

Appendix 4: Hybrid sanitary pad research in India

Many menstrual hygiene options are needed to meet the needs of women and girls. Reusable options such as cloth pads and menstrual cups play an important role in reducing need to purchase pads every month which also reduces impact on the environment. Menstrual cups can be reused for years so provide a significant reduction on sanitation and solid waste systems. As a product that requires insertion in the vagina, they may not be acceptable for unmarried women in many cultures. Both menstrual cups and reusable pads require a higher up-front cost than disposable pads, which can sometimes be prohibitive to low-income women. They also require access to clean water and soap, and thorough drying—resources that are not always available in poor communities.

PATH has been exploring a concept for a hybrid sanitary pad—a reusable, leak-resistant surround with the flexibility of allowing women to use either a disposable or reusable absorbent material. The reusable hybrid pad surround would dry quickly, prevent leaking, and reduce impact on the environment from plastic waste disposal. With co-funding from another project, PATH completed a number of designs of our hybrid sanitary pad concept. There are several options for the outer surround: one with mesh fabric over the top and one that has no mesh and holds the absorbent material in place with elastic. Other variations are in the way the pad is worn: one has wings with Velcro or snaps to secure it to underwear and another has loops for a drawstring that allows it to be worn as underwear. All prototype designs were made with leak-proof, easy to clean material that is used in the US for baby diaper wraps. Umbrella material or rip-stop fabrics are other soft, waterproof fabrics that may be available in low-resource settings.



Velcro straps secure hybrid pad to underwear.

Indian FGD results

PATH conducted two focus group discussions to hear feedback from women in Trichy, Tamil Nadu on the hybrid sanitary pad concept. There were 8 women per group between the ages of 18-45. Discussions were facilitated by a moderator in Tamil using a structured discussion guide. Notes were taken in English and the sessions were taped, transcribed and translated into English. Results were entered into data sheets for analysis by PATH.

Participants represented various sanitation systems: biogas, communal, household. Groups represented both cloth and disposable sanitary pad users.

Awareness and sources of information on menstrual hygiene:

When women started menstruating, they did not tell their mothers. A girl tells an aunt or other trusted female who informs the girl's mother. After this, mothers became a primary source of information.

"I told there is blood coming and I did not know what is that, and then they understood that I have attained age and made me to sit separately for 16 days and do some function."

– FGD respondent

There has been a cultural shift from the previous generation regarding sources of information. Half the women said girls now learn about menstruation from school, television, or other sources. This may reflect more girls going to school than previously and also the influence of mass media. Menstruation was a cause for celebration by the family, especially if it happens early.

"We cannot go to the public toilet for this change and people will be coming there and we will feel shy."

- FGD respondent

"Those days, girls will attain puberty at 19 years also but now only they take the children to doctor at the age of 12-13 years after seeing other children nearby who attain puberty at the age of 12 years." FGD respondent

Some women said they would feel shy to talk about menstruation and would never discuss it with males. Some other women said they could talk to friends or coworkers who would understand. A few women said their mother and elders called it "bad blood" but that its release was good.

"The bad blood comes out during periods and then we will be free." FGD respondent

Cultural practices to manage menstruation

Almost all women noted restrictions in activity or separation from the family during menstruation. These include sitting separate in the home, staying on the porch for several days, not doing work, not going to school or work, not lifting weight, and not going to the pooja (religious) room.

"We will not go to temple and also not attend any functions." FGD respondent

However, cultural attitudes are changing. Several women noted that it used to be women sat separately "now they take bath and do their regular work." A few women said they are in college and cannot take the time away or their studies would be affected.

A few women learned about sanitary pads from television ads. Other sources of information were sisters, friends, schools, and hospitals. Women paid between Rs. 20–35 for packs of 8 pads. Women used between half pack and a pack a month, with one woman using two packs per month. One woman supplements with cloth.

A few women chose disposable pads because of concern about germs which they heard on television. Some noted the convenience of disposable pads: they stay in place, don't leak, and are absorbent. A few commented on the smell of cloth pads and also noted their embarrassment of others seeing cloth being dried. Women who used cloth rags had not tried disposables or been taught how to use them.

"To use cloth is difficult as we have to wash and dry it, and also we cannot dry it in open as gents will come to house and they may see it." FGD respondent

Cloth users consistently spoke of using cotton (old saris or lungis) which was more absorbent and soft, and most of the cloth users used underwear, referred to as inner wear (jatti). Cloth is a problem in the rainy season. A few women said that cloth "will have some eggs in it and it turns white and so we are not reusing it." It was noted that cloth takes more water to wash. Almost all women would not change their menstrual hygiene product in the communal toilet.

Menstrual waste disposal

Women dispose of cloth rags in various ways, the most common being rinsing and letting them go in the river or burying in the river bank. A few women dried and buried or burned them. One woman in each FGD was aware of the incinerator at the communal toilet and disposed of rags there. Women who responded in one FGD all put their disposable pads in plastic and disposed of the bag in the river; one rinsed the pad first. In the other FGD half the women reported burning their pads; one used the incinerator in the communal toilet. Sources of information on disposal were television and women's self-help groups,

Sanitary pad # 10

Waterproof material, mesh top to hold cloth or disposable absorbent material in place, opening at the end, wings with a snap to secure pad around underwear.

Figure 1: Sanitary pad #10



Alternative menstrual hygiene products

The women were shown some reusable cloth pads made of velour with additional layers that could be added on days of heavier flow. Most women did not see these as being useful. They would: be too heavy, not dry well, not stay in place, and not be absorbent enough. A few women were interested and asked where these reusable pads were sold and noted they had

Velcro stickers to attach to underwear. When shown a menstrual cup, most women felt it would be irritating and uncomfortable. A few women noted that it would be inconvenient to empty and one woman said children might play with it.

Hybrid sanitary pad prototypes

The facilitator showed women several versions of the hybrid reusable sanitary pad including ones that could be secured to underwear or worn with an elastic belt or drawstring. Some versions had a mesh enclosure that could be filled with any absorbent material (disposable or reusable cloth) and others had a rim but no mesh enclosure so absorbent material, such as cloth, could be placed on top. All of them had a reusable, colorful base made of waterproof material that is easy to dry. Most women thought the hybrid pad was safe and several noted that it could be used with either cloth or a disposable material. One thought the version with elastic was like the method used in the old days. Various hybrid pad designs were passed around to the women who identified number 10 and 5 as preferred designs.

"[We can clean the cloths in the river] because it is running water and all the ladies do like that and the smell will not be in the house."

- FGD respondent

Women appreciated this hybrid pad's flexibility of use with either cloth or disposable material. This made several women willing to consider trying it. A few women noted the material might be irritating or "cause wounds."

"It is like a jatti (inner wear) and we can keep both either the cloth and pad."

"It is better to use pad than cloth inside to absorb for a longer time."

The hybrid pad appealed to some of the women who use disposable pads – they swathe the hybrid pad as an attractive holder for their disposable pads, giving them an extra layer of protection from leaking. One woman said she would pay R 30 or 50 for it.

“It will be like regular jatti (inner wear) and they would have stitched with net cloth and we can keep the pad inside.”

Some women said it is like underwear; it is stiff and will not slip but also looks comfortable. Many said it was safe and secure and could be worn when going out of the house. One woman noted “We can dry it in sunlight and it is good if sunlight falls on it.” This comment was a contrast to the attitude about cloth which has to be hidden when dried, perhaps because this would appear to dry quickly and also because it does not look like a menstrual hygiene product.

Overall: Women reacted positively to the hybrid pad concept with some reservations about durability, comfort, and suggestions to increase the length and width. The flexibility of the hybrid pad seemed to appeal to both cloth and disposable pad users.

“There are no disadvantages and only benefits.”

Women who use cloth preferred the type with an elastic belt. Women who use disposable pads preferred the type that snaps to underwear. Several women noted that the pads should all be long and wide enough to accommodate cloth or a disposable material or pad. It was noted that the hybrid pad would be good for school girls or women who are out of the house all day. Other comments were to have just one snap or Velcro attachment on the bottom, it does not need to have a pattern as it will be worn inside, the absorbent material should be removed from the top to avoid touching it.

Menstrual hygiene stakeholders

We showed the hybrid pad prototypes to a number of stakeholders including the district planning group, NGOs involved in menstrual hygiene, and representatives of two different groups that made disposable sanitary pads. All groups expressed interest in the potential for income generation. One group asked if they could copy the pattern, and traced the design on paper.

Recommendation

Finalize the two preferred hybrid pad designs and make sufficient prototypes to include in a usability and acceptability study with women. Studies should explore locally-available waterproof materials, cost, marketing and distribution approaches, and income generation potential.

Figure 2:
Sanitary pad
#5



Sanitary pad # 5

Waterproof material, no mesh on top, two strips to secure cloth or disposable absorbent material. Loops allow this hybrid pad to be worn as underwear using an elastic or fabric drawstring waistband.