

Report on Rural Menstrual Hygiene Management in Villipuram District, Tamil Nadu, India



by Auroville Village Action Group, January 2011
www.villageaction.in

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Abstract

A study was conducted with 300 women in 2 blocks of Villipuram district, rural Tamil Nadu to better understand the interplay of factors (socio-economic, educational, cultural, environmental,) that determine a rural Indian woman's menstrual hygiene management (MHM) practices.

The survey identified a general lack of information available to women about menstruation, and limited options for alleviating their menstrual discomfort.

Nearly all women (95%) experience some lifestyle restriction associated with menstruation with the belief in impurity and being polluted as the most commonly identified reason for these restrictions.

The extent, to which a woman is influenced by beliefs that result in lifestyle restrictions, is most strongly correlated with her level of education.

The survey revealed that choice of products used to manage menstruation (either cloth or disposable pad) is mostly influenced by cost factors, comfort and habit as well as cultural restrictions and beliefs. Women are largely not aware of the environmental impact in product choice.

Implications for the future of Menstrual Hygiene Management for Tamil Nadu which can have relevance for India are noted at the end of this report.

Introduction

Although menstruation is an important and unavoidable part of every woman's life, Menstrual Hygiene Management (MHM) in India has been recognised as a poorly addressed area of public health and is increasingly being taken up as a key intervention area by both Government and NGO's. To understand the importance of Menstrual Hygiene Management, it has to be looked at from the wider perspective of women's health. Hygienic insufficiencies are considered to be one of the reasons for maternal morbidity still being at a comparatively very high rate between 250 and 450 per 100,000 live births (UNICEF 2010b¹) and other diseases, mainly infections, related to a lack of hygiene being widely spread in India. Hence all steps taken to improve the population's hygienic practices as well as the overall sanitation of India, aim at reducing the number of victims of, and people suffering from the current circumstances. A particular incentive to tackle this issue is the focus indirectly put on it by the Millennium Development Goal no. 5 dealing with maternal health and universal access to reproductive health, which aims for the reduction of maternal morbidity by three quarters by 2015 (UN 2010b²).

Auroville Village Action Group (AVAG), an NGO working for grassroots community development in the rural areas surrounding Auroville (in Vanur block, Villupuram district, Tamil Nadu) has been working extensively on women's issues since 1986. It began a concentrated exploration with women on the subject of MHM in 2009, motivated by rural women's eagerness to explore this subject in seminars, and fascinated by the complex linkages between social, cultural, economic, health and gender issues surrounding MHM. A research study with the following aims was initiated:

- To better understand the beliefs and attitudes that rural women have in regard to menstruation.
- To better understand the practices they have, to manage their menstruation including choice of products, and identify the obstacles they face for managing their menstruation in a dignified, hygienic, economically viable and non-polluting way
- To identify gaps in knowledge among rural women in order to provide a basis for developing a comprehensive educational program suitable for rural women.

Methodology

AVAG partnered with Pitchandikulam, another NGO working in the Auroville surrounds

¹ UNICEF (2010b): Info by country. India. http://www.unicef.org/infobycountry/india_statistics.html. [latest view: 28.11.2010]

² UN(2010b): Millennium Goals. Maternal Health. <http://www.un.org/millenniumgoals/maternal.shtml> [latest view: 28.11.2010]

(Marakanam block), to undertake a study with 300 rural women in 2 blocks of Villipuram district. A survey was created to investigate the following broad areas:

- Impact of socio-economic factors on MHM
- Menstrual history and knowledge about menstruation
- Issues to do with personal hygiene and privacy including discomforts and lifestyle restrictions
- Reasons for product choice, including cost factors and options for disposal
- Feelings and attitudes about their experience

Sample size and selection

Led by Anbu Sironmani, a social worker and the director of AVAG, development workers in AVAG and Pitchandikulam were trained in administering the survey. A pilot study was undertaken with 10 women, the survey was again modified and the final version was created. Of the 300 interviews, 200 were administered by AVAG staff and 100 by Pitchandikulam staff.

2/3rd of participating women were members of self help groups (SHG's) from one of the two participating NGOs, and the remaining 1/3rd were chosen randomly as daughters, relatives, neighbors and friends of SHG-members. Participants belonged to both Dalit (86) and non Dalit (214) communities. Age and caste diversity was deliberately included to give information about a wider spectrum of women and to see if these factors are influential.

From 10th August to 22nd October 2010, one to one interviews were conducted at NGO headquarters when women attended programs, as well as in their homes, workplace and in the school during break. Each interview took about 15-20 minutes and included 47 questions (see appendix 1)

Profile of respondents

The participant's profile varied in terms of age, education, occupation, marital status and income.

Age: participants ranged from 13 to 50 years with an average age of 28 years.

Education: 61 of 300 women were illiterate, 60 women had studied up to 5th, 114 of them have studied 6th- 10th and 48 up to 11th-12th standard. 9 women were college graduates and 3 had a higher education.³

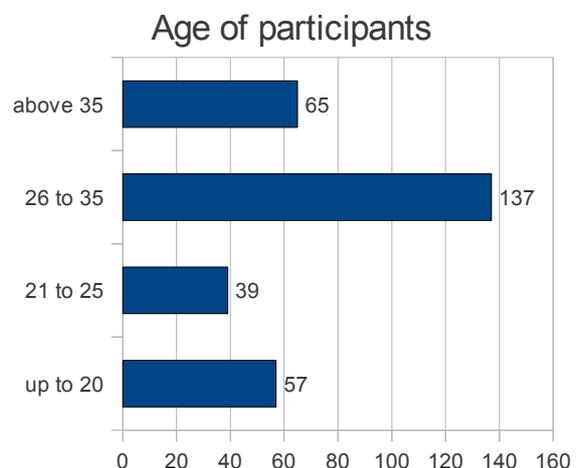
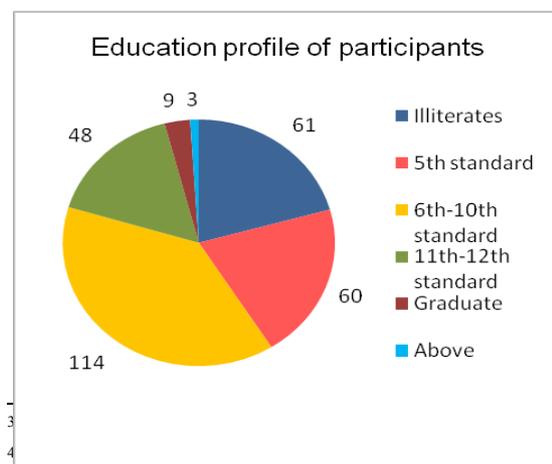
Occupation: 40% of participants are working women, 49% housewives and 11% schoolgirls.

Marital status: 80 women were unmarried, 210 married, 7 widowed and 3 deserted.

Income: The family's income ranged from below Rs.2000 to over Rs.7000 per month.

The reported average income of their families was about 4200 rupees per month.

Variations in age can be taken from the graph below.⁴



Findings

Access to Information

Typically the onset of menstruation is a traumatic and fearful experience for young girls in India.

The onset of menstruation in Tamil Nadu is celebrated as manjal neer-attu vizha (puberty ceremony), during which relatives and friends of the girl are invited to a grand feast and ritualistic ceremony of purification of the girl. She receives expensive gifts of clothing and jewellery.

Yet, in spite of the elaborate way in which menarche is celebrated in the culture, it is surprising that young girls are not prepared for it with information about the biological process, health and hygiene issues, social meanings (including social readiness for marriage) and implications for conception.⁵

In our survey, women were asked about the initial source of menstrual knowledge, feelings of preparedness and how they could deal with questions and concerns. Aunts, neighbours, older sisters and grandmothers have been the traditional sources of information about the management of menstruation in this culture.

To the question, 'From whom did you first learn about menstruation?', the respondents answered as friends(62), mother(46), sister (40), neighbour(14), school(10), and others(8). While 49 were not sure/could not remember the person, around 25% women (71) have mentioned other female relatives as their source of learning about menstruation. This shows that friends, mothers, sisters and female relatives are the prime source of information for girls to learn about menstruation. This also reveals that the contribution of the school is only 3%.and health care institutions did not seem to play any noteworthy role in this among the respondents of this survey.

Traditionally in Tamil society, a widespread belief exists that the mother should not be the one to see and "verify" her daughter's first menstrual bleeding.

In this survey, (32%) of participants first informed their mother at the onset of menarche and 33% had informed some other female relatives e.g. grand mother, cousin etc., Others informed their sister(14%), neighbours(10%), friend(7%), some body at school;(2%) and other females(2%)

During the survey the investigators also realised that though the women had informed their mothers first, it was not the mothers who 'verified' the blood. Rather they had informed the other female relatives in the family or neighbours to verify it. Even in the cases where the mother happened to be the one verify it; she was not feeling it alright after that.

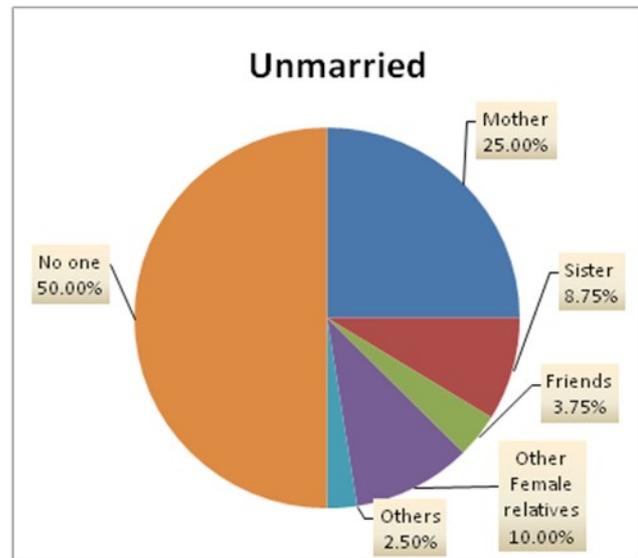
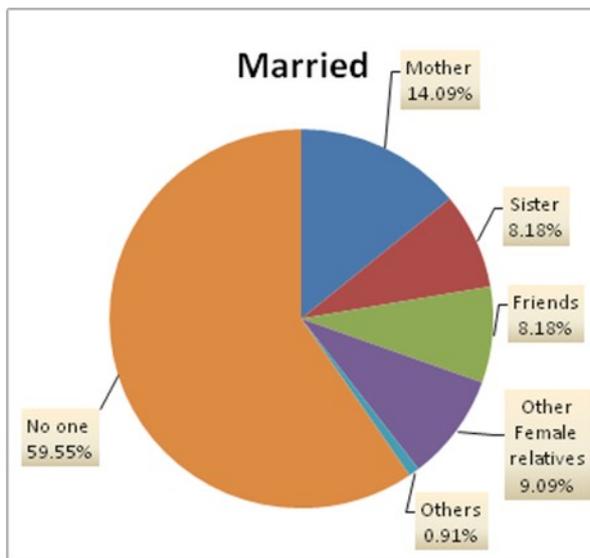
⁵ Puberty Rituals, Reproductive Knowledge and Health of Adolescent Schoolgirls in South India, K.A. Narayan, D.K. Srinivasa,, P.J. Pelto and S. Veerammal*Asia-Pacific Population Journal, June 2001

Only 21% of participants reported feeling well informed about menstruation. Among the remaining 79% of participants, 67% would have liked to know more about this issue and it shows the openness and longing to unfold the secrecy behind the issues related to menstruation.

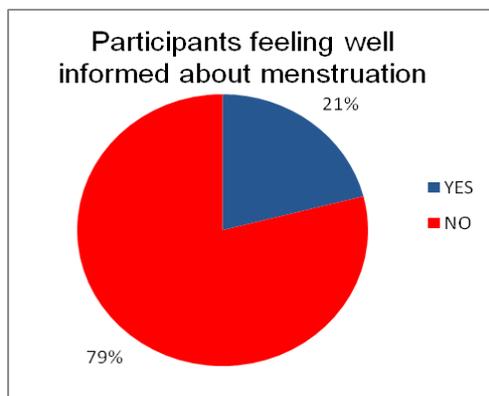
More than half of participants (57%) answered that they had nobody to talk to about their doubts and fears concerning their menstruation and 129 women had reported they have some one to talk to regarding issues and concerns related to menstruation. Among them 51 women, including 20 unmarried respondents, answered it was their mother. Other women speak to sisters (25), friends (21), and other female relatives (28). Five women answered it was doctor, neighbour and elderly women in the village.

Persons woman talk to	Married	Unmarried	Total
Mother	31	20	51
Sister	18	7	25
Friends	18	3	21
Other Female relatives	20	8	28
Others	2	2	4
No one	131	40	171

PERSONS WOMEN TALK TO IN %



This reveals that around 60% of married and 50% of unmarried respondents have nobody to talk to and another 25% of unmarried and 14% unmarried women find their mother as their resource to get information related menstruation. Here it is interesting to note that in spite of Government's efforts to extend MHM support via community health care workers and teachers the role of formal educational and health care institutions seem to be very minimum.



Health and hygiene factors

Menstrual profile of respondents

Around one quarter of the respondents (26 %) answered to have an irregular cycle. Among the women who reported irregular cycle, more than 1/3rd of them are aged between the 21 and 25 and another 29% of the women are below 20 years of age. Only 23% of the women above 35 years answered to have an irregular cycle. This has implications for educational programs and other interventions.

The average length of a menstrual cycle among the participants is 28 days. For 61% of the women the length is 28-30 days. Only 10 women had below 15 days cycle and for 9 women it was above 35 days.

More than half of the participants (58%) answered the strength of their cycle to be “moderate”, followed by 19% “light”, 17% heavy and 5% variable. 5 women answered, that it was only strong at certain times, for example while sleeping.

When the 66 women having a strong or variable cycle were asked, “since how long it has been like this”, 25% were not sure. Other responses ranged from several months to over 20 years, with 11 answering “over 12 years”. While 19 women have the problem ever since they attained puberty, others had it after child birth (11), contraception (11), marriage (10) and abortion and 14 women are not sure about it.

The participants bleed for an average of 3-4 days, 88% falling within a normal bleeding range of 2 – 5 days. 12% reported a bleeding cycle of longer than 6 days/month.

Personal hygiene and privacy

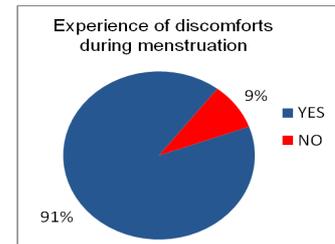
Only 17 of the 300 participants reported not having access to water all the time (at home or more commonly tap in same street). When women without access to water were asked, how they manage their menstrual hygiene, they find a source of public water and store it or wash in their neighbour's house.

One woman does not change her cloth until water is available and another always burns it after use.

Twenty three women feel that they have not enough private space to change or wash their cloth. 7 of them always wait until everybody, or at least all the men left the house before changing sanitary products. Though a vast majority of them do not have individual toilets at home they do not consider as a need or priority for privacy and use thatched or semi structure behind the house for bathing and this place is used for cleaning and changing cloth.

Discomforts during menstruation

A vast majority of the respondents (91 %) reported experiencing some kind of discomfort before or during menstruation. However, 44% of the working women (53 women) responded that their jobs were affected by their menstruation and almost 20% of working women (23) have reported that their job affected their menstruation. On further enquiry nine of them had expressed that they bleed heavily due to the job and another seven reported about other problems like varied bleeding, white discharge, stomach pain and hip pain.



Physical discomforts

Among the participants, 75% answered that they had some kind of physical discomfort before menstruation and many women expressed of experiencing more than one discomforting factor mentioned in the questionnaire.⁶ The discomforts mentioned most frequently were abdominal cramps (63%), headache (24%) and body ache (20%). Apart from this around half of the respondents (146) also chose to give answers that were not among the given options like hip pain (59), pain in the legs or hands (50), white discharge(40),extreme fatigue, breast pain, pain in the vagina and vomiting.

The number of women experiencing physical discomfort during menstruation was less(54%) than the women experiencing premenstrual discomfort. Here also, the common symptoms were abdominal cramps (46), followed by the hip pain (38) and hand/leg pain (27) and lower back ache (21). Women also mentioned other problems like body ache (9), pain in their vagina (9) and other problems like headache, extreme fatigue, vomiting white discharge etc.

This reveals that a considerable number of women experience discomforts prior to the onset of their period and during the time of menstruation.

Coping strategies

When the women suffering from physical symptoms were asked what they do to cope with their discomforts, 48% answered “I hide the pain and continue my routine”. Another 43% answered that they rest and do no or less work when the pain is severe. 6% of the women take allopathic medicine to decrease their pain and 6% drink cool or soft-drinks⁷. Among the participants, only 5 women use herbal or home remedies, while 17 women take allopathic medicine and this lead us to believe that among the rural population, that trust and knowledge about traditional healing practices are fast disappearing.

⁶ Since few women had given more then one answer, percentages add up to over 100%

⁷ Same as 6

Among the women who experience physical discomfort before or during menstruation, two third of the women (66%), consisting of 167 married and 32 unmarried women, reported having no one to help them with their domestic responsibilities. Out of 101 women reported that they have somebody to help it was the mother for seven married and 39 unmarried. It is interesting to notice that in the case of married women only 19 get help from husbands and 11 get help from mothers-in-law and 9 from their daughter. Very few women seem to get help from other female relatives like sister, grandmother, and sister in law, aunt and sons or niece.

This survey reveals strikingly that more than three quarter of the married (76%) women, who bear the burden of domestic responsibilities, do not have any one to help to cope with the discomforts during their periods.

Contrary to our general belief that people can get help easily in the rural environment, this reveals that if at all women get help, it is only from the members of immediate family, mostly from female ones. When there is no one in the family to support or no willingness to help, women end up doing the work by themselves with out getting chance to rest, which is the case for 199 respondents.

Emotional discomforts

Nearly half of the participating women (47%) suffer from some kind of emotional discomfort during menstruation. Among them more than half (51%) feel irritation during their period. A sizeable number of women also reported that they felt depressed (40%). Even though anger was not among the given options, 18% of the women reported anger as an emotional consequence of their period.

Concerning emotional discomforts, the number of women who take some time out is higher than with physical discomforts. Around one third of women (32%) that suffered from emotional discomforts cope with their feelings by talking to other women like their mothers, daughters, neighbours or colleagues. 20% answered that they take rest, 13% sleep and 4% watch TV. On the other side, 11% of women maintain silent and 9% concentrate on their work to keep control over their emotions. 5% of them just release their anger in conflicts with children or other people. Since normally, men are kept far away from the topic of menstruation, only 4 women talk to their husband or father when they have emotional problems associated with menstruation.

Restrictions and Beliefs

South Indian female puberty rites can be divided into three main segments of ritual action. The ritual series begins when the girl “comes of age” (*vaisuku varuvathu*), at the age of 13,14 or thereabouts. This is a period of ritual seclusion. The girl sits separately on a wooden plank in a corner. Neighbourhood women gather for a ceremonial meal that is served on plantain leaves, after which they paint the girl’s feet with a mixture of red ochre, turmeric and limestone. For ritual seclusion, a *kudisai* (hut) is made of fresh leaves, for example, those of coconut, neem and mango, among others. This hut may be either inside or outside the house. Food is brought to her, and she takes complete rest. She is helped by other women while bathing. Daily bathing alternates between “head-bath” and “ordinary bath”. When she goes to the toilet, she must carry neem leaves and something made of iron, to ward off evil spirits. Special foods are prescribed for this seclusion,

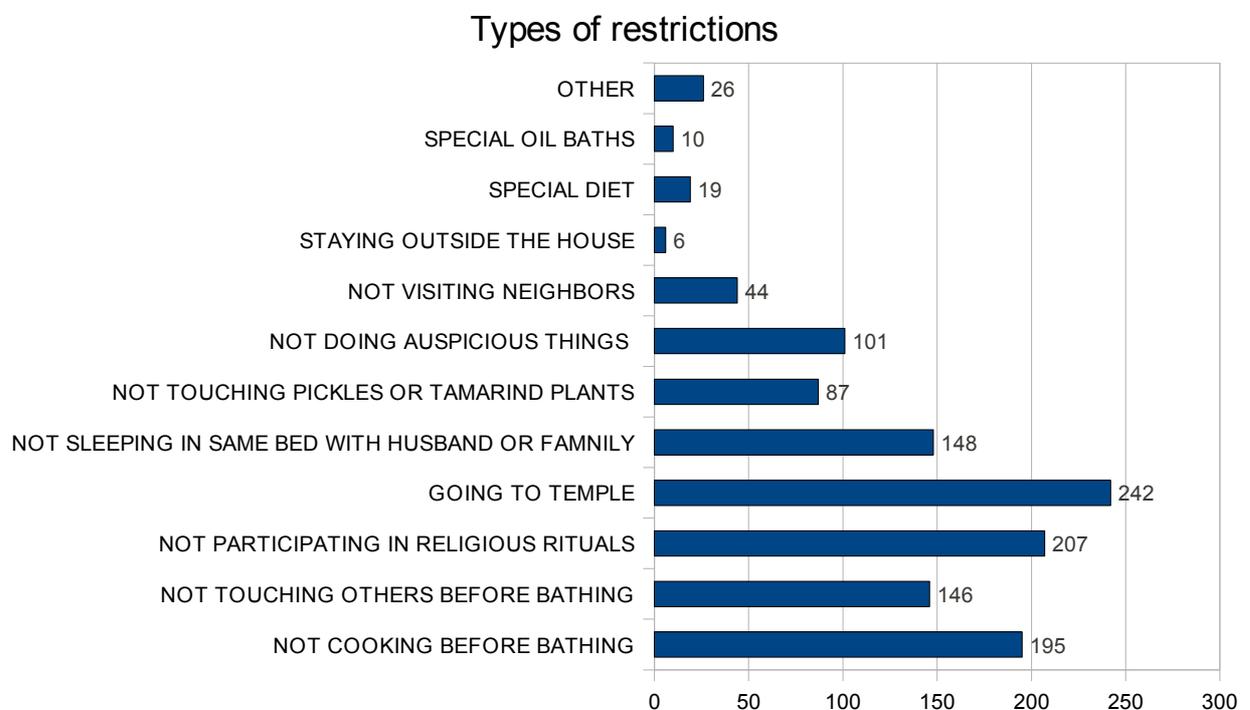
which is continued for 9, 11 or 13 days (it must be an odd number of days). The third and final step in the series is the *manjal-neeru*, or *satangu*. The ritual is often performed in the third month after the *puniya-thanam*, but can be any time before the girl marries. The *manjal-neeru* is celebrated with pomp and splendour. Even poor families borrow money, or pledge their jewellery in order to make this event a grand occasion. This major celebration has many of the same elements as a wedding -large numbers of relatives and friends are invited; a priest officiates at a *pooja* (prayer ritual), a wide assortment of food with many sweets is served, and the girl receives gifts of jewellery and clothing⁸. Every part of the ritual involves giving bath to the girl symbolizing “purifying” the girl.

The Survey inquired into the beliefs that result in restrictions of lifestyle. In particular, there was an attempt to identify if restrictions had a negative consequence for the women in terms of either health or self image/identity.

Nearly all women respondents (96%) reported to follow some kind of restrictions when they have their period consistent with cultural norms.

Out of the 300 participants, only 11 women (about 4%) answered not to have any restriction, On deeper questioning by the interviewer, it was found that 4 of them were converted Christians, 3 were employed by one of the participating NGOs (thus more regularly exposed to programs addressing issues of gender discrimination) and only two are club-members and two students.

The restrictions mentioned by the participants are high in number and variety, as can be observed in the table below.⁹



⁸ Puberty Rituals, Reproductive Knowledge and Health of Adolescent Schoolgirls in South India, K.A. Narayan, D.K. Srinivasa,, P.J. Pelto and S. Veeramal*Asia-Pacific Population Journal, June 2001

⁹ The respondents have chosen more than one answer and hence the number of responses are more than the number of respondents.

Most women following a special diet eat only vegetarian food during their period or forego sweets. Doing Auspicious things includes wearing flowers and applying tumeric or bindis on the face. Pickles and Tamarind plants have a special meaning in Tamil culture, since they are conserved for a longer time. Due to the concept of impurity during menstruation, there is a widespread belief that these products might spoil when touched by a menstruating woman.

Most restrictions that surround handling food, access to temple and staying outside the house suggest that women take very seriously the common perception of being impure and the possibility to pollute others while having their period. However, many women believe that they can become pure again by bathing after sleeping, before they start their activities. Very few women, especially Dalits have mentioned about a special oil bath¹⁰ which even allows them to go to the temple.

Attitudes towards restrictions

Even if some restrictions appear to be very uncomfortable and hindering, most women agree with them as a cultural norm. To the question of disagreeing with the restrictions, very few women (11%) seemed to have negative opinions on these and said that they were not comfortable with the restriction of 'not visiting the neighbours'(12), 'not allowed to touch things like pickle or tamarind'(12), and staying outside the house(1). 7 women did not like to have any restriction.

Around 90% percent of the women had given responses in favour of the restrictions. 29% of women even answered explicitly that they agreed with all the restrictions,. This suggests that women were proud to answer that they never oppose these traditional and religious rules.

As a reason for their acceptance, 39% of women who accepted the restrictions answered "it is our culture". About one third of the women were motivated to follow the restrictions due to fear that some thing bad might happen otherwise.(20%) and fear for punishment(10%), 15% answered that they kept the restrictions because they want to follow the conviction of the elders and 9% are afraid of being punished.". Women also liked to follow the restrictions since it was part the religion (23), they did not want to be impure (11), did not want to face the disapproval of the neighbour (7) and due to the belief that the restrictions were all for the good of the people .

More than three quarters of the participants (227) have reported that they have never tried to break these restrictions and the remaining 63 have broken the restrictions at different point of time. 23 women had broken the restriction of going to the temple or participating in religious rituals during menstruation. They had done so on festival days and on important family occasions like death, birthday and marriage celebration. 20 women also answered that they cooked or had touched pickles or tamarind or others or their clothes and done other domestic responsibilities before bathing in the morning, since they do not have any one to help at home. Few have broken the restrictions when on one was at home indicating that they tend to follow the rules due to pressure from others. A few women had expressed keeping flower in the hair, drawing kolam in front of the house, entering the house before bathing, not taking oil bath at the advice of the doctor, feeding dogs (they are not supposed to feed during periods) or sleeping with family members as violation of the restrictions. A few women also reported that they take tablets to avoid getting their menstruation during festivals and family functions.

These findings correlate with the study of K.A. Narayan et al in which it was found that the concept of impurity is at the root of most of the restrictions, based on the belief that doing or not doing certain things will lead to harm for herself or others in the family in particular.

In order to get further information about the women's background, which might influence their decision to break restrictions, caste, age and education of the women were analysed. Caste does not seem to play an important role, since 19% of Dalit- and 21% of non-Dalit women answered that

¹⁰ In this oil bath, women mix sesame, coconut and castor oil and apply it on their head before bathing

they had broken the restrictions at least once.

The same is true for age: 21% of women under 25 and 21% of women over 25 broke a restriction.

In the case of education, among the illiterates 13% answered to had broken the restriction, while it was 19% among the women studied up to 5th to 10th standard and 29% of the women studied between 11th and 12th standard have broken the restrictions. In the case of graduated, since the sample size is small we were not able to come to a conclusion.

Employment of women also may be a factor that influences non-compliance with cultural rules - while only 10% of home makers have broken the rules, it was 29% among the working women and 26% among the students.

Choice of Product

According to the survey, the women were using cloth and disposable pads in relatively equal distribution. 128 women (43 %) use cloth, while 123 women (41 %) use disposable pads. 15% of women reported using both products, and 7 women reported managing their menstruation in a different way (using only panties and petticoats or petticoats only). Furthermore, the survey shows that younger women prefer to use disposable pads. Among the participants under 20 years of age, 53% use pads and 25% use cloth, while among women 35 years and older, only 19% use pads and 68% use cloth.

On average, the women reported changing cloth or disposable pads 7 times per menstrual cycle.

The economic situation seems to have an impact on the choice of product, with the average family income of the women using disposable pads being about 4690 rupees per month, and the income of the women using cloth being about 3690 rupees per month. This suggests that women are likely to use the more expensive disposable pads when they can afford them.

Surprisingly, the caste of the participant does not seem to influence her choice of product very much. Among the non-dalit women, 41% use cloth, 41% use pads and 18% use both. Among the dalit women, 47% use cloth, 41% use pads, 4% use both and the remaining ones do not use anything.

However, among the working women, the users of cloth (42%) and pad (43%) are more or less equal in number.

Menstrual hygiene management with cloth

In rural Tamil Nadu, it is a common practice to fold a piece of old cotton cloth to absorb the menstrual blood. In this survey the respondents have reported using old cotton sari (36%), used lungi (34%) or petticoat (23%) to manage bleeding. Very few of the women use different sources of cloth or just any cloth that is available.

The menstrual cloth is usually held in place by panties (74%). Since not all of the women use panties, the rest keep it in place by a cloth belt (21%) or by tucking it into the skirt (5%).

Reasons for using cloth



The above table reflects the reasons for using cloth. 41% of the users of cloth preferred it, because they have always used it and saw no reason to change their habits and irrespective of caste and age factors nearly ¼ had chosen cloth for economic reasons. Few respondents had given flexibility of cloth to use according to the strength of bleeding, lack of access for pads or space to dispose of the pad, lack of information to use other products, the feeling that pads are harmful for the health of women as reasons for using cloth to deal with menstruation..

When the women who used both cloth and disposable pads were asked when they preferred cloth, 1/3rd answered “while sleeping”. 28% answered when there is no one to get disposable pads for them and 23% answered when there are no pads available in their shop. 19% answered using the cloth when they could not afford disposable pads.¹¹



So it seems that among the users of both cloth and disposable pads, more than half (53%) only use the cloth when disposable pads are unavailable.

These findings suggest that costs, familiarity of habit and to some extent comfort are the biggest motivators for women to choose cloth over disposable pads. It also indicates that concerns for environmental impact of disposable pads are not a motivating factor for women to choose cloth.

Obstacles to using cloth

Around three fourth of cloth-users have concerns about changing the cloth when not at home (72%). The mentioned obstacles include lack of private space (51%)¹². Furthermore, 14 % reported feeling

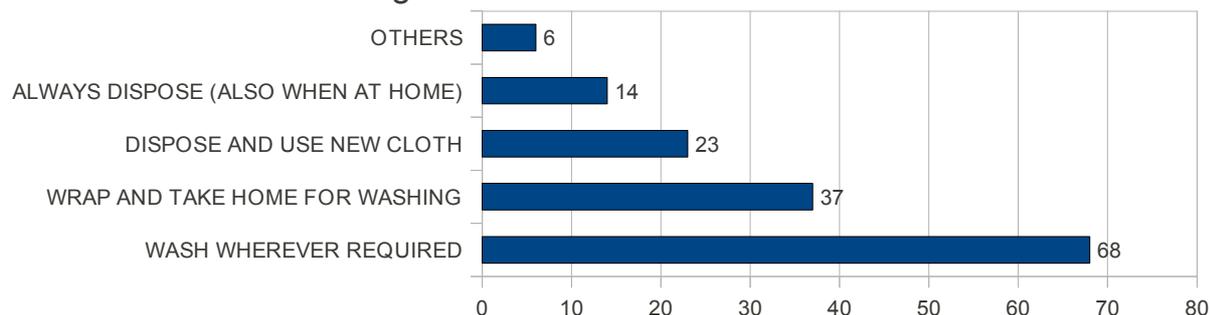
¹¹ For some questions, the respondents were given the possibility to give more than one answer, so percentages do not always add up to 100%

¹² Percentages concerning obstacles are calculated by regarding all the women finding change outside difficult as

too ashamed to either wash, dry or dispose the cloth in public.

Consequently, 17% of cloth-users that found use of cloth outside the house difficult answered, that they do not change their cloth outside. And 18% of them would not go outside at all while menstruating.

Management of used cloth when outside



While some women have developed innovative ways of dealing with cloth outside, like folding the cloth in a way, that there is always got a clean layer of cloth on top, most women combined both products to manage going outside. 69% of users of both cloth and disposable pads (29 women) prefer to use pads for going outside and cloth while in the house.

Management of used cloth

Since it is very important for the prevention of infections that the cloth is completely dried in the sunlight, AVAG was especially interested in the ways in which the women handled drying the cloth. The survey reveals that there are many traditional or religious beliefs about the drying. Nearly ¾ of cloth-users (70%) answered that there were some issues or myths about drying the cloth in their families and communities.

Nearly half of the cloth-users (48%) believe that certain animals (snakes, lizards, and insects) shouldn't touch the cloth and 45% of participants believe that birds (eagles) shouldn't fly above it 20% of cloth-users answered that men shouldn't see the cloth and another 8% women even believe that nobody should see the cloth. If these rules were broken, it would be a sign of bad luck or the women would not be able to get pregnant.

Such restrictions and fears of being punished make drying and storage of the cloth difficult for women.

When the women were asked where they dry their cloth, around three quarter of the respondents responded that they it in place not frequented by men (47%), under other clothes(7%) and 18% in some other place.

Only 28 % dry the cloth openly exposed in the sun.

So the major obstacles preventing a hygienic management of menstruation with cloth seem to be the shame in front of others, especially men, cultural beliefs and limitations of education process.

156 users of cloth store it in following ways: 42% wrap it in a cover and keep it in the bathroom, 19% insert it in the roof top, 4 % keep it open in the bathroom and 4% store it along with their other clothes. 6% dispose the cloth after one cycle, 8% put it in a cover before storing it in some other place and 16% store it elsewhere without a cover. Also, 14 women (8%) use the cloth like a sanitary pad and dispose it immediately after use.

Usually, women don't use the cloth for long. For 78% of users, the cloth lasts for less than 3 months, including 14% that use it only for one cycle. 7 % use it for 4 to 6 months and 2% for 7 to 12 months. 4 women answered, that they use it until the cloth is damaged and 19 could not give an exact answer.

When women finally dispose the cloth, the majority of 53% burn it, followed by 31% that bury it in the soil. 10% throw it into the bushes and 3% put it into the garbage. 3% dispose it in an other way. Some women also chose multiple options of dispose.

Menstrual hygiene management with disposable pads

Reasons for using disposable pads

The main reasons for women to choose disposable pads are feelings of comfort, cleanliness and convenience (see table). While 24% of pad-users report that they absorbed better, 4% of cloth-users claim that cloth absorbs more than pads.

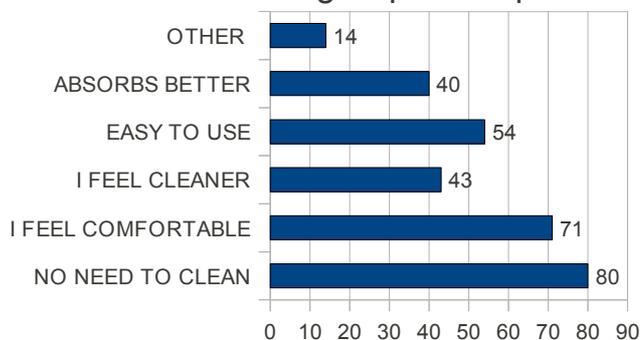
On average, the women using disposable pads spend about 26 rupees per month on them.

When users of both products (42) were asked at what time they prefer to use pads, more than two thirds (69%) of women answered “when going out” and 16% use the pad in the rainy season, probably because it is difficult to dry the cloth during this time.

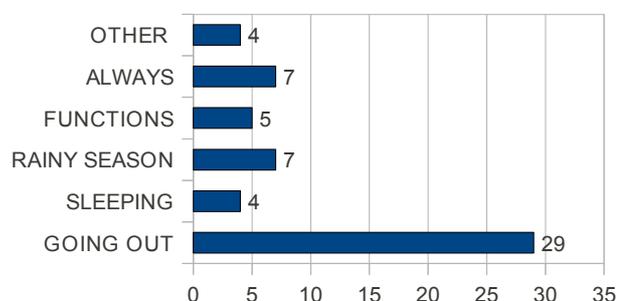
11% prefer using the pad for functions, probably due to extended time away from the house. 9% of women preferred disposable pads for sleeping, compared to 33% who use cloth for the same purpose. 16% of users answered that they always prefer pads, which is a high number, when one considers that this was not a given option.¹³

However, 13% of all women prefer to use cloth, since they are not able or willing to afford disposable pads, indicating that if they could afford it, they would opt for pads.

Reasons for using disposable pads



Preferred occasions for using pad among users of both



Disposal of pads

Since AVAG considers the use of disposable pads to be an important environmental issue, users were asked how they dispose of the pads. The answers confirmed that the majority of users (44%) throw the used pad out with the garbage, which pollutes the environment. 38% of users bury the pads in the soil. 13% burn the pad with plastic, which also creates pollution and may lead to health problems when the smoke is inhaled.

4 Users flush the pad down the toilet.

A large number of the users (21%) said that due to the fear that others could see the menstrual blood they would wash the pad before disposing of it in one of the ways mentioned above.

¹³ In some questions, there was the opportunity to give more than one answer, so percentages do not always add up to 100%

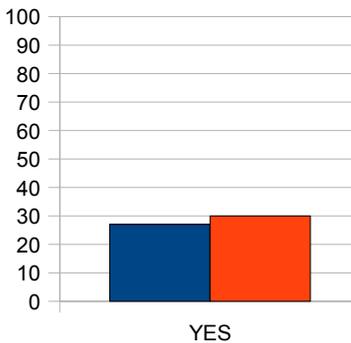
Not one user was able to report disposal via a public incineration system – the method advocated as a best practice by promoters of disposable pads.

Health impact of product choice

There was not a significant difference in problems like rashes or infections among pad-users (18%) and cloth-users (19%).

Furthermore, the number of participants having an irregular cycle is even slightly lower among the users of cloth (26%) than among the users of disposable pads (28%). This may be due to the fact that the average age of pad-users is lower and young girls usually tend to have a less regular cycle. There is no statistically significant variation in length of menstrual cycle relative to the used product.

Did you ever experience problems like rashes or infections



General feeling towards menstruation

When asked about the over all feelings towards menstruation, the respondents expressed positive (27%), negative (30%) and neutral feelings (37%) and 6% of the respondents were not sure about it. The different positive responses were “pleasant (11) %, empowering (11%), relaxing, good for health etc and the women who had negative attitudes towards menstruation responded as isolating, our fate, I do not like it and so on. The neutral responses of the participants were: it is good for health and hence I have to accept it, if it does not come it might give trouble to me etc.

Attitude towards the Survey

At the end of the survey the respondents were asked how they felt answering the questionnaire. More than 2/3rd of the women (71%) expressed feeling positive about the survey and the different responses given by these participants were “feeling good (140), curious (44), happy (29), very good thought provoking experience(11), important topic for everybody(8), unique chance and so on. The factors like knowing the field staff and involving, only the female staff in the survey had contributed towards these 245 positive responses.

Seventy five respondents had expressed the feeling of shyness (44) and embarrassment (29) and one woman had expressed that she felt like running away. Five were not sure about the response for this question.

Conclusions

This survey confirmed other research findings that in rural Tamil society, that there seems to be a big silence regarding the menstrual issues of women. 79% of women felt not well informed about menstruation, most of whom would like to know more and more than half of the respondents have nobody to talk to about doubts and fears concerning menstruation. In particular women do not feel comfortable to expose men to details concerning their menstrual experience.

A vast majority of women (91%) identified some physical or emotional problems connected to menstruation yet many of them handle these problems by hiding the pain and continuing their routine without support.

Nearly all of the women (95%) have some kind of restrictions during their menstruation. The majority of restrictions are based on concepts of impurity surrounding the condition of

menstruation, which translate into prohibitions based on the belief that doing or not doing certain things will lead to harm for self or others in the family in particular. Most of the women accept these restrictions and beliefs as part of their culture and religion, with only 21% answering that they had ever broken one of them. Women seem to be more prepared to challenge the cultural norm to conform to restrictions, when they have higher education.

Concerning product choice the crucial issue being examined was whether the women are able to use the product in a hygienic way without unnecessary negative self image. The issue of sanitary waste disposal was also examined. Vast majority of women reported using old cloth (43%) and disposable pads (41%) or combination of both to manage their menstruation with a clear trend that younger women tend to use disposable pads. Both of the products have pros and cons however, concerning health, the choice of product doesn't seem to have an impact. Cloth is less expensive and creates no environmental pollution, but is difficult to handle when away from home. Nearly $\frac{3}{4}$ of cloth-users (70%) answered that there were some issues or myths about drying the cloth in their village.

Disposable pads have the biggest advantage of convenience however, they create environmental pollution, with the majority of users throwing them away with the garbage, burning or burying them. Habit, economic factors (no cost of cloth) and comfort are the most strongly motivating factors for women to choose to use cloth rather than disposable pads – environmental factors relating to disposal are not a consideration affecting choice.

Finally, it was the experience of the survey team that initially, while a few women were quite uncomfortable to speak about menstruation, in most cases, women enjoyed the opportunity to speak about menstruation and found the interview a satisfying experience. Many women at the end of the survey, spontaneously asked questions to do with their experience of menstruation and showed an eagerness to learn more.

Implications for the future of MHM in rural Tamil Nadu

- Based on this research's findings, a need for more information to be available to girls and women concerning the biological/physiological processes of menstruation as well as the beliefs and taboos that generate feelings of shame and impurity is indicated. It is assumed that the extent to which educational interventions directly address the knowledge deficits of beneficiaries, the more effective they will be. For this reason, deeper study into the extent of lack of knowledge and the dominance of beliefs would need to be identified in each specific context, especially in regard to its impact on the empowerment, the self-perception etc. of women – educational inputs can be tailored accordingly. Training could also be provided to those who are responsible for guiding young women on how to accept menstruation as a natural biological process and integrate this experience into a positive self image – again context specific. This is also the chance to address issues such as self-respect, dignity, empathy and informed choice regarding use of products. Education could also include guidance on non-allopathic ways of dealing with the discomforts and problems associated with menstruation and product choices that are healthy and non-polluting. A rich knowledge might be found in the communities themselves. Men and adolescent boys could also be exposed to educational programs as part of gender sensitization efforts.

- There is a need for support structures for managing and dealing with menstruation e.g. Disposal facilities in public buildings, and to advocate for places with access to water and privacy

- There is a need to consider solid waste issues associated with menstrual product disposal. Development of non polluting alternatives to commercially available disposable pads which are growing in popularity in other parts of the world may offer a solution to this problem. Researching availability of such products in India has only revealed 2 options – a model by Goonj

http://www.goonj.org/not_just_apiece.html that uses re-cycled cloth and another model by Vikalp design http://www.vikalpdesign.com/sanitary_napkin.html that has not gone beyond design phase. In light of this AVAG are designing cloth re-usable models for a pilot project to field test in rural sector

- Focus groups can be a tool to further explore the impact of discussing what is normally considered taboo in a group setting and generate a wider knowledge base for designing appropriate strategies for effective MHM.
- Access to resources to build toilets at home will help women to get the needed private space to improve their menstrual hygiene practices.

Limitations

There are several factors that limit the survey examining women's menstrual hygiene management. First, it became clear that participants did not always state their real income – tending to understate income possibly for fear of this having implications for their government benefits – this may lead to some data distortions concerning conclusions relating to economic factors. Second, the occupation of participants could not be further specified, since the survey only provided the options “home maker” or “other”, but none concerning the particular profession. Regarding question of emotional discomfort, the survey failed to distinguish discomforts that arise pre-menstrual from those that arise during menstruation. In hindsight, conducting the survey with such a wide age range presented greater complexity in data analysis.

Acknowledgements

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Contact: avagoffice@auroville.org.in

Appendix 1

Menstrual Survey

Please answer only the questions you are comfortable with.

Age: _____

Village: _____

Category: SHG/ Non-SHG/Student/Others

Caste: _____

Education: a. Illiterate/ b. upto 5th / c. up to 6-10th / d. upto 11-12th / e. graduates/ f. above

Marital status: a. unmarried/ b. married/ c. widowed/ d. deserted

A. Economic status of the respondent

1. Occupation: a. Home maker/ b. other _____

If a), please go to Q .No 2

1.1 If working, what is the average monthly income you get?

a. Upto 1000/ b. 1001-1500/ c. 1501-2000/ d. 2001-2500/ e. 2501-3000/ f. 3001-3500/ g. 3501-4000/
h. 4001-4500/ i. above 4500

2. Apart from you how many other earning members are there in your family?

a. 1/ b. 2/ c. 3/ d. 4/ e. above 4

3. What is the total monthly income from all sources? (Salaries, agriculture, cattle, vehicle etc.)

a. Upto 2000/ b. 2001-3000/ c. 3001-4000/ d. 4001-5000/ e. 5001-6000/ f. 6001-7000/ g. above 7000

B. Menstrual history

4. At what age did you attain puberty?

a. Less than 10/ b. 11-12/ c. 13-14/ d. 15-16/ e. 17-18/ f. above 18/ g. Not sure

5. From whom did you first learn about menstruation?

a. Mother/ b. sister/ c. other female relative/ d. School/ e. friend/ f. others _____

5.1. Who did you inform when you got your first period?

a. Mother/ b. sister/ c. other female relative/ d. School/ e. friend/ f. others _____

6. Do you feel you were well informed about menstruation? a. Yes/ b. No

6.1. If no, do you feel that had you known more, it would have been better? a. Yes/ b. No

7. Regarding menstruation related doubts and questions did you have any one to speak to?

a. Y/ b. N

7.1. If yes, who?

a. Mother/ b. sister/ c. other female relative/ d. School/ e. friend/ f. others _____

8. Is your menstrual cycle regular? Yes/ No/ not sure

8.1. Is yes, what is the length of your menstrual cycle?

a. Less than 15 days/ b. 16-21 / c. 22-27/ d. 28-30/ e. 31-35/ f. above 35 days/ g. other: ___ months

8.2. If irregular since when? a. Since attaining puberty/ b. after marriage/ c. after childbirth/

d. after contraception/ e. others _____

9. Is your menstrual cycle...? a. Light/ b. Moderate / c. Heavy/ d. Varies/ e. others _____

If heavy or varies,

9.1 since how long? _____ Months/ years

9.2 since when?

a. Since attaining puberty/ b. after marriage/ c. after childbirth/ d. after contraception/ e. others _____

10. How long do you bleed for?

a.Up to 2 days/b.3 days c.4-5days/d.6-7days/e.more than 7 days

C. Personal Hygiene and Privacy

11. Is clean water always sufficiently available to wash yourself? a.Yes/b.No

11.1. If no, how do you manage? _____

12. Do you feel that you have enough private space to wash and change? a.Yes/b.No

12.1. If no, what is bothering? _____

D. Discomforts during menstruation

13. Do you experience any discomfort before menstruation? a.Yes/b.No

→ If no, please go to Q.No 14

13.1. If yes what are they?

a.Abdominal cramp/b.Body ache/c.lower back ache/d.Headache/e. Extreme fatigue/

f.Vomiting/g.others _____

13.2. How you do you cope with the physical discomforts?

a.Rest/ b.Walk /c.Take allopathic medicine/d.Take herbal remedy/e.I hide the pain and continue my routine/f.Others _____

14. Do you experience any physical discomfort during menstruation? a.Yes/b.No

→ If no, please go to Q.No 16

14.1. If yes what are they?

a.Abdominal cramp/ b.Body ache/c. lower back ache/d. Headache/e. Extreme fatigue/

f.Vomiting/g.others _____

14.2. How you do you cope with the physical discomforts?

a. Rest/ b.Walk /c.Take allopathic medicine/ d.Take herbal remedy/ e.I hide the pain and continue my routine/f.Others _____

15. If you handle domestic responsibilities, do you have anyone to help you during this time?

a.Y/b.N

15.1. If yes, who is that one? _____

16. Do you experience any emotional discomfort? a.Yes / b.No

→ If no, please go to Q.No 18

16.1. If yes what are they?

a.Feeling depressed/ b. Irritation/c. Lack of concentration/ d.Shame/ e.others _____

17. How do you cope with emotional discomforts during menstruation?

a. I talk to my mother or sister or friend /b. I take medicine/c. I take herbal remedy/d. I sleep/e. I rest
f. Other _____

If not working, please go to question No. 20

18. If you have a job, does your menstruation affect your job? a.Yes/b.No

18.1. If yes, how? _____

19. Does your job affect your menstruation? a.Yes/b.No

19.1. If yes, how? _____

20. Are you limited from tasks during your menstruation? a.Yes/b.No

If No please go to Q. No 24

20.1.If yes, please specify: a.Cooking-after bathing / b.Touching others after bathing /
c.Participating in religious rituals/d.going to temple/e .Sleeping in the same bed with husband or
family/f.Touching pickles or tamarind or plants/g.Doing auspicious things like applying turmeric
on the face or keeping flower on the hair or red bindi/h.visiting the neighbors /
i. Other _____

21. What are the restrictions you agree with ? a. Cooking-after bathing /b.Touching others after
bathing /c. Participating in religious rituals/d. going to temple/ e .Sleeping in the same bed with
husband or family/ f. Touching pickles or tamarind or plants/ g. Doing auspicious things like
applying turmeric on the face or keeping flower on the hair or red bindi/ h. visiting the neighbors /
i. Other _____

21.1 Why do you agree with these restrictions? a. It's our culture/b. It's part of our religion/c. I
am scared to be punished/d. I don't want something bad to happen to the family /
e.Other _____

22. What are the restrictions you disagree with ? a.Cooking-after bathing /b.touching others after
bathing /c.Participating in religious rituals/d. going to temple/ e.Sleeping in the same bed with
husband or family/f.Touching pickles or tamarind or plants/g.Doing auspicious things like applying
turmeric on the face or keeping flower on the hair or red bindi/h.visiting the neighbors /
i.Other _____

22.1 Why do you disagree with these restrictions?

23. Have you ever tried to break these restrictions? a.Yes/b.No

23.1. If yes, please specify: _____

E. Using different materials

24. What kind of product do you use for sanitation? a.Cloth/ b.Disposable pad/ c.both

→If cloth, go to question 29.

→If pads, go to question 40.

If using both:

25. When do you prefer to use cloth?

a.When not enough money/b.no one to get the pad/c.when I am out /d.pad is not available in the
shop/e.while sleeping/f.while at home/ _____

26. When do you prefer to use pads?

a.going out/b.sleeping/c.during sickness/d.rainy season/e.functions/f.other _____

27. Which one you prefer more? a.Cloth/b.Pad

28. Why do you prefer one over the other?

a. Comfortable/b. easy to handle/c. absorbs better /d. Feels clean/e. Lack of easy access to water/f. Economical/ g. I feel modern /h. I feel traditional/i. Others _____

→ Please go to question 30

If using cloth:

29. Why do you prefer to use cloth?

a. It does not cost money/b. since beginning I have been using it/c. It is more comfortable/d. I do not know how to use other things /e. disposable pads are not available in my place/f. My family does not allow me to use pads/g. Others _____

30. While using cloth, what kind of material do you prefer to use?

a. Old lungi/ b. sari/ c. in skirt/ d. other _____

31. How do you keep it in place?

a. Using panties/b. cloth belt around the waist/c. tug it to the in skirt/d. Other _____

32. How easy is it to change if you are not at home? a. Easy/ b. Difficult

32.1. If it is difficult, what are the obstacles?

33. What do you do with the used cloth?

a. I wash it wherever I am/b. I wrap and keep with me until I go home to wash it/c. I dispose the used cloth and use the new one/d. I always dispose the used cloth /f. Others _____

→ If the answer is d go to question 37

34. How do you dry them?

a. In a place not frequented by men/b. under other clothes/c. under the sun without minding others/ d. other _____

34.1. Are there any issues around drying them? a. Yes/b. No

34.2. If yes, what are they? _____

35. How do you care for it and store it after you have finished your period?

a. Wrap it in a cover and keep it in the bath room/b. along with my other cloth/c. insert it in the roof top/d. keep it just like that in the bathroom/e. others _____

36. How long does the cloth last you for? a. Only once /b. up to 3 /c. 4-6/d. 7-9/e. 10-12 Months

37. If you dispose the old cloth, how do you dispose of it?

a. Burn it/b. bury it in the soil/c. throw it in the bush/d. other _____

38. Have you experienced any problems such as infections or rashes when using cloths?

a. Yes/b. No

38.1. If yes, please

specify: _____

39. Are there myths in the villages about the menstrual cloths? Yes/No

39.1 If yes, what is that?

a.Birds should not fly over the cloth/b.Animals/insects should not climb on it/c.Men should not see it/d.other _____

→ If using cloths please go to question 44: If both please go to question 41

If using disposable pads:

40. Why do you prefer to use disposable pads?

a.No need to clean it/b.I feel comfortable /c.I feel cleaner/d.Easy to use/e.absorbs better/
f.Others _____

41. How much does it cost you per month?

a.Up to 20/b.21-25/c.26-30/d.31-35/e.36-40/f.above40 rupees

42. How do you dispose of it?

a.Throw it out with the rest of the garbage/b.Burn it with plastic/c.Other _____

43. Do you experience any problems such as infections or rashes when using disposable pads? .Yes/b.No

43.1. If yes, please specify: _____

44. How many hours maximum do you use the same cloth or pad?

a.up to 4hours b.4-6 hours c.7-8 d.8-10 e.10-12 f. more than12 hours

45. How many times do you change cloth/pads during one menstrual cycle?

a.up to 6 times/b.7-9/c.10-12/d.13-15/e.16-18/f.more than 18 times

46. What are your feelings towards menstruation?

a.Pleasant/b.getsintheway/c.Isolating/d.Empowering/e.Aversion/f.Other _____

47. How do you feel about answering these questions?

a.Good/ b.Embarrassed/ c.Shy/ d.Curious/ e.Others _____

In case you need extra space for some answers please use the below given table after mentioning the appropriate question number.

Sl.NO.	Q.NO.	Details

Date:

Signature of the investigator