The Menstrual Opportunity: Periods and Public Health

The challenges surrounding menstrual health management (MHM) in developing countries has long been approached from perspectives that are focused on education equality rather than holistic health outcomes. As such, the effects of menstruation, social stigma surrounding it, and a lack of access to menstrual health products on young girls' educations has been the main driving force behind funding focused towards period poverty. More recent research on MHM has allowed for a more comprehensive understanding of its effects as a health issue as well as a driver of educational inequality. Due to inadequate materials used during menstruation such as cloth or even dirt, it has been shown to lead to potentially severe health consequences ranging from infections, infertility, disability and mental distress. (Ahmed & Yesmin (2008), Sumpter & Torondel (2013), Hulland et al. (2015), Garikipati & Boudot (2017).

Social determinants of health

Consideration of public health issues relies on understanding of the social determinants of health, which as outlined by the Ministry of Health refers to a variety of non-medical factors in an individual or community's life which influence their health.

The Ministry of Health (2017) recognises a wide range of factors such as income, employment, education, housing, as well as social, cultural, and economic determinants of health. The understanding of social determinants of health is an important factor in considering the full scope of variables that can impact and influence menstrual hygiene management, particularly in developing countries with limited resources.

Poor Access to Menstrual Products

Women in impoverished communities have very little choice on what they use to manage their menstruation, as disposable pads are very expensive and many women cannot afford more than one or two pieces of menstrual cloth which must be reused until they wear out (Goonj, 2018). An Indian woman died from tetanus following an infection from a rusted hook on a piece of menstrual cloth she used (Goonj, 2018). Death and illness following the use of unsuitable menstrual cloths may be an underreported issue due to the stigma surrounding menstruation.

Mizan et. al. (2020) studied the relationship between genital infection and menstrual hygiene in adolescent girls in rural Bangladesh. 10.8% of girls in this study were using sanitary pads, 87% were using cloth and 2.2% were using toilet tissue. 64.7% were suffering from Candidiasis, 19.2% Trichomoniasis, 16.1% suffering from Bacterial Vaginosis. The authors found both a lack of awareness in adolescent girls

about maintaining their menstrual hygiene and a high frequency of genital infections among the girls with improper menstrual hygiene practices.

“Menstrual taboos... threaten the physical health of women in India” (pp 10, Hollister-Jones, 2016) who use a wide variety of materials to manage menstrual blood; ashes, leaves, newspaper, husk sand or menstrual cloths. Users of menstrual cloths may not wash between uses due to the stigma surrounding menstruation and the dirty cloths. Those that do wash their cloths are then ashamed to dry them in public, creating an even more optimal breeding ground for bacteria on damp cloths, which are also then attractive to insects. Insects from menstrual cloths entering the body from the vagina are known to cause infection and deaths (Hollister-Jones, 2016).

These challenges become heightened and more difficult in emergency situations, as resources become scarce and inaccessible (M. Sommer et al. 2016).

Poor Access to Menstrual Education

Education is a vital element within menstrual health. Menstrual education is able to provide an opportunity for adolescents to learn about the changes that occur in their body, the reproductive system, contraception, and fertility.

Lack of menstrual education can cause a range of health issues, as women may not have full knowledge around recognising abnormalities within their body, and when to seek medical advice.

Bangladeshi mothers’ educational level and access to media affect their knowledge of menstrual hygiene. One study showed that 69% of illiterate mothers, 78.8% of mothers with primary education and 70.4% of mothers with secondary education have little or no knowledge of menstrual hygiene (Mizan et. al., 2020).

According to Verma (et. al., 2020), 36.4% of urban girls and 38.2% of rural girls surveyed in India would not consult anyone about problems with their menstrual cycle.

Garg & Anand (2015) report that Indian and Iranian girls avoid exercise while on their period because there is a cultural belief that this will make their period more painful, while exercise can in fact help with premenstrual syndrome, pain and bloating. Indian belief that you should not have a bath while menstruating results in poorer hygiene and futhers health risks to women and girls. “Many of the practices during menstruation have direct implications on reproductive health. For instance, not bathing

during menstruation can lead to compromise in hygiene of the girl and thus lead to... reproductive tract infections." (Garg & Anand, 2015)

Garg and Anand, 2015, further argue that health education around menstruation that strategically works to combat myths and social taboos surrounding menstruation will directly improve the health of girls and women.

Menstrual education can also help challenge stigmas or potentially harmful beliefs around menstruation. According to a UN field report in Nepal (United Nations, 2011), "women are considered 'impure' during their menstruation cycle, and are subsequently separated from others in many spheres of normal, daily life". The places where they stay are often in very basic, exposed and unhygienic conditions, such as a cattle shed or separate hut.

One study on this practice reported the women experiencing these practices voiced feelings of 'insecurity, guilt and humiliation, as well as sadness and depression' (Dadeldhura DDC as cited in United Nations, 2011) There have also been reports of snakebites (NY Times, 2017), fires or fatal smoke inhalation (The Guardian, 2019).

Mental Health and Menstrual Health

The shame surrounding menstruation and it's accompanying cultural taboos has implications for women's mental health (Garg & Anand, 2015). The causes of mental illness are complex and varied, however common factors include social isolation or loneliness, severe or long term stress, social disadvantage and poverty, and long term issues with physical health needs (Mind, 2017). Verma (et. al., 2020), found that menstruating girls in India would withdraw from visiting friends and family, attending education, and visiting the holy places of their faith while menstruating. This regular social withdrawal is a possible risk factor for increasing mental health challenges in women and girls. The stress that can be experienced related to menstruation management in circumstances of poverty, with a lack of support and limited options, cannot be underestimated. A young Indian woman whose father's income was barely enough to meet the needs of their family tells a not-for-profit organisation Goonj (2018): "Two-three days before I get my periods, I feel mentally ill, thinking of what I could use during those days, because there is no easily available cotton cloth. Whenever I think about the ordeal, I get a headache...I feel sick and often pray to God to stop my periods forever." A similiar pressure was also reported in a case where a 14 year old Kenyan girl comitted suicide after her teacher shamed her, called her 'dirty' for having period blood on her clothes, and sent her out of the class (BBC, 2019). A 12 year old Indian girl also took her own life after being given a duster cloth to use as a pad and sent to stand

outside the classroom. She left a note describing her teacher as ‘harassing and torturing’ her (BBC, 2017).

Female Education and Child Mortality - Periods as the Missing Link

Lack of access to menstrual products has been shown to increase rates of missing school, dropping out, and poorer academic performance overall (Garg & Anand, 2015). This is a significant issue in societies where there is widespread lack of access, but also affects girls facing menstrual poverty in developed countries. In India, over 23% of girls drop out of school when they begin menstruating (Garg & Anand, 2015), while in Aotearoa New Zealand, the Youth19 Rangatahi Smart Survey (2020) found that 12% of surveyed students reported difficulty accessing menstrual products, and 8% reported that this meant they had missed school before. Students from decile 1 - 3 schools were more likely to have missed school for this reason, as were rangatahi Māori and Pacfiic youth. This mirrors the overall experiences globally around the challenges accessing education during menses for those who are unable to access menstrual products.

Mothers with higher education levels are more likely to: have increased soap use, increased family wealth, better and better child diet and growth scores (Miller et. al., 2017); immunise their children, access preventative medical care, and avoid chronic malnutrition (Keats, 2016, as cited in Andriano & Mondo, 2019), receive more prenatal care, be literate, have partners with higher education levels, and plan their families (Makate & Makate, 2016, as cited in Andriano & Mondo, 2019). Various studies found 8-36% of child mortalities in Malawi, Uganda, Indonesia, Taiwan and Zimbabwe were caused by lack of maternal education (Andriano & Mondo, 2019). Research in Zimbabwe found that an additional year of maternal secondary education decreased child deaths by 21%, while in Uganda an additional year of maternal primary schooling decreased infant deaths by 34% and decreased under 5 year old deaths by 36% (Andriano & Mondo, 2019). Further research is needed in this entire field, and the bias in existing research is probably to understate the relationship between women’s education and the health of children, as women in middle to low income countries with lower levels of education are less likely to report child death or have health records kept for them (Andriano & Mondo, 2019).

Women’s Work and Public Health

Menstrual health can affect a woman's ability to work. “When women work, they invest 90 percent of their income back into their families, compared with 35 percent for men. By focusing on girls and women, innovative businesses and organizations can spur economic progress, expand markets, and improve health and education outcomes for everyone” (CGI, n.d.).

When unable to work, sick days can affect pay, which can often affect whole families. In Bangladesh study found women couldn't be in the workplace for on average 6 days out of the month because of menstruation (HER health, 2017).

Menstrual health is important for an entire society; a woman's level of education is a predictor for children's health and education. Lack of access to health education and menstrual products creates intergenerational cycles for both genders.

The Menstrual Opportunity

Addressing menstrual health challenges can create opportunities for improved health, education and economic participation . As an often overlooked area, effective MHM has the potential to create real change. Simple interventions such as education and provision of sanitary products, can positively impact areas that may be seen to be difficult development issues.

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