from males, such as buying pads when needed. Participant 2 shared, "So, there was my one thing where my brother went and bought a pad for me." Participant 1 also highlighted the emotional support provided by males and participant 5 appreciated having male friends who talk openly about menstruation, making her feel more comfortable. This finding is supported by Rajak, where it was found that men want to learn more about menstruation, especially those who have sisters [22].

- Education and awareness

Participants shared that menstruation is rarely discussed with males, often females are discouraged by older females to not talk with males about menstruation. Participant 1 explained, "So, I think because of the elder ones, they are not passing on good knowledge to the future generation." Participant 5 recalled that her school separated boys from girls during sex education, leaving boys uninformed about menstruation. All participants emphasized the importance of open conversations about periods, especially within the home. This aligns with the studies by Verma and et al., and Jadav et al., found that in Indian society shame and stigma around menstruation are deeply ingrained, but educated women are better informed so less secretive about menstruation [18, 14].

4. Discussion

The findings suggest that males hold more negative beliefs about the necessity of secrecy surrounding menstruation compared to females. This aligns with Fishman and Rajak who found that males often view menstruation as women's issue and feel disgust toward menstrual blood fostering avoidance behaviours [2, 22]. The beliefs related to the annoyance of menstruation do not significantly differ between genders, both genders share similar beliefs regarding rules or restrictions associated with menstruation also negative perceptions of menstruation as a form of disability were observed in both genders. The study by Deepa et al., and Oklu et al., reveals that males have poor awareness and perception of menstruation but a deep understanding of cultural restrictions was found [20, 9].

Females' significantly higher scores on the pleasant scale, the finding aligns with a study, that women view menstruation as a natural part of life [23], and study by BML Munjal University et al., found a slight tendency for males to hold more restrictive views on menstruation [12]. From schools' males only learn about biological aspect of menstruation but its only later through female interaction they get better understanding cramps, mood swings and cravings. The study by Gundi & Subramanyam and BML Munjal University et al., shows similar results where they found that boys often receive limited information regarding menstruation and its through female interaction they awareness regarding menstruation increase [6, 12]. They often feel awkward while discussing about menstruation but they try to support females through buying pads and providing emotional support. A study shows, that its only through female interaction they get deeper understanding of menstruation [12, 13, 7].

Females reported that they mother discourage them to not discuss about menstruation with males, this led to male's viewing menstruation as impure because of lack of open discussion at home. Females often used words like "aunties" to refer to periods. However, some males especially younger males are supportive towards females. Researches done by Mason et al., and McCammon et al., reveals that cultural silence reinforces stigma, which discourages open discussion [7, 8]. Prince & Annison, emphasized need of open conversation, especially with males [16].

Both genders desired more menstrual education and specially males mention of not receiving this nor at home or school. The study by Moon et al also mentioned that young adults desired for more information on menstrua's [15]. Males hold more negative beliefs and have secrecy around menstruation this is mostly due to lack of discussion at home. The various study reveal that due to patriarchal beliefs they is lack of discussion around menstruation at home which further reinforces negative beliefs regarding menstruation [10]. Overall, both genders highlight the need for more open discussion and better education to reduce stigma and foster support.

5. Conclusion

The aim of the study was to understand the awareness, beliefs, and attitudes of both genders and to explore the impact of males' awareness, beliefs, and attitudes on females. The study found that males maintain secrecy around menstruation, both genders find it annoying with shared restriction beliefs and negative perceptions as a disability. Mostly females view menstruation as natural and positive, because of more awareness due to open discussions. Despite social norms and limited early exposure there is improvement in males' attitudes because of close female relationships.

The vital role of mothers is found in shaping the comfort around menstruation discussion specially for females. Both genders highlighted the need for open discussion and early education at home and schools.

The findings suggest a valuable opportunity for educational reform, highlighting the need for comprehensive and inclusive menstrual education for both genders. Additionally, the findings indicate that family plays significant role in shaping attitudes toward menstruation so parents should be psycho-educate regarding this, helping them to create a supportive and open environment at home.

The questionnaire was based on self- report questionnaire, responses could be influenced by social desirability, also as the questionnaire consisted of 45 items it could even lead to inattentive responses. The sample also lacked diversity across age, socioeconomic status, cultural, and geographic backgrounds, limiting the generalizability of the findings.

Future research could expand sample diversity, particularly by including on older male. Longitudinal studies could explore how attitudes and beliefs about menstruation evolve over time and with life experiences. Additionally, investigating the influence of specific cultural, religious, and societal norms can provide deeper insights on menstruation-related attitudes and factors that shape these beliefs.

Compliance with ethical standards

Acknowledgments

I am deeply grateful to everyone who offered their guidance and support throughout my research journey. Their invaluable assistance made this accomplishment possible. I extend my sincere gratitude to Kristu Jayanti College (Autonomous), affiliated with Bengaluru North University. I am also immensely thankful to all the participants who graciously dedicated their time and cooperation by taking part in this study. Lastly, I owe a special thanks to my family and friends for their constant support, encouragement, and assistance throughout this endeavour.

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

The study strictly followed established ethical guidelines to ensure the rights and well-being of all participants. Informed consent was obtained from each participant, ensuring that they are fully aware of the study's purpose, procedures, and any potential risks involved before they agree to take part. Confidentiality and anonymity were upheld throughout the research process; participants' personal information was protected and not disclosed in any published findings or discussions. Additionally, participants had the right to withdraw from the study at any time, without any repercussions. All data collected was securely stored and strictly used for research purposes only, maintaining the integrity and confidentiality of participant information.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Van Lonkhuijzen, R. M., Garcia, F. K., & Wagemakers, A. The Stigma Surrounding Menstruation: Attitudes and Practices Regarding Menstruation and Sexual Activity During Menstruation. *Women's Reproductive Health*. (2023); 10(3), 364–384. <https://doi.org/10.1080/23293691.2022.2124041>
- [2] Fishman, K. Putting Men Back in the Menstrual Cycle: A Qualitative Analysis of Men's Perceptions of Menstruation. (2014)
- [3] Aktürk, Ü., & Erci, B. Muslim Women's Beliefs About Menstruation in Turkey. (2023)
- [4] Munro, A. K., Hunter, E. C., Hossain, S. Z., & Keep, M. A systematic review of the menstrual experiences of university students and the impacts on their education: A global perspective. *PLOS ONE*, (2021);16(9), e0257333. <https://doi.org/10.1371/journal.pone.0257333>

- [5] Verma, A., Patyal, A., Meena, J. K., & Mathur, M. Breaking the silence around menstruation: Experiences from urban and rural India. *International Journal of Community Medicine and Public Health*. (2021); 8(3), 1538. <https://doi.org/10.18203/2394-6040.ijcmph20210859>
- [6] Gundi, M., & Subramanyam, M. A. Curious eyes and awkward smiles: Menstruation and adolescent boys in India. *Journal of Adolescence*. (2020); 85(1), 80–95. <https://doi.org/10.1016/j.adolescence.2020.09.013>
- [7] Mason, L., Sivakami, M., Thakur, H., Kakade, N., Beauman, A., Alexander, K. T., Van Eijke, A. M., Laserson, K. F., Thakkar, M. B., & Phillips-Howard, P. A. 'We do not know': A qualitative study exploring boy's perceptions of menstruation in India. *Reproductive Health*. (2017); 14(1), 174. <https://doi.org/10.1186/s12978-017-0435-x>
- [8] McCammon, E., Bansal, S., Hebert, L. E., Yan, S., Menendez, A., & Gilliam, M. Exploring young women's menstruation-related challenges in Uttar Pradesh, India, using the socio-ecological framework. *Sexual and Reproductive Health Matters*. (2020); 28(1), 1749342. <https://doi.org/10.1080/26410397.2020.1749342>.
- [9] Oklu, P., Charles-Unadike, V. O., Salu, S., & Ananga, M. K. Her Period, Our Taboo: The attitudes and perceptions of schoolboys towards menstruation in Ghana: a cross-sectional study. (2023); <https://doi.org/10.21203/rs.3.rs-3204799/v1>
- [10] Inthaphatha, S., Isin-Xiong, L., Louangpradith, V., Xiong, V., Xaitengcha, V., Phengsavanh, A., Nishino, K., Hamajima, N., & Yamamoto, E. Period shaming behavior among male students in Luang Prabang Province, Lao People's Democratic Republic: A cross-sectional study. *PLOS ONE*, (2023); 18(7), e0288145. <https://doi.org/10.1371/journal.pone.0288145>
- [11] Long, J. L., Haver, J., Mendoza, P., & Vargas Kotasek, S. M. The More You Know, the Less You Stress: Menstrual Health Literacy in Schools Reduces Menstruation-Related Stress and Increases Self-Efficacy for Very Young Adolescent Girls in Mexico. *Frontiers in Global Women's Health*. (2022); 3, 859797. <https://doi.org/10.3389/fgwh.2022.859797>
- [12] BML Munjal University, Malik, C., Saha, A., Shukla, P., Dha, A., Shekhar, N., Maheshwari, R., & BML Munjal University. Understanding The Male Mentality of Menstruation Among University Students. *Journal of Business, Ethics and Society*. (2021); 1(I). <https://doi.org/10.61781/11I2021/6bmlm>
- [13] Kim, N. Men on Menstruation: A Causal Comparative Analysis of College Males' Attitudes Toward Menstruation. (2023); 12(4).
- [14] Jadav, A., Ali, T., Mushti, D., Davis, S., & Chaudhury, S. Beliefs and Attitudes towards Menstruation in Urban Women. 35(4).
- [15] Moon, G., Kim, I., Kim, H., Choe, S., Jeon, S., Cho, J., Hong, S., & Lee, J. How can we improve knowledge and perceptions of menstruation? A mixed-methods research study. *BMC Women's Health*. (2020); 20(1), 214. <https://doi.org/10.1186/s12905-020-01007-4>
- [16] Prince, H. E., & Annison, E. Men and menstruation: Views and perspectives influencing participation in adventurous activities. *Sport, Education and Society*. (2023); 1–14. <https://doi.org/10.1080/13573322.2023.2269213>
- [17] Kabongo, T. E., & Malose, L. Experiences of Black South African Single Fathers. *The Open Psychology Journal*. (2023); 16(1), e187435012303020. <https://doi.org/10.2174/18743501-v16-e230414-2022-90>
- [18] Verma, A., Patyal, A., Meena, J. K., & Mathur, M. Breaking the silence around menstruation: Experiences from urban and rural India. *International Journal of Community Medicine and Public Health*. (2021); 8(3), 1538. [https://doi.org/10.18203/2394-6040.ijcmph20210859DevelopmentBATM \(scale\).pdf](https://doi.org/10.18203/2394-6040.ijcmph20210859DevelopmentBATM%20(scale).pdf)
- [19] Deepa, S., Agrawal, T., Attokaran, T., Fathima, F. N., & Johnson, A. R. Awareness, perceptions and practices regarding menstruation and menstrual hygiene among students of a college in Bengaluru Urban district, South India: A cross-sectional study. *International Journal of Community Medicine and Public Health*. (2019); 6(3), 1126. <https://doi.org/10.18203/2394-6040.ijcmph20190597>
- [20] Wall, L. L., Teklay, K., Desta, A., & Belay, S. Tending the 'monthly flower': a qualitative study of menstrual beliefs in Tigray, Ethiopia. *BMC Women's Health*. (2018); 18(1), 183. <https://doi.org/10.1186/s12905-018-0676-z>
- [21] Rajak, I. She Got Her Period: Men's Knowledge and Perspectives on Menstruation. UMI. (2015).
- [22] Wong, W. C., Li, M. K., Chan, W. Y. V., Choi, Y. Y., Fong, C. H. S., Lam, K. W. K., Sham, W. C., So, P. P., Wong, K., Yeung, K. H., & Yeung, T. Y. A cross-sectional study of the beliefs and attitudes towards menstruation of Chinese undergraduate males and females in Hong Kong. *Journal of Clinical Nursing*. (2013); 22(23–24), 3320–3327. <https://doi.org/10.1111/jocn.12462>.