



**THE ALL
GIRLS ECO
PROGRAMME**

**SUSTAINABLE PERIODS – THE
WHY, WHAT AND HOW – POSSIBLE
APPROACHES**

Written by: Nisha Natarajan and Josephine Ambrose

Reviewed and edited by: Nour Rashid

ABSTRACT

Sustainable menstruation implies the use of eco-friendly menstrual products that do not cause a negative impact on the environment. According to various statistics, a menstruating woman can produce 200 kg of non-biodegradable menstrual waste on an average, every year. Moreover, many women are unaware about the proper handling of menstrual waste. Women manage menstrual waste differently when they are at home or outside; at homes, they dispose of menstrual products along with domestic wastes and in public toilets, they flush them in the toilets without knowing the consequences of choking. So, there is a need to educate and make them aware of the environmental pollution and health hazards associated with them. This paper intends to elaborately explain the idea (what) of sustainable menstruation, the reason (why) it is the need of the hour and the ways (how) by which it can be accomplished. | **THE COVEN**

INTRODUCTION

Menstruation wastes are the wastes that are generated by a female in her reproductive years. These wastes are produced during menstruation which is commonly known as menses, periods, or monthly bleeding cycle.[1] Sanitary waste or menstrual waste disposal is a crucial issue in today's scenario all over the world. Handling this waste is a problem on many fronts. Owing to the disposal management techniques and taboo around menstruation, it is necessary to come up with a solution that will manage sanitary waste on all fronts. [2] So far, while importance was given only to promoting the usage of sanitary napkins, it is equally important that the problems caused by dumping sanitary waste in landfills or incineration of this waste be addressed. Considering the various hazards caused by this widely accepted yet problematic disposal method, it is necessary to come up with a solution that is sustainable on every front. To avoid proliferation of the problem, a decentralized solution to handle the menstrual waste at its generation point is vital. [2] This type of waste must be prevented at source and hence, undergoing menstruation in such a way that would be sustainable in the long run and that would not generate toxic waste, is needed. Safe menstruation for every female is imperative. This would also ensure a less harmful impact on the environment. Women have developed their own personal strategies to handle the period. Globally, these strategies vary due to personal preferences, availability of resources, economic status, education status, and knowledge about menstruation. [1] The lack of knowledge on environment and health impacts prompts the usage of non-biodegradable, disposable products that leads to various health problems like Toxic Shock Syndrome as well as the piling up of waste in already full landfills.

ANALYSIS OF PROBLEM

1. WHY SUSTAINABLE MENSTRUATION?

Menstruation is a natural phenomenon occurring during the reproductive years of a woman. It is also known as periods, menses or menstrual cycle. In order to absorb the menstrual flow, women use various products known as menstrual products. These products vary from woman to woman and are dependent on their knowledge, preference, availability, and ease of buying. These products are either disposable or reusable. Plastic has become an essential material in modern life, and menstruation is no exception. For almost a century, most commercial menstrual products have contained somewhere between a little and a lot of plastic in their basic design. On any given day 800 million women in the world have their period. Many of them use disposable sanitary products such as menstrual pads, which can take over 800 years to decompose. [3]

Disposable sanitary napkins (DSNs) are generally made of 90% plastic and keeping in mind the adhesives, packing, etc., each pad is equivalent to around 4 plastic bags. [1] While plastic based menstrual products have helped women to have healthier periods, one of the primary reasons that make these products an area of concern, is how these are disposed of and their overall impact on the human health and environment. Due to a lack of awareness and influence of socio

economic factors, disposal practices of women in under-developed and developing countries largely includes open burning, burying the products in pits in the fields or flushing them into the sewer system. Such practices lead to pollution of the air, water and land (groundwater).

Burning of DSNs at a temperature less than 800°C typically releases asphyxiant and irritant gases into the atmosphere. The World Health Organization (WHO) recommends incinerating all health related waste only at temperatures over 800 degrees. [1] Disposable pads often contain furans and dioxins. Furans are present in pesticides that are sprayed on inorganically grown cotton or tree plantations. And dioxins are present if a chlorine-bleach process is used to bleach the cotton or wood-pulp used in sanitary napkins. Dioxins and furans are among the deadliest toxins known to science, being highly toxic even in trace quantities. When pads are burnt, these toxins are released into the atmosphere and can travel a long way from the point of emission. [4] [5]

Women bury their pads in community pits where degradation does not occur. This has a long-term effect on the health of the land. Burying can leach the infectious agents in the used menstrual products into the groundwater.

Plastic based products contain polymer gels that swell when moistened. Hence, flushing these into sewer systems leads to choking of such systems and invites additional costs.

There is no proper way to dispose of single use, disposable menstrual products. There is also no way of recycling pads and tampons because of sanitary considerations. Therefore, they will either end up in landfills or be incinerated (air pollution).

2. WHAT IS SUSTAINABLE MENSTRUATION?

Sustainable development has been defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” [6] [7]. Menstrual health & hygiene is defined by UNICEF as women and adolescent girls using a clean material to absorb or collect menstrual blood, and this material can be changed as often as necessary for the duration of the menstrual period. Menstrual Hygiene Management includes soap and water for washing the body as required, and access to facilities to dispose of used menstrual management materials and is directly related to Goal 6 of the Sustainable Development Goals. [3]

Sustainable Menstruation is the usage of biodegradable sanitary napkins, reusable cloth napkins, menstrual underwear, and menstrual cups. Biodegradable sanitary napkins can decompose in six to 12 months. Reusable cloth pads and menstrual underwear can be reused for a year or two. Menstrual cups are made of medical-grade silicon and are reusable for five to 10 years. [8] [9] Such practices greatly reduce the harmful impact on the environment.

WHAT IS CURRENTLY BEING DONE

Various environmental advocacy groups have identified the ill-effects of DSNs and their prolonged use. Compared to six years ago, the awareness regarding sustainable menstruation and eco-friendly menstrual products has increased manifold. More women are shifting towards reusable menstrual cups and cloth pads. [10]

However, there is still a lot that needs to be done. The women who are making the switch are urban women and the problem of menstrual waste management is still persistent in the rural areas or low income areas (less developed and developing countries). Unfortunately, the efforts to prompt the rural women to undertake better menstrual hygiene practices and proper

menstrual waste disposal practices are met with challenges like “period poverty”, “taboos” and social/cultural beliefs.

PERIOD POVERTY

Many countries have implemented tax exemptions on sanitary pads and tampons. This made menstrual hygiene products more accessible and affordable to a lot of menstruators. But this also added to the growing problem of managing menstrual waste arising from DSNs.

Period poverty is the inability to afford hygienic and sustainable menstrual products thereby leading to decreasing menstrual health management and improper menstrual waste management in low-income areas. [10]

Women not fortunate enough to afford sanitary napkins and other hygienic menstrual hygiene products use rags, ash, plastic, or even sand as alternatives. Their ways of disposing or reusing these materials are unhygienic and unsustainable mainly because of the lack of awareness and affordability.

THE SOLUTION

3. HOW TO MENSTRUATE SUSTAINABLY?

1. AWARENESS

The problem lies mainly in the awareness regarding sustainable menstruation. Because DSNs are affordable, and comfortable (to most women), these are the most widely used menstrual products. Once more and more women, especially women in rural areas, are made aware of the environmental and health effects of DSNs, the gradual shift to eco-friendly products can be pushed further.

- Increased educational materials promoting the benefits of eco-friendly menstrual products.
- Open conversations about periods and sustainable and hygienic period products in schools, especially in the rural areas, which would also promote the idea of sustainability in school going girls and break the taboo around menstruation. Menstrual hygiene and waste management should be an integral part of the education curriculum.
- Voluntary disclosure of the raw materials used in the manufacture of DSNs and tampons, by the producers.

2. AFFORDABILITY

A simple pack of three reusable cloth pads costs around Rs. 160 which is unaffordable for many.

- There should be tax exemptions on reusable menstrual products just like DSNs and

tampons so that more and more menstruators can make the shift, including the women in low-income areas. This would not only make these products affordable, but also promote the use of such products.

- Distribution of sustainable menstrual products should be free of cost in schools and educational institutes to promote their usage as well as spread awareness among women.

3. ACCESS TO CLEAN WATER

In order to menstruate sustainably, the prerequisites are not only the sustainable and affordable menstrual products but also - very importantly - the access to clean water and soap for washing and reusing the sustainable products.

4. DISPOSAL

Disposal is the least favorable method for menstrual waste management. Most of the women who use DSNs dispose of it along with their daily household waste without segregation. This is further segregated by the waste segregators at the waste collection center. These segregators have to deal with the infectious waste which could have been avoided had the waste been segregated before collection itself.

- The producer shall explore the possibility of using all recyclable materials in their products or they shall provide a pouch or wrapper for disposal of each napkin or diapers along with the packet of their sanitary products.
- The consumer must wrap the used products carefully and properly in the pouch provided.
- The consumer should place the menstrual waste in the bin meant for dry waste or non-bio degradable waste.
- Incineration only at temperatures greater than 800°C.

5. SUSTAINABLE ALTERNATIVES

PERIOD UNDERWEAR [11] [12]

Period underwear can be used like normal underwear and are therefore considered to be ‘fuss-free’ and ‘straightforward’. They have padding to absorb the blood, made in a variety of thicknesses. They can be rinsed and either machine or hand washed between uses. Therefore, they require no special maintenance – as they can be washed with other clothes. They are an expensive option – 1 pair costs \$27 (USD) or ₹998 (India). They are more cost-effective in the long run.

MENSTRUAL CUPS [13] [14] [15] [16] [17]

Menstrual cups are made of silicone. They are bell-shaped and sit underneath the cervix of a woman. Silicone is the second most abundant mineral in the Earth’s crust and is not hazardous to the environment. Silicone is a material derived from silica (a type of sand) which will eventually degrade. Moreover, it is also safe to use internally. Menstrual cups can be reused for 10 years and can be used for up to 12 hours before emptying.

It is still a risk for Toxic Shock Syndrome if they are left in for too long – same as with tampons. The risk is extremely low, but Toxic Shock Syndrome can be fatal. In between

periods they can be cleaned using boiling water alone. FLOW [16] carried out a study in 2011, on a group of menstruating women, aged 19 to 40 who were randomly given tampons or a menstrual cup for one cycle. The study found that menstrual cups were a satisfactory alternative to tampons.

A huge drawback to the menstrual cup is that it is not considered culturally appropriate in some parts of the world. Most expensive of all menstrual hygiene products, but lifetime costs tend to be lower given that these products have the longest life span compared to all other available products.

REUSABLE SANITARY PADS/ REUSABLE SANITARY TOWELS [18] [1] [19] [10]

Sanitary pads that are made of cloth (cotton, micro-fiber, antimicrobial treated). Reusable sanitary towels can be bought or can be made – ActionAid have created a step-by-step guide. [18] These are worn outside the body and are made of cloth, often with a leak proof layer at the bottom. Products may have wings with buttons to firmly attach products to underwear. These can be used multiple times up to 2 years. These products need to be soaked and washed thoroughly in water at room temperature, using mild soap (not antiseptic solutions), dried well, and stored in a clean, dry space. While most reusable cloth pads need to be dried in the sun, some products can be dried in the shade. A pack of 6 reusable sanitary towels will cost \$27 (US). More expensive than disposable sanitary pads. Eventually, both the products are more cost effective than DSNs.

BIODEGRADABLE SANITARY TOWELS [20]

Instead of being made from traditional plastics, biodegradable sanitary towels are made from bioplastics. Bioplastics are conditionally compostable depending on the conditions they are in. If they end up in the landfill, the towels behave the same way as non-biodegradable options. Therefore, it is imperative that they are segregated carefully. They do not biodegrade in the ocean either, only biodegrade in soil at the right temperature.

CONCLUSION

This paper has tried to explore the problem of menstrual waste management. Waste management hierarchy states that prevention is the first and the best step for managing any type of waste. Keeping this in mind, this paper explains the various ways in which the generation of menstrual waste can be reduced and the various eco-friendly alternatives that are available. Many women are still unaware about what happens to the used disposable pads once they are disposed of. This paper aims to put light on the same and suggest sustainable alternatives. Eco-friendly or sustainable menstrual products have a huge impact in reducing the burden on landfill sites. Menstrual cups, Period Underwear, Reusable cloth pads are some

eco-friendly products that have a shelf life of 2- 10 years, are skin-friendly and do not require much maintenance. The major drawback of such eco-friendly products is their affordability. Menstruating women in low-income areas are unable to afford these products. Even though once bought, these products are cost-effective in the long run compared to the single use, disposable menstrual products; but because of their high costs, many women are forced to think twice before buying them. One solution is to implement tax exemptions on these products so that it reaches women far and wide. Another issue is that even if these products are made affordable, their reusability depends on the access to soap and clean water. Most of the low-income areas are devoid of clean water which again, aggravates the problem of menstrual hygiene management and puts the onus on DSNs because of their “easy disposal”. This is harmful for both the women as well as the environment.

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