

# Psychological and emotional aspects of menstrual health and hygiene management: Experiences of adolescent girls from rural Assam, India

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## Abstract

The onset of menstruation is a landmark event in women's life which is known to bring many psychological and emotional changes along with physical changes. In many countries, particularly in developing and emerging countries, such as India, it also brings various challenges for women to manage menstruation hygienically. Studies have often highlighted several well-known practical and physical barriers to Menstrual Health and Hygiene Management (MHHM); e.g., lack of WASH (Water, Sanitation and Hygiene) facilities, lack of affordable menstrual absorbents, and so on. However, there are also some psychological and emotional barriers; such as, trauma of menarche, feelings of embarrassment, stress, anxiety, and shame. These psychological and emotional barriers are known to create tremendous psychological burden for millions of girls while managing their menstruation. However, these challenges and their impact on women's psychological well-being are relatively less acknowledged and ill-understood. The study was conducted in Assam, India, with a sample of 185 adolescent girls (10-19 years) who participated in 21 Focused Group Discussions (FGDs). Findings show that mostly girls were unaware about menstruation before menarche; their first encounter with menarche was traumatic. Lack of adequate guidance and counselling even after menarche result in significant mental pressure among girls. Several cultural and religious restrictions, feelings of shame and embarrassment, myths and misconceptions associated with menstruation were mentioned. The study concludes that the emotional and psychological barriers of MHHM are preventable by improving the channels of proper guidance and counselling about menstruation in a supportive environment. The study suggests some interventions for the same.

**Keywords:** Adolescent girls, Menstrual Health, Psychological and emotional barriers, Stress, Trauma

## Introduction

Menstruation is a normal bodily process, but in many societies, it is surrounded by cultural and religious restrictions as well as social taboos. As a taboo topic, there is a widespread silence around this topic in the society. Parallel to these restrictions and taboos, the poor state of Menstrual Health and Hygiene Management (MHHM) in many countries is also well-documented. India is no exception to this.

Studies have claimed that the status of MHHM is *poor* in India [1]. Understandably, this adversely affects the health and well-being of women and girls by putting them at risk for many diseases, such as, Reproductive Tract Infection (RTI), Urinary Tract Infection (UTI), and other bacterial infections [2-5].

A large body of research has shown that menstruating girls and women, particularly in lower-and-middle-income countries encounter numerous barriers to achieve an adequate level of menstrual health. The same is true for India. Usually, researchers have focused on the physical and practical

barriers of MHHM; such as unmet needs of clean water, sanitation and hygiene (WASH), and the related health needs, as faced by women and girls during menstruation [1,6-8]. However, there are also emotional and psychological aspects linked to menstruation, which, when unaddressed, become a barrier for MHHM. These psychological and emotional challenges of menstruation and MHHM have remained relatively under-researched and poorly acknowledged. These aspects include:

- Experiences of embarrassment during the management of menstruation
- Stress and anxiety due to the practical challenges
- Trauma of menarche (onset of menstruation)
- Emotional pressure due to various cultural and religious restrictions
- Fear of stigma
- Feelings of being 'unclean' or 'dirty'

In fact, scholars have claimed that in a lower-and-middle-income country, where practical challenges of MHHM are much likely to be greater, the psychological and emotional challenges of MHHM are unlikely to be considered as important [9-11]. Thus, the oversight or neglect of these aspects of MHHM is common.

Most of the earlier studies have considered secrecy and silence as one of the major reasons for the negativity around menstruation which eventually leads to the psychological barriers of MHHM. But this study aims to find out the psychological challenges of the adolescent girls from a place where the culture is not silent about menstruation; in fact, menstruation is celebrated. This study investigates the psychological and emotional barriers faced by the adolescent girls of Assam where the first menstruation of a girl is celebrated among most of the communities; and also, Assam is a place where people worship a menstruating Goddess (Kamakhya Devi). If silence or secrecy around menstruation is not the main issue then it is worth investigating to divulge the other issues that causes the psychological and emotional barriers for the girls. The paper will primarily deal with the following research question: *What are the main psychological barriers some adolescent girls have to go through in Assam, how they have dealt with these psychological barriers, and what are the effects of these barriers on their menstrual health and overall well-being?*

Studies on India have shown that the first menstruation is often traumatic among the adolescent girls due to the lack of preparedness of menarche [12,13]. A sudden bodily change about which an adolescent girl is completely unaware beforehand, may bring a sudden trauma for her. It is reported that most of the Indian women and girls lack information and proper guidance about MHHM before the onset of menstruation, and even after menstruation cycle has started. [3,14,15].

Due to lack of preparedness for menarche and insufficient knowledge and information regarding management of menstruation, and the unsupportive environment, menstruation is mainly *negatively* perceived and experienced by the adolescent girls [5,10,16-18]. This negative attitude towards menstruation is bolstered by the secrecy, shame, embarrassment, and negative representation of menarche and menstruation in the societies [12,18-20].

The practical barriers of menstruation, such as, lack of Water, Sanitation and Hygiene (WASH) facilities, unavailability, inaccessibility and unaffordability of hygienic menstrual absorbents can also cause anxiety and stress among the adolescent girls during the management of menstruation [5,15,21]. Due to the lack of sufficient clean water, lack of gender-sensitive sanitation facilities, and unavailability of hygienic menstrual absorbents, adolescent girls have to go through tremendous stress, uncertainty, embarrassment and anxiety while managing their menstruation. Often, they try to cope up with the adverse situation and try to figure out some strategies to manage their menstruation without the resources. In this way, a simple and normal biological event becomes a stressful event for the adolescent girls.

Studies indicate that the myths, misconceptions and ongoing social taboos, the cultural and religious restrictions that prevail in Indian society, create emotional pressure among the adolescent girls that has adverse implications on adolescent girls' menstrual health and reproductive health, and self-confidence and agency [22-26]. After menarche, girls are expected to be disciplined according to some societal norms; they are expected to follow certain rules and restrictions set by the society. The social conditioning manipulates the adolescent girls in such a way to believe in the societal taboos and follow the religious and cultural restrictions that the fear of stigma builds up in their minds and they are bound to behave accordingly. This instant change in their lives just after they reach puberty may create emotional pressure on the adolescent girls. The image of oneself as impure, defiled and unhealthy can erode one's self-esteem in a significant way, in particular among the vulnerable adolescents [23-25]. However, there is barely any discussions in the research community, or any proper targeted policy initiatives to tackle these psycho-emotional barriers of MHHM.

The paper argues that the psycho-emotional barriers of MHHM are equally important, and there is a need of documenting these barriers of MHHM, understand them, and attend them with due consideration while designing intervention and policy making. For, in a country such as India, where women and girls have to face enormous challenges to reach an adequate level of MHHM due to the physical barriers (e.g. lack of WASH, lack of availability, affordability and accessibility of hygienic absorbents etc.), the psychological barriers may add an extra burden to the women and girls in managing their menstruation. Secondly, the emotional and psychological barriers are entirely emotional, psychological and subjective, and any physical intervention only considering the physical barriers may not be helpful to improve the situation.

This paper has undertaken a qualitative study to understand the psychological aspects of menstruation, and the attitudes about menstruation among some adolescent girls in Assam. Considering the fact that silence or secrecy around menstruation is claimed as one of the major barriers of MHHM, it is worth investigating the psychological barriers of MHHM of the adolescent girls of a place where menstruation is celebrated, and people are not silent about menstruation. This paper investigates the *coping strategies* used by the girls to deal with the various MHHM challenges while managing their menstruation which create psycho-emotional barriers. The process of finding and applying the coping strategies is even a stressful process for the adolescent girls, and hence, the strategies that the girls adopted and their process of finding these strategies are also important to discuss while discussing the psychological barriers of MHHM.

This paper concludes that the psychological barriers of MHHM are avoidable by reinforcing social support, trying to eliminate the taboos at least within family, and inducing positive attitudes among girls and women about the phenomenon of menstruation, improving the channels of adequate guidance and counselling for girls before and after menarche regarding menstruation and MHHM. While designing menstrual health interventions, we must keep the psychological aspects of menstruation, and the emotional challenges that an adolescent may face.

## Methodology

### Study area

The study took place in four districts of Assam, a north-eastern State of India. As per the latest National Family Health Survey (NFHS-5) conducted by GOI, the State of Assam was among the Indian states which are performing poorly. Being the fourth most unhygienic state (NFHS-5) in terms of menstrual hygiene management, it is worth investigating to capture the psychological experiences among girls and women of Assam, where people are not completely silent about the topics of menstruation. Assam not only celebrates the onset of menstruation of a girl, but also worships a menstruating Goddess (Kamakhya devi). Out of 33 districts in Assam, total four districts were selected for the present study: namely, Udalguri, Bongaigaon, Dibrugarh, and Tinsukia.

### Study period

The study was carried out from April-June, 2019, and January-March, 2020.

### Study population

**Inclusion criterion:** Adolescent girls (10-19 years) both from rural and urban areas were included in this study. Inclusion of adolescent girls is important because studies in India claimed that the onset of menstruation is often traumatic and stressful specifically for the adolescent girls due to lack of proper guidance and adequate knowledge about MHHM which induces negativity about menstruation among them [5,10,12,13].

**Exclusion criteria:** Any girl under 10 and above 19 years were excluded from the study. For, adolescent girls are the most vulnerable population in terms of constant physical and psychological changes, and, with increasing age, the adult women get familiar with the biological process of menstruation, its management, and other reproductive changes.

### Sample size and study sites

The study involved a total of 153 adolescent girls participated in Focused Group Discussions (FGDs). Samples were collected through door-to-door visits in selected villages. For each district, the study has identified at least 4-5 villages for data collection. In Assam, more than 82 percent of population lives in the rural areas, and therefore, for a holistic understanding of the situation, this study chose rural population.

### Informed consent

The girls were informed about the purpose of the study and after building up a rapport, assent was obtained from them. Moreover, parents were approached beforehand to request their approval for their daughters to participate in the FGDs. Written informed

consent was obtained from the parents. An effort was made to facilitate the environment where girls were comfortable to talk about the issue of menstruation.

### FGDs

Participants were given the following topics to discuss among them, and the moderator helped to direct the discussion within the purview of our research:

- The participant's preparedness for menarche or the onset of menstruation
- Experiences of first menstruation
- Experiences of subsequent menstruations
- Experiences of management of menstruation: E.g. changing of menstrual absorbents, hand wash etc.
- Experiences of physical challenges, if any: E.g. lack of WASH facilities, availability of hygienic absorbents, disposal facilities etc.
- Identifying coping strategies to overcome the challenges
- The process of figuring out the coping strategies to deal with menstruation
- Participant's own perception and attitude towards menstruation and MHHM
- Experience of restrictions due to social and religious or cultural norms

The aim was to capture participants' raw experiences, positive or negative, about menstruation, and management of menstruation. The FGDs were moderated mostly by a female community member of the village where the FGDs took place. The presence of the local female member helped to put the girls at ease and to join the discussion. The average number of participants in each FGD was 7, and the average duration of each FGD was 1 hour to 1.5 hours. The researcher observed the FGDs, and took notes. At the end of the FGDs, the points were discussed and verified with the moderator for better understanding of the discussion. The audio of all the FGDs were recorded, along with the running notes, for future references. The researcher noted the body language of the participants also. The discussions were transcribed verbatim from local language into English.

### Analysis

The data were analysed using *thematic content analysis* [27]. Thematic content analysis is a useful approach when the research tries to find out something about people's views, opinions, experiences or values, knowledge from a set of qualitative data; such as, interview transcripts, and FGDs [28]. This method enables the researcher to identify themes, patterns, and relationships to answer the related research question. Thematic analysis involves a six-step process [29]. This study employs an inductive or 'bottom up' way, and a semantic approach to identify the themes.

### Findings and Interpretation of Data

By following the six-step process of thematic analysis, the following themes have been developed from the FGD excerpts to analyse the data:

- Mental preparedness/unpreparedness before menarche
- Experiences of first menstruation
- Experiences of subsequent menstruation, physical challenges and coping strategies
- Perception and attitudes towards menstruation and MHM, and
- Influences of social, cultural and religious norms and restrictions

#### **Mental preparedness/ unpreparedness before menarche**

It is observed that the adolescent girls are mostly unaware about the phenomenon of menstruation before menarche. Data shows that 34.66 percent were completely unaware about menstruation while 65.34 percent knew very little about menstruation before menarche. Those who knew very little about menstruation, reported that they only knew about the fact that menstruation is something that is related to girls and women, and it happens every month (although they are not aware about what exactly happens), and during this time, a woman has to face several challenges. Like many other girls, during FDGs, we can consider the narratives of a participant:

*I had no idea about menstruation and how it happens before I started menstruating. All I knew is that it is something when women have to go through tough time. I saw my mother that on certain days she did not enter into the kitchen and cook, did not worship, did not sleep on the bed, and even did not allow us to touch her. When I asked her about this, she did not give any explanation; rather she used to say a woman's life is not easy, you will come to know (P50, a 15-year-old, during FGD).*

Similar kind of statements have been collected from another 16 adolescent girls. From the above narratives, it can be seen that though they had other women in the household, their mothers or sisters, no one prepared them, no one armed them with proper information about menstruation before menarche. We can see that only the restrictions were visible to the girl, along with the silent message of accepting these as part of a women's life, without any substantial information about what menstruation is, and how it needs to be managed. It also gives us a deep insight to unfold a woman's attitudes and behaviour towards her own health and lifestyle based on the socio-cultural structure around her. From the narratives, it can be assumed that her mother accepts a lifestyle for her own as the way the social structure of gender determines the standard norms for a woman; in fact, she also expects that to be followed by her daughter. Talking about menstruation openly and frankly (even with your own daughter) is a stigma in the society which is also visible in the narratives as when the daughter asked her mother about it, she simply did not give any explanation.

**Perception of menstruation as a disease:** A very few girls (0.79 percent) reported that they thought that menstruation is a disease before they started menstruating. Although the number of the girls who thought menstruation is a disease is very less, yet this is something alarming, and worth investigating that at what kind of situation, or environment, a normal bodily process can be perceived as a disease. As per the narratives, this is because the girls observed their elder sisters crying due abdominal pain during certain days every month. Even among them, some girls reported that they still consider menstruation is nothing but a disease because during those

days they have to go through a number of physical discomforts. As for instance, the following narratives can be considered:

*I feel menstruation is a kind of disease because every month during those days when blood is coming out very frequently, I feel very weak, I feel extreme pain in the lower part of my stomach. But, as you know, you cannot do anything about it as it is a girls' problem (P18, a 13-year-old, during FDGs).*

A normal biological phenomenon is perceived as a disease. This may happen due to sheer ignorance. The experience of the first menstruation is undoubtedly a new experience for an adolescent that changes her life. In this time, all she needs is psychological and physical support from her family and friends who can guide her in a proper and adequate way. But, when the girl lacks such support and information, she tries to learn about it by observing others and whenever she learns from her observation has become adequate for her. Perceiving menstruation which is a normal biological process may also the result of this lack of proper support and adequate information. Moreover, a sense of helplessness is also visible in the narratives as the girl thought that discomforts and pain are extremely private and must be handled only by the girl herself without sharing about it with anybody.

#### **Source of knowledge about menstruation before reaching menarche:**

It is observed that those who knew about menstruation before menarche, mostly received that information from their friends who have already experienced menstruation. Mothers came into the picture only after the girl reached her menarche. The friends were seldom much older or more matured than themselves. Therefore, the quality or the kind of information and knowledge that they gathered from their peer-group remains questionable. On such cases, the understanding about menstruation may be very vague and inadequate. As one of the girls stated as follows:

*My best friend got her first periods before me, so I am lucky (smiles...). I got know from her about what is it (menstruation) before I got my first periods. She said having periods is really painful... (participant).*

*What did she exactly tell you about menstruation? Can you elaborate? (Researcher)*

*She said when you get your periods, blood comes out of your vagina just like urine. She also said that the blood must go out of our body to purify our body, but the process is painful (participant). (P21, a 13-year-old, during FDGs).*

This shows that inadequate and vague information is passed on among girls by each other as they do not have adequate source of information and guidance. Girls are usually curious to know about menstruation when they come to know that one of their friends has gone through this. As they cannot ask their mothers (as mothers are reluctant about this information sharing before menarche), they try to know about menstruation (which is a very surprising experience for them) from their friends who had already experienced it. Once again, it seems that lack of proper guidance and information lead the girls to driven by vague and inadequate knowledge about menstruation.

**Role of culture of celebrating first menstruation in preparing girls before menarche:** The research studied a population in which menstruation is culturally celebrated and also worshipped unlike



many other places in India, where talking about menstruation is even a taboo. For this reason, this study aimed to investigate whether this culture of celebration of first menstruation has played any role on preparing the adolescent girls for menarche before they reach menarche. Studies have shown that the cultural celebration of menstruation among the Assamese community is mainly served the purpose of following the rituals and customs through which they announce the pubertal status of the girl [30]. Despite all of the adolescent girls in our study population were familiar with this celebration of first menstruation, many did not have any idea about what menstruation is all about before menarche. When asked about their learnings from the celebration, girls were simply stating about the rituals, and customs followed during the celebration which confirms the fact. Moreover, it is revealed that the elders did not give them any information about the physiology of menstruation, or about management of menstruation during this celebration. For instance, the following narratives can be considered:

*Before your first menstruation started, did you attend any Tuloni Biya? (Researcher)*

*Yes, of course. My best friend's Tuloni Biya was celebrated before me (Participant).*

*How was the celebration? Did you come to know what menstruation is, after this celebration? Did you ask your friend about it? (Researcher)*

*The celebration was nice. We all enjoyed a lot. But I did not know what menstruation is at that time, she just said when blood will come from my vagina, my Tuloni Biya will also be celebrated... I was scared after hearing about this, and had no idea what will happen (Participant).*

*What did you learn from this celebration? (Researcher)*

*I learned that when a girl got her first menstruation, she has to follow a lot of rituals, her family keep her in a corner for few days, and then celebrates with feast (Participant).*

*Is that all you learned from your friend's Tuloni Biya? (Researcher)*

*Yes (Participant). (P2, 14-year-old during FGDs).*

Similar kind of narratives were collected from another 13 girls who simply stated about the rituals and customs those were followed during menstruation when they asked about their learnings from the celebration. This shows that although this community is not silent about menstruation, and, in addition have a wonderful celebration of womanhood, yet it seems that this celebration does not really contribute in preparing the adolescent girls for menarche. Even being a part of this celebration, most of the girls were still did not have any adequate knowledge about menstruation before their menarche; in fact, they remained uncertain and surrounded with the feelings of fear which affected their psychological well-being. This opens up another facet of a society where menstruation is celebrated yet may be still perceived as a taboo.

### **Experiences of first menstruation**

For most of the girls, their experience of first menstruation was very stressful and traumatic.

**Feeling scared and embarrassed:** A large number of respondents (74 percent) reported that they were very *scared and embarrassed* on occurrence of their first menstruation. To quote the words of one participant:

*I had no idea what is happening to me when I saw blood is coming out of my vagina. I went to toilet when I discovered this, I could not come out of the latrine almost for one hour. I was very scared. I did not know what should I do (P23, 16-year-old during FGDs).*

Similar narratives have been collected from another 21 girls. The experience of first menstruation is often very traumatic for the girls. This is mostly due to lack of awareness and adequate guidance. Girls are simply clueless what is happening with their body and what should they do with this sudden bodily change. At that very juncture, they are emotionally helpless due to fear, embarrassment, guilt, and anxiety. A normal bodily phenomenon become a sudden shock for them. The narratives show the tremendous stress and anxiety of an early teen when she suddenly discovers an unusual physical change in her body about which she is completely unaware.

It is usually very natural that whenever a child feels scared, the first person they approach, is their mother although sometimes they may also approach the person with whom they feel comfortable.

Although it was observed that the mothers' role is very negligent before a girl reaches her menarche among our study population, yet, almost all girls (98 percent) reported that when they started their first menstruation, the first person they went to was their mother. This may be due to that their mother was the nearest and available person at that time to communicate with. Very few girls said that they informed to teacher (female) about their first menstruation because at that time they were at school. In this context, the role of the female teacher is also considerable because at that moment that particular teacher had the sole responsibility to console the girl with compassion and make her understand that menstruation is as normal as any other bodily phenomena. A teacher's role in this regard can have significant implications for the girl's psychological and emotional well-being vis-a-vis menstruation. As reported by the girls, mostly the teachers advised girls to go home when they start menstruating at school. During FGD, the following narratives were stated:

*I saw bloodstains on my friend's skirt. I knew that it is period blood as I already had my first periods a year ago. I told her, and the moment she came to know she started crying. The boys were also making fun of her. I informed to our class teacher and thank God the teacher allowed my friend to go home immediately (P41, 15-year-old during FGDs).*

Similar kind of narratives were collected from 8 more girls. It is evident that on their first menstruation, most of the girls had to experience stress and anxiety. For many, it was an embarrassing and helpless situation to deal with. The role of the teachers at school or the role of the mothers at home was negligible to boost the morale of the girls so that they could smoothly deal with the onset of menstruation. On top of that the teasing from the male peers at school makes it a more difficult and embarrassing situation for the girls. Often on such occasion, they may feel guilty about having even a normal biological phenomenon. In our society, usually males are not trained to sensitize about menstruation; even in schools nothing has been taught to the boys about the normalcy of the physiological phenomenon of menstruation. As the society perceives it, most of the males also perceive it as a stigma.

**Experience of Tuloni Biya (celebration of first menstruation):** Most (84 percent) of our study participants reported that their first menstruation was celebrated with a feast among the community, and

all of them were happy and positive about this celebration. In Assam, the celebration of first menstruation is known as *Tuloni Biya*, which is performed to commensurate the attainment of womanhood status to a girl [30]. The term “*Tuloni*” comes from the Assamese word “*tula*” or “*tuli lua*”; meaning to be lifted or elevated and “*Biya*” means marriage. Therefore, *Tuloni Biya* signifies the upgradation from childhood to womanhood. Historically this celebration was related to child marriage; however, the modern-day celebration of *Tuloni Biya* is nothing but an announcement of the pubertal status of a girl among community members by following certain rituals [30]. As per the rituals of *Tuloni Biya*, when a girl attained puberty, she would go through a period of isolation. She used to be confined in a room, where a special bed spread with hay was laid for her. She would not be allowed to touch anything nor touched by anyone for seven days. This was because the girl would be considered *chua*, meaning impure [31]. For the first three days, she would be debarred from eating any solid cooked food. In these days, fruits and uncooked grams and pulses, milk and milk products were offered to her. On the fourth day, she would be bathed with *maah-holodi*, i.e., gram and turmeric with proper wedding rituals. As for instance, we may understand this with the help of the following narratives:

*Did your first menstruation (Tuloni Biya) was celebrated?*  
(Researcher)

*Yes, of course it was celebrated* (Participant)

*What were your experiences from the day you found out your first period blood to the day of celebration? Can you elaborate.* (Researcher)

*When I found blood for the first time, I did not know that it is menstruation although I had heard that when blood will come from my vagina, it's the sign of Tuloni Biya. Immediately, I informed my mother as I was scared. My mother locked me in a room, and called my aunts, and ladies from the neighbour. Then, I was given a pair of Mekhela-Chador (traditional Assamese attire) to wear, and a bed made with hay to sleep in that room for four days. No male members were allowed to enter in that room, neither I was allowed to go out. On that day, nothing was given to me to eat till the evening, and in the evening, I was given some fruits to eat. From next day on up to fourth day, I was allowed to eat fruits and uncooked beans. On the fourth day, after the bath, I got new clothes to wear.* (Participant)

*How did you feel during those four days?* (Researcher)

*Terrible! Specially, when I was not allowed to take bath during these three days.*

*Oh! You were not even allowed to take bath? And, could you change your menstrual absorbents? How could you managed to go to the toilet?*  
(Researcher)

*Yes, I was not allowed to take bath during the first three days. I changed my menstrual absorbents early in the morning, also used the toilet at that time. It feels like I am in a jail* (Participant)

*So, when was the celebration? What were your experiences? How did you feel about this celebration?* (Researcher)

*On the seventh day, it was celebrated. I was very happy. I was dressed up like a bride, everybody who came, brought gifts for me. Everybody gave blessings to me. I was getting lots of attention that day, so I was happy (smiles...). There was feast arranged by my parents. All my relatives, my cousins came to our house for this occasion and we had a great time* (Participant)

Regarding the rituals and celebration, similar narratives were collected from almost all the participants; and all of them reported that they were happy about the celebration although they had to go through several restrictions, and rituals which made them uncomfortable just before the day of celebration. From the narratives, it seems the experiences of the very first encounter with menstruation was surrounded with fear and anxiety. It also seems that the journey from the day the adolescent girl encounter with her first menstruation to the day of the celebration of her first menstruation was also stressful. But, probably the grand celebration exclusively for her first menstruation, and the opportunity to be the centre of attention for all of her family members made the girls feel happy and positive about this culture of celebration.

### **Experiences of subsequent menstruation, challenges, and coping strategies**

Just as the first experience of menstruation was challenging for the adolescent girls, the experiences of subsequent menstruation were challenging too.

**Guidance and information after menarche:** It was observed that information about menstruation and MHHM was usually given to the girls by their mothers or elder sisters *once they start menstruating*.

In our study, we found that although before a girl reaches her menarche, mothers were reluctant about information sharing and guiding their daughter regarding menstruation and MHHM, yet, once the girls had their first menstruation, most of them (77 percent), had received information and guidance from their mothers. But, important to note here is that in most of the cases, the information they have received from their mothers were nothing but the old traditional advices such as a list of dos' and do not's. This shows that the mothers also may not be aware of the adequate MHHM measures or they may be too much influenced by the taboos and societal customs. This may be the reason why most of the girls had a very confusing and vague understanding about the physiology of menstruation as they may not have received even the rudimentary information about the physiology of menstruation. When asked about the physiology of menstruation (e.g. the source of menstrual blood, the reason of menstruation etc.), the girls gave some vague and unclear descriptions. Moreover, some girls feel inferior than boys because they have to go through menstrual cycle and restrict themselves in many cases during menstruation. This indicates to another facet of their psychological well-being in terms of lack of self-esteem and self-valuation. As for instance, we may consider the following narratives:

*The blood comes out of the stomach through the vagina. God made us (girls) like this. We have to go through this (menstruation) every month. Boys are lucky, they can do whatever they want* (P32, 12-year-old during FGDs).

Similar narratives were collected from another 9 girls. Along with an unclear and vague understanding about the physiology of menstruation, the above narratives also show that the girl has gone through inferiority complex because of a normal bodily process. Due to the restrictions imposed on her during her menstrual cycle, she felt that it is her fault that she is having menstruation. This shows the mental states of the girls and their immense psychological pressure which is eventually inducing negativity towards their own bodily process as well as their identity and autonomy as a woman.

**Challenges of managing menstruation, coping strategies and, stress, fear and anxiety:** Shame and fear were the factors associated with the management of menstruation. The girls reported that they have to go through a constant fear of leakage of the menstrual absorbent specifically when they are at school. The girls also informed that leaking of menstrual absorbent is a shameful occurrence for them which leads to embarrassment. The girls perceive it very shameful and embarrassing if by any chance their menstrual fluid leaks and spoils their clothes. During FGDs:

*Once I had my periods at school and I came to know only when my skirt is soiled. Everybody was laughing at me. It was so embarrassing. I could not come to the school for one week due to shame* (P48, 14-year-old during FGDs).

This shows that management of menstruation is a stressful process for many girls, specifically, when there are physical barriers of MHM. When the girls need to change their menstrual absorbents and they do not have the facilities to manage so, they may come under tremendous stress and anxiety of leaking their menstrual fluid which they considered as a shameful event.

Most of the girls (79 percent) reported various problems and difficulties in disposing or washing their menstrual absorbents. It was also reported that as the girls have to face various physical barriers of MHM such as, lack of WASH facilities, or, lack of accessibility of hygienic absorbents, or, disposal facilities, eventually they started to cope with the situation and try to manage their menstruation in whatever possible way they can manage. The act of washing or disposing their menstrual absorbent is a stressful act for many girls. Those who use clothes as menstrual absorbent said that they had to wash their menstrual cloth early in the morning or at night so that nobody can see them. They dried these clothes in a secluded area away from people's eye. The girls who use sanitary napkins as menstrual absorbent reported that they first wash the used pad with water and then wrap it up and bury it or burn it. All girls reported that they feel extremely embarrassed if someone watched them disposing off or washing their menstrual absorbent. A constant fear of exposing their menstrual status in front of someone else, or, the continuous stress and anxiety of seen by somebody while disposing, or, washing their menstrual absorbents creates another level of challenges for the girls which is often overlooked. During FGDs, one participant stated:

*I have to be very cautious when I go for changing my pad. It's really stressful you know. First, I need to make sure that my father and brothers are not at home, and then I have to hide the pad to take it to the bathroom. After changing, I have to first make sure no one is around so that I can throw the pad* (P37, 16-year-old during FGDs).

Menstruation is stressful for many girls due to the physical and practical challenges they have to go through. Lack of water sources and infrastructure, and availability, accessibility and affordability of hygienic menstrual absorbents make them anxious about the normal bodily process. They had to mentally struggle to figure out the coping strategies to deal with their menstruation. During interview, one girl said:

*We do not have a pakka (cement structure) bathroom in our home. There is even no door which you can lock from inside in our bathroom. So, I am always worried whenever I take bath... I usually take bath very early in the morning* (participant)

*And, what about water? How do you manage the water to take bath?* (Researcher)

*We have to bring water from the pond which is located at the backside of my home. I cannot get so much of water for washing and taking bath... it is difficult to go the pond every time, especially at night. So, whatever water I get, I manage with that... sometimes I really feel why we are so poor... why being a girl is so difficult* (participant). (P12, 13-year-old, FGDs).

While talking about menstrual absorbents they use, one girl during interview said:

*When I go to school, I use Whisper (a Brand of sanitary napkins), but when I am at home, I use cloth* (participant).

*Why so?* (Researcher).

*Because pads are so expensive you know. And, these not available also near to my house. So, when I am at home, I do not waste pads... I cannot... I have to think for my next periods also* (participant). (P34, 15-year-old, FGDs).

The girls have somehow tried to adjust with the situation and this may be because they have no other choice. They had gone through tremendous stress and anxiety due to the challenges, and to figure out their coping strategies to manage their menstruation which may eventually lead to negative feelings about menstruation.

### Perceptions and attitudes towards menstruation

Although girls had negative feelings about menstruation due to the challenges they face, yet the attitude towards menstruation among the girls were not always negative. Even though few girls (as mentioned above) perceive menstruation as a disease, yet most (73 percent) of the girls consider it as a normal bodily phenomenon; and, a few (14 percent) perceive menstruation as a gift given by God. But, the perceptions and attitude towards menstruation is still an important issue to be discussed as it may reveal many other psychological aspects among girls about menstruation.

**Perception as the ability to be fertile:** Some girls (36 percent) perceive menstruation as an upgradation to womanhood; they know that it is somewhat related to fertility. Although they are correct about the physiological link, yet, perceiving menstruation as a capability to be fertile may also induce certain wrong messages into their minds. They may think that fertility is a capability which can facilitate a girl or a woman to achieve a respectable status in the society. In that sense, even though adolescent girls may perceive menstruation very positively, yet, in a very negative manner. For, they may perceive menstruation just as an ability which society sanctions, and, not as a normal bodily phenomenon which is crucial for the good health of a woman. One girl during interview said:

*In our community, the first menstruation is celebrated. Neighbours, relatives and friends all are invited to the occasion. It is a grand celebration... they said now I become a woman and it is a big thing* (participant).

*Did your first menstruation celebrated? Were you happy about that?* (Researcher).

*Yes, of course. Although I was scared when I start menstruating for the first time, still I was very happy during the celebration because everybody made me feel so special that day... I got so many gifts also (smiles)...* (participant). (P44, 17-year-old, FGDs).

The positive attitude towards menstruation among some girls may be due to the celebration; it is may be due to the feeling that



menstruation can give them the ability to be fertile which they were told as something very worthy. This makes them to feel happy about menstruation. But, this positivity towards menstruation as an ability (which society sanctions as something worthy and valuable) may also encourage the girl to believe that she is worthy only if she is fertile. This kind of attitude may further become the causes of anxiety and depression for the girl, if in any case, the girl cannot be able to conceive in future.

### **Influences of the social, cultural and religious restrictions**

Both positive and negative feelings towards menstruation were observed among the girls. Although some of them (as mentioned above) are positive about menstruation as they perceive menstruation as an ability to be fertile, yet their feelings about menstruation were negative due to the imposed rules and restrictions that menarche brought to their lives.

**Feeling of guilt and fear:** As we know various myths, misconceptions, taboos and restrictions prevail in Indian societies surrounding menstruation and, these can also affect adolescent girls' psychological well-being. One girl during FGDs stated:

*Once I went to a temple with my family... there I got my periods. I felt so guilt. I thought now God will curse me... my mother also scolded me... she said this may bring bad luck... I was very scared. (P39, 12-year-old, FGD).*

Most of the girls (63 percent) were unhappy about the imposed restrictions and the concept of perceiving a menstruating girl as dirty and impure. But still, they follow the restrictions because of the fear of being the reason of bringing bad luck to their family. This shows the girls had to go through constant fear and guilt due to the restrictions imposed on them during menstruation.

**Anxiety about consequences:** When asked about why they follow the restrictions despite not wanting to, many girls said that they are anxious about the consequences of not following the restrictions. During FGDs, one participant said:

*If I still do the things which I have been told not to do during my periods and because of that if something bad happens to my family, I can never forgive myself (participant).*

*Why do you think so? (moderator).*

*Because I have heard many stories from my grandmother how bad things can happen to you and your family if you do not follow these restrictions (participant).*

*Do you believe those stories? (moderator)*

*How can I not believe? I saw one woman in my village itself. My grandmother said she always cooked for husband even though she was menstruating... and, what happened to her do you know? (participant).*

*What? (moderator)*

*Her husband had a very serious accident... (participant). (P22, 14-year-old, FGDs).*

It is evident that due to the social, cultural and religious restrictions, and the myths and taboos prevail in the societies, the adolescent girls have to go through guilt, fear and anxiety which creates an additional emotional pressure on their psychological well-being.

## **Discussion**

As mentioned in the introduction, there are a few studies which have tried to explore the psychological challenges of menstruation (India specific) that the girls and women have to go through. Our study is an attempt to understand adolescent girls' perspectives concerning menstruation and the psychological and emotional challenges they face while managing their menstruation.

The findings of this study show that the onset of menstruation was a stressful and traumatic experience for many girls as they were unaware about it. Similar findings have been observed by other studies in other parts of India [13,32,33]. Lack of knowledge and information about menstruation before menarche and lack of guidance about the importance of hygienic management of menstruation after menarche are the main reasons of this stress and trauma. Previous studies also show that lack of information and preparedness around menarche and menstruation is one of the major reasons of the negative feelings (e.g. anxiety, fear, shame, stress and embarrassment) among the adolescent girls [3,20]. But, in the present study it is found out that although before menarche girls were barely informed about menstruation, yet after menarche, they have been given guidance and information regarding the management of menstruation; but those information and guidance were basically about the traditional dos and do nots during menstruation. Girls were advised to follow those restrictions during their menstrual cycle; moreover, the type of menstrual absorbents to be used, disposal methods, diet etc. all were advised considering the taboos and socio-religious norms. No information about the physiology of menstruation and the hygienic management of menstruation were given to the girls based on scientific norms. In the previous studies this kind of findings were not revealed.

It was also found out that the information and guidance seem insufficient to cater to the psychological and emotional challenges of the adolescent girls as the study findings show that girls were worried and anxious at every step of their menstruation whether be it during menarche or even after menarche. It is important to mention here that although other studies have claimed that girls have some inadequate and vague knowledge about menstruation and MHHM, and, one of the reasons of this vague knowledge may be due to their faulty source of information, yet those studies have not further investigated about the psychological consequences of these vague information. In this study, it is investigated and it is found that due to this vague information alongside the strict rules and restrictions associated with the management of menstruation creates extra burden of anxiety and stress on the girls.

The menstrual management in school premises was equally stressful for the girls. The lack of supportive environment from the teachers and fear of leaking of menstrual fluid and the stress about subsequent embarrassment made the girls feel uncomfortable in the school. The physical challenges of menstrual management faced by the adolescent girls in the school premises has been also observed in the studies of other parts of India, Kenya, and Tanzania [9,34,35]. But, the psychological and emotional challenges of managing menstruation in the school premises have been ignored in the earlier studies.

This study found that due to the number of taboos, myths and restrictions encircling menstruation evokes many negative feelings towards this normal bodily phenomenon called menstruation. The



emotional pressure of following the religious and cultural restrictions and the fear of negative consequences if they failed to follow those restrictions induce negativity towards menstruation among the adolescent girls. The act of segregating the menstruating girls and women and perceiving them as impure and dirty, restricting them in various daily activities (e.g. restrictions in cooking, worshipping, touching household things and any other person etc.) make the women and girls feel inferior and instil a negatively influenced self-image. Therefore, it has serious psychological impact on girls and women. Earlier studies have not paid much attention to psychological impact on girls and women due to taboos, myths and restrictions; the studies were focused on the adverse impact of taboos, myths and restrictions on women's menstrual health. The adverse impact of myths, taboos, and the social, cultural and religious restrictions on adolescent girls' menstrual health has been observed by other studies [22-24,36].

In this study, it is revealed that the onset of menstruation is culturally celebrated among the Assamese community. Although girls were happy with the fact that their first menstruation was celebrated, yet when it came to the discussion about the physiology of menstruation, experiences of menarche, experiences of managing menstruation, their personal hygiene practices etc., girls felt shy and embarrassed to talk about it. Due to the celebration of menarche, some girls have somewhat a positive attitude towards menstruation, but their reason of this positive perception of menstruation is mostly because of the fertility power they gained after menarche which is induced in their minds as something very worthy.

Therefore, it is evident that the feelings of fear and embarrassment of exposing the menstrual status in front of someone else, the stress of figuring out the strategies to arrange water and sanitary protection for their menstruation, the feelings of anxiety regarding the disposal of menstrual absorbents, the feelings of depression and constant fear about negative consequences of not following the cultural and religious norms, all these psychological barriers among adolescent girls are crucial part of their menstrual management. These psychological barriers also need proper attention in the policy initiatives and intervention designing process.

### Recommendations

Menstrual Health and Hygiene Management is a crucial aspect of adolescent health and well-being. Any intervention regarding this should be multi-faceted and should be equipped to cater both the physical as well as psychological and emotional barriers of MHHM. The study suggests following for that:

- Counselling about menstruation and MHHM should be provided for adolescent girls at least in all the Government schools. If the information about the physiological reasons of menstruation and the importance of its hygienic management are provided before puberty, then girls can have at least a basic understanding of the changes in their body and will be prepared for it beforehand.
- The role of the mothers can be very crucial to prepare their daughters for menarche and to guide them in managing their menstrual periods. The unnecessary stress, fear, embarrassment and anxiety among the adolescent girls can be alleviated if mothers can cater them with emotional support and assurance that menstruation is a normal bodily process. For that, mothers

also need to educate themselves and equip themselves with adequate information.

- Another stakeholder which can play a vital role in this context is the society or the community. Menstruation is a sensitive issue in our society which is surrounded by secrecy, shame, and embarrassment. To educate the young girls in such a topic, community level engagement is necessary. As we have mentioned, among our study participants, the first menstruation was celebrated in their community. This cultural practice is undoubtedly a great example to break the tip of the iceberg of the traditional silence and secrecy around menstruation and puberty. This cultural practice of celebrating menstruation can be used as an intervention to educate girls about menstruation and MHHM, or at least can create the adequate platform for initializing open discussion on menstruation and MHHM. Such steps will boost up the morale of the adolescent girls and can contribute in reducing their psychological distress associated with menstruation.
- Due consideration of the psychological and emotional challenges of menstruation and MHHM within the policy initiatives.

### Conclusion

This study unfolds many serious concerns about menstrual health and hygiene management among adolescent girls. The psychological and emotional challenges of managing menstruation are usually perceived as insignificant; but these challenges can have a robust effect on the hygienic management of menstruation of the girls. However, these psychological barriers of menstrual management are preventable and remediable with minimum effort. The age-old socio-cultural myths, taboos, beliefs and practices cannot be changed overnight; executing change in attitude is not an easy task for any health intervention. Instead of entangling in myths and traditional taboos, it is important to figure out ways to spread awareness about safe and hygienic management of menstruation. Aligning MHHM awareness drives with the local and community culture can be great idea to communicate about puberty and menstruation among adolescent girls. Strategies are needed to be developed with innovative ways to improve the communication between the adolescent girls and their parents, and teachers. Enabling socio-cultural environment for discussion of menstruation-related problems frankly instead of going through stress and anxiety is a must-have requirement. An ideal supportive society would be such which can cater an environment where the adolescent girls are much comfortable to talk about their menstrual experiences and share their challenges of management of menstruation.

### References

1. Sarkar I, Dobe M, Dasgupta A, Basu R, Shahbabu B. Determinants of menstrual hygiene among school going adolescent girls in a rural area of West Bengal. *J Fam Med Prim Care*. 2017;6:583-8.
2. Kamath R, Ghosh D, Lena A, Chandrasekaran. A study on knowledge and practices regarding menstrual hygiene among rural and urban adolescent girls in Udupi Taluk, Manipal, India. *Global Journal of Medicine and Public Health*. 2013;2(4).
3. Thakur H, Aronsson A, Bansode S, Stalsby Lundborg C, Dalvie S, Faxelid E. Knowledge, Practices, and Restrictions Related to Menstruation among Young Women from Low Socioeconomic Community in Mumbai, India. *Front Public Health*. 2014 Jul 3;2:72.

4. Paria B, Bhattacharyya A, Das S. A Comparative Study on Menstrual Hygiene among Urban and Rural Adolescent Girls of West Bengal. *J Fam Med Prim Care*. 2014;3(4):413-7.
5. Mitra A, Mahajan RG, Rangoonwala M, Kadri AM, Amin C, Gajera K. Awareness and Practices on Menstrual Hygiene Amongst Adolescent Girls in Rajkot District of Gujarat. *Heal J*. 2015;6(2):61-7.
6. van Eijk AM, Sivakami M, Thakkar MB, Bauman A, Laserson KF, Coates S, et al. Menstrual hygiene management among adolescent girls in India: a systematic review and meta-analysis. *BMJ Open*. 2016 Mar 2;6(3):e010290.
7. Kuhlmann AS, Henry K, Wall LL. Menstrual Hygiene Management in Resource-Poor Countries. *Obstet Gynecol Surv*. 2017 Jun;72(6):356-76.
8. Kaur R, Kaur K, Kaur R. Menstrual Hygiene, Management, and Waste Disposal: Practices and Challenges Faced by Girls/Women of Developing Countries. *Journal of Environment and Public Health*. 2018;2018:1730964.
9. Sommer M. Where the education system and women's bodies collide: The social and health impact of girls' experiences of menstruation and schooling in Tanzania. *J Adolesc*. 2010 Aug;33(4):521-9.
10. McMahon SA, Winch PJ, Caruso BA, Obure AF, Ogutu EA, Ochari IA, et al. 'The girl with her period is the one to hang her head' Reflections on menstrual management among schoolgirls in rural Kenya. *BMC Int Health Hum Rights*. 2011 Jun 16;11:7.
11. Crichton J, Okal J, Kabiru CW, Zulu EM. Emotional and psychosocial aspects of menstrual poverty in resource-poor settings: a qualitative study of the experiences of adolescent girls in an informal settlement in Nairobi. *Health Care Women Int*. 2013 Oct;34(10):891-916.
12. Burrows A, Johnson S. 'Girls' experiences of menarche and menstruation', *Journal of Reproductive and Infant Psychology*. 2005;23(3):235-49.
13. Khanna A, Goyal RS, Bhawsar R. Menstrual practices and reproductive problems: a study of adolescent girls in Rajasthan. *Journal of Health Management*. 2005 Apr;7(1):91-107.
14. Anand E, Singh J, Unisa S. Menstrual hygiene practices and its association with reproductive tract infections and abnormal vaginal discharge among women in India. *Sex Reprod Healthc*. 2015 Dec;6(4):249-54.
15. Phillips-Howard PA, Caruso B, Torondel B, Zulaika G, Sahin M, Sommer M. Menstrual hygiene management among adolescent schoolgirls in low- and middle-income countries: research priorities. *Glob Health Action*. 2016 Dec 8;9:33032.
16. Thakre SB, Thakre SS, Reddy M, Rath N, Pathak K, Ughade S. Menstrual Hygiene: Knowledge and Practice among Adolescent School Girls of Saoner, Nagpur District. *J Clin Diagnostic Res*. 2011;5(5):1027-33.
17. Bachloo T, Kumar R, Goyal A, Singh P, Yadav SS, Bhardwaj A, et al. A study on perception and practice of menstruation among school going adolescent girls in district Ambala Haryana, India. *Int J Community Med Public Health*. 2016 Apr;3(4):931-7.
18. Rajagopal S, Mathur K. Breaking the silence around menstruation': experiences of adolescent girls in an urban setting in India. *Gender & Development*. 2017;25(2):303-17.
19. House S, Mahon T, Cavill S. Menstrual hygiene matters: a resource for improving menstrual hygiene around the world. *Reproductive Health Matters*. 2013 May 1;21(41):257-9.
20. Sommer M, Sutherland C, Chandra-Mouli V. Putting menarche and girls into the global population health agenda. *Reprod. Health*. 2015;12:24.
21. Sommers M., Mumtaz Z., Bhatti A. Formative Menstrual Hygiene Management Research: Adolescent Girls in Baluchistan. Real Medicine Foundation; Islamabad, Pakistan: 2016.
22. Kumar A, Srivastava K. Cultural and social practices regarding menstruation among adolescent girls. *Soc Work Public Health*. 2011;26(6):594-604.
23. Gultie T, Hailu D, Workneh Y. Age of menarche and knowledge about menstrual hygiene management among adolescent school girls in Amhara province, Ethiopia: implication to health care workers & school teachers. *PLoS One*. 2014 Sep 30;9(9):e108644.
24. Tan DA, Haththotuwa R, Fraser IS. Cultural aspects and mythologies surrounding menstruation and abnormal uterine bleeding. *Best Pract Res Clin Obstet Gynaecol*. 2017 Apr;40:121-133.
25. Anchebi HT, Shiferaw BZ, Fite RO, Abeya SG (2017). Practice of menstrual hygiene and associated factors among female high school students in Adama Town. Ethiopia. *J Women's Health Care* 6: 370.
26. Sharma S, Mehra D, Brusselaers N, Mehra S. Menstrual Hygiene Preparedness Among Schools in India: A Systematic Review and Meta-Analysis of System-and Policy-Level Actions. *Int J Environ Res Public Health*. 2020 Jan 19;17(2):647.
27. Krippendorff K. Content analysis an introduction to its Methodology. London: Sage Publications; 1980.
28. Braun V, Clarke V. Successful Qualitative Research: A Practical Guide for Beginners. London: SAGE Publication; 2013.
29. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006;3(2):77-101.
30. Dutta D, Chakraborti C, Mishra P, Tuloni Biya and its impact on menstrual health: A qualitative exploration of the menstrual experiences of adolescent girls in Assam. *Development Policy Review*. 2023 Sep;41(5):e12699.
31. Gogoi NK. Continuity and Change Among the Ahom. New Delhi: Concept Publishing Company; 1964.
32. Garg R, Goyal S, Gupta S. India moves towards menstrual hygiene: subsidized sanitary napkins for rural adolescent girls-issues and challenges. *Matern Child Health J*. 2012 May;16(4):767-74.
33. Tiwari A, Ekka IJ, Thakur R. Assessment of knowledge and practices regarding menstrual hygiene among adolescent girls of Government higher secondary school, station Murhipar, Rajnandgaon (C.G.) *Int J Community Med Public Health*. 2018;5:1335-8.
34. Dasgupta A, Sarkar M. Menstrual Hygiene: How Hygienic is the Adolescent Girl? *Indian J Community Med*. 2008 Apr;33(2):77-80.
35. Jewitt S, Ryley H. It's a girl thing: Menstruation, school attendance, spatial mobility and wider gender inequalities in Kenya. *Geoforum*. 2014 Sep;56:137-47.
36. Garg S, Sharma N, Sahay R. Socio-cultural aspects of menstruation in an urban slum in Delhi, India. *Reprod Health Matters*. 2001 May;9(17):16-25.