

Assessing Menstrual Cup Acceptability and Benefits in Uganda and Mozambique

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ABSTRACT

Background: Managing menstrual hygiene is a challenge among girls and women especially in low-income countries due to traditional beliefs, lack of knowledge and information on best hygienic practices, and limited access to appropriate and affordable menstrual hygiene products. An alternative to using sanitary pads or tampons for menstrual hygiene management, is the menstrual cup. CouldYou? a US-based non-profit is addressing the challenges of Menstrual Health Management of rural women and girls in Africa with the CouldYou? Cup, a menstrual cup. There was an intervention through this initiative in selected provinces in Mozambique and Uganda where women and girls received the menstrual cup. This study therefore examines the acceptability and benefits of the CouldYou? Cup in these countries. **Methods:** The menstrual hygiene intervention in Uganda and Mozambique covered the period August 2021 to January 2022, on a sample size of one hundred and forty-two (142) teenagers and adults who received CouldYou? Cups (menstrual cups.) One hundred and seven (107) were from Mozambique and thirty-five (35) from Uganda. The study selected participants from the Nampula province in Mozambique and Kyakitanga, Seguku, and Zana provinces in Uganda. The study categorized the respondents into teenagers and adults with overall average age being nineteen (19) years. Age ranged between twelve (12) and forty-three (43) years. Community-based participatory research (CBPR) tools were used to record views and elicit rich responses from the girls. Quantitative surveys were conducted using KoboCollect. The qualitative data, on the other hand, was collected through FGDs and KIIs using interview guides and semi-structured interviews. **Findings:** The study has revealed that participants use multiple products to address their menstrual needs in Uganda and Mozambique. Since the women and girls started using the menstrual cup, the menstrual cup has become a sustainable and safer substitute for unhygienic menstrual products including old clothes / rags and toilet

rolls. The menstrual cup has an average of 91.5% acceptability rate in Mozambique and Uganda measured by the willingness of participants to use the product. Acceptability was 100% in Uganda and 88.8% in Mozambique based on the willingness of participants to use the menstrual cup. Measuring acceptability by the product adoption rate gives a 95.8% acceptability across all countries and 98.6% when acceptability is measured by the “like” for the cup. On the average, each participant used the cup for four (4) months. 58.5% depended on only the menstrual cup and 36.6% used the menstrual with sanitary pads, and 0.7% used the menstrual cup with tampons to manage their monthly menstrual needs. In-depth interviews showed that participants who could afford sanitary pads, preferred to use the menstrual cup as a substitute to cut down their recurring monthly expenditure on menstrual products. Participants described economic and convenience as advantages of using the menstrual cup. Purchasing sanitary products was an economic burden to the study participants. Expenditure on menstrual products varied significantly across both countries. Results from a paired sample test across both countries showed a significant decrease in participants monthly expenditure on menstrual products by 76.5%. Average monthly expenditure had (at the point of data dissemination) decreased by 81.9% in Mozambique and by 23.5% in Uganda. **Conclusion:** Findings from this study reflect that the menstrual cup is accepted and used widely as a substitute for sanitary pads. The economic advantage of the menstrual cup outweighs all other benefits.

Keywords: Menstrual cup; Acceptability; CouldYou? Cup; Intervention; Sanitary pads; Tampons; Menstrual hygiene management; Menstruation; Menses

INTRODUCTION

Menstruation is a natural physiological phenomenon that occurs in adolescent girls and women who have not reached menopause (Biran et al., . Menstrual Hygiene Management (MHM) has been defined by the WHO and UNICEF Joint Monitoring Programme (JMP) as Women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials. Menstruation demands available material resources as blood absorbent, personal hygiene and waste disposal, preferably with enough confidentiality (Sahim, 2015). Globally, women and girls have self-managed their menstruation and their strategies to manage menstruation vary from country to country based on available menstrual products, personal preferences, cultural beliefs, indigenous traditions, economic status, and education or knowledge. Unavailable and unaffordable menstrual products lead to school and work absenteeism, and participation in social activities (Sommer, 2010).

Accessible and affordable menstrual hygiene products is overlooked and poses a major challenge for women and girls especially in developing countries (Crofts et al., 2012). The difficulty in accessing menstrual hygiene products likely suggests that women and girls have considerable struggle in going about their normal duties during menstruation. They either half-heartedly attend to daily routines and other relevant activities or forgo them entirely because of the physical discomfort, psychological distress and feelings of low self-esteem (Mason et al., 2019) due to stigmatization (Johnston-Robledo & Chrisler, 2013) and difficult access to menstrual absorbents. Several studies have shown that girls in low-income settings struggle or

miss school when menstruating if they can't effectively manage their menstrual hygiene (Boosey et al., 2014). For example, in Ghana, it has been found that 95 percent of girls sometimes miss school due to menstruation (House et al., 2013). Safe, accessible menstrual hygiene products have a considerable positive impact on women and girls' occupational, social and educational capacity.

Introducing the menstrual cup has become an efficient and effective menstrual management strategy. Different from other menstrual products, the menstrual cup does not increase infections (Howard et al., 2011; Kakani & Bhatt, 2017). The rate of bacterial infection associated with the cup is minimal or entirely absent (North & Oldham, 2011; Phillips-Howard et al., 2016), implying that the menstrual cup does not present adverse effects on the vaginal flora (van Eijk et al., 2019).

Despite the wide usage of the menstrual cup, the acceptance rate varies due to several reasons. According to (Beksinska et al., 2021; Howard et al., 2011) the comfort it offers and the capacity to collect blood (Howard et al., 2011) are the drivers of the menstrual cup acceptability by some users. On the other hand, the discomfort associated with the cup leakage at times, the constant desire to urinate and the notion that the cup could get stuck in the vagina (Pokhrel et al., 2021; van Eijk et al., 2019), are revealing challenges of some users, but there remain much to explore on the acceptability and further dive into the benefits of using the cup.

The CouldYou? Women and Girls' Health Initiative is one of the intervention programs to sustainably address Menstrual Health Management of rural women and girls in Africa using the CouldYou? Cup (a menstrual cup). The initiative aims to provide the CouldYou? Cup and menstrual health education to aid in keeping girls in school and keeping women comfortable and active in their daily routines and other communal activities during menstruation. The initiative has been implemented in some African countries, the USA and Mexico. This study has examined the acceptability and benefits of the menstrual cup in Mozambique and Uganda, specifically.

While the menstrual cup is not a widely known menstrual management product in Africa, there have been several countries that have had access to this product, with a number of studies conducted on its acceptability (Beksinska et al., 2021; Beksinska et al., 2015; Mason et al., 2019). However, there has not been a comparative study between Mozambique and Uganda on the use and acceptability of the menstrual cup. Again, there has been limited studies conducted on the menstrual cup acceptability and benefits in both countries Uganda, which warrants this study. The construct of acceptability in this study is different from previous studies. In this study, frequency of menstrual cup usage, convenience, likeness, willingness to use are the criteria used in measuring acceptability. In an effort to contribute to menstrual cup intervention in Africa, our study compares the acceptability of the CouldYou? Cup in Uganda and Mozambique.

The remaining section of the study is organized as follows; section two presents the methods of the study, section three presents results, section four captures a cross examination and discussion of results, the fifth section presents ethical consideration and the final section draws conclusion on the study.

METHODS

This menstrual hygiene intervention in Uganda and Mozambique covered the period between August 2021 and January 2022, on a sample size of one hundred and forty-two (142) teenagers and adults who received CouldYou? Cups (menstrual cups). One hundred and seven (107) participants were from Mozambique and thirty-five (35) were from Uganda. The study selected participants from the Nampula province in Mozambique and the Kyakitanga, Seguku, and Zana provinces in Uganda. The study categorized the respondents into teenagers and adults with overall average age of nineteen (19) years. Ages ranged between twelve (12) and forty-three (43) years. Community-based participatory research (CBPR) tools were used to record views and elicit rich responses from the girls. Quantitative surveys were conducted using KoboCollect. The qualitative data on the other hand was collected through FGDs and KIIs using interview guides and semi structured interviews.

The power of narrative and visual techniques was harnessed while engaging with the participants to acquire deeper insights into the data. The quantitative surveys were conducted using KoboCollect, however, the responses for open-ended questions were recorded with audio recorders and recording sheets. The qualitative data, on the other hand, was collected through FGDs and KIIs using interview guides, semi structured interviews.

Table 1: Description of Respondents

Country	Frequency	Percent	Valid Percent	Cumulative Percent
Uganda	35	24.6%	24.6%	24.6%
Mozambique	107	75.4%	75.4%	100%
Total	142	100%	100%	

RESULTS

The current study is a follow-up survey to investigate the acceptability and benefits of the menstrual cup in Uganda and Mozambique. Focus Group Discussions (FGDs) with participants gave insights into dialogues and conversation around menstruation, the menstrual cups, menstrual hygiene behaviors and practices, and social norms around menstruation. The study used several questions for the assessment. The findings are presented and discussed in the subsequent subsections. Respondents were granted the opportunity to give multiple responses on some questions since some employed multiple products for their menstruation management, attributable to cost of FHPs.

Menstrual Products Use

Results in Table 2 show multiple products used by participants in both countries. Before the menstrual cup intervention, CouldYou? conducted a baseline study to gain insight on their menstrual health and set the metrics needed to compare the menstrual cups with the other menstrual products as done by (Mason et al., 2019; van Eijk et al., 2019). The widely used menstrual products prior to the CouldYou? initiative included sanitary pads, locally made menstrual products from dump cloths which they referred to as rags. The old cloths were reusable for only a cycle but this depended on the type of material used. Some used tampons, toilet rolls, to mention a few others. After the initiative, another survey was conducted which again considered the menstrual products they use. The findings revealed an interesting turn of events.

From Table 2, in both Uganda and Mozambique, the CouldYou? Cup influenced changes in the adoption of menstrual products used by the beneficiaries. Before the cup intervention, 26.4% used the locally made menstrual product from dump cloth, however, this figure has been reduced to 0.7%, representing a 97.3% decline in its usage. Also, evidently, the adoption rate of sanitary pads had declined from 68.6% to 40.8% signifying about 41% drop in the use of sanitary pads. Tampon users in both countries were just 0.7% from 2.1% before the introduction of the menstrual cup. The use of toilet rolls / papers ceased after participants received the menstrual cup. Before the cup intervention, only one (1) participant in Mozambique reported using the menstrual cup. At present, 95.8% reported using the menstrual cup.

Table 2: Menstrual Products Use

Menstrual Product		Responses		Percent of Cases
		N	Percent	
Current Products	Old cloths / Rags	1	0.5%	0.7%
	Sanitary Pad	58	29.6%	40.8%
	Menstrual Cup	136	69.4%	95.8%
	Tampon	1	0.5%	0.7%
Total		196	100.0%	138.0%
Previous Products	Old cloths / Rags	37	22.4%	26.4%
	Sanitary Pad	96	58.2%	68.6%
	Menstrual Cup	1	0.6%	0.7%
	Tampon	3	1.8%	2.1%
	Toilet rolls / Papers	28	17.0%	20.0%
Total		165	100.0%	117.9%

Percentages and totals are based on respondents

Table 3: Menstrual Products Use by Countries

Menstrual Product		Current Products			Previous Products		
		Mozambique	Uganda	Total	Mozambique	Uganda	Total
Old cloths / Rags	Count	1	0	1	37	0	37
	% within Products	100.0%	0.0%		100.0%	0.0%	
	% within Country	0.9%	0.0%		34.6%	0.0%	
	% of Total	0.7%	0.0%	0.7%	26.4%	0.0%	26.4%
Sanitary Pad	Count	24	34	58	63	33	96
	% within Products	41.4%	58.6%		65.6%	34.4%	
	% within Country	22.4%	97.1%		58.9%	94.2%	
	% of Total	16.9%	23.9%	40.8%	45.0%	23.6%	68.6%
Menstrual Cup	Count	101	35	136	1	0	1
	% within Products	74.3%	25.7%		100.0%	0.0%	

	% within Country	94.4%	100.0%		0.9%	0.0%
	% of Total	71.1%	24.6%	95.8%	0.7%	0.0% 0.7%
Tampon	Count	1	0	1	3	0 3
	% within Products	100.0%	0.0%		100.0%	0.0%
	% within Country	0.9%	0.0%		2.8%	0.0%
	% of Total	0.7%	0.0%	0.7%	2.1%	0.0% 2.1%
Toilet rolls / Papers	Count	0	0	0	28	0 28
	% within Products	0.0%	0.0%	00.0%	100.0%	0.0%
	% within Country	0.0%	0.0%		26.2%	0.0%
	% of Total	0.0%	0.0%	0.0%	20.0%	0.0% 20.0%

Percentages and totals are based on respondents

For product usage across countries, there was no reported use of old cloths/rags in Uganda for both periods – before and after the menstrual cup intervention. Specifically, in Mozambique, women/girls who used old cloths/rags reduced from 34.6% to 0.9%, a 97.3% decrease within five (5) months of introducing the menstrual cup. With regards to the use of sanitary pads, the percentage had declined from 58.9% to 22.4% in Mozambique and increased marginally in Uganda from 94.2% to 97.1%. No participant in Uganda used tampons before and after the introduction of the menstrual cup. In Mozambique, results of the study showed a decline from 2.8% to 0.9%. The study also found that no participant in either Uganda or Mozambique used toilet rolls / papers after the menstrual cup intervention. Results from the study show the menstrual cup to be a dominant product after its introduction. All participants from Uganda and 94.4% of participants from Mozambique use the menstrual cup.

Menstrual Cup Usage

The menstrual cup is used frequently by participants. On the average, a participant has used the cup for four (4) months. Comparatively, participants from Uganda have used the cup a month more than those in Mozambique but the difference is not statistically significant ($p=0.122$).

Regarding the monthly usage frequency, from a Likert scale of 1 to 5, 5 being always and 1 being not use at all, 59.2% always use the menstrual cup throughout their menstrual cycle and 26.1% use it often during their period. The results further shows that 4.2% do not use the cup at all and 7% use it once during menstruation.

In-depth interview with participants revealed that participants who do not use it frequently are now getting familiar with the cup. One participant said:

“You know it’s not comfortable for the first time. I have been using it for the past 2 months. I used it once for the first month and twice for the second month and it felt better in the second month. This month I will try and use it for 3 days”.

Another participant also said:

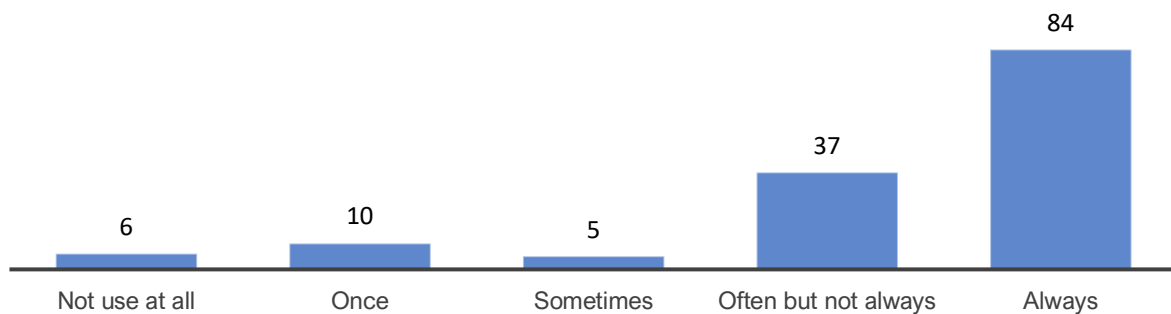
“My first experience with the cup was very uncomfortable. I even felt it will drop if I walked with it but it didn’t. Now, I use it more than the first 3 months but sometimes I use the pad when”.

Table 4: Descriptive statistics of months of menstrual cup use

Country	Months	Std. Deviation
Mozambique	4.35	1.332
Uganda	4.71	0.75
Total	4.44	1.223

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.581	1	3.581	2.418	.122
Within Groups	207.348	140	1.481		
Total	210.930	141			

Figure 1: Frequency of monthly CouldYou? Cups usage during menstruation



Perception of the CouldYou? Cups

Several items were put together in this study to investigate the perception of the beneficiaries on the CouldYou? Cups. The issue of convenience, the like for the cups and the ratings the beneficiaries would give to the cups were inculcated in the survey.

A Kruskal-Wallis H test was deployed to test the statistical significance in convenience, willingness to use the cup, and like score for the cup between Uganda and Mozambique. Tables 5 and 6 present results of the Kruskal Wallace H test and the descriptive statistics for the perceptions about the menstrual cup.

Table 5: Mean ranks from Kruskal-Wallis H test

Variable	Country	Mean Rank	Mean
Willingness to use the Cup	Mozambique	69.54	4.76
	Uganda	77.50	
Convenience of the Cup	Mozambique	76.82	4.35
	Uganda	55.23	
Preference (like) for the Cup	Mozambique	74.56	4.30
	Uganda	62.14	

Table 6: Kruskal-Wallis H test

	Willingness to use the Cup	Convenience of the Cup	Preference (like) for the Cup
Kruskal-Wallis H	4.250	9.044	2.950
df	1	1	1
Asymp. Sig.	0.039	0.003	0.086
a. Kruskal Wallis Test b. Grouping Variable: Country			

Convenience of the menstrual cup

For the convenience scoring, the Kruskal-Wallis H test showed that there was a statistically significant difference in convenience score between Mozambique and Uganda, $\chi^2(2) = 9.044$, $p = 0.00$, with a mean rank convenient score of 76.82 for Mozambique and 55.23 for Uganda. The test score implies that participants from Mozambique perceive the cup to be more convenient than the participants from Uganda. From the descriptive statistics, the average score of 4.35 presents a higher rank (agree) for the menstrual cup, for both Uganda and Mozambique.

From the Likert scale of 1 – 5, 1 being strongly disagree and 5 being strongly agree, 46.5% of the participants strongly agree that the menstrual cup is convenient and 45.8% agree to that assertion. On the contrary, 4.2% of these beneficiaries stood neutral regarding convenience in the use of the cup.

Specifically, within Mozambique 56.1% strongly agree to the statement that the menstrual cups are convenient to use. In Uganda, only 17.1% of the respondents strongly agreed to same assertion. 33.6% in Mozambique constituting 25.4% of the beneficiaries agree that the product is convenient to use while 82.9% in Uganda (constituting 20.4% of the total participants) also agree that the product is convenient to use. Overall, 3.5% disagree with the assertion that the menstrual cup, is convenient.

Table 7: The convenience of the menstrual cup

		Disagree	Uncertain	Agree	Strongly Agree	
Mozambique	Count	5	6	36	60	107
	% within Country	4.7%	5.6%	33.6%	56.1%	100.0%
	% of Total	3.5%	4.2%	25.4%	42.3%	75.4%
Uganda	Count	0	0	29	6	35
	% within Country	0.0%	0.0%	82.9%	17.1%	100.0%
	% of Total	0.0%	0.0%	20.4%	4.2%	24.6%
	Count	5	6	65	66	142
	% within Country	3.5%	4.2%	45.8%	46.5%	100.0%
	% of Total	3.5%	4.2%	45.8%	46.5%	100.0%

Percentages and totals are based on respondents.

Preference (like) for the menstrual cup

For the preference scoring, the Kruskal-Wallis H test showed that there was no statistically significant difference in the menstrual cup preference (like) score between Mozambique and Uganda, $\chi^2(2) = 2.9$, $p = 0.08$, with a mean rank convenient score of 74.5 for Mozambique and 62.14 for Uganda. The test score implies that participants from Mozambique like the menstrual cup more than the participants from Uganda, but the difference is not significant statistically. From the descriptive statistics, the average score of 4.30 presents a higher rank (Like quite well) for the cup for both Uganda and Mozambique.

From the Likert scale of 1 – 5, 1 being not like the menstrual cup and 5 being like the menstrual cup very well, 49.3% of the participants like the menstrual cup very well and 40.1% like the menstrual cup quite well. There was no strong dislike for the menstrual cup, but 9.2% said they like the menstrual cup slightly.

Across countries, in Mozambique, 56.1% liked the menstrual cup very well whereas 28.6% participants from Uganda like the menstrual cup very well. In Mozambique 29.9% like the menstrual cup quite well and 71.4% in Uganda have similar preference for the menstrual cup. Only 1.9% in Mozambique and none from Uganda were uncertain in their like for the menstrual cup.

Table 8: Preference (like) for the menstrual cup

		Like slightly	Like somewhat	Like quite well	Like very well	Total
Mozambique	Count	13	2	32	60	107
	% within Country	12.1%	1.9%	29.9%	56.1%	100.0%
	% of Total	9.2%	1.4%	22.5%	42.3%	75.4%
Uganda	Count	0	0	25	10	35
	% within Country	0.0%	0.0%	71.4%	28.6%	100.0%
	% of Total	0.0%	0.0%	17.6%	7.0%	24.6%
Total	Count	13	2	57	70	142
	% within Country	9.2%	1.4%	40.1%	49.3%	100.0%
	% of Total	9.2%	1.4%	40.1%	49.3%	100.0%

Percentages and totals are based on respondents

Willingness to use the menstrual cup

Participants willingness to use the menstrual cup is one of the measures of acceptability for this study. Results from the Kruskal-Wallis H test showed that there was a statistically significant difference in the willingness to continue using the menstrual cup score between Mozambique and Uganda, $\chi^2(2) = 4.25$, $p = 0.03$, with a mean rank score of 69.5 for Mozambique and 77.5 for Uganda. The test score implies that participants from Uganda are more willing to continue using the menstrual cup than those from Mozambique. From the descriptive statistics, the average score of presents a higher rank (very willing) to continue using the menstrual cup in Uganda and Mozambique.

From the Likert scale of 1 – 5, 1 being very unwilling to use the menstrual cup and 5 being very willing to use the menstrual cup, 91.5% with only 0.7 who are very unwilling to use the menstrual cup. Specifically in Mozambique, 88.8% are very willing to continue using the menstrual cup whereas all the participants from Uganda do not have any intention of stopping using the menstrual cup.

Table 9: Willingness to use the menstrual cup

		Very unwilling	Unwilling	Uncertain	Very willing	Total
Mozambique	Count	1	8	3	95	107
	% within Country	0.9%	7.5%	2.8%	88.8%	100.0%
	% of Total	0.7%	5.6%	2.1%	66.9%	75.4%
Uganda	Count	0	0	0	35	35
	% within Country	0.0%	0.0%	0.0%	100.0%	100.0%
	% of Total	0.0%	0.0%	0.0%	24.6%	24.6%
	Count	1	8	3	130	142
	% within Country	0.7%	5.6%	2.1%	91.5%	100.0%
	% of Total	0.7%	5.6%	2.1%	91.5%	100.0%

Benefits of the menstrual cup

The participants described economic and convenience advantages of using the menstrual cup. Purchasing sanitary products used to be an economic burden to the study participants. One participant cited *“I like the menstrual cup because it is less costly relative to the pad. Once my period starts, I just boil it water and insert without spending any money”*. Another participant said *“The cup is less costly and rarely soils your cloth. The fact that you don’t have to buy products monthly makes the cup a better option”*

Results show that managing menstruation is more expensive in Mozambique than Uganda and the difference was statistically significant ($p=0.00$). From a one-way analysis of variance, it was USD 4 more to manage monthly menstruation in Mozambique than Uganda. Before the menstrual cup intervention, a participant in Mozambique spent averagely USD 5.72 monthly on menstrual products and a woman/girl in Uganda spent USD1.7. After the menstrual cup intervention, average expenditure for both countries were USD 1.12 monthly, USD 1.03 in Mozambique and USD 1.36 in Uganda. A paired sample test revealed a significant ($p=0.00$) decrease increase in monthly expenditure by 76.5% from USD 4.73 to USD 1.12.

Table 10: Monthly expenditure on menstrual products

Monthly expenditure on menstrual products	Country	Mean	Std. Deviation
Current Expenditure	Mozambique	1.0366	0.63576
	Uganda	1.3671	1.14049
	Total	1.1181	0.79871
Previous Expenditure	Mozambique	5.72	3.375
	Uganda	1.70	4.568
	Total	4.73	4.078

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Current Expenditure	Between Groups	2.882	1	2.882	4.633	.033
	Within Groups	87.068	140	.622		
	Total	89.950	141			
Previous Expenditure	Between Groups	427.858	1	427.858	31.255	.000
	Within Groups	1916.488	140	13.689		
	Total	2344.346	141			

Further participants found the menstrual cup to be comfortable and safe whenever they used it. The benefits clearly connect to their perceptions about the convenience use of the product with most girls giving several testimonies. Below are some quotations from the participants on their perceived benefits of the menstrual cup:

Table 11: Quotations from participants on their perceived benefits of the menstrual cup

Participant	Quote
Participant 1	The cup is less costly; it doesn't soil my clothes and it controls the blood flow well.
Participant 2	The cup is comfortable and easy to use
Participant 3	The cup is very economical and safe to use.
Participant 4	I really feel comfortable and safe in using the cup.
Participant 5	The cup is comfortable above all. When I use it, it sometimes feels I'm not wearing anything.
Participant 6	The cup is very comfortable and safe when wearing them I don't even notice
Participant 7	Since I started using them I just feel better and better. No money to waste and the cup is comfortable.
Participant 8	The cup feels so comfortable, and I don't have to spend money to get a sanitary pad frequently. If I don't have the pad, I still have my cup to use.
Participant 9	I feel comfortable and safe. My only challenge is that I still can't tell when its full.
Participant 10	The comfort and safety of the cup is not comparable. I think steps should be taken to make the cups available to all.

DISCUSSIONS

This comparative study has examined the use of the menstrual cup in Uganda and Mozambique to determine its acceptability and benefits. While the study has revealed some exciting learnings about the cup, the findings in general are consistent with similar studies conducted in other countries. The usage of menstrual products by the study participants have seen some significant changes and they attribute these changes to the use of the menstrual cup. Whiles

some significant changes have occurred in the adoption rate of some menstrual products, it is a fact that girls use multiple products monthly. A product that has dropped off the list of absorbents is toilet rolls/papers. Also, the use of old cloths/rags also experienced a drastic cut-rate.

In both Mozambique and Uganda, no single use of old cloths/rags was reported after the menstrual cup intervention, but specifically in Mozambique, women/girls who used old cloths/rags reduced within five (5) months of introducing the menstrual cup. The use of sanitary pads declined in Mozambique and increased marginally in Uganda. There was no single use of tampon in Uganda before and after the menstrual cup intervention. The study results show that, the menstrual cup has become a dominant product after its introduction because all participants from Uganda and majority from Mozambique use it. This implies that, beneficiaries in Uganda have accepted the menstrual cup entirely.

The use of sanitary pads only declined in Mozambique but increased marginally in Uganda since participants still use it but this time around with the menstrual cup as the next best alternative. The reason for the sanitary pad decline in Mozambique is largely attributed to the economic advantages the menstrual cup has over sanitary pads and this shows how much the menstrual cup has influenced the choice of menstrual products. From this study, the menstrual cup is now dominant among the multiple products used, justified by the overall user rate of 95.8% and 100% acceptability in Uganda. This findings are consistent the work of (Beksinska et al., 2015) who established that many novice users accepted the menstrual cups due to the benefits they offer.

Participants like for the menstrual cup, convenience, and willingness to continue using the menstrual cup justifies the high rate of acceptability of the menstrual cup. The results has shown that more than three-quarter (3/4) of the participants agree that the menstrual cup is convenient to use, which confirms the findings of (Pokhrel et al., 2021). On the preference for the menstrual cup using likeness scale as the measure, Mozambicans like the menstrual cup more than from Ugandans, but the difference in preference was not significant statistically.

The economic and convenience advantages of the menstrual cup was highlighted to be the dominant benefits. Users attest that the menstrual cup has significantly reduced the cost burden of monthly menstrual products as confirmed by (Pokhrel et al., 2021)

This study therefore points that the menstrual cup has been widely accepted in both Uganda and Mozambique, consistent with the findings of (Mensah et al., 2021, Beksinska et al., 2015; Hyttel et al., 2017a).

ETHICAL CONSIDERATION

The data for this study are all protected from public access and protected with passwords. Computers with these data are accessible to a few authorized persons and all printed documents are locked up in file cabinets. Since menstruation is a sensitive subject, the confidentiality of the research was emphasized from the beginning of the interviews and the purpose of the study was always shared with the participants.

CONCLUSION

This comparative study has examined the use of the menstrual cup in Uganda and Mozambique to determine its acceptability and benefits. While the study has revealed some exciting learnings about the cup, the findings in general are consistent with similar studies conducted in other countries.

The usage of menstrual products by the study participants have seen some significant changes and they attribute these changes to the use of the menstrual cup. A product that has dropped off the list of absorbents is toilet rolls/papers. The use of old cloths/rags has experienced a drastic cut-rate and no single use of old cloths/rags was reported after the menstrual cup intervention.

From this study, the menstrual cup is now dominant among the multiple products used, justified by the overall user rate of 95.8% and 100% acceptability in Uganda. More than three-quarter (3/4) of the participants agree that the menstrual cup is convenient to use. On the preference for the menstrual cup using likeness scale as the measure, Mozambicans like the menstrual cup more than Ugandans, but the difference in preference was not significant statistically.

The economic and convenience advantages of the menstrual cup was highlighted to be the dominant benefits. Users attest that the menstrual cup has significantly reduced the cost burden of monthly menstrual products.

This study concludes that the menstrual cup offers more economic and convenient benefits, and has been accepted in Uganda and Mozambique.

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