

Abstract for IRN Forum, Whyalla, July 2012

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Body Expulsions and Rural Community Health - Spaces, Perceptions and Management Systems

Abstract

Nature has always had its own methods to rejuvenate and regenerate, and the process often begins with an expulsion or removal. The broad definition of “expulsion” means removal of an unwanted person, product or an item. However, in the context of the human body “expulsion” is largely associated with natural removal of unwanted items such as body fluids, solids, and gases.

Most bodily expulsions are “positive”, providing physical and psychological relief when exiting the human body. Outside of the body, the expelled product takes on a “negative” aspect (e.g. defecation), and if left “untreated” or not “managed”, in the way scientifically / medically recommended, may impact the health of a community. Understanding of bodily expulsions and their management thus becomes crucial for a community’s health and wellbeing.

Vikalpdesign, a design studio in Udaipur Rajasthan, India has worked with rural communities in Uttarakhand and Rajasthan and has examined the way expulsions are perceived and managed. These exercises were done through a series of health workshops in both states of India, through focused group discussions with existing community groups, cutting across gender and age in order to understand expulsions from different lenses.

In particular, the expulsion, menstruation was studied from the point of view of

- physical spaces for managing this
- perceptions, attitudes and taboos of rural communities toward this expulsions
- devices and receptacles for managing this expulsion

Simple solutions were designed to help communities relook at these issues and “spring back” in order to manage expulsions in a more healthy and scientific manner.

1. Background

Human beings have some control or no control over natural expulsions from the body, the only control that they can exercise is how, when and where to manage/remove/throw out the expulsion. Feces, gas, urine, semen, sweat, menstruation, phlegm, saliva or pus are all expulsions that “clean”, that are “positive” for the body– leaving behind a “cleansed” feeling, both physically and psychologically. Once outside of the body, expulsions take on “negative” connotations.

Defecation and spitting are good examples – the expelled products, excreta, spit, saliva, phlegm lead to serious community health problems when left in the open. Open defecation, common for many rural and poor communities, exposes the excreta to flies. The flies sit on feces, then sit on

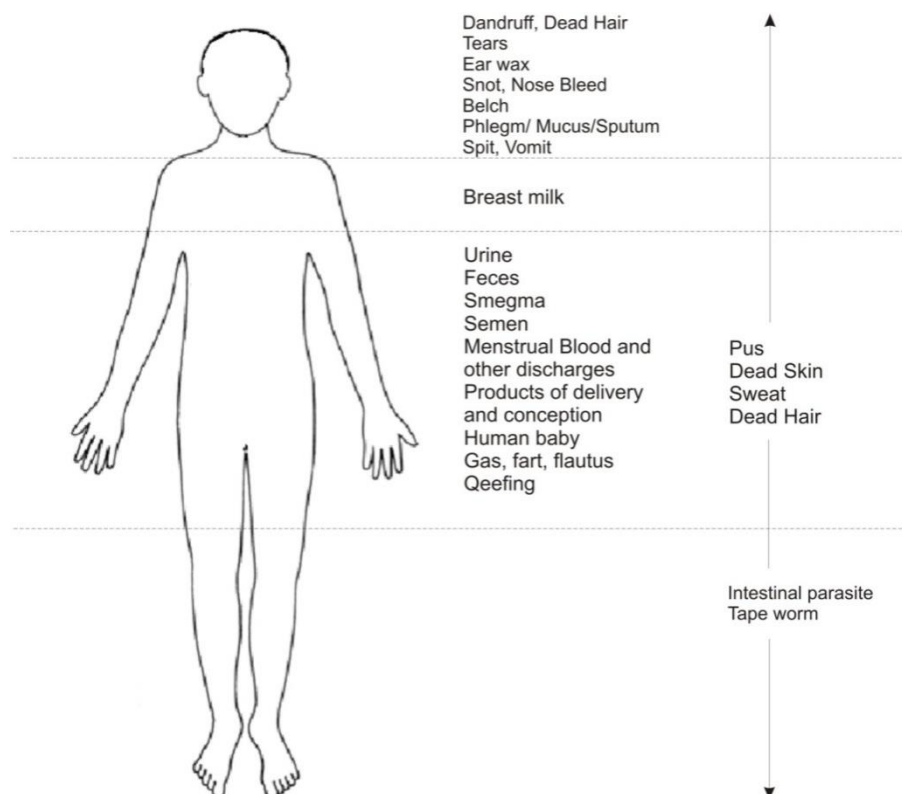
the food we eat. Pathogens enter the food chain causing disease and death (Kar and Chambers, 2008).

Similarly spit, phlegm is expelled from the mouth on to the open ground. This triggers the transmission of infectious disease. Clearly expulsions impact health of a larger community, if left “untreated” or not “managed”, in the way scientifically / medically/ socially recommended. Understanding of expulsions and its management thus becomes crucial for a community’s health and wellbeing.

2. The enormity of human body expulsions

2.1 The Expulsion Map

Areas in the body from where removals or eliminations take place, can be plotted on a map of the human body. The map makes one realize the enormity of expulsions - no part of the human body seems to have been spared. Nature has devised its own ways to remove, eliminate or shed. The removed element gives room to new elements, the new elements are again removed and the process continuing cyclically until “life” leaves the human body. Expulsions slow down as death approaches, the human body begins to shut down and expulsions eventually stop (Hospice of North Central Florida 1996). Expulsion areas or zones can typically be specific to an orifice, snort from nose, tears from the eye or feces from the anus. They can also be from all over the body. For example dead skin or hair is shed from every square centimeter of the human body.



Murthy, Mini Project 2, IDC, IIT B, March 2012

The diagram above divides the body into four zones in order to list expulsions from each of these sectors. If we look at the male or female body separately, semen is specific to male, menstrual blood, breast milk, vaginal fluids and queefing specific to female. However, at just one glance, it is easy to imagine what would happen if there were no secretions or removals. Breast milk, is that one vital fluid that provides nourishment to the baby, semen, is that vital fluid that gives life, menstrual blood is that other secretion related to conception – there appears to be no expulsion that is unimportant. Worms and parasites appear to be an interesting category as it is another form of life that is expelled out!

2.2 The nature of expulsion

All expulsions can be simply classified into four broad categories, states of matter, solids, liquids, gases and in combinations of the three states (such as semi-solid). These body eliminations can be experienced through the five senses, they can be seen, felt, touched, smelled or tasted. Further the expulsions are either naturally, instinctively, removed from the body, triggers may cause its removal or human beings may accelerate its removal. A few examples of expulsions in the table below illustrate ways in which expulsions are triggered.

Nature of the expulsion	Specific to	Trigger
Tears - liquid	Male and Female	Emotion- sadness, joy, frustration, anger
Belch – gas/air	Male and Female	swallowing air, break down of food
Fart - gas/air	Male and Female	routine, swallowing too much air, consumption of certain foods example beans
Feces	Male and Female	loaded intestine
Semen - liquid	Male	sexual activity
Menstrual Blood – liquid/semi solid	Female	hormonal change
Breast Milk - liquid	Female	child birth, child, mothers emotion - love
Vaginal flatulence	Female	exercise, stretching, sexual activity

One unique feature of any expulsion is emotion. Disgust, relief, mirth or indifference toward an expulsion, the emotions toward it, is completely dependent on culture, values, tradition and context. However, universally, it has been observed that passing of gas or farting in public, is one expulsion, that brings with it an emotion of laughter, of mirth, of humour.

Expulsion	Emotion
products of menstruation	seen as matter of fact, discomfort/anxiety when it does not come, extreme to mild disgust when it comes out, relief when it comes out
emesis/vomit/barf	discomfort/anxiety when it does not come, extreme disgust when it comes out, relief when it comes out
dandruff, dead skin, flaky skin, hair fall	seen as matter of fact, mild disgust when it comes out

Interestingly, fluids have always been associated with emotions, bile for example has been associated with anger. “The word humor itself is a word of many meanings. The root of the word is "umor" meaning liquid or fluid. In the Middle Ages, humor referred to an energy that was thought to relate to a body fluid and an emotional state”(Wooten 1996, p. 49).

It is therefore not surprising when we find emotions playing a vital role in any expulsion.

2.3 Perceptions, attitudes toward and management of expulsions and its consequence

In the Indian rural context in many communities, many of the expulsions are managed openly in front of other human beings. Perceived as a normal body function, it appears to cause not even the slightest bit of embarrassment that may perhaps be felt in other cultures. A throat is loudly cleared, deep belches are seen as positive signs of satisfaction, farting by an elder is accepted, a nose is noisily blown, saliva is spat out in a jet, and sweat wiped with the end of a turban, on the sleeve of a shirt or the end of a veil. A pregnant woman will vomit openly – it is a way for her to declare publicly that she is expecting a child. On the other hand if the pregnancy is unwanted, the vomiting will take on another dimension.

Coughing or sneezing, is regarded as a non issue, the act done noisily, with the mouth open. The use of a separate piece of fabric such as a handkerchief for managing this, is not an option. Large volumes of phlegm are taken care of by clearing the throat and spitting, noses are loudly and violently blown with liquids removed by hand and thrown with a sharp jerk on to the ground. It is not considered rude to cough or sneeze loudly - covering the mouth when coughing or sneezing is also not a common practice (Simon, R, 2011). It is well documented that cough hygiene is not very common in many communities - a viral cough or a cough of a person who has Tuber Colossus can be contagious.

Toilets for defecation or urination do not exist in many rural and poor contexts. It is estimated that more than half of India's 1.2 billion population have no access to toilets (<http://www.indiawaterportal.org>). Women wake up, carrying with them a container filled with water, making their way to an empty spot to be able to ease themselves. “We get up at 5 am to shit. I go by myself, occasionally with neighbours. When we sit down to shit – we never care about who is looking, if we begin to care then we will never be able to get on.” (Murthy, L, 2011)

While it is established that once outside the body, some of the uncovered expulsions, becomes hazardous, yet expulsions remains uncovered. While attitude are commonly blamed for this, the another larger issue at play is economics. The more money a family earns, the more they can spend on expulsion management. Toilets can be built to manage defecation and urination. Running water facilities through overhead water tanks can be installed. Soap can be purchased that will last the whole month. Thus public health gets compromised when attitudes and affordability issues overlap.

3. The expulsion menstruation

What is menstruation? - Girls and women have an organ in their bodies called uterus. This is where a baby grows. The uterus is connected to two ovaries by two fallopian tubes. The eggs present in the ovaries start maturing between 9 to 16 years of age. One egg is released every month and reaches the uterus after passing through the fallopian tubes. As the egg proceeds through the tubes a layer of blood coats the walls of the uterus. Gradually this layer begins to thicken. In case the egg fertilizes, the same layer provides nourishment to the baby growing inside. When fertilization does not take place, the inner layer becomes superfluous and starts breaking. This causes bleeding. The process is called menstruation. Bleeding usually lasts four to six days. – (Sharma, M, 2002, p.9).

While menstruation is directly linked to both man and woman for procreation, the subject has been traditionally viewed as a woman's domain. Never discussed, seen as "private", the matter only comes into quiet focus in the context of marriage and child bearing. The onset of periods means a girl is ready for marriage, an event filled with relief for the parents. The absence of an expected period means a wanted or an unwanted pregnancy. The regular arrival of periods at a time when you want to get pregnant, is unwelcome, and points to infertility. There are many dimensions to this event in a woman's life.

The in depth understanding of menstruation and communities was grounded in field work. Between the years 2000 and 2003 – through the MacArthur Foundation Fellowship, the author from studio Vikalpdesign, worked through focused group discussions with adolescents associated with 8 NGOs in Southern Rajasthan, India. 600 adolescents were involved in these discussions at many health communication workshops. Subsequently, over the next 8 years, Vikalpdesign had opportunities to continue working in the area of reproductive health. From 2007 – 2009, the studio trained over 250 community health workers under a Government of India Mission, National Rural Health Mission, in the state of Uttarakhand.

3.1 Taboos, Perceptions, Spaces and Consequences

Taboos, misconceptions, blind beliefs, negative attitudes surround the subject of menstruation in Rural India. Menstruation for girls and women, has usually been about being compromised. In the rural context, this is very evident. This "time" has always been seen as "dirty". The "dirty" attitude takes on many strong negative forms that eventually affects a woman's image, self esteem, health, well being and her position within society. Rags, old cloth, bags filled with ash and sand - are methods to manage the period. Because blood is seen negatively, anything is used to wipe off the flow.

The time during periods was always been considered polluting and dirty. Women say the following "We wear nothing at all, bleeding into our skirts. That's why we isolate ourselves into the cowshed". (From focused group discussions). The notion of pollution gave rise to the practice of keeping women away from the rest of the household during these times - physically removing and isolating women into other spaces. Even to this day, in many parts of India, women separate themselves from the rest of the household to retreat into the "got" or the cowshed. They stay here for three days, not bathing, not being able to clean themselves and only

to return to the main house when their “time” is done. At the time of return to the main parts of the house, some “purify” the body by sprinkling themselves with cow’s urine and then proceed to bathe.

The “banishing” did not always mean moving to another space, the other form of this was restriction of movement and access to other spaces within the household. The kitchen was out of bounds, religious spaces were out of bounds.

“I was told not to touch my mother during certain times in month. I had to light the lamps at this time. Then my father would be the one cooking, with my mother instructing him from the side”

“I see my sister and my mother sitting in the corner of the house at certain times of the month.”

My mother and sister do not touch the pickle jar at this time, they believe the pickle will spoil”

(Jatan Workshop 2012)

This banishment came with its own embarrassment, the knowledge that you are menstruating became public knowledge and with it came layers of shame and the practice of hiding matters related to menstruation. The menstrual cloth was kept hidden, away from the site of men. This took on extreme forms, with communities believing that that men will go blind if they see the cloth. Hence the cloth after washing was hung in the darkest corners, hidden amongst roof tiles.

Not just rural India, Africa has similar practices. Janet Hoskins speaks of the menstrual hut in her paper the “Menstrual Hut and the Witches Liar” (2006). The practice was common in Africa where women went into menstrual huts located outside of the village. Many women in the community gathered in the hut and stayed through the three to five days. The hut also doubled as space for birthing.

Were men insecure for not being able to biologically produce children? Society did not completely understand menstruation, seeing this as a mystery. Was this systematic isolation, a strategy to gain power which they did not have, which the women had? Did the insecurity lead to “shaming” and “shunning” women? Isolating women during menstruation - was this a way designed by men to keep track of paternity (lostwomynspace.blogspot.com, 2011).

The absence of a toilet with a water facility added to the isolation. Women never had a private spot to wash their cloth completely and properly. So washing was in public, often a hurried affair. The public nature of cloth management resulted in the use of dark colored cloth at this time of the month. The dark menstrual cloth solved the problems of visible blood as it would not show on the cloth. Other differently coloured discharges from the body, indicative of infection, were thus never identified in time.

Taboos, beliefs and perceptions play a major role in how menstruation is seen and managed and these very systems impact way people live. The consequences of these life styles impact reproductive and community health.

3.2 Exclusion of men and consequences

The silence around menstruation is deafening. This has been observed from many focused discussions done over the past years. The existence of this silence was more than evident in a

survey done by the author at an engineering college. She was able to collect 22 code words used by the respondents for alternate words for menstruation. (Murthy, L, 2011). These code words are used so that men do not get to know – it is this silence that raises so many questions. Who is responsible for making menstruation shameful and making this a subject of shame and quiet? Is it the women themselves?

Men, first learn about period from their friends, from their peer group, from magazines and advertisements but usually not from mothers or other females in the family (Allen, R K, Kaestle, C E & Goldberg, A E, 2011). This is not too different from India. In the Reproductive Health Workshop that recently conducted by the author for Jatan Sansthan (June 28th/29th 2012) male participants reported the following:

“We always wondered what it was that was supposed to come out from a women’s body. Was it really blood as they claim?”

“When I asked questions about periods, the subject was always changed. I only understood when I became an adult.”

“The school teacher always skipped the reproductive health chapter, telling us to read it at home.”

Silence is communicated very early, when you are a child. Boys are particularly left out from this, seeing this as “not their business”. *“Sometimes we know when girl has her period. She has that look about her!”* (Jatan Workshop 2012). Withholding information from men - that “I am menstruating”, is common. Women will say they have pain, headache, stomach ache, not too many women will openly admit “I have my period”. *“The Sweet Secret”*, this is the way Anne Frank writes about menstruation in her diary, later published as *The Diary of a Young Girl*. Anne as a young teenager, gets her period when she is in hiding. While she does not like the pain and the discomfort, she loves the fact that only she knows and no one else!

The implications of silence are many – an example is insensitivity towards adolescent girls and women by space and building planners. Until very recently no one acknowledged that girls did not go to school on the day they had their period as there were no “usable” toilets. UNICEF reports on school sanitation “Adolescent girls are especially vulnerable to dropping out, as many are reluctant to continue their schooling because toilet facilities are not private, not safe or simply not available.”-(<http://www.unicef.org/india/wes.html>). There are plenty of studies that show the co – relation of school attendance by girls and presence of safe, usable toilet.

There is also lack of proper toilet facilities for women in state run bus stands, railway stations and public spaces like collector’s office, courts and others.

“Once I was travelling in Rajasthan roadways n periods were about to happen n the bus-stops were extremely small villages with no proper sanitation, still I somehow managed to slip a pad inside my pocket from my bag n went to that horrible bathroom.” – (Murthy, L, 2011).

C.S Lakshmi (Hindu, June 5, 2005) writes about insensitivity in her article “Planning Public Spaces”. She speaks of absence of spaces for women. According to her, gender does not have a place anywhere when planning space and building construction. If women had been more vocal, perhaps the male dominated construction industry would have been sensitized long ago and would have by default, included facilities and conveniences for girls and women.

Would some of these situations have existed if women had included men in menstruation? Perhaps if women had shared within their own families, information, thoughts, feelings and problems, men in individual families would have been more sensitive. A collective of sensitive men would have meant a sensitive society.

4. Understanding the interlinks and responding to felt needs

There are direct impacts of economic status, taboos, perceptions and attitudes on community health.

- A poor family may not have access to basic hygiene elements such as soap and clean cloth.
- The products used during menstruation are often unhygienic leading to reproductive health infections.
- There is shortage of water in many areas or no piped water.
- There is no place to clean one's body or the menstrual cloth thoroughly.
- The “no bathing” taboos during periods leads to poor hygiene.
- With the kitchen out of bounds, the food is “controlled” by others at home leaving women and girls nutrition compromised
- *Men will go blind if they see the menstrual cloth* – a belief so strong – it results in complete mismanagement of the cloth. The cloth is hidden in dark and damp corners, moisture never completely leaves the cloth, giving room for fungal infection
- Silence means a woman will not speak about her menstrual problems.
- Women's health is always on the “back burner”. Help in seeking medical care is an option only when a situation appears to be out of control.

During the author's work as a Mac Arthur fellow (2000 – 2001), her team designed health workshops to address issues that would lead to more self esteem and self worth for young girls and women. Taboos and superstitions were reexamined and discussed and left to the girls and women to decide future course of action after making informed choices. Additionally, the team pioneered the “*lace walah kapda*” – in *hindi* language to mean for cloth with straps. This was a simple design for a napkin that could be worn with a draw string, which did not require the user to wear underwear. (Traditionally under clothing may or may not be worn or may not easily be available in remote locations.) The bottom layer of the cotton cloth was designed to be of any colour, however the cloth worn close to the skin was white, cream or light colour. There was a small rectangular piece of plastic that could be placed under the white layer to catch “leaks”.



Girls and women made these cloth pads at health workshops. The “stitch your own pad” session usually lasted an hour, at the end of which was a session covering “How to wear the pad” using card board dolls shown above. This was followed by a session on how to care for yourself and the cloth

- Use light coloured cloth so you are able to identify what you are discharging. If you have discharge of different colours such as green, yellow, pink or grey, you may have an infection and you need to seek medical help.
- Change at least three times a day
- Wash the menstrual cloth with water, use soap if you have this at home
- If there is water shortage in your area, bathe every day during your periods
- Never be shy about menstruation, it concerns all of us, man or woman.

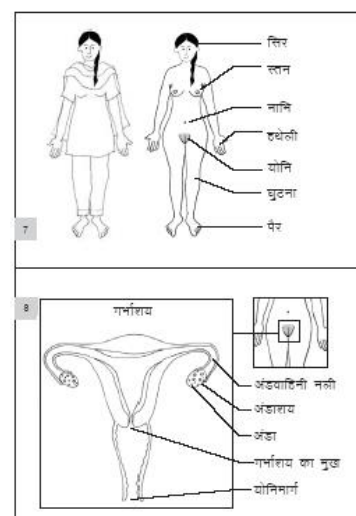


For follow up with adolescents who read, a menstrual wheel was designed to explain the science of menstruation. As the wheel rotates on the pivot, the stages of the menstrual cycle appear in the window.



Health Communication Workshops with adolescents in progress

A simple “take away” comic book called *Seedhi Sachi Baat* - in *Hindi* to mean straight talk, was also developed and distributed to school girls. This had to be designed with discretion; it had to be small so it could be tucked away in the pocket of the uniform.



Example pages of the comic book

There were other initiatives that began in India a couple of years later in response to needs of women. An NGO *Goonj* took the lead with a campaign "Not just another piece of cloth", (<http://goonj.org>). This initiative brought visibility and focus to the issue on a large scale, additionally the campaign provided poor women clean cloth to wear during menstruation.

Designs, strategies and its implementation, keep evolving with time and need. These past few years have seen a lot of improvement in infrastructure in India. Roads have been built; the face of transportation has changed. The clothing scenario too has improved in many areas as a result of this. Underclothing for example is available in many places and girls and young women have access to these items. In south Rajasthan, the “*lace walah kapda*” lost its popularity – the cumbersome draw string was not contemporary and no longer favored by the younger generation who buy panties for themselves. Women and girls simply prefer placing layers of cloth in their under wear, an improvisation on the “stick on to your panty” pad available in the market.

So once again in response to the need for a contemporary design, a Micro credit group Self Help Group of an NGO *Jatan Sansthan* called *UGER* got into action. The self Help group had a sub group, a stitching group making cloth hand bags as a part of a supplementary income initiative. An idea took root. They decided to develop a cloth pad that could be made as a part of the larger range of UGER products. A variety of cloth pad designs available on the internet, lunapads, eco fem pads, random researches on youtube for home pads, were first studied. A five day workshop was organized and many samples of were made that were designed as press on to the underwear prototypes. The first batch of 50 pads were made, these were tested, and the design improved. Since then, and a lot of 100 sanitary napkins rolled out in August 2012.

These napkins are made from cotton fabric, are reusable, washable and can last about an estimated four months. Regular cloth users report that the cloth becomes very stiff and unfit for use after about four months. Field trials for these pads are still in process. Marketing and distribution are the next action points. The UGER pads are in two designs one with an insert and one without. Within this there were three sizes, small medium and large.





UGER women's' group discusses future action

These have been some of the responses to felt needs at the field level in the context of rural and poor communities in India.

5. The way forward

The strong connect between body expulsion management and health which used to earlier be missed - is steadily beginning to be seen. There has been a growing interest in menstruation these past few years.

The more recent initiative is an inexpensive disposable solution for poor women, pioneered by Shri A Murugathan, an entrepreneur from South India, in the year 2009. He designed a low cost machine to produce napkins, that has the capacity to churn out 120 napkins in one hour (<http://www.triplepundit.com/2012/03/business-difference-humble-sanitary-pad-changing-lives-rural-women-india/>). The machines are made and sold under the name of Jayaashree Industries. A.Muruganathan, both produces and sells napkins managing all activities at the grassroots.

This initiative has seen the mushrooming of many small scale industries in the rural sector. Many government schemes in India have been launched that distribute pads to government schools girls as a part of a Reproductive Health Scheme. There are small scale NGO initiatives as well, a group in Bangalore, South India, called MITU (mitufoundation.org) distributes pads to young girls and women who cannot afford to buy their own.

Responding to the “felt need” on a large scale has been pad distribution. There is a negative side to pad distribution. This has to be examined in detail and must to be seen in another context. The

nature of the commercial pad needs to be completely understood. The pads currently available in the market are not earth friendly. What are pads made of?

- The outer lining is a polymer – degrades after a very long time
- Wood pulp, paper pulp that forms the core of the napkin is bleached to make it white – more chemicals. Cheaper pads use recycled paper as the filler
- The gel is a substance that solidifies liquids under pressure
- The last layer is a rectangular piece of plastic – degrades after a very long time

It is believed that the average sanitary napkin takes 500 to 800 years to completely degrade. All sanitary napkins eventually reach a land fill - currently there seems to be no viable earth friendly large scale disposal management method. With India's growing urban demand for napkins, the question is how much can the earth hold? Multinational companies make sanitary napkins that are not eco friendly, yet the well designed nature and convenience of the product, compels women to use these items - even at the cost of affecting their own health. Pads give women freedom, to go where they want to, to get on with their daily lives without any hindrance.

Industry no longer takes expulsions for taken for granted - as they are a profit making sector, body sprays for body odour, fragrances for the washrooms, scrubs and exfoliating devices for skin, the products available to manage expulsions are plenty. Profit making companies continually push their products through advertising, making us believe we cannot do with these expulsion management items. They almost be little traditional simple solutions.

The understanding of menstruation and good menstruation management practices leads to robust reproductive health of a community, understanding this interlink in totality is very crucial. In conclusion, the logical action points to:

1. If relevant information is shared with the community, there will be better understanding of reproductive health and menstruation in particular. People will take logical decisions rather than blindly accepting what media and policy planners tell them to do.
2. If tangible practical solutions are created, menstruation will be managed efficiently.
3. These cannot standalone and must be backed by advocacy and good policies for implementation at a larger sustainable level.

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