Five Year Study of a Unique, Eco-friendly, Menstrual Cup, That Enhances the Quality of Women's Lives During Menstruation

DR. Alfred A Shihata, M.D Department of Medicine and Science, Scripps Research Institution, San Diego, USA

DR. Steven Brody, M.D, PhD School of Medicine, University of California, San Diego, USA

Abstract (300 word limit)

Globally 1.9 billion women are of menstruating age. Menstrual cups are gaining more popularity among women, who prefer cups over pads and tampons. [1]. The innovative FemmyCycle (Figure 1) has several advantages over traditional menstrual cups. (Figure 2) **Objective:** To mitigate and correct the side effects caused by traditional menstrual cups. The most common side effect among traditional cups is leakage.

Methodology: We focused our study on all causes of leakage and other side effects caused by traditional menstrual cups. Methods of corrective and preventive actions included; the no-spill design, the use of a removal ring instead of a rigid stem, the use of a flask shaped body rather than the conical shape of traditional menstrual cups (Figure 2), and the elimination of suction holes as well as the need to manually open the cup. (Figure 3 & 4) We analyzed 834 independent reviews by women who have had prior experience with traditional menstrual cups to obtain objective results. **Findings:** The implementation of these design changes and enhancements of the written and digital instructions produced measurable, positive results in favor of the FemmyCycle. We analyzed all the reviews for FemmyCycle to measure the prevention of leakage and other side effects. We selected the reviewers who volunteered to compare the FemmyCycle with their experience using traditional cone shaped cups. There were many reasons why women preferred FemmyCycle, but the most common by far was the prevention of leakage followed by the ease of insertion, ease of removal and comfort when inserted. **Conclusion:** The implementation of the design changes from a conical shaped cup with a removal stem to a flask shape cup with a removal ring, in addition to the added no-spill feature and enhanced instructional material, improved the acceptability of the FemmyCycle.

Image



Figure 1: FemmyCycle Menstrual Cup



Figure 2: Traditional Menstrual Cup



Figure 3: No Spill

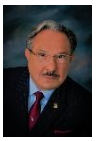


Figure 4: No Spill Design

Recent Publications (minimum 5)

1. Shihata A, Brody S: An innovative, Reusable Menstrual Cup that enhances the Quality of Women's life during Menstruation. British Journal of Medicine & Medical Research 4 (19): 3581, 2014.
2. Penelope A Phillips-Howard, et al. Menstrual cup use, leakage, acceptability, safety, and availability: a systematic review and meta-analysis Lancet Public Health 2019; 4: e376– 93.
3. Kuhlmann AS; Peters B. Unmet Menstrual Hygiene Needs Among Low-Income Women: Obstetrics & Gynecology. 133 (2): 238–244, FEBRUARY 2019
4. Ten VTA. Menstrual hygiene: A neglected condition for the achievement of several millennium development goals. Europe External Policy Advisors. Oct 2007.
5. Sommer M. Where the education system and women's bodies collide: The social and health impact of girls' experiences of menstruation and schooling in Tanzania. J Adolesc. 2010; 33: 521–529. [PubMed].
6. Anna Maria van Eijk, Kayla F. Laserson, Elizabeth Nyothach, et al Research, Use of menstrual cups among school girls: longitudinal observations nested in a randomized controlled feasibility study in rural western Kenya, Reproductive Health volume 15, Article number: 139 (2018) Reproductive Health volume 15, Article number: 139 (2018).
7. https://www.accessdata.fda.gov/cdrh_docs/pdf12/K121857.pd f K121857

Photograph



Dr. Alfred Shihata, President/CEO of FemCap Inc., invented FemmyCycle menstrual cup and FemCap cervical cap. He is affiliated with Scripps Institutions of Medicine & Science and holds medical degrees in England, Canada and the USA. He has six patents and brings over four decades of women's reproductive health research as a medical device designer. He received the "Why Didn't I Think of That?" award from BIOCOM, Southern California's largest biotech trade association. He has published in the New England Journal of Medicine and other medical/scientific journals. * Dr. Shihata is a Life Member of the Society of American Inventors and the Association of Reproductive Health Professionals. Email: alfred@femcap.com

*Selected Publications

HIV/STIs and Pregnancy Prevention, Using a Cervical Barrier and Microbicide, A. Shihata and S. Brody, World Journal of AIDS, Vol. 1 No. 4, 2011.