

Perceptions Related to Menstruation Among Male Medical Students in Chengalpattu, Tamil Nadu- A Qualitative Study

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KEYWORDS

Perceptions,
Menstruation,
Male Medical Student

ABSTRACT

Background: Menstruation being a normal physiological process is often associated with myths and misconceptions with cultural diversities. Such taboos include restrictions in their diet, participation in cooking, visiting places of worship, as well as having to sit or sleep separately from the rest of the household. Most men are unaware about the normal physiology of menstruation. And those men who know still lack understanding of what a woman goes through physically and emotionally. This study aims to understand the views, perceptions and beliefs of male medical students towards menstruation.

Materials and Methods: This is an Ethnographic study undertaken among male medical students in a Tertiary care teaching hospital in Chengalpattu, Tamil Nadu. The study was conducted for a duration of 2 weeks, from May 3rd to May 17th, 2024. 16 male medical students were chosen by purposive sampling as representatives from all years. Qualitative data was collected by techniques like Free Listing and Pile sorting, Participatory Research Techniques like Pair wise ranking and Force Field Analysis and In depth techniques like Focus Group Discussions. The data obtained were analysed to deduce networks, codes and themes.

Results: The results state that the participants consider media as the most important factor influencing perceptions towards menstruation and education as the factor that least influences perceptions towards the same. The results from the Force Field Analysis activity is such that the participants consider sex education through social media as the most influential facilitator of positive perceptions towards menstruation. The FGD demonstrates the tension between traditional beliefs and the evolving professional roles of male medical students.

Conclusion: The findings reveal that media significantly shapes their views, often more so than formal education. Addressing these educational gaps can help dispel myths, reduce misconceptions, and foster a more supportive environment for women. Future research should expand to include diverse populations and longitudinal studies.

1. Introduction

Menstruation is a normal physiological process. It is often associated with myths and misconceptions which are different in different cultures. Such taboos include restrictions on their diet, participation in cooking, visiting places of worship, as well as having to sit or sleep separately from the rest of the household.^{1,2,3} Most men are unaware of the normal physiology of menstruation. And those men who know menstruation is a normal phenomenon still lack understanding of what a woman goes through physically and emotionally. Many studies have been conducted to assess knowledge, perceptions and beliefs about menstruation among adolescents, both boys and girls and women.^{5,6} Inadequate menstrual health knowledge among men, especially male medical students who are future healthcare providers, can result in poor support and empathy toward menstruating women.^{7,8} Including male medical students in menstrual health education is particularly vital, as these individuals are expected to become advocates for women's health and address health issues with sensitivity and empathy.^{9,10}

Research indicates that while male students in medical fields gain scientific knowledge of menstruation, cultural beliefs and traditional attitudes can still influence their perceptions.¹¹ There are no such studies conducted on male medical students. As future doctors and leaders, it is imperative that they have sound knowledge and understanding of this normal physiological phenomenon in order to help build a better tomorrow. This study aims to understand the views, perceptions and beliefs of male medical students towards menstruation.

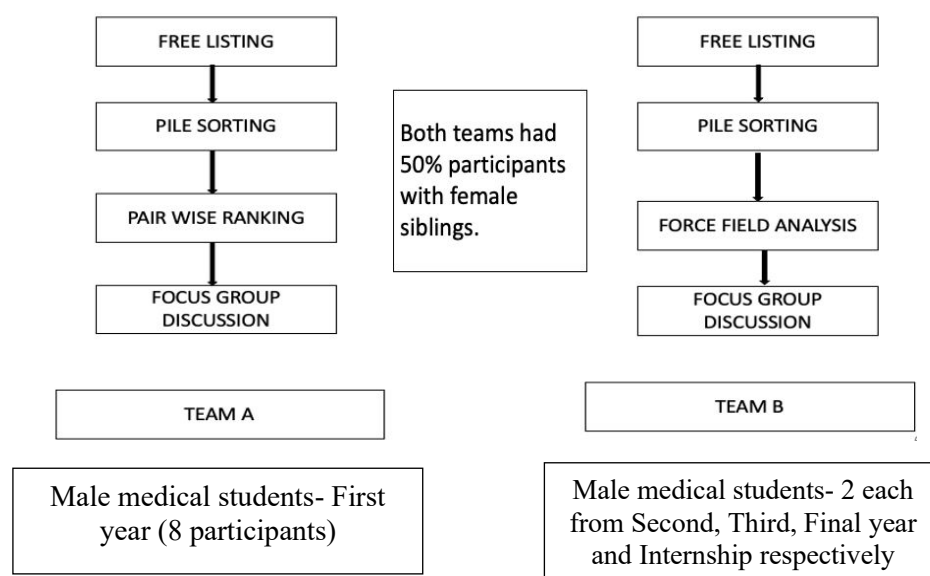
2. Objectives:

1. To explore the perceptions and beliefs of male medical students towards menstruation in a Tertiary care teaching hospital in Chengalpattu.
2. To interpret how the perceptions and attitudes of the study participants affect their behaviour related to menstruation.

3. Methodology:

This is an ethnographic qualitative study. The study was conducted at the Department of Community Medicine, Karpaga Vinayaga Institute of Medical Sciences and Research Centre, Maduranthagam, Tamil Nadu for a duration of two weeks. The participants were male interns and male medical undergraduates from First to Final year MBBS. Of 299 male students, sixteen were chosen purposively. They were then divided into two groups A and B of eight each. These sixteen participants were chosen such that 50% had female siblings. Also, 8 of the participants were from the First year MBBS, and the remaining eight were chosen such that two participants were selected from the Second, Third, and Final year MBBS and internship respectively. Qualitative methods like Participatory research techniques (Pairwise ranking and force field analysis), In-depth techniques (Focus Group Discussion) and systematic techniques (Free listing and pile sorting), were used in this study. A questionnaire was developed referring to similar literature, to assess knowledge, attitude, perceptions and practices of menstruation among male medical students.¹²⁻¹⁶ A pilot study was conducted and the overall reliability of the questionnaire was **0.81**.

Workflow of activities planned for Teams A and B



The responses from the pilot study were used to develop an Interview guide. **Free listing and pile sorting** were done, the results of which were used to derive cognitive maps using the **Visual**

Anthropac software (version 1.0.2.60). **Pair-wise ranking** was conducted for Team A and **Force Field Analysis** was done for Team B respectively. **Focus Group Discussions(FGD)** were conducted separately for both teams. Participants were explained about the activity and materials were provided to them for the same. Consent was obtained from both groups before beginning the activity. In the free listing activity, the participants of the two groups were given the study topic and were asked to list the factors influencing the perception and beliefs of men towards menstruation. After which these factors were pile sorted by the participants respectively. Focus Group Discussions were conducted for both groups on different days. It comprised of the facilitator, who was asking the questions to the participants from the interview guide, and a note taker who was recording the answers, expressions and involvement of the participants. Arrangements for the venue, seating and refreshments were made. The FGD started with an ice-breaking session by showing a video clip. The ground rules of the Focus Group Discussion were explained after which the discussion began. Open-ended questions and probes were used and the discussion was recorded using two recorders kept at both ends of the table. Ethical approval was obtained from the Institutional Ethics Committee(IEC). Permission was obtained from the respective departments in which the candidates were posted in.

4. Results:

Table 1: Free listing: Factors influencing perceptions and beliefs of men towards menstruation

Item	Frequency (%)	Average Rank	Salience
Myths and taboos	81.3	2.77	0.588
Lack of education	68.8	4.45	0.345
Media	68.8	2.55	0.517
Practices at home	68.8	4.45	0.296
Presence of female siblings	56.3	3.33	0.384
Lack of awareness	50	3.63	0.335
Societal factors	37.5	4.83	0.184
Religion	31.3	3	0.22
Lack of sex education	31.3	4.2	0.147
Female peers	25	4.25	0.124
Rural/urban residence	18.8	4.67	0.109
Generational gap	18.8	4.33	0.107
Male chauvinism	12.5	5.5	0.049
Presence of elderly people in the family	12.5	4	0.057
Ignorance	12.5	6.5	0.038
Relationships	6.3	4	0.016
Attitude of male peers	6.3	4	0.025

The free listing data provides a clear picture of the factors influencing men's perceptions and beliefs towards menstruation, highlighting the most and least important factors according to the respondents. "Myths and taboos" and "media" are seen as the most critical influences, while items like "attitude of male peers" and "relationships" are considered less significant. Myths and Taboos has High frequency (81.3%), low average rank (2.77), and high salience (0.588). This factor is widely recognized and considered very important. Media has High frequency (68.8%), very low average rank (2.55), and high salience (0.517) (Table1).

Table 2: Pile sorting analysis- Competence matrix: Factors influencing perceptions and beliefs of men towards menstruation

Item No.	Competence	Eigen Value & Eigen Ratio	Interpretation
1	0.596	Eigen value: 7.490 Eigen ratio: 10.905	Data exhibits strong fit to the consensus model, supporting an assertion that, despite individual differences, all respondents in the sample belong to a single culture with respect to this domain
2	0.532		
3	0.65		
4	0.674		
5	0.602		
6	0.622		
7	0.769		
8	0.653		
9	0.748		
10	0.712		
11	0.495		
12	0.823		
13	0.747		
14	0.807		
15	0.723		
16	0.699		

The Competence matrix lists the competence scores for 16 participants. These scores indicate the level of agreement or consensus among participants regarding the given domain. The competence scores range from 0.495 to 0.823, showing variability in how closely individuals align with the consensus. This matrix shows that the study data strongly fit the consensus model, indicating that participants share a similar understanding of the factors influencing men's perceptions and beliefs about menstruation. The competence matrix reveals individual variations in alignment with this consensus, while the high eigen-value and eigen ratio suggest a dominant underlying pattern in the data (Table 2).

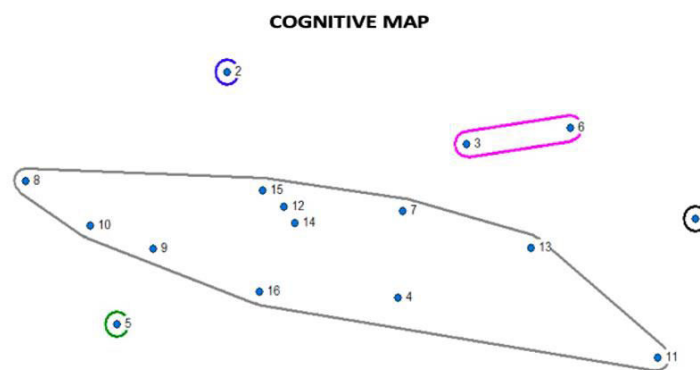


Figure 1: Cognitive map of the pile sorting analysis

The Cognitive map visually summarizes how respondents in the study grouped various factors related to men's perceptions and beliefs about menstruation. The central cluster indicates items that are perceived similarly, while the isolated items suggest unique perceptions. This map helps identify

FACTORS INFLUENCING PERCEPTIONS & BELIEFS OF MEN TOWARDS MENSTRUATION

FACTORS	EDUCATION	AWARENESS	MYTHS & BELIEFS	MEDIA	SOCIETAL FACTORS	TOTAL	RANK
EDUCATION	X	AWARENESS	MYTHS AND BELIEFS	MEDIA	SOCIETAL FACTORS	0	V
AWARENESS	AWARENESS	X	MYTHS AND BELIEFS	MEDIA	SOCIETAL FACTORS	2.5	III
MYTHS & BELIEFS	MYTHS AND BELIEFS	AWARENESS	X	MYTHS AND BELIEFS	SOCIETAL FACTORS	2	IV
MEDIA	MEDIA	MEDIA	MYTHS AND BELIEFS	X	MEDIA	3.5	I
SOCIETAL FACTORS	SOCIETAL FACTORS	SOCIETAL FACTORS	SOCIETAL FACTORS	MEDIA	X	3	II

PERCEPTIONS AND BELIEFS OF MEN TOWARDS MENSTRUATION

FACILITATORS

- Sex education through school works
- Presence of female siblings/female friend
- Good parenting
- Company and businesses
- Normalizing talking about it
- Educational status

FORCE FIELD ANALYSIS

BARRIERS

- Lack of awareness
- Cultural practices
- Gender gap
- Stigma
- Social economic status
- Practices at home

INTRODUCTION
Simplified version of Force Field Analysis model. The diagram shows the factors that facilitate or hinder men's perceptions and beliefs towards menstruation. The central box represents the Force Field Analysis model, which is a simplified version of the original model. The diagram is a hand-drawn representation of the model, showing the factors that facilitate or hinder men's perceptions and beliefs towards menstruation.

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The following questions related to attitude were put forth by the moderator;

“Men have a real advantage in not having the monthly interruption of a menstrual period. Could you reflect on this statement?”

P2(A): *“We have 1000 problems and this is not one of them, so I’m happy.”*

“Do you think women make too much of the associated minor physiological effects of menstruation?”

P1(A): *“Some women want and seek attention from others”*

P2(A): *“Some girls exaggerate and use boys for their needs”*

P4(A): *“Not all, but some girls use this as an excuse”*

P8(B): *“I have never thought of it as an exaggeration since I have seen my sister in pain during her cycles.”*

“Are you embarrassed of buying menstrual products for your family/friend?”

P6(A): *“I am not embarrassed! The surrounding makes me feel that way. I can do it for my family, but society stops me from doing so...”*

P5(B): *“There is a stereotype among non-medicos. They still feel ashamed”.*

P7(B): *Nods no... “I have a sister, female friends and my mother too. My thinking has changed”.*

“Do you think it is necessary to make someone who is menstruating feel comfortable?”

P7(A): *“Yes. I have seen my sister feel uncomfortable. We should try to understand them during that time.”*

P7(B): *“We should comfort them and not disturb them”.*

Perception:

The following are some of the questions pertaining perception that were put forth by the moderator.

“Menstruation is the expulsion of impure blood. What is your take on this?”

P5(A): *“We know now that it is not impure blood after joining MBBS”*

P8(A): *“This is absurd!(Nods in disagreement) I have a sister, my grandmother being a biology teacher, made sure that I understood what menstruation is.”*

“Do you think women should bathe as soon they wake up while menstruating?”

P5(B): *“Necessary? Yes. Compulsory? No.”*

P5(A): *“They wash their hair. They believe all this is inter-linked in the name of God”*

“Do you think women shouldn’t touch plants/flowers while menstruating?”

P1(B) *“They can! But they don’t do so in the name of religion and culture. I tried explaining but their thoughts didn’t change”*

“Do you think women shouldn’t enter the pooja room/ temple while menstruating?”

P4(B): *“This is a strong statement. In the olden days the temples were located on hills and in the forests, where animals could smell blood, so it was unsafe for women. But even in those days, women were allowed to visit temples that were on plains or those that were not on difficult terrain.”*

P8(B): *“This has to change at least from my generation”*

Do you know that most of these practices are still being followed?”

P7(B): “Change should start with me. It will be difficult to explain to non-medicos, but something is better than nothing.”

P8(B): “Now the 8 of us...We will try and bring a positive change among the rest.”

Practices:

The following are some of the questions pertaining practices that were put forth by the moderator.

“Have you ever shared chores when your mother/sister were menstruating?”

P1(A): “We would divide the work among ourselves at home.”.

“Have you ever bought menstrual products for someone?”

P5(A): “I have. I was asked not to say the name of the product loudly by the pharmacist.”.

At the end of the FGD sessions, the participants were asked if they learnt anything new from this discussion. Their responses were as follows:

Table 3: New knowledge and understanding acquired from the session

Team A	Team B
Women should be given personal space	How frequently pads should be changed. Risk of infection and Staphylococcal Toxic Shock Syndrome (STSS) if pads/tampons are not changed every few hours.
Education and literacy rate should be improved	Number of pads used on an average during menstruation
Got to know about pre-menstrual syndrome	Why it is necessary to comfort women
Got to know about other menstrual products	Importance of sharing this knowledge to the future generations.

The thematic analysis demonstrates an evolution in the perceptions of male medical students. (Figure 4)

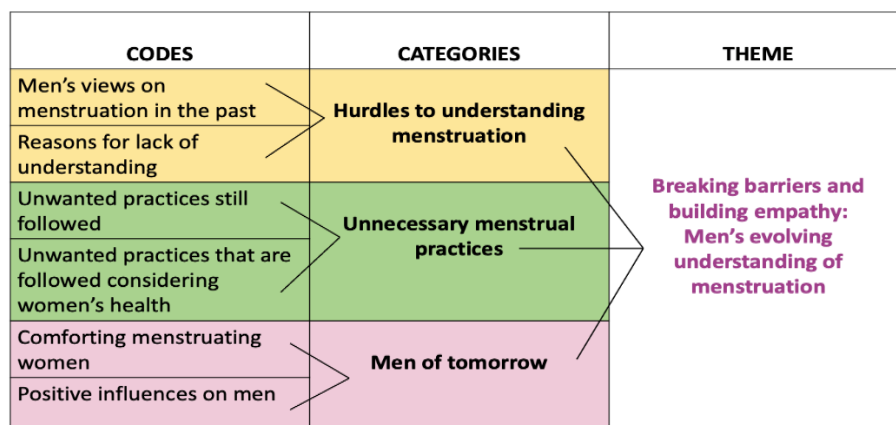


Figure 4: Thematic analysis

Network Analysis:

In the network analysis of perceptions around menstruation, the following key nodes and relationships were identified:

Knowledge Sources: Nodes include **family**, **school**, **medical education**, and **media**. Connections show that participants' understanding is largely shaped by cultural and educational contexts, with medical education offering scientific insights.

Cultural Practices and Restrictions: **Taboos** (e.g., **purity**, **avoidance of temples**), **stigmatized spaces** (public buying of products), and **familial practices** are interlinked. Participants often referenced these in relation to **personal beliefs** and **societal expectations**.

Role of healthcare professionals: The network of **empathy**, **supportive practices**, and **professional responsibility** shows a move from cultural constraints toward a more health-centric perspective, with participants recognizing their potential to influence change.

Stigma and Social Taboos: This node includes **embarrassment**, **discomfort** with open discussions, and **societal norms**, closely tied to **public perception** and **internalized stigma**. Participants navigate personal discomfort, often related to **public settings**. This network demonstrates the tension between traditional **beliefs** and the evolving **professional roles** of male medical students, balancing personal upbringing with the desire to contribute positively to menstrual health awareness.

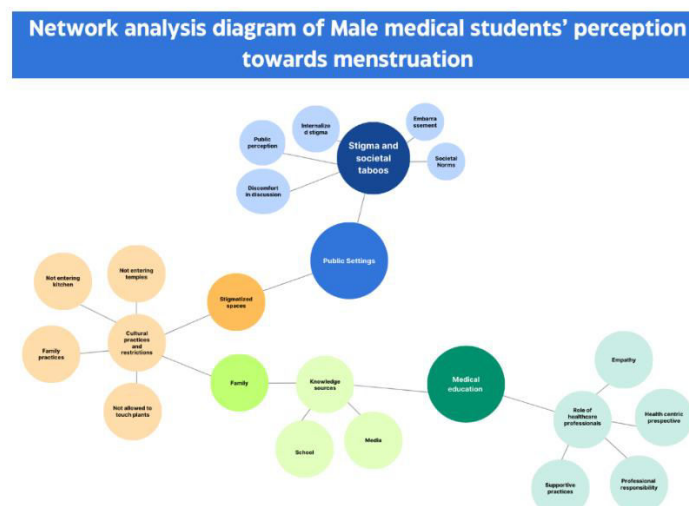


Figure 5: Network analysis

5. Discussion:

This study provides valuable insights into the beliefs and cultural practices that shape the minds of young men in understanding this natural physiological process. Many participants stated that though there are many myths about menstruation, medical education has helped them dispel such misconceptions.¹ Similar studies in India and other countries have also identified myths as a significant barrier to understanding, this shows that menstrual health education should be incorporated in the medical curriculum to create a supportive healthcare environment for women.^{2,3} Family dynamics and experiences with female peers were reported to have a significant influence on the perspectives of the participants. Participants who grew up with female siblings were open to discussing menstruation and to help with household chores when the women of the house were menstruating. Those participants that grew up in conservative settings and those without female siblings had a few stereotypical views.⁴

Research suggests that early introduction of menstrual health education can benefit both genders to overcome generational barriers to understanding and accepting menstruation as a normal physiological phenomenon.^{5,6}

Media presentations and societal taboos have also emerged as significant factors in influencing the perspectives of the participants. Most participants described the advertisements as being comical or unrealistic. They also stated that these illogical portrayals depict the society's reluctance in accepting menstruation as a normal process rather than encouraging healthy discussions.⁷ Studies have shown that media has the power to shift public perceptions, and accurate, stigma-free portrayals could help create an environment where both men and women feel comfortable discussing menstrual health, potentially reducing stigma.⁸

The study reveals a shift in the perception of the participants as they progressed in their medical training. Participants expressed their desire to support menstruating women with empathy in their future roles as healthcare professionals. Institutions can also benefit from including menstrual health education in the medical curriculum by fostering a stigma free approach, benefitting both patients and providers.^{10,11}

6. Conclusion:

This ethnographic study provides valuable insights into the perceptions and beliefs of male medical students regarding menstruation. The findings reveal that media significantly shapes their views, often more so than formal education. Establishing an environment where male medical students feel comfortable discussing menstruation openly, perhaps through workshops or discussion groups, may help dismantle these stigmatized views. Addressing these educational gaps can help dispel myths, reduce misconceptions, and foster a more supportive environment for women. Future research should expand to include diverse populations and longitudinal studies.

Limitations: The study was conducted in a specific geographic and cultural setting of Chengalpattu, Tamil Nadu therefore it may not be generalisable for regions with different cultural norms. Furthermore, the exclusive focus on medical students may not capture perceptions of men from non-medical or less-educated backgrounds.

Recommendations: Integrating comprehensive menstrual health curriculum in medical education to address myths and taboos. Conducting similar studies in different cultural settings would help better understand the perceptions of diverse population. Conducting longitudinal studies following this qualitative research would help evaluate how the perceptions of the participants evolve with education and professional exposure.

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