

The ST Dispo Bag – Waste Pickers Create a Solution to an Occupational Health Problem

Introduction

A recent survey of 1000 rural women, tells us that barely 12% of India's menstruating women use sanitary napkins. Yet in terms of numbers, given India's population, this amounts to a staggering 36 million women using – and more to our point in this paper, *disposing of* – sanitary towels every month! The Government at both central and state levels is actively working to manufacture and distribute low-cost sanitary pads, in partnership with NGOs to push this 12% usage to as close to 100% as possible. Paradoxically, while increased usage of STs will benefit some women, it also gives rise to a related issue that negatively affects the health of other women: the safe and sanitary disposal of sanitary napkins and the occupational health of the women who handle waste. Who is thinking about how these soiled napkins will be disposed, ask waste pickers who handle this offensive and potentially risky waste, often with their bare hands? SWaCH, a waste pickers' cooperative in Pune, is pushing a simple, low-cost solution – ST Dispo Bags that will benefit the user, the waste picker, the city and the organisation.

The scale of the problem

At 12%, India has one of the lowest sanitary napkin usage figures in the world, and stands out compared to the figures of other Asian countries -- 100% in Japan and Singapore, 64% in China and 88% in Indonesia. Most Indian women use cloth pads and some still use traditional local methods such as wood ash or coarse wadding of plant fibres. Many of these methods are uncomfortable, insanitary and in some cases (such as use of coarse fibre or ash) actually dangerous to women. The gravity of this situation has been recognised and government at both central and state levels is actively working to manufacture and distribute low-cost sanitary pads.¹ Paradoxically, this gives rise to another related issue that is equally demanding of our attention: the safe and sanitary disposal of sanitary napkins and the occupational health of those who handle waste. After all, if we are concerned about women's health, then our concern should extend from menstrual hygiene to the occupational health of those women who have to handle the soiled pads after they are disposed.

If we take the number of women in the 15-54 age group as 300 million, even at the current low figure of 12%, we can estimate about 36 million women using and disposing of sanitary pads every month. Assuming an average of 12 napkins/woman/ month, we are faced with 432 million soiled

pads of mixed cotton+wood pulp fibre/plastic to be safely disposed of every month – without contaminating water bodies, blocking sewer lines, adding more non-biodegradable waste to landfills and equally importantly, without posing an occupational hazard to those who handle solid waste, often with their bare hands.

The volume of soiled pads disposed is only going to increase in the near future. At every level, from the larger environmental impact to the impact on an individual's health, this is an issue that needs serious and urgent attention.

Issues and obstacles in the use of sanitary pads

Some women's groups are questioning the very notion of disposable sanitary napkins as the only solution to the issue of improving menstrual hygiene and lowering the incidence of RTI. There are examples of village level self-help groups and cooperatives who are popularising the use of cheap, soft, comfortable, washable cloth pads made by the SHGs and cooperatives themselves. These do not have a recurring cost and are more affordable in the long run, not to mention less harmful to the environment. But, washable cloth pads require water and soap – not always easily available. Further, since most of the washing in low income settlements takes place at a communal tap or hand pump, it is unlikely that women will wash their used cloth pads there. For the time being at least, commercially produced STs seem to be here to stay. Here are some of the main issues with regard to their usage:

Cost: Most sanitary napkins are just too expensive for lower income group women to use regularly – if at all. About 70% of women in India say their family can't afford to buy them. A pack of 10 ordinary sanitary napkins costs about Rs 30-40. Therefore, average spending per woman/month, would be around Rs 48, which is expensive for a low-income group family. As one village woman put it, the choice would often be between buying milk for the children or sanitary napkins for herself. Recognising that the biggest barrier to using a sanitary napkin is affordability, the government is encouraging schemes that aim to manufacture and/or provide low-cost sanitary napkins to girls and women in lower-income groups. ²

In Maharashtra, for example, a union government scheme that offers sanitary napkins at highly subsidized rates to promote menstrual hygiene and safety from disease among girls in the 10 to 19 age group was announced on Women's Day, in March 2012. The Rs 150-crore scheme will be launched in 150 districts across the country in the first phase. The selected districts in Maharashtra

are Dhule, Nandurbar, Akola, Buldhana, Amaravati, Latur, Beed, Satara and Osmanabad. Adolescent girls between 10 and 19 years living in rural parts are entitled to get a pack of sanitary napkins at highly subsidised rates every month, according to the state's deputy secretary R S Jadhav. Packs were to be made available at primary health centres (PHCs) in these districts. Women health activists, under Asha (Accredited Social Health Activist) banner, will have to deliver them to the adolescents girls in their area for Rs 6 per pack every month. As an incentive, Asha will get Re 1 per pack delivered.²

Health and socio-economic implications of not using sanitary pads: It has been clearly documented that inadequate menstrual protection has a direct impact on the school drop-out/absenteeism ratio of menstruating girls -- an average of 50 days of school missed annually per girl in that age group, according to one survey. Secondly, the incidence of Reproductive Tract Infection (RTI) is 70% higher amongst women and girls who do not use sanitary napkins.

It is certainly not the case that sanitary napkins are the *only* sanitary and safe method for absorbing menstrual blood – clean strips of cloth, for example, can provide perfectly good protection – but only IF the strips are frequently changed and properly washed and sun-dried. Goonj, an NGO that recycles old clothes, in fact produces re-usable cloth pads and supplies them at low-cost to lower income group women. Unfortunately, the taboos and restrictions that surround the issue of menstruation in India coupled with the cramped living conditions in low-income group housing where the bathing/washing facilities are often communal, make it almost impossible to adequately wash and sun-dry the strips, rendering them insanitary and a fertile field for the growth of microbes. If cloth strips are not properly washed and sun-dried, they can cause a high incidence of RTIs.

Market value of the sanitary pads industry: Increasingly, sanitary napkins are being perceived as more of a necessity and less of a luxury in India. Urban women make up 20% of the country's sanitary napkin market. The Indian female population aged from 13 to 50 is estimated to consume sanitary napkins worth 12 billion USD a year. In 2008, there were 96 million women in urban India and, at that time, it was projected that that number would increase by 17% to 1.2 billion women in 2013. With this predicted population growth, the **sanitary napkin market could potentially be valued at as much as USD\$365m in 2013**, up from US\$166.1m in 2008. These confident growth projections make it imperative that we make equally focussed plans for establishing a disposal protocol for the soiled napkins that is safe both for the environment and also for the waste pickers.⁴ These optimistic figures must be kept in mind when we discuss Extended Producer Responsibility – EPR.

Environmental and health implications for waste pickers

Environmental implications of sanitary pad disposal: The materials used to manufacture most pads are derived from the petroleum industry and forestry. The absorbent core, made from chlorine-bleached wood/cotton pulp, could be reduced to make slimmer products with the addition of polyacrylate gel which sucks up the liquid quickly and holds it in a suspension under pressure. The remaining materials are mostly derived from the petroleum industry, the cover stock used is polypropylene non-woven, with the leak-proof barrier made from polyethylene film. Over 90% of a sanitary pad is made of crude oil plastic; the rest is made from chlorine-bleached wood/cotton pulp. We are rightly concerned about the billions of plastic shopping bags given away daily, but by using plastic-laden feminine hygiene products, each year we add the equivalent of hundreds of billion plastic bags to our waste stream.

The problems with these materials are that they are neither biodegradable nor recyclable, so disposal issues are created worldwide. Disposed pads often end up in the oceans of the world. Given the massive impact that this product has on the environment and eventually on communities, there is now an increasingly vocal demand that the manufacturers of sanitary napkins assume more responsibility for the entire life-cycle of their highly-profitable product – including where their products go after sale, and how and where they are eventually disposed.

As an organisation that works with waste pickers and is concerned about their welfare and working conditions, SWaCH has been asking manufacturers to at least assume a more proactive role as far as domestic disposal of these pads is concerned. That is, there should be a disposal option that is provided along with the product. Now that the idea of 'Extended Responsibility' has come into play across the globe and in India with the Plastic Waste (Management and

SWaCH

SWaCH Coop is India's first wholly owned cooperative of self employed rag pickers /waste collectors and other urban poor, based in the city of Pune, Maharashtra, India. SWaCH is authorised to provide door to door waste collection and other allied waste management services by the Pune Municipal Corporation (PMC). This includes collection, resource recovery, trade and waste processing. SWaCH seeks to provide decent livelihoods in the recycling industry. Through the medium of over 3000 members, SWaCH services over 300,000 households across the city. SWaCH is promoted by [KagadKachPatraKashtakariPanchayat \(KKPKP\)](#), the waste pickers' union that organised 6000+ rag pickers /waste collectors to work with dignity and created a sustainable de-centralised, waste management model in the country.

Disposal) Rules 2000, SWaCH has been trying to start a dialogue with industry representatives and government, not only seeking their cooperation in encouraging the use products like the ST dispo bag, but also making it mandatory to do so.

The impact on waste pickers' health

What is to be done with used napkins? The government schemes mention the installation of dedicated incinerators etc. in schools and communities, but given the poor track-record that we have in India of maintaining technology in effective working condition, it is safe to say that most of the sanitary napkins used will continue to find their way, in increasing numbers, into the solid waste collection system. In the case of the city of Pune, this means that these increasing numbers of used sanitary napkins will be handled by SWaCH members and other waste pickers.

As a group, waste pickers are already vulnerable health-wise. According to the WHO, of the 95 waste workers studied at an open dump site in Bombay –

- 80% had eye problems
- 73% respiratory ailments
- 51% gastrointestinal ailments
- 40% skin infections or allergies.

An investigation of waste pickers who worked at a site in Calcutta revealed that

- 32% had protozoal and helminthic infections as compared to 12% in the control population of a nearby town.

There is a similar high incidence of infectious and non-infectious diseases among waste pickers and populations that live near open dump sites, in many other low-income countries. Waste pickers often cut themselves on broken glass and sharp pieces of metal that have been disposed in the general waste and have open wounds on their hands. In this situation, soiled sanitary napkins and diapers are not just offensive to handle, but can actually be dangerous to the health –infection with Hepatitis/ Tetanus/ HIV/ E.coli/ Salmonella/ Staphylococcus, would be a very real possibility.

According to the Centers for Disease Control and Prevention (CDC) (USA), *'...both Hepatitis B and C can thrive in blood-soaked materials and in residue on restroom fixtures left behind by infected individuals. The virus is extremely hardy and it can survive in a drop of blood or bodily fluid or even on a dry surface for weeks and still be capable of causing infection. Hepatitis C may survive on*

environmental surfaces at room temperature for up to four days. The viruses can enter the body through direct contact with broken skin. ... (I)t must be assumed that any and all soiled feminine care products may contain bloodborne pathogens.'

Hepatitis Foundation International recommends that bloodstained material such as tampons and menstrual pads be placed into sealable plastic bags before disposing of them in waste receptacles. '(Cleaners) would be well advised to treat all blood and bodily fluids, including menstrual blood, as if they are infected and potentially harmful to the health.'⁵ SWaCH would recommend the use of biodegradable ST Dispo bags instead of plastic bags, for all the obvious environmentally sound reasons.

Doug Calvert, president of Cannon Hygiene Inc., a global restroom hygiene service company notes that '*...to call them **sanitary** (napkins) is a bit of a misnomer. Although they are sanitary when first used, because the napkin is usually in use for a period of time, they become a breeding ground for harmful bacteria or germs when it comes time to dispose of them. ... still today, there is no known manufactured chemical or natural-ingredient treatment that has proven to effectively reduce or inhibit the growth of bacteria in the napkins for a prolonged period of time. This is why women must be sure to wash their hands thoroughly after removing sanitary napkins. And, it's why cleaning professionals must be especially careful in how they handle and dispose of them, which is often not the case.'*

SWaCH and the ST Dispo Bags

ST Dispo bags are manufactured by members of SWaCH, Pune's waste picker collective, using recycled newspaper. Minimally priced at Rs 1 per bag, these are small clearly-marked 'envelopes' with a string that enables them to be securely tied, ensuring that the contents do not spill out into the general waste that is sorted through manually by waste pickers looking to salvage recyclables. Old, destitute waste pickers, who have no other means of income, benefit directly from the sale of these bags, as do those who are unable to work temporarily due to pregnancy, injury or ill-health. Waste pickers can easily identify these bags due to the label on them and this also helps channel this waste into a different stream.

'We hate reaching into the sack of waste and encountering used diapers and used sanitary napkins,' says a SWaCH member. *'When people throw napkins in the waste, they don't think that someone is sorting through all this household rubbish to recover recyclables. So they wrap the napkins in any old*

polythene bag, or don't wrap it all. Some people wrap the napkins in newspaper, but often this opens up and the dirty napkin is exposed. Yes, we are waste pickers, but there are some things we would not like to touch.'

Adds Rebecca Kadari, another SWaCH member: *'In the waste we get diapers, sanitary napkins... These products are very convenient for people. Our cooperative is making special paper bags for disposal of sanitary napkins which you can buy at just Rs 10 a pack. When you dispose such items in these bags which are marked with a special symbol, we will know what is inside and we won't open these bags. Now these items come just like that in the waste bags which we open to look for recyclables. When we are working with waste we have to take care of our health. It will be better for you also, it is a better way of disposing waste.'*

Another waste picker and SWaCH member, Shobha Bansode says that she puts plastic bags on her hands when she has to handle sanitary napkins. "That's the only way I can handle this waste." She says.

Says Rajendra Kamble, a SWaCH member, *"There never has been a uniform method of disposal of these pads. Some people wrap it in paper, some put it in a plastic bag and some just throw it, without putting it in anything. But even if one did wrap it, we had to take it out of the wrapping - the paper or plastic, as the municipal wet garbage truck does not even let one small piece of paper and plastic into it. So at the end of the day, we still have to handle your used napkins. But now, when we have started getting them wrapped in these ST disposal bags, we don't even touch it. We just put it in the truck or the container. We don't need to handle anyone's soiled napkins anymore!"*

Baby Mohite, another SWaCH member says that she always has a bundle of ST Dispo bags wrapped in the pallu of her sari, when she goes off to work. *"I actively campaign door-to-door to get women to use the ST Dispo bags. I not only insist that they use it, I take out the sample I carry and show them how to tie the string, how to keep the yellow label facing outwards. And yes, people have been buying them. I have sold about 1500 till date. I recently went to a*

The Ministry of Environment and Forests has notified the Plastic Waste (Management and Handling) Rules, 2011 on 4th February, 2011. As per these Rules, in line with the principle of Extended Producer's Responsibility (EPR), the municipal authority may ask the manufacturers, either collectively or individually to provide the required finance to establish the plastic waste collection centres. The producers are required to finance, and organize a system for environmentally sound management of waste generated from their products. The concept of EPR has been adopted as being practised in various countries, requiring the producers to take responsibility for the end of life of their products and to ensure that the waste from such products is channelised for safe handling.

college for a session on waste recycling – the teacher there suggested very mildly that the girls should consider using the ST Dispo Bags, but I pushed to the front and told the girls that it was not a ‘suggestion’ it was an order, compulsory, and they had to buy and use the bags, or face the wrath of waste pickers like myself! They all bought packs of ST Dispo Bags. That’s how to do it.”

The SWaCH waste pickers are unanimous in saying that the plastic pouches provided for disposal by some ST manufacturers, are of no use – “We find the napkins unwrapped in the waste, and the plastic pouches also, empty, in the waste,” say Shobha Bansode and Baby Mohite.

Currently, SWaCH Pune uses an incentive-based programme to encourage its members to sell the bags in the communities in which they live or work. This has had varying levels of success – in one affluent neighbourhood, after buying the ST Dispo bags, they were not used and eventually landed up in the trash. But SWaCH member Kausa Bibi has shown that it is not only possible to convince women to buy and use these ST Dispo bags, it is possible to sell them even in low-income communities.

Kausa’s story begins one day when she noticed that her son was looking particularly glum. On enquiring, Kausa found out that her son, a supervisor with SWaCH, had been given a target to meet, selling ST Dispo bags, and felt hesitant about selling this ‘women’s thing’. He felt very sceptical also about whether people in a low-income community would be willing to pay for a product to dispose of waste. Kausa laughed and asked him to hand over the bags. She left home, and walked through the vasti where she lived, and by that evening, had sold 200 bags! Since then, she has been put forth as role model in the marketing of ST Dispo bags.

As one Pune resident said: ‘I recently used the ST disposal bag and after I threw it in the dust bin, I did not feel guilty, as I knew that no one would be opening it and handling my used sanitary pad. Also when I threw it in the dust bin, it actually looked beautiful and I thought that this really is the best way of disposing one's pads.’

SWaCH currently sells about 10,000 ST Dispo bags a month.

Conclusions and challenges that lie ahead

SWaCH has taken the first steps in beginning a dialogue with manufacturers and the local government about appropriate disposal of STs, keeping in mind the occupational health issues of

waste pickers, and in the light of the EPR guidelines as included in the Plastic Waste Management Rules. Efforts are also being made at an individual level through the SWaCH members to convince citizens to use the ST Dispo bags. Some of the recommendations that could be made are:

Recommendations

- Government and NGOs must research and publish more data on the disposal methods of sanitary napkins, at a domestic level, especially in urban India. An educated guess would predict that more than 90% of urban women in India, dispose of their used sanitary napkins in a very slipshod manner. These findings must be publicised to bring home the urgency of the issue.
- Waste pickers must be given a forum to convey to other urban women, how they feel about having to handle soiled napkins, often with their bare hands. Face-to-face conversation often brings home the issue and results in genuine change.
- It could be proposed to make it mandatory for sanitary napkins to be disposed of in a way that allows them to be clearly identified – for example, by using an ST Dispo bag. Penalties could be proposed for non-compliance – in the same way that there was strict enforcement of the Wet/Dry garbage rule for collection.
- Manufacturers should be encouraged to take a more pro-active role in convincing consumers to use ST-Dispo bags.
- Offices, hostels, public restrooms etc. could be asked to stock dispensers of ST Dispo bags.

Notes

1. *"Sanitary Protection: Every Woman's Health Right", a survey undertaken by AC Nielsen. Reviewed and endorsed by community development organisation Plan India, the survey was conducted in October 2010 and involved 1,033 women in the menstrual age and 151 gynaecologists from across India.*
2. *Girls in 9 districts can now have menstrual hygiene, Umesh Isalkar, Times of India, March 7, 2012,*
3. *Breaking a cultural taboo, Maitreyee Handique, Live Mint, June 9 2011*
4. <http://www.cmmonline.com/articles/sanitary-disposal-units-in-women-s-restrooms-3>
5. Outlook Profit 2008 pp 34-35
6. Searchlight South Asia, Promoting Feminine Hygiene in India, June 21 2011, Nisha K Kulkarni

7. Consultation on EPR, KKPKP
8. Ecoexist website link to ST Dispo bags