Title

Improving Menstruation Management in Uganda

Issue

Managing menstrual hygiene in low-income countries is difficult due to lack of access to feminine hygiene products and few adequate sanitary facilities. Studies in Uganda have found that many girls struggle to attend and do well in school due to inadequate resources to manage their periods. Lack of education means that teachers, communities, and families do not have understanding of menstruation, and do not understand how to support girls to improve school attendance.

Research in Uganda regarding menstrual hygiene management has been primarily among school-aged girls. Research² among girls in 6 primary schools in the Rukungiri district in Uganda found that 61.7% missed at least one day of school per month due to menstruation. The primary reason for missing school was that there was no private place for girls to wash and change at school, followed by fear of staining their clothes. The last reasons were due to discomfort or pain. One senior female teacher reported that even female teachers occasionally miss school for similar reasons. The study also assessed the toilet facilities at the schools, and found that none of the schools had toilets adequate for good menstrual hygiene management, based on UNICEF's WASH guidelines for sanitation and hygiene. All of the schools had pit latrines, but none of them had soap, water, or disposal area for feminine hygiene products within the latrine itself. 3 schools had water available elsewhere, but all had unreliable access to water, making it essentially impossible for girls to clean hygiene products or wash their hands. Only one school had toilets with sufficient light necessary for managing menstrual hygiene, and only two had doors in the toilets necessary to maintain privacy.

Another study³ surveyed water and sanitation facilities at 18 secondary schools across Uganda and found similar results. These facilities were found to be largely inadequate for general hygiene, and made managing menstruation particularly difficult. Girls did not have toilet paper and instead used old pieces of paper or their hands. Half of the schools had water available, but only one had water available within the sanitation facility. At boarding schools, 43% of girls said they did not have enough privacy to change pads, and instead hid under their bedsheets or behind bed frames to change. Few of the pit latrines had disposal areas available for feminine hygiene products so some girls reported throwing used products into the latrine, causing latrines to become blocked when they were cleared with suction hoses.

The Rukungiri girls² were asked what improvements they would want in a toilet, and girls requested basics including water, soap, a basin, toilet paper, improved lighting, and more toilet cubicles for girls. In the US, we take for granted that all bathroom facilities will have trash bins in stalls or just outside them to dispose of feminine hygiene products, and we would never expect to go without soap and running water in a bathroom. This research highlights how difficult sanitary management of menstruation is for girls at school in Uganda.

In addition to sanitation issues, many girls lacked access to adequate feminine hygiene products. The same research among the Rukungiri schoolgirls² found that nearly all girls (87%) used plain cloth in place of a pad. Less than half used a purchased sanitary pad, and less than 10% used tampons or menstrual cups. Almost 90% of the girls reported being unable to buy disposable pads at least once. The most common reason was because of cost, the second was due to unavailability at local stores. One girl reported she missed school while menstruating because she was afraid her menstrual cloth would fall out if she was beaten at school, and many girls reported hesitance to participate in class activities and reduced concentration due to fear that

other students would find out they were on their period. Access to appropriate hygiene products is important so that girls can be more comfortable. If girls have safe, clean products that will keep them clean and dry they will be more comfortable in school, more willing to attend, and more willing to participate.

Focus group discussions² revealed general difficulty discussing menstruation due to its taboo nature in Uganda and showed generally poor understanding of menstruation among both students and teachers. Over a third of the girls said menstruation is a disease, and nearly half said it is unhealthy for women to be physically active while menstruating. Additionally, poor knowledge of menstruation and its connection to fertility may lead to unintended pregnancy⁶, but there is little research to support or reject this theory in Uganda. Interviews with teachers reaffirmed similar views, and showed that teachers have little to no training regarding menstruation². Male teachers in particular had generally poor knowledge of menstrual hygiene management, with one male teacher stating that the government should provide "special rooms with all the equipment that is needed for ladies" but was unsure exactly what "equipment" is needed. Female teachers endorsed male teacher and general community disinterest in improving menstrual hygiene management for the schoolgirls. One teacher even stated that she had wanted to purchase feminine hygiene products for the girls, but the community prevented her from doing so because they believe it was an inappropriate way to spend school money. Many girls also reported difficulty managing their periods due to shame associated with menstruating³. Girls at boarding schools reported difficulty washing reusable pads because they did not want to leave them to dry in a visible area. Less than 3% of girls were able to dry their pads in the sun, and 1 out of 7 girls reported having to use damp pads which caused irritation and chafing. Of the 18 schools surveyed, 5 had incinerators for trash disposal. However, girls hesitated to use them for

feminine hygiene products because incinerators were located far from the latrines. The girls have to carry bundles from the latrines to the incinerators, and report associated shame as this made it obvious they were menstruating. The taboo nature of menstruation not only causes girls to feel shame, but also makes education difficult for girls, teachers, and parents.

Menstrual hygiene management will affect nearly all girls and women for ~40 years of their lives. Without solving this issue, Uganda will not be able to move forward. Millennium Development Goals such as promotion of gender equality will not be achievable without the reduction of obstacles to women with regards to menstrual hygiene management⁴. The main ways to improve on this issue will be improvement of availability of feminine hygiene products, improvement of sanitary facilities, and education. Education is needed for both girls and communities to improve support for menstruating women. Lack of support both at home and at school makes it very difficult for girls to manage their periods, which may cause them to be more likely to miss school and fall behind.

Burden on Health

Menstrual hygiene products can be difficult for girls to obtain. In Uganda, a package of 10 disposable pads costs \$1.35 USD on average³, which is unaffordable for many households as 34.6% of people live on less than \$1.90 a day⁸. In addition to lack of products, sanitary facilities are likely inadequate. The World Health Statistics 2016 report⁹ found that only 19% of the population was using improved sanitation facilities in Uganda in 2015.

Data from the Human Development Goals⁸ published by the United Nations shows that mean years of schooling for girls is 4.5, 1.3 years less than the mean years of schooling for boys. Additionally, the ratio of women to men aged 25 and older with at least some secondary education is 0.81 – meaning for every 10 men with some secondary education, there are only 8 women. This difference may be related to lack of access to feminine hygiene products and poor sanitation facilities.

However, lack of research in the area of menstruation in developing countries means there are no standardized measures for evaluating the level of menstrual hygiene management, and no standardized related outcomes6. For example, from 2010 to 2015 26% of secondaryschool aged girls were enrolled in secondary school, compared to 28% of all secondary-school aged children (both boys and girls). This statistic makes it appear that boys and girls are have nearly equal enrollment, but it does not account for girls who are enrolled in school but regularly miss class. It also does not compare male and female performance or graduation rates, which may be a better measure of the effect of missed days than enrollment. There is also no standard for rating sanitation facilities on menstrual hygiene management⁵, making it difficult to measure facilities and compare them across schools or countries.

Several studies^{5,7} have called for further research, particularly in quantitative measures. As seen above^{2,3}, most research is qualitative and focuses on the conditions faced by menstruating women and requests girls have for improved menstrual hygiene management. Quantitative data would provide more concrete evidence of the effect of poor menstruation management on girls and women. Such evidence could include rates of days of school missed due to menstruation, school performance of girls compared to boys, or decreased enrollment rate of girls in school after puberty. It is also extremely important to develop a standard for sanitation and hygiene facilities in order to evaluate facilities to find if they are adequate for menstrual hygiene management.

Country Context

The Human Development Goals report and the World Health Statistics 2016 report both showed generally inadequate women's health and equality. The maternal mortality rate in Uganda is 343 deaths per 100,000 live births, and adolescent birth rate (ages 15-19) is 111.9 births per 1000 women ages 15 to 19⁸. Only 44.7% of married women had adequate modern family-planning methods⁹, and Uganda ranks only 121 on the gender inequality index⁸.

Solutions

There are several proposed solutions to improved availability and affordability of feminine hygiene products in Uganda. One study in Uganda³ found that girls generally prefer commercially produced disposable sanitary pads (CDSPs) because they are "modern", lightweight, secure, and rarely leak. However, as stated above³, CDSPs are much more expensive and difficult to find. One proposed solution would be locally produced reusable or disposable pads.

AFRIpads¹ is a company based in Uganda that produces reusable, washable pads. These pads are made with buttons to secure the pad to the underwear. This design helps to alleviate concerns girls have reported about menstrual cloths coming loose and falling out. AFRIpads operates a workshop in Masaka, Uganda that produces menstrual kits. These products not only improve menstrual hygiene management for women in Uganda, but also provides women with jobs in Masaka. One study³ found that most girls who used AFRIpads preferred them, and 28 of 29 AFRIpad users in the study thought they were better than CDSPs. They were described as soft, reliable, and cheap. However, low-income girls thought they were too expensive, while affluent girls did not want to have to wash them.

MakaPads⁵ is another company based in Uganda which produces disposable, biodegradable pads which they claim to sell for 50% less than other disposable pads. These pads

are locally made out of papyrus and are 95% biodegradable. These pads also come with adhesive and elastic to hold the pad in place, which again may help alleviate concerns about pads coming loose during wear. Since the pads are biodegradable they can be disposed of in pit latrines and don't require trash bins for disposal, a common problem found in past studies³. However, girls who used MakaPads reported that they were unreliable, leaked, and sometimes caused blood stains³. These pads don't have "wings" which may cause leakage. The simplest solution here would be to modify production to add wings to hold these pads in place. This could provide a solution for girls who would prefer not to use reusable pads, but who cannot afford other CDSPs.

A year supply of CDSPs cost 10x a year supply of AFRIpads and 3x a year supply of MakaPads, showing that these products are much more cost-effective^{3.} These pads provide an affordable solution to girls who currently use traditional materials like cotton cloths, where there are concerns for the material falling out or leaking.

Girls surveyed³ rarely reported use of insertion products such as cups or tampons. They are generally much more expensive and are generally seen as culturally inappropriate, making them an unlikely solution. Many girls did not think they would use insertion products even if they were available because of fears that they would be difficult or painful to use.

Menstrual Hygiene Matters⁴ is an excellent resource that could be implemented in Uganda. The tool-book provides a comprehensive overview of ways to improve menstrual hygiene management in low-income countries at a community level. It includes many modules including information on women's education, men's involvement, interventions for schools, and interventions for communities.

The school intervention module includes plans for girl-friendly latrines that would greatly improve girls' ability to manage their periods. One such model includes private latrines, hand-

washing stations with water collectors, and change-rooms. This set-up can also be modified to include an integrated incinerator for feminine hygiene product disposal. The cost of building this latrine in Ghana was expensive at \$3,500, but this is a solution that could be implemented with assistance and funding from government agencies or NGOs. When funding sanitary facilities, these types of organizations should ensure that the facilities include solutions for menstrual hygiene management. The toolkit also includes low-cost changes that can be made to existing latrines, such as adding trash buckets or small incinerators for product disposal, or adding small handwashing stations. By combining these solutions, new and existing latrines could be made to allow women to easily and effectively manage their periods. In tandem with improved feminine hygiene products, girls would be able to comfortably attend school without feeling shame due to their periods.

Conclusion

Menstruation management in Uganda is made more difficult by lack of menstrual hygiene management supplies. This includes lack of affordable, clean, and effective feminine hygiene products, as well as few sufficient sanitary facilities. These challenges can cause girls and women to miss school or work, and cause them shame in managing their periods. This results in decreased gender equality, though exact measures of this are difficult to obtain due to lack of research. The way to tackle this problem is from several directions including improvements to communities, schools, and educations for men and women. Locally made solutions such as AFRIpads or MakaPads not only provide cost effective solutions for women, they also provide job opportunities and support local economy. Improvements to latrines can help girls manage their periods and reduce shame, which would help encourage them to attend school even while menstruating. By improving menstrual hygiene management in Uganda, we

can make the daily lives of girls easier and help them finish school, join the workforce, and improve gender equality across the country.

Resources Used

AFRIpads - a monthly challenge, a sustainable solution. AFRIpads. http://afripads.com/.
Accessed May 10, 2017.

2. Boosey R, Prestwich G, Deave T. Menstrual hygiene management amongst schoolgirls in the Rukungiri district of Uganda and the impact on their education: a cross-sectional study. *Pan African Medical Journal.* 2014;19. doi:10.11604/pamj.2014.19.253.5313.

3. Crofts T, Fisher J. Menstrual hygiene in Ugandan schools: an investigation of low-cost sanitary pads. *Journal of Water, Sanitation and Hygiene for Development*. 2012;2(1):50-58. doi:10.2166/washdev.2012.067.

4. House S, Mahon T, Cavill S. Menstrual Hygiene Matters: A resource for improving menstrual hygiene around the world. *WaterAid*; 2012.

5. MakaPads. Technology For Tomorrow. http://www.t4tafrica.co/makapads. Accessed May 10, 2017.

6. Phillips-Howard PA, Caruso B, Torondel B, Zulaika G, Sahin M, Sommer M. Menstrual hygiene management among adolescent schoolgirls in low- and middle-income countries: research priorities. *Global Health Action*. 2016;9(1). doi:10.3402/gha.v9.33032.

 Sommer M, Sahin M. Overcoming the Taboo: Advancing the Global Agenda for Menstrual Hygiene Management for Schoolgirls. *American Journal of Public Health*.
2013;103(9):1556-1559. doi:10.2105/ajph.2013.301374.

8. The Human Development Report 2016: 'Human Development for Everyone'. *United Nations Development Programme*; 2017.

9. World Health Statistics 2016: Monitoring health for the SDGs. *World Health*

Organization; 2016.

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