Background Recent developments in HIV prevention, including the dapivirine vaginal ring, have shown promising results in protecting women from HIV. Additionally, a healthy vagina is protective against HIV/STIs but vaginal practices can disturb the vaginal environment. The objective of this study was to explore vaginal practices and assess the changes during contraceptive vaginal ring (CVR) use among Rwandan women.

Methods Rinda Ubuzima, a research site in Kigali, Rwanda, collected data on vaginal practices using mixed methods (in-depth interviews, observations, focus group discussions, surveys) during a safety and acceptability study of CVRs. Education about safe vaginal practices was provided at study visits after baseline. Descriptive and thematic analyses were conducted.

Results At baseline, 57% of the 289 participants reported washing inside and outside the vagina while 124 (43%) reported washing outside only. 65% of those washing inside and outside the vagina reported doing so once a day. Participants reported washing inside the vagina while bathing (93%), after sex (63%), and during menses (54%). A total of 157 (96%) participants reported inserting water and/or soap with fingers into the vagina. Qualitative data suggested that vaginal practices went beyond those listed in the survey and included herbs, stones, gels, and food in order to increase vaginal lubrication and tightness, treat vaginal symptoms, and clean the vagina. Only 14 of the 120 (12%) women reported a reduction/increase in their vaginal practices following ring insertion. However, after triangulation of data, over 25% of the participants reported changes in their vaginal practices resulting from study participation.

Conclusions Vaginal cleaning is frequent among the study population and increased education from the research site about vaginal practices encouraged some women to change their behaviour during the short duration of the study. Additionally, there are more vaginal practices that may need consideration for ring development and rollout in Rwanda.