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Margaret A. McLaren and Monalisa Padhee

ABSTRACT

While increased attention to menstruation as a significant health issue for women and girls is positive, some menstrual interventions promoted by Water, Sanitation, and Hygiene (WASH) programmes primarily focus on hygiene, infrastructure, and product provision. This focus fails to challenge the social and cultural stigma surrounding menstruation, as well as interconnected issues of gender discrimination, marginalisation, and inequality. We advocate approaching menstruation as a matter of sexual and reproductive health rights (SRHR), which recognises that sexual and reproductive health depends in part upon the realisation of the rights that support it. This requires a holistic approach to menstrual health that includes addressing shame, social stigmas and restrictions, and gender inequality, in addition to providing access to menstrual-friendly toilets. This holistic approach should also include comprehensive and community-driven sustained training and education about sexual and reproductive health and rights. Drawing upon research on four grassroots NGOs in India, Goonj, Barefoot College, Jatan Sansthan, and EcoFemme, we demonstrate that locally based NGOs are well-placed to create community-based educational trainings, provide access to context-specific and culturally appropriate menstrual products, and, perhaps most significantly, to challenge stigma around menstruation.

Bien qu'il soit positif d'accorder une plus grande attention aux menstruations en tant que question de santé importante pour les femmes et les filles, certaines interventions en matière de menstruations promues par les programmes d'eau, d'assainissement et d'hygiène (WASH) sont principalement axées sur l'hygiène, les infrastructures et la fourniture de produits. Cette orientation ne permet pas de lutter contre la stigmatisation sociale et culturelle qui accompagne les menstruations, ni contre les questions interdépendantes de discrimination, de marginalisation et d'inégalité fondées sur le sexe. Nous préconisons d'aborder les menstruations comme une question de droits de santé sexuelle et reproductive (DSSR), reconnaissant ainsi que la santé sexuelle et reproductive dépend en partie de la réalisation des droits qui la soutiennent. Il faut pour cela adopter une approche holistique de la santé menstruelle qui englobe la lutte contre la honte, la stigmatisation et les restrictions sociales et l'inégalité entre les sexes, en plus de l'accès à des toilettes adaptées aux menstruations. Cette approche holistique devrait également englober une formation et une éducation soutenues, complètes et menées par la communauté sur la santé et les droits sexuels et reproductifs. Nous nous appuyons sur des recherches

KEYWORDS

Menstrual health; Water; Sanitation; and Hygiene (WASH); menstrual hygiene management (MHM); sexual and reproductive health rights (SRHR); gender discrimination; India; NGOs

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menées sur quatre organisations non gouvernementales (ONG) de la base populaire en Inde — Goonj, Barefoot College, Jatan Sansthan et EcoFemme — pour démontrer que les ONG locales sont bien placées pour créer des programmes de formation éducatifs communautaires, fournir un accès à des produits menstruels adaptés au contexte et à la culture et, aspect peut-être le plus important, lutter contre la stigmatisation liée aux menstruations.

Aunque es positivo que cada vez se preste más atención a la menstruación como un importante problema de salud de mujeres y niñas, algunas intervenciones sobre la misma promovidas por programas de Agua, Saneamiento e Higiene (WASH) se centran principalmente en la higiene, la infraestructura y el suministro de productos. Este enfoque no plantea revertir el estigma social y cultural que rodea a la menstruación ni tampoco los problemas interconectados de discriminación de género, marginación y desigualdad. En el presente artículo impulsamos que se aborde la menstruación como una cuestión de derechos de salud sexual y reproductiva (SRHR), reconociendo que esta depende en parte de la realización de los derechos que la sustentan. Esto requiere un enfoque integral de la salud menstrual, que aborde la vergüenza, los estigmas, las restricciones sociales y la desigualdad de género, además de proporcionar acceso a retretes adaptados a la menstruación. Asimismo, dicho enfoque debe incluir formación y educación sostenidas, integrales y dirigidas por la comunidad, sobre la salud y los derechos sexuales y reproductivos. A partir de la investigación realizada sobre cuatro organizaciones no gubernamentales (ONG) de base en India —Goonj, Barefoot College, Jatan Sansthan y EcoFemme —, sostenemos que las ONG locales están bien posicionadas para realizar formaciones educativas basadas en la comunidad, proporcionar acceso a productos menstruales específicos para el contexto y culturalmente apropiados y, quizás lo más importante, revertir el estigma en torno a la menstruación.

Introduction

In the past decade there have been rapid and welcome advancements in the treatment of menstrual health and hygiene, not least its increased visibility globally. Menstrual Health and Hygiene Day is celebrated internationally, and research and information are shared by a broad community of health professionals, researchers, and NGOs. Promoting menstrual health varies by country and region, and can include a range of different measures to improve women's and girls' menstrual health, including improved hygiene, increased access to products, de-stigmatisation, and legislation that supports these positive changes. In India, as well as other countries in the global South, much of the focus has been on hygiene as well as access to products. While hygiene and access to products are important, addressing issues of social stigma and structural inequality also need to be prioritised. Initiatives that provide women and girls access to products and improved hygiene provide necessary material conditions for managing menstruation, but we argue that menstrual health should be viewed in the broader context of women's sexual and reproductive health rights (SRHR), and that 'Progress in SRHR requires confrontation of the barriers embedded in laws, policies, the economy, and in social norms and

values – especially gender inequality – that prevent people from achieving sexual and reproductive health' (Starrs *et al*. 2018).

The World Health Organization (WHO) defines reproductive health as:

> a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. (WHO 2020)

Sexual health includes overall well-being related to sexuality as well as

> a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled. (Inspire 2020)

Seeing menstrual health in the broader frame of sexual and reproductive health makes it clear that it cannot be achieved simply by remedying deficiencies, such as access to toilets or products, but must provide a positive context for 'physical, mental and social well-being' and must challenge discrimination and violence. Moreover, menstrual health should be understood as a human right that is often a condition for other rights such as access to education, movement in public space, and the right to dignity and autonomy.

Recent approaches to menstrual intervention have broadened from a focus on menstrual hygiene to explicitly include menstrual health as well as hygiene. Shifting from hygiene to health is significant because this broader perspective requires taking into account 'the psychological, socio-political, and environmental factors that accompany the menstrual experience' (de la Roche and van der Veerdonk 2019). We believe that local NGOs can contribute uniquely to advancing menstrual health by providing important supplements to the work of national initiatives. We offer case studies and examples from four NGOs in India that centre women's and girls' sexual and reproductive health and connect it to the broader framework of human rights and gender equality. These organisations prioritise education and awareness but also challenge the sexist oppression undergirding the stigmatisation of menstruation to create sustainable and comprehensive approaches to menstrual health.

Methodology

We provide case studies of approaches of four community-based organisations from India: Goonj, headquartered in New Delhi; Barefoot College, in Tilonia, Rajasthan; Jatan Sansthan, in Udaipur, Rajasthan; and EcoFemme, in Auroville, Tamil Nadu. The information here relies on research conducted by Kenzie Helmick, Margaret McLaren, and Monalisa Padhee. As the Program Head of the Women's Wellness Initiative at Barefoot College, Monalisa Padhee could also share her knowledge obtained from observing many educational initiatives on menstrual health. Information was gathered primarily through participant observation and semi-structured interviews.[1] During our time at

each organisation, we conducted qualitative interviews with leaders of the organisation, staff members with responsibilities for implementing the programmes, and those with direct responsibility for reproductive health education and training, users of the organisations' menstrual products, and employees who helped produce them. We took extensive field notes and, when possible, we recorded interviews and transcribed them. Drawing on the interviews and our field observations, we conducted a thematic analysis of the data by noting which issues recurred both within and across the organisations.

In the first section of the article, we discuss Water, Sanitation, and Hygiene (WASH) initiatives around menstrual health. The inclusion of menstruation as a significant issue for sanitation and hygiene programmes indicates progress on gender inclusion. We note that WASH interventions seeking to improve menstrual health need to attend to the specific needs of menstruating girls and women by providing 'menstrual-friendly toilets'. In this section, we also point out that the initial term used for WASH programmes addressing menstruation, 'menstrual hygiene management' (MHM), inadvertently reinforces the image of menstruation as dirty and impure, while the current terminology of 'menstrual health and hygiene' reflects a more positive and more holistic view.

In the second section, we criticise approaches that over-emphasise products as the only 'solution' to menstrual health. In the first sub-section, we describe how the promotion of subsidised and free disposable products can lead to the dominance of only one type of product. We emphasise that menstrual health does not only rely on the type of product used, but upon education about the way the product is used and awareness about other factors affecting menstrual health. In the last sub-section, we address the need for providing information on a range of options.

In the third section, we propose that approaches to menstrual health need to include education and awareness to address cultural and social stigma surrounding menstruation, and its connection to gender inequality, as well as information on pain management and other health issues accompanying menstruation. In addition, educational programmes should include men, engage multiple generations, and be adapted to local contexts.

We provide case studies of the menstrual health work of Goonj, Barefoot College, Jatan Sansthan, and EcoFemme in the fourth section, highlighting the ways that their programmes employ innovative and effective strategies for addressing menstrual health. All four organisations aim to break the silence and challenge the cultural stigma associated with menstruation, and all emphasise reproductive and menstrual education that goes beyond simply addressing the menstrual cycle. While each organisation faces challenges in its work, all exemplify the sexual and reproductive health and rights approach that we advocate.

We conclude with recommendations taken from the best practices of these organisations: respect autonomy, recognise importance of local contexts, develop inclusive curriculums and educational resources, and acknowledge that menstrual health must be addressed within the larger context of structural inequality.

WASH and menstruation

WASH programmes seek to provide universal access to clean drinking water and proper sanitation as mandated by Sustainable Development Goal 6.2: 'access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations' (UNICEF 2019). Such access undeniably has a positive impact on global health because of the strong correlation between sanitation and health (Ram Mohan and Dulluri 2017). Gender permeates all aspects of WASH, from whose voices are included in policy and decision-making to how the absence of water or proper sanitation has gender-differentiated effects (Sweetman and Medland 2017). WASH's eventual adoption of the issue of menstruation arose from an increasing push for gender-specific concerns (Fisher *et al.* 2017). As the WASH sector turned to issues of gender equity, menstruation was deemed a crucial barrier to access to education for girls because schools often did not have toilets that offered the privacy needed to change menstrual products (van Eijk *et al.* 2016).

Menstrual hygiene management

Prior to 2005, menstruation was not considered a pertinent public health or development issue. The term 'menstrual hygiene management' was first introduced during a UNICEF roundtable at a conference in 2005 (Sommer *et al.* 2015). This meant that menstrual health fell under the purview of WASH programmes: 'The inclusion of the word "hygiene" linked directly to the WASH sector's focus on water, sanitation, and hygiene in education and to public health' (Sommer *et al.* 2015, p.1305). But overemphasising hygiene runs the risk of reinforcing the notion of menstruation as dirty, impure, and unclean. Necessary attention to hygiene as an aspect of menstrual health must be accompanied by recognising that there are many other aspects of menstrual health, including challenging the stigma that menstruation is impure and dirty.

Over the past 15 years the understanding and definition of menstrual interventions has broadened to include systemic factors linked to gender equality, education, and rights. But the initial emphasis on hygiene is clearly reflected in the term 'menstrual hygiene management', defined as accessing 'clean material to absorb or collect menstrual blood' that can be 'changed in privacy as often as necessary', as well as 'using soap and water for washing the body as required and having access to facilities to dispose of used menstrual management products' (Alberda 2018). Providing toilets and access to soap and water are a natural part of WASH's work. Indeed, infrastructure improvements such as building toilets can contribute to protecting women's dignity and providing safety by providing a safe and private place to change their menstrual product (Koonan 2019).

WASH and toilets

Recently in India, the Swachh Bharat programme's rapid progress has reduced the number of people without basic sanitation from 56 to 28 per cent (N.C. Sharma 2017).

Through building toilets at schools and in communities, WASH programmes that focus on infrastructure have provided important contributions to MHM initiatives. But in order to contribute to meaningful improvements in menstrual health, WASH programmes must be designed to meet the needs of girls and women. As advocates of gender-mainstreaming within WASH have noted, toilet facilities must be built to afford privacy, with separate facilities for males and females, doors that lock, and means of disposal for menstrual products must also be available; additionally, toilet facilities must be regularly cleaned and maintained. Without attention to these aspects, simply increasing the number of toilets bears no relation to an improvement in menstrual hygiene and health (Koonan 2019).

Even if implemented well, addressing the material need for toilets leaves out other aspects of menstrual health such as education and awareness, pain management, challenging social and cultural stigma, and addressing gender discrimination. A study on social taboos and menstrual practices found that, even when toilets are cleaned regularly, have doors that lock, and a waste bin is provided, women still hesitate to use them to change their pads as often as necessary because of the social stigma surrounding menstruation, which in some areas includes the social seclusion of women during menses (Joshy *et al.* 2019).

From menstrual hygiene management to menstrual health and hygiene

In recent years, the understanding of menstrual interventions has broadened from a focus on hygiene to include health, rights, and structural (systemic) factors. UNICEF's *Guidance on Menstrual Health and Hygiene* notes:

> By using the term menstrual health and hygiene in this guidance, we include both the factors included in the JMP (Joint Monitoring Programme for Drinking Water, Sanitation and Hygiene) definition of MHM together with the broader systemic factors that link menstruation with UNICEF's goals in health, well-being, education, equality and rights. (UNICEF 2019)

Despite this shift, an overview of policy initiatives for MHM implemented in schools by the Indian government found that interventions focused more on infrastructure than on education, leaving aside important aspects of menstrual health (Muralidharan *et al.* 2015). In this paper, we embrace the broader definition given above, which also implies a multi-sectoral collaboration among development projects, government programmes, and local NGOs, as local NGOs can make unique and important contributions, especially to education and awareness efforts.

Product-centred approach

Literature on MHM consistently reports access to menstrual products as the primary issue for low- and middle-income countries, along with access to water (Sinha and Paul 2018). For many low- and middle-income countries this means promoting a shift from using cloth to disposable products.

Shift to disposable pads

In 2010 India launched a nationwide programme to subsidise the cost of disposable sanitary napkins for 15 million adolescent girls every month (Garg *et al.* 2012). Traditionally, the majority of women and girls in India used cloth or rags as a menstrual absorbent (Garg *et al.* 2012; Koonan 2019). Improper washing and drying of the cloth can lead to reproductive tract infections (RTIs) (Mahon and Fernandes 2010). The aim of free distribution of pads in schools along with better facilities was to provide girls with adequate ways to manage their menses at school and prevent dropouts. This is crucial for their education and their subsequent life opportunities (Sinha and Paul 2018).

Providing disposable products is a seemingly straightforward and simple solution to avoiding RTIs. However, this overlooks the fact that it is not only the material used as the menstrual absorbent that can be responsible for causing RTIs (disposables not changed often enough can also lead to RTIs), but other factors, such as the lack of education about the use, changing, washing, drying, and storing of menstrual absorbents play a part. One obstacle to using cloth is the stigma surrounding visibility of the cloth while hanging to dry. Addressing this stigma directly through community-based education and awareness programmes is part of a broader approach to menstrual health.

Along with this government programme to distribute free pads in schools, the tax on menstrual products, which was first lowered from 12 to 5 per cent, was abolished in October 2018.

While making menstrual products more affordable through eliminating the tax on them is commendable, the efforts of the government to provide free pads, and the increase of multinationals selling such material into the Indian market, mean that use of disposable pads may completely eclipse the use of reusable products such as a piece of cloth, reusable cloth sanitary napkins, or newer alternatives such as menstrual cups. Yet widespread use of disposable sanitary products brings with it the accompanying problem of waste disposal. Initiatives that promote disposable menstrual products must also include education about proper means of disposal, and facilities for disposal, such as an incinerator.[2]

The primary issue with this product-centred approach is that it mistakenly sees access to products as the main route to menstrual health rather than as one component of measures to achieve menstrual health; in this way the product itself becomes the solution (and menstruation is cast as a problem).

Respecting autonomy

A second issue with the product-centred approach is that it can take away women's and girls' autonomy. Government programmes overwhelmingly offer disposable products, while many NGOs produce only reusable products. For example, three of the four organisations we discuss produce only reusable pads. When programmes provide only one type of product, women and girls often make do with what has been given. Poor women and girls will inevitably use the subsidised and free products, making it less likely that they choose which product works best for them given their unique circumstances. Such constraining of choice has the unintended consequence of reducing women's autonomy and

undermining their dignity. One way to help preserve some autonomy is to provide information and, if possible, access to a wide range of menstrual products. All four of the organisations we researched provide information about a range of menstrual absorbents and encourage informed choice.

Even a product-focused approach should include information about the impact of using disposables on the environment so that women and girls can make informed choices. In a recent article in the *Indian Journal of Gender Studies*, Savera relates:

> After the first time I used a washable cloth pad, I was a convert: The pads were exceedingly comfortable and did not result in frustrating and painful rashes … After use, the washable pads need to be rinsed and soaked in cold water for at least half an hour, and then washed and dried in the sun. Despite the extra effort which can sometimes be taxing and inconvenient in hostel, it is completely worth the toil. Not only is it astoundingly comfortable but also is completely environment friendly and does away with the guilt which I often felt while using plastic pads, which are severely damaging the planet in innumerable ways. (Savera 2019, p.183)

When programmes simply provide menstrual products without a range of choices or education about the benefits and drawbacks of using each product, this overlooks not only important contextual factors such as access to water, privacy, and disposal, but also can ignore the different needs of those who are disabled. For example, when we interviewed Nira Bai, who has restricted mobility due to polio, she told us she faces difficulties in washing cloth pads owing to her disability, and lack of a private space and clean water. The disposable pads provided relief to the everyday washing, and she felt more comfortable with the product (personal story, Barefoot College, Tilonia, 23 December 2018).

If a physical disability or lack of clean water limits one from changing and washing the cloth pad regularly, then disposable pads serve menstrual health better, in spite of the issue of disposal. However, in many places reusable cloth pads are more culturally accepted. For instance, in a study done among rural tribal girls in Gujarat, India, the majority (68 per cent) preferred using cloth to disposable sanitary napkins (32 per cent) (Shah *et al.* 2013).

We note that these context-specific differences are best addressed by training health workers from within the communities they serve (such as ASHAs in India – a group of all-female community health workers), and by organisations working closely with the communities. Interventions at the national level are not generally well-equipped to do the type of long-term work in communities that would result in shifts in stigma, sexism, poverty, and lack of health information. Without local partnerships and input, well-meaning initiatives can replicate the 'saviour approach', when well-meaning outsiders attempt to solve a problem without knowledge of the local context (Koffman and Gill 2013).

Menstrual health as a part of sexual and reproductive health and rights

Addressing stigma

Girls and women suffer from a myriad of health problems not only because of poor access to menstrual products or facilities, but also because of the stigma on menstruation which

prevents them from following the right hygienic practices. Many girls and women do not wash and dry cloth pads in the open or do not change the disposable pads at regular intervals when male family members are around at home, because of the shame of carrying a pad or disposing of it (MacRae *et al.* 2019). These unhygienic practices, caused by shame and stigma, can become breeding grounds of infections and diseases.

Often taboos exist because menstrual blood itself is viewed as dangerous and impure, with various myths promulgating the potential harms of menstrual blood, which supposedly can be used by women to manipulate individuals or through which they can be controlled by evil spirits (Garg and Anand 2015). These beliefs encourage secretive management of menstruation, as girls and women hide evidence of their menses for fear that they will be responsible for injury to their family members or community. In their meta-analysis of articles published over a 15-year span on India and MHM, van Eijk *et al.* (2016) found that restrictions during menstruation were very common and included religious restrictions, restrictions around preparing and touching food, sleeping with or sitting with family, household work and exercise, and going out in public.

Moreover, restrictions that limit girls and women's mobility, deny them access to public spaces, or endanger them by forcing them to sleep outdoors, constitute gender discrimination. When violations of rights are justified by menstrual taboos, approaches to menstrual health must challenge them and develop comprehensive programmes of education and awareness. Authors of a study examining the connection between menstrual restrictions and interpersonal violence urge that 'ending these practices will require, together with legislation, changing and challenging social norms' (Cardoso *et al.* 2019, p. 42).

Product-centred solutions often fail to address this larger and more pervasive issue of social and cultural stigma. Because social and cultural norms vary regionally and are perpetuated through family and community, they can be most effectively challenged and changed by those within the community, rather than by the government or outside development projects. These taboos make it difficult to engage in dialogue about menstruation and inhibit honest conversations even between mothers and daughters. Connecting menstrual blood to having babies reframes it as a positive and natural process, and can promote honest communication among family members and across different generations because of the high value placed on children.

Moreover, both men and women should participate in these conversations about the significant role of menstruation in reproduction, family life, and overall health as a way to change taboos associated with it and understand it as a natural bodily process.

Pain management and health factors accompanying menstruation

In addition to addressing cultural stigma, a comprehensive approach to menstrual health needs to attend to factors that often accompany menstruation, such as increased tension, fatigue, stress, and menstrual pain. In a quantitative study conducted in rural India, researchers used a measure of 'menstrual insecurities', defined as 'the suite of social, environmental, and biological concerns and negative experiences resulting from menstruation', to assess menstrual-related experiences (Caruso *et al.* 2020, 3). For example,

they found that women who experience tension at onset of menstruation and have difficulty doing work when menstruating had high menstrual insecurity scores. When pain management and irregular periods are not addressed adequately, girls and women suffer, often with negative consequences on their ability to work or attend school. Even when school girls have access to free sanitary products, studies have highlighted that they miss school because of pain during menstruation and lack of awareness on where to seek help (Vashisht *et al.* 2018).

Community-based education and awareness programmes that cover issues related to pain and other forms of discomfort, such as those adopted by the NGOs we researched, will provide a long-term and sustainable approach for addressing these aspects of menstruation, as will be shown below.

Education and awareness

In a systematic review on MHM in India, it was highlighted that less than 50 per cent of the girls had knowledge about menstruation when they first started menstruating (Sharma *et al.* 2020). Most often they received information from mothers and grandmothers who themselves perpetuate the notion of impurity, and enforce restrictions (Thakur *et al.* 2014). Learning that menstruation is 'impure', 'dirty', and 'polluting' impacts girls' self-esteem and confidence, and makes them feel inferior to their male counterparts (Garg and Anand 2015). This also prevents them from seeking information about their body and bodily functions. In addition, as already mentioned, girls and women are made to suffer in silence on issues of menstrual disorders, pain, and gynecological issues (Chandra-Mouli and Patel 2020).

Families are an important site of socialisation and learning; information about menstruation is primarily shared from mother or older female relative to daughters, thus education about reproductive health must occur across the lifecycle of girls and women of all ages. Community-based multi-generational education and awareness programmes can interrupt the transmission of inaccurate information about menstrual health and reproduction, as well as the perpetuation of cultural stigma from generation to generation.

Currently, many MHM programmes target girls in schools. Because these programmes are relatively new, women who finished secondary school a decade ago may not have basic knowledge about reproduction, including the menstrual cycle. Additionally, the focus on school girls does not account for menstruating women past school age or girls who have dropped out of school (MacRae *et al.* 2019).

Comprehensive educational programmes for girls and women of all ages would require ongoing programming in communities, and not only in schools. They should be designed around a model of health as a human right and go well beyond simply training on how to use and dispose of menstrual products. Teaching that menstruation is part of the reproductive cycle and that it is connected to other aspects of health, such as nutrition, grounds menstrual health in the human right to health and may make menstruation less stigmatised. Part of this health education would include awareness of menstrual-

related difficulties such as painful periods, endometriosis, urinary tract infections, and treatment and pain management for them.

In the next section, we discuss the strategies of NGOs working with communities to provide comprehensive education and awareness programmes, which cover many of the elements mentioned above.

Case studies from Indian organisations

Background

India can be considered as one of the few countries in the global South which has made significant progress in providing access to menstrual products. Many schemes by national and state governments have made provision for distribution of free sanitary pads to school-going girls (Chatterjee 2020). Additionally, disposable pads have been subsidised and distributed via community health workers in communities (Garg *et al.* 2012). Data from National Health Family Survey-4 points out that around 58 per cent of women between the ages of 15 and 24 use commercially and locally made disposable sanitary napkins and tampons, with rural users at 48 per cent and urban users at 78 per cent (National Family Health Survey 2015–16, 114). However, despite these efforts, menstruation is still cloaked in the culture of shame and silence. Provision of low-cost menstrual products and WASH facilities is only a partial solution to the problems and challenges faced by menstruating women and girls (Thomson *et al.* 2019).

Some grassroots organisations have created and implemented community-driven approaches which address menstrual health as interconnected to social stigma, patriarchal subordination, and discrimination. Holistic models focusing on education and challenging gender inequality and social stigma have emerged from communities' participation both in design and implementation phases of such programmes, ensuring sustainable behavioural changes.

Goonj: not just a piece of cloth

Founded in 1999, Goonj has its headquarters in New Delhi and provides disaster relief, humanitarian aid, and community development in 23 states across India. Goonj's 'Not Just a Piece of Cloth' (NJPC) initiative attempts to break the culture of shame and silence around menstruation with the Triple A approach: Access, Awareness, and Affordability (Patkar 2020). Their primary emphasis is on awareness rather than just creating a product: awareness drives are conducted where girls and women open up with their issues and work together to find solutions.

The NJPC initiative emerged out of Goonj's work in disaster-affected areas as the need became clear for menstrual products as well as other basics such as food and clothing. As a complement to their awareness and education campaign, they train women from marginalised communities to manufacture reusable cloth pads named 'My Pad', made from recycled cotton. Each pad is composed of a long rectangle of fabric and thin cotton strips

to be used as absorbents. This design has several advantages: it is simple and inexpensive to make; it can be adjusted to have more- or less-absorbent material depending on the flow; and the strips of cotton are not immediately recognisable as menstrual products when drying on the line (field visit, Delhi, 18 December 2018). Goonj partners with NGOs working in local communities to determine the areas of greatest need. Often part of these projects involves improving health or sanitation, and 'My Pad' is introduced as an element of those initiatives. Girls and women from low-resource communities can afford these pads and are initially provided with a year's worth of 'My Pads' for free.

As part of the awareness initiatives, Goonj has organised the *Chuppi todo baithak* (break the silence) in many communities across India where girls, women, and men have raised various myths and taboos surrounding menstruation. They have launched 'NJPC – A Million Voices', asking people from both rural and urban areas to share their thoughts and experiences around menstruation, to ensure voices that are often excluded are brought to the forefront. The aim is to promote open dialogue, the more we speak about it, the more we normalise it, and this can be crucial in understanding various facets of this interconnected issue. Goonj is committed to bringing in the voices of the homeless, sex workers, migrant communities, tribal population, and disabled people. Since 2018, they have been organising 'Menstrual Dialogue: Missing Voices and Missed Out Voices' where they initiate dialogue with representatives from marginalised populations and provide a platform to raise their issues.

The main objective of Goonj's menstrual initiative is not to sell a product for profit but as a way to promote dialogue and normalise menstruation (interview with Goonj staff member overseeing all programmes, Arun, Delhi, 18 December 2018). Significantly, these conversations are mixed-gender and multi-generational. When menstrual education is provided in the schools, the parents of girls are asked to attend, and where possible boys are included as part of menstrual and reproductive education, to normalise these processes and break the silence that often accompanies taboos (interview with Goonj staff member overseeing NJPC, Asha, Delhi, 20 December 2018).

With its headquarters in Delhi, Goonj partners with local organisations to implement its programming and its infrastructure projects. A key aspect of its work is to create a volunteer base to keep the work going after the initial programme and training from Goonj. The main challenges Goonj faces are that the effectiveness of its programmes will depend on the strength of the relationships with local partners, the longevity of the relationship, the effectiveness of building a volunteer base, and Goonj's ability to adapt its reproductive curriculum to local contexts.

Barefoot College: women's wellness

Barefoot College, located in Tilonia in rural Rajasthan, is a not-for-profit social enterprise working across India since 1972, towards building more self-sufficient, sustainable, and resilient rural communities. Its Barefoot Solutions includes community-based initiatives on renewable energy (solar), water, health, education, and rural livelihood. Barefoot

College aims to enable and empower those in rural communities, especially women, to become change agents in their communities.

Barefoot's community-based health initiative provides information contextualised to the rural environment, as well as basic health services to girls and women of all ages. Grassroots health leaders and community health workers are trained to provide accurate health information and conduct monthly '*kishori* meetings' (adolescent girl meetings) and women's group meetings. Not only are menstrual, reproductive, and maternal health and nutrition discussed at length in these meetings, but active discussion takes place on sensitive topics such as child marriage, domestic violence, and gender discrimination and its implications on health outcomes (Deshmukh and Mohan 2018).

In recent years, recognising the intersectionality approach needed to address underlying structural and social barriers to women's empowerment, a holistic women-centred, inclusive, and practical training curriculum, 'Enriche', was co-designed with the local partner NGOs and community members. The curriculum uses a mix of in-person workshops, digital content, and self-learning tools which transcend the barrier of literacy to reach out to girls and women of all ages and literacy levels.

One of the key components of the Enriche curriculum is the Women's Wellness module. The module uses interactive board games, story-telling, role plays, comics, and menstrual aprons which graphically show female anatomy and the different stages of the menstrual cycle. These resources provide non-literacy-based information on interconnected issues of menstrual and reproductive health, nutrition, and hygiene. Complementing these educational resources, bodily changes during adolescence and the process of menstruation are also explained through sharing personal experiences and stories (Barefoot College 2019).

> After the workshops, many girls and women would wait to ask specific questions on their health issues or for someone they know, and this has led to seeking timely consultations. (Interview with Barefoot College staff member in Enriche, Mira, Tilonia, 23 December 2018)

The women's wellness module is complemented by other modules which use culturally relevant video comics to facilitate discussions on various rights, e.g. SRHR. After the training, the participants are provided with a 'learning and sharing toolkit' which consists of pictorial books on menstrual and reproductive health and nutrition, and with menstrual aprons which they can use to conduct training in their own communities. The programme so far has trained women from more than 19 states in India who have gone back as change agents and peer educators for their communities (interview with Barefoot College staff member in educational programmes, Seema, Tilonia, 22 December 2018).

Barefoot College has also trained and supported a group of four or five women to manufacture and sell environmentally friendly pads with the aim of providing hygienic affordable menstrual products in villages in Rajasthan. Both during the women's wellness workshops and sale of these pads in the communities, information on hygienic usage, storage, and disposal of all available menstrual products is provided, equipping women with information and knowledge to make informed decisions about their own health

(interview with Barefoot College staff member in production unit, Rita, Tilonia, 23 December 2018).

One of the challenges Barefoot faces is that local women and girls may face competing demands on their time, preventing them from participating in the training that allows the long-term community engagement necessary to scaling up its activities. In addition, to foster community-level changes, they also need to involve men in their awareness initiatives.

Jatan Sansthan: Uger

Founded in 2001, Jatan Sansthan, located in Udaipur, Rajasthan is a grassroots organisation that works with 1,300 rural and resource-poor villages in Rajasthan on various community development programmes, including health and education. In 2011, Uger, an initiative focused on reproductive education, became a separate programme within Jatan Sansthan. Uger's main goals are to put an end to shame around menstruation, raise awareness on menstrual health in communities, and promote environmental sustainability through producing and promoting reusable cotton sanitary pads.

Similar to Goonj's philosophy, Uger believes that menstruation cannot be viewed as a women's matter only, rather it is a matter for the entire society. Unfortunately, most men have little information, and often have misinformation, on menstruation. Many times, they take part in upholding and perpetuating taboos, myths, and restrictions. To remedy this, Uger employs several male trainers and includes men and boys in its training programmes. Having male trainers reinforces the idea that reproductive health is not only a women's issue and that menstruation is not a shameful secret but a normal biological process. Uger provides training on menstrual health for other organisations and corporations when requested. However, when the commissioning organisation finds out there will be male trainers, still an unusual practice in India, they sometimes raise objections. Uger persists in sending male trainers, explaining the reasons behind the practice and the importance of men taking leadership roles in reproductive education (interview with Uger male trainer, Jivan, 26 December 2018). Through its unwavering commitment to including men in the trainings, Uger lays the foundation for sharing the responsibility with men to change attitudes of families and communities towards menstruation (Uger and EcoFemme 2017).

Uger's training takes an empathetic and interactive approach. All participants, including boys and men, stitch Uger cloth pads and make menstrual bracelets. The menstrual bracelets can be given as gifts or be worn by the men; these serve as yet another way to stimulate conversation about menstruation (field visit to Uger production unit, Udaipur, 27 December 2018). We observed first-hand that although initially adolescent boys may feel embarrassed discussing menstruation, the process of creating a menstrual bracelet and pad sparked conversations about menstruation; and greater knowledge and communication about these issues is beneficial to men because they can be more supportive of the women in their lives.

Uger works closely with local communities to create educational resources which are context appropriate, including those that can be used by girls and women with disabilities. Uger is creating new educational materials that can be used by blind girls and women, such as an embossed menstrual apron to show (and feel) the different organs involved in reproduction, as well as a three-dimensional model of a torso to demonstrate product use through touch (Murthy and Thukral 2014). This important initiative is still in its early stages and we look forward to learning about its impact (meeting with Uger director, team, and interns, Udaipur, 26 December 2018). Working at the intersection of menstrual health and disability, Uger embraces an inclusive model of reproductive health, not a 'one size fits all' approach.

Like the other NGOs we visited, Uger not only teaches about reproductive health but also produces reusable pads. They intentionally use white cotton for the absorbent surface so that women and girls can easily detect any change in the colour of their menstrual blood that may indicate an infection or irregularity. While our criticism of the product-centred approach does not apply to Uger, their promotion of white cotton reusable pads will only work well if the cultural stigma associated with menstrual stains has been overcome, as pads need to be dried in the sun. As mentioned above, focus on one type of product can curtail women's and girls' choices. Uger attempts to balance its commitment to environmental sustainability by advocating reusable pads with its commitment to respecting the autonomy of women and girls by educating them about the entire range of product choices.

Another challenge Uger faces is resistance by local communities and corporations for including male trainers as reproductive and menstrual health educators. This resistance may inhibit the effectiveness of the training if participants are not comfortable with the male trainers.

EcoFemme

EcoFemme, founded in 2010, is a social enterprise located in Auroville in the state of Tamil Nadu. EcoFemme was originally conceived as a livelihood project for local women, making pads for sale outside India. It has evolved into an organisation with close ties to the local community which provides education and training around menstrual and reproductive health in nearby schools and villages (Muralidharan 2017). The training curriculum, in addition to covering basic aspects of reproduction and menstruation, emphasises choice and autonomy for girls and women, highlighting the various types of menstrual absorbents, their uses, and their implications for both economic and environmental cost.

EcoFemme produces reusable cloth pads because of its commitment to environmental sustainability. However, like the other organisations, their education and training on menstruation introduce women to a variety of products. EcoFemme leads women through a product analysis, which asks users to reflect on these factors for each option: How to use it? How is it made? Materials? Lifespan and disposal? Cost (per month, per year)? Considering these factors helps women make an informed choice that is right for

them, based on knowledge gained from the educational programme and their own experience (interview with EcoFemme director, Karin, Auroville, 31 December 2018).

The education and training that EcoFemme provides goes well beyond menstruation itself; they also cover wellness (nutrition, biology, reproduction) and reflections on culture. This broad-based approach reflects an understanding of menstruation as an integral aspect of women's and girls' overall health. Viewing menstruation as an integral aspect of health is important for addressing pain that often accompanies periods. One woman said that her favourite part of the training she received from EcoFemme was the stretches she learned to reduce cramps (field visit, community member, Shakti, Auroville, 31 December 2018). EcoFemme has even produced a video with yoga poses specifically for relieving menstrual pain.[3]

EcoFemme takes an interesting approach to addressing cultural stigma. Rather than dismissing cultural restrictions and taboos, a facilitator encourages women to share their beliefs and customs regarding menstruation, and to reflect on their effects in terms of safety. For instance, the taboo about keeping one's menses private means that women are hesitant to dry their menstrual cloth in the sun or in the open; improperly dried menstrual cloth can lead to urinary tract infections; or a taboo that requires women to sleep outside may result in attack by animals. The training sessions prepare women to have conversations about cultural taboos around menstruation with their community, to distinguish between safe and unsafe practices (interview with EcoFemme staff member, Priya, Auroville, 31 December 2018). Other taboos, such as not going into temples, do not cause a direct threat to safety, and women are encouraged to choose what is right for them. For example, 'when asked about challenging the prohibitions regarding menstruation, Sudha (42 years) commented, "I have thought about altering the practices but Mum said I cannot go to the temple"' (Whelan 2016, 47).

EcoFemme has evolved from an international product-focused initiative to an organisation providing educational programmes both in schools and in the communities near Auroville. But much of its work is still focused on producing environmentally friendly reusable sanitary pads marketed globally. They are striving to collect data so that their programmes can respond to evidence-based needs to adapt both their educational programmes and their product design to the local communities. At the time of our field work in January 2018, EcoFemme did not have men involved in its education and training as participants or trainers. As we have discussed, integrating men into the work of menstrual health, although challenging, is necessary to change the larger social context and stigma around menstruation (Uger and EcoFemme 2017).

Conclusions and recommendations

Many health practitioners and policymakers across the globe have recognised that menstruation can create challenges against women and girls realising their full potential. However, most of them have invested in approaches that focus on product and infrastructural aspects under the WASH framework (Thomson *et al.* 2019). As a result, there are many challenges associated with menstruation which have remained

unresolved. We suggest that viewing menstrual health as embedded within sexual and reproductive health and rights ensures that programmes address not only biological facts but also the psychosocial experience of menstruation, its place within reproductive health, and cultural and social stigma that contribute to gender inequality.

The four NGOs described in the paper have shown with their community-driven work that providing menstrual products or WASH infrastructure may start the conversation and satisfy some basic needs, but needs to be supplemented by awareness-raising and educational programmes that provide information on bodily changes, and on menstruation and reproductive health. Such programmes benefit from the kind of local involvement and knowledge that NGOs are well-positioned to support when they have positive and long-standing relationships within the community. This is also required for large-scale shifts against restrictive and discriminatory beliefs and practices.

The experience of such NGOs offers important lessons. First, the autonomy of women and girls to choose the type of product that is right for them should be paramount in menstrual interventions that include access to products. The NGOs we discussed all emphasise informed choice, derived from introducing women and girls to a basket of products, demonstrating the use and care of each one, as well as discussing their benefits and drawbacks. Emphasising informed choice has practical advantages, for example, in areas of water scarcity, reusables may not be practical or easy to wash regularly enough to preserve health. Informed choice also respects the dignity and wisdom of each woman to choose for herself.

Secondly, the education and awareness that the NGOs provide recognise that menstrual health is intimately connected to social and cultural contexts, and it involves challenging gender discrimination when it limits girls and women's access to education, work, and public presence. Taboos need to be addressed and challenged and this can only happen by taking a multi-generational approach involving girls and women of all ages – as well as men and boys – in conversations and training about menstrual and reproductive health. An important aspect of this education is to create inclusive educational tools which provide accurate information in the most engaging and interactive way, thus promoting critical discussions. Because these conversations require trust and openness, they should be led by community health workers and local teachers.

Thirdly, some of the NGOs have created strategies and designed tools to involve the most marginalised groups, including sex workers, disabled, and semi-illiterate and illiterate women and girls. Their work has ensured that dignified menstrual health and hygiene are not for a privileged few but benefit all sections of communities.

Finally, approaching menstrual health as embedded in the larger concerns of sexual and reproductive health helps to expand the focus from infrastructure, such as toilets, and provision of products, to education and awareness. This approach recognises that menstrual health cuts across sectors like WASH, education, and environment, linking it to structural, social, and cultural barriers to gender equity.

Notes

1. Names of all interviewees have been changed to protect their anonymity. Organisations, role in the organisation, and dates are provided to give context to information gathered.
2. Incinerators reduce the mass of solid waste incurred by disposables yet present different environmental and health problems such as air pollution and toxic gases from burning plastic.
3. See EcoFemme (2013).

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