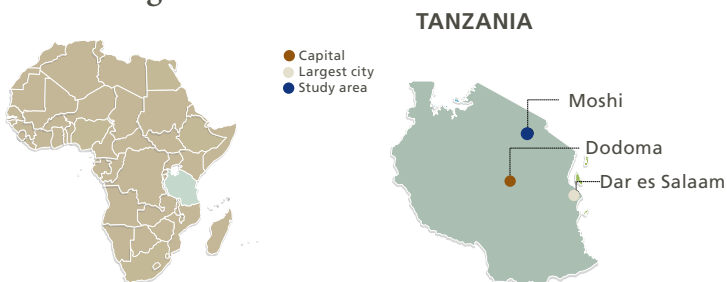




Health outcomes from using menstrual cups – A pilot study from Moshi, Tanzania

POLICY BRIEF FROM LUND UNIVERSITY CENTRE FOR SUSTAINABILITY STUDIES AND FEMME INTERNATIONAL | 2021

Efforts to reduce period poverty¹ for girls and women around the world has increased in the last decade because of growing scientific evidence showing how it impacts both physical and mental health, mobility, household expenditures, school performance and employment as well as sanitation systems and the environment² – all of which are key factors relevant for achieving a number of the Sustainable Development Goals³. In Tanzania, attention to address Menstrual Health and Hygiene (MHH) has so far, focused primarily on school girls^{4,5,6,7,8,9,10,11,12} leaving a knowledge gap about how it affects the country's menstruating women.



What are menstrual cups?

Menstrual cups (MCs) are small, bell-shaped receptacles made of medical-grade silicone. They sit inside the vagina, collecting rather than absorbing blood – thus leaving no medium for bacteria to collect and grow, and does not change the vaginal microbiome, making them a safer option than products that absorb. Cups can be worn for up to 12 hours, meaning they can last all day at work if there is no clean water, privacy, and place to change. Cups can also last for up to 10 years, making them both a highly economic and environmentally sustainable menstrual care technology¹³.



WHY WAS THIS STUDY DONE?

To date, no research has been published on adults who have been using menstrual cups for extended periods of time.

Past MHH research has overwhelmingly focused on adolescent school-girls, leaving a knowledge gap about women between 20-50 yrs of age.

Few MHH studies have been conducted that target the link between health – economy – well-being outcomes.

WHAT DID THE RESEARCHERS DO AND FIND?

By applying an integrated and mixed methods study approach, including the novel Swab Party, comparisons between menstrual cup users and non-menstrual cup users could be made.

Study results show that extended menstrual cup use has multiple direct and indirect health outcomes, including reduced incidence of urinary tract infections, bacterial vaginosis and skin rashes, less mental anxiety and higher self-confidence in addition to lowering health care costs, impacting both physical and physiological health.

Findings also gives evidence that women's overwhelmingly positive attitudes towards using menstrual cups continue after several years, ensuring their sustained usage.

WHAT DO THESE FINDINGS MEAN FOR POLICY?

Using menstrual cups can have significant benefits on women's health and well-being in Tanzania, motivating a policy push to increase their spread across the country.

NGOs and CBOs working on MHH in Tanzania are encouraged to include menstrual cups, in their programming, to increase their acceptability, availability and accessibility alongside other promoted menstrual products.

The government of Tanzania and its relevant ministries are encouraged to promote menstrual cups as a viable and sustainable menstrual care option in future MHH policies and projects, to increase their legitimacy and affordability, and scale up their use.

About the study

The aim of this study was to explore and compare reproductive health, ability to participate in daily activities, and menstrual economics between menstrual cup users and non-users. The study was originally conceived as a longitudinal double-cohort study; due to COVID-19, the longitudinal aspect was dropped. The study was made possible through a collaboration between LUCSUS, Femme International, National Institute for Medical Research (NIMR), Tanzania and the Kilimanjaro Christian Medical Centre (KCMC) Laboratory, with co-funding from Lunette Cups. The study was conducted in Moshi, Tanzania (See Map) where Femme International, is based and could recruit menstrual cup users. Seventy-nine women aged 20-50 years (average age 33) participated in data collection, which due to COVID-19 occurred six months apart. For this study, we partnered with another NGO, Give a Heart to Africa (GHTA), that had received Femme International’s education + menstrual cup intervention the previous three years. This meant we had women who had been using a cup for 2-3 years, a first in research. In total, we had 25 cup users and 54 non-users.

Method and Data analysis

Pivotal to the study was organizing and facilitating, what we now call a *Swab Party*, a novel participatory method where women, in addition to participating in different types of data collection, also had their nails painted, danced to music from a DJ, and munched on locally made and served food and beverages, all aimed at making the event a fun occasion, while still ensuring research validity and maintaining women’s privacy and integrity. The first *Swab Party* occurred in November 2019, hosted at GHTA, whilst the second data collection, occurring during July 2020, involved individually visiting women at their homes, due to COVID restrictions.

Data collection involved a quantitative questionnaire, filled out with paper/pencil, collecting information on socio-demographics, product usage and practices, participation during menstruation, self-report symptoms, menstrual economics, and menstrual well-being.

Vaginal swabs were self-administered, and tested for bacterial vaginosis and *C. albicans* (yeast infection), and urine samples for urinary tract infections (UTIs). Focus group discussions (FGDs) with menstrual cup users further explored the change in menstrual experience with cup usage, including participation, comfort, well-being, and health. Snowball sampling was employed to select our study participants at GHTA. Women were excluded if they were pregnant or not menstruating (for example, having reached menopause, or breast-feeding).

Quantitative data was analyzed to examine whether differences between cup- and non-users could be seen for reproductive health, participation, menstrual economics. Additionally, we explored the correlation between self-report symptoms and laboratory diagnoses. Qualitative data was analyzed using thematic analysis guided by the Integrated Model of Menstrual Experience². See Fig. 1.

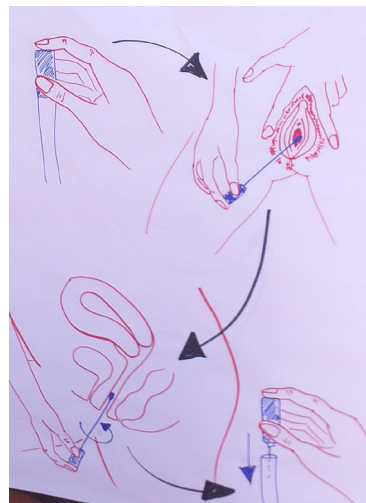


Fig. 2. Illustrated instruction on how to conduct the self-swab test. Fig. 3. Mr. Shabaan Katari from NIMR administering the testing equipment to one of the study participants during the Swab Party inside the GHTA compound. (Photos by: Sara Gabriellsson).

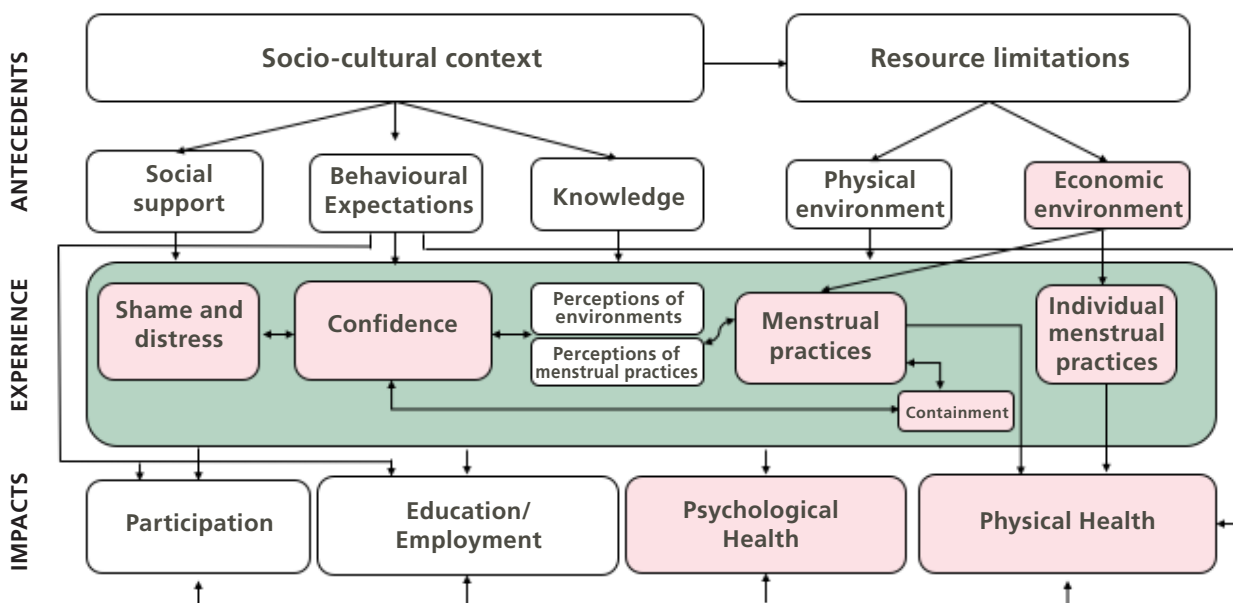


Fig. 1. Outcomes (in pink) of menstrual cup use among women in Moshi, Tanzania, illustrated here utilizing the Integrated Model of Menstrual Experience by Hennegan et al., 2019 and modified by the authors.

Study results

Women ranged in age from 20 to 50 years old (mean 33 years), and represented 15 different tribes. They were primarily Christian (n=53) and Muslim (n=12). The majority were married or had been, and only six women reported having no children. Education levels ranged almost equally from primary to college or technical training/certificate. A majority of the women (60 %) reported having paid work outside the home, including managing their own businesses, working at GHATA, or other office jobs, few engaged in work in informal places, like local food markets.

PHYSICAL HEALTH

Data analysis show that the women using menstrual cups are less likely to report health symptoms such as itching, rashes, pain associated with their periods, while this is more commonly reported among those not using menstrual cups (Fig. 4). Laboratory testing also confirmed that menstrual cup users had fewer positive diagnoses for urinary tract infections, as well as lower incidence of bacterial vaginosis, and yeast infections (Fig. 5). Result thus indicate that using menstrual cups can assist in reducing menstrual ailments, common to low-income countries².

”I feel confident engaging in other activities while menstruating, like swimming, running, climbing, and walking long distances without getting itching or scratching”

- Menstrual cup user in Focus Group Discussion, November 7th 2019.

PSYCHOLOGICAL HEALTH

Besides physical health benefits the study also gives evidence of positive impacts on psychological health, whereby menstrual cup users reported having less feelings of shame during their menstruation compared to non-menstrual cup users (Fig. 6). Moreover, menstrual cup users also reported having higher levels of confidence while on their period compared to non-menstrual cup users (Fig. 7). Women explained in the FGD that there were several reasons for this: first, since starting to use the cup they feel more secure and are therefore more mobile and miss work less; second, the costs of managing their periods have decreased, not only because the cups can be used for years, but also because of lowered expenses linked to health treatment, such as clinic fees, transportation costs and analgesics or other medications. In addition, they mentioned that they now feel less stressed about not having to frequently wash and dry blood stained clothes and/or cloths, hide and dispose of smelly menstrual waste products and worry about where and how they could safely change. And because anxiety and pain are part of the same feedback loop, less stress and fear meant they also felt less menstrual pain.

In sum, the results of this pilot study reveal that extended menstrual cup use among women in Moshi have benefitted both their physical and psychological health, contributing to making their menstruation easier to manage and their social life more engaged.

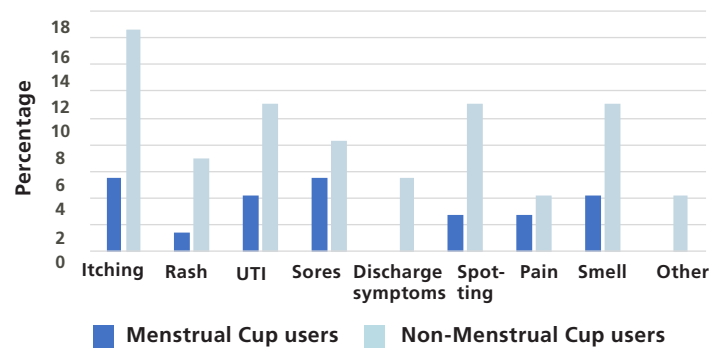


Fig. 4. Self reported health symptoms linked to menstruation

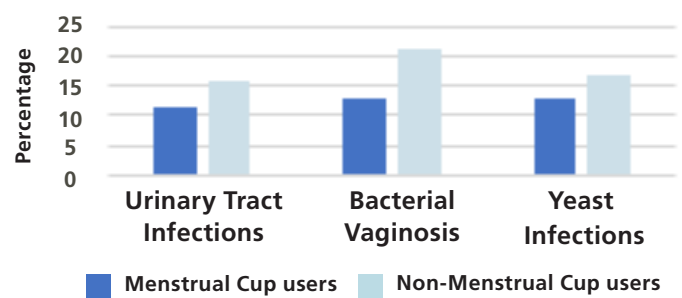


Fig. 5. Laboratory confirmed disease diagnoses

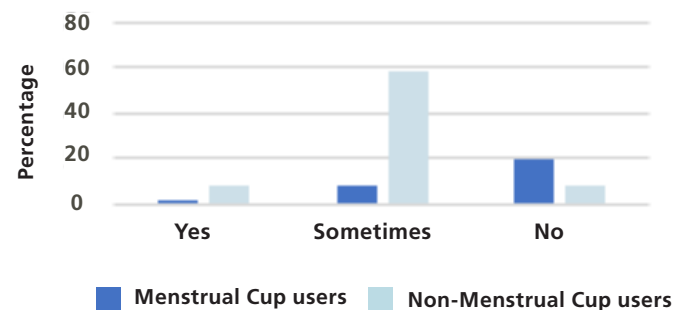


Fig. 6. Do you ever feel shame during your menstruation?

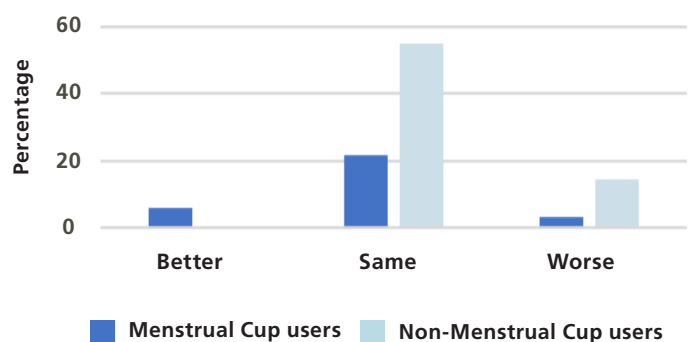



Fig. 7. What is your confidence level during your menstruation?

How Menstrual Cups contributes towards the SDGs

6 CLEAN WATER AND SANITATION




Menstrual cups reduces menstrual waste from entering sanitation systems and clogging them, lessening women's burden of managing taboo waste.

3 GOOD HEALTH AND WELL-BEING




Menstrual cups reduces the number and gravity of ailments and diseases linked to menstruation, improving women's physical and psychological health.

8 DECENT WORK AND ECONOMIC GROWTH



Menstrual cups improves mobility and protection, enabling women to participate in work during their menstruation.

5 GENDER EQUALITY



Menstrual cups raises women's self-confidence during their periods, empowering them to reclaim their dignity and challenge menstrual inequalities

SUSTAINABLE DEVELOPMENT GOALS

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ACKNOWLEDGEMENTS

A number of people and institutions have made this pilot study possible. Most importantly we would like to thank the women from Moshi who participated in the study; Lunette Cups who generously provided the majority of the funds to conduct the study and Dr. Calister Imeda at NIMR for assistance with acquiring the research permit. In addition, we also thank GHTA for hosting the swab party and to Margareth Mlembezi for assisting us in organizing the event. Our gratitude also goes to Shabaan Katari at NIMR and Ester Kyara from KCMC for exceptional collection and analysis of lab-samples. We also thank staff from Femme International in Moshi– Violet John, Neema Macha, Pule Erick and Florence Akara for enumeration assistance and translations as well as SIDA for co-funding, through the collaborative capacity building program SUSTAIN between University of Dar es Salaam and LUCSUS.

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