



Vuka[♀]

PARTNERSHIPS

Funded by the United States Agency for International Development (USAID)

IMPLEMENTED BY

CONRAD

The University of North Carolina at Chapel Hill (UNC)

FHI 360

Desmond Tutu Health Foundation

One Cow Standing



FLORIDA STATE
UNIVERSITY

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THE SCIENCE OF IMPROVING LIVES



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Institute on Digital Health and Innovation



THE SHORT OF IT

Vuka+ is an mHealth intervention to promote PrEP medication adherence and sustained PrEP use over time among South African adolescent girls and young women.

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PrEP-eligible adolescent girls and young women participated in the pilot RCT



Participants are located in Cape Town, South Africa



In the pilot RCT, participants were asked to use the app for at least 5-10 minutes a day for one month

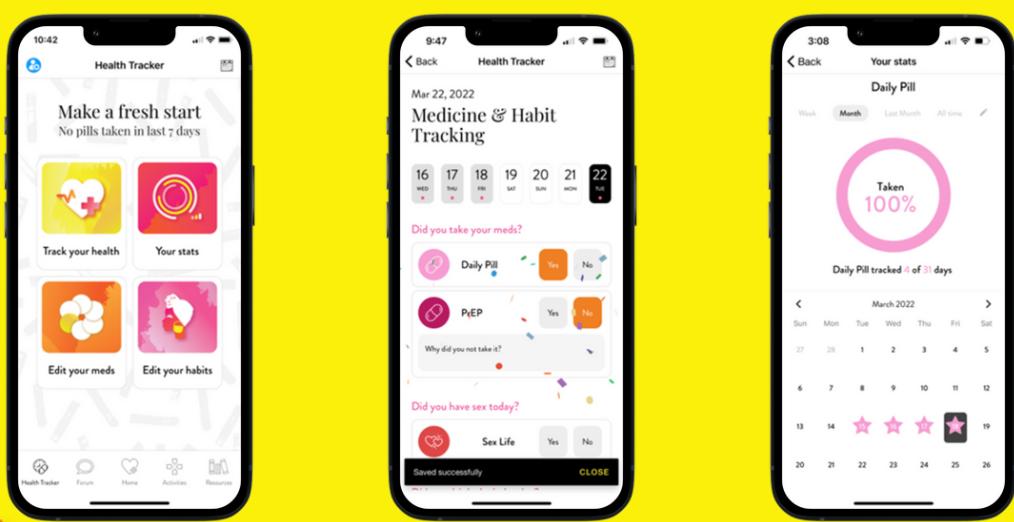


Main RCT anticipated to begin in Fall 2022

APP FEATURE HIGHLIGHTS

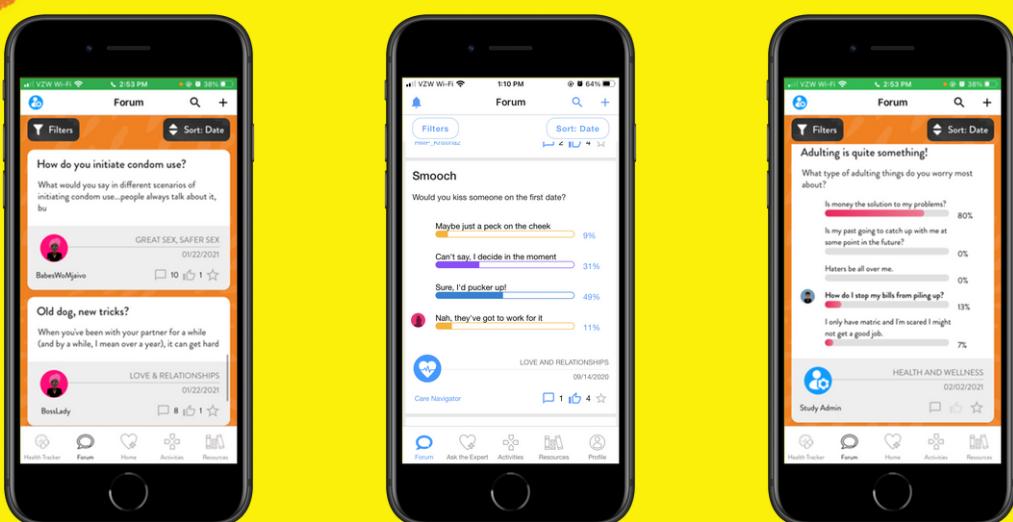
Health Tracker

Track and layer behaviors with medication tracking to see patterns and meet adherence goals. Participants can also use the calendar and analytics to support self-monitoring and get feedback on their progress.



Forum

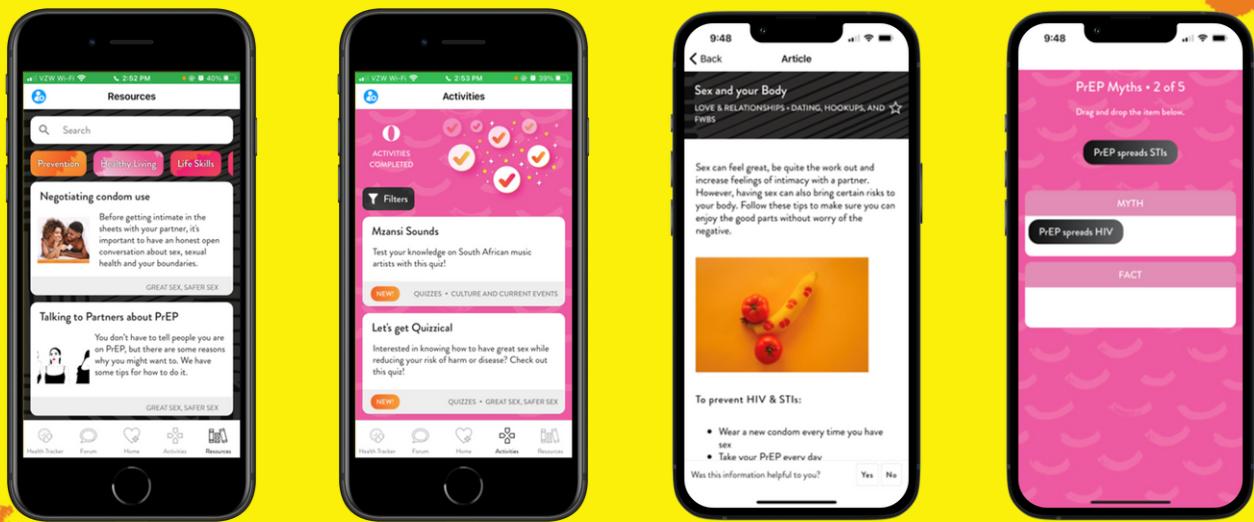
Forum discussions and polls foster community support and peer-to-peer sharing within the app.



APP FEATURE HIGHLIGHTS

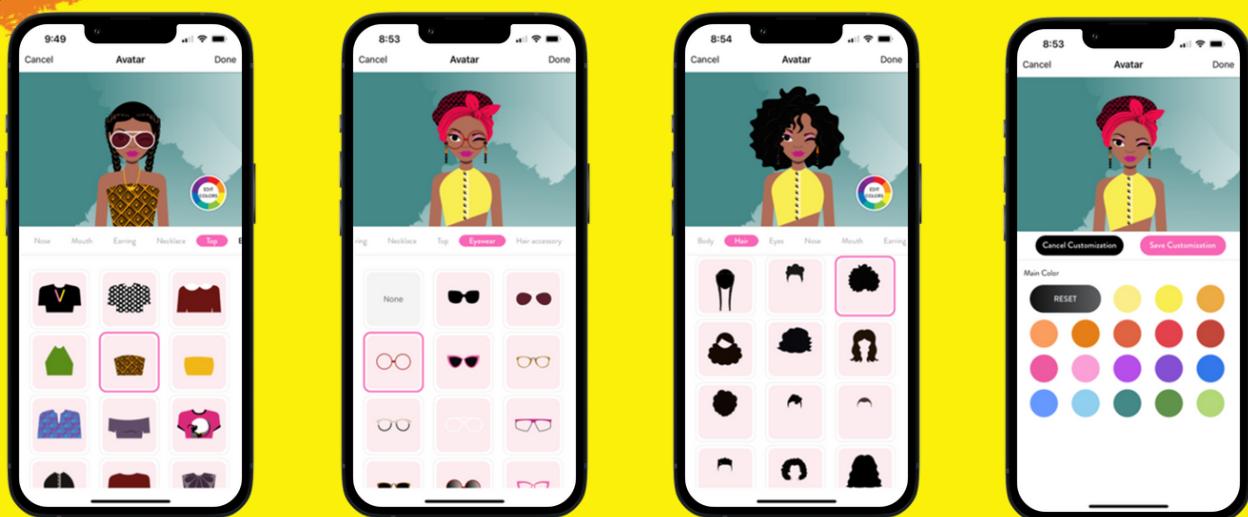
Resources & Activities

Provides educational content across range of health topics, as well as supports app engagement and behavior change through information and skill-building.



Avatar Customization

Encourage and sustain app engagement over time by “unlocking” new accessories to personalize your avatar.



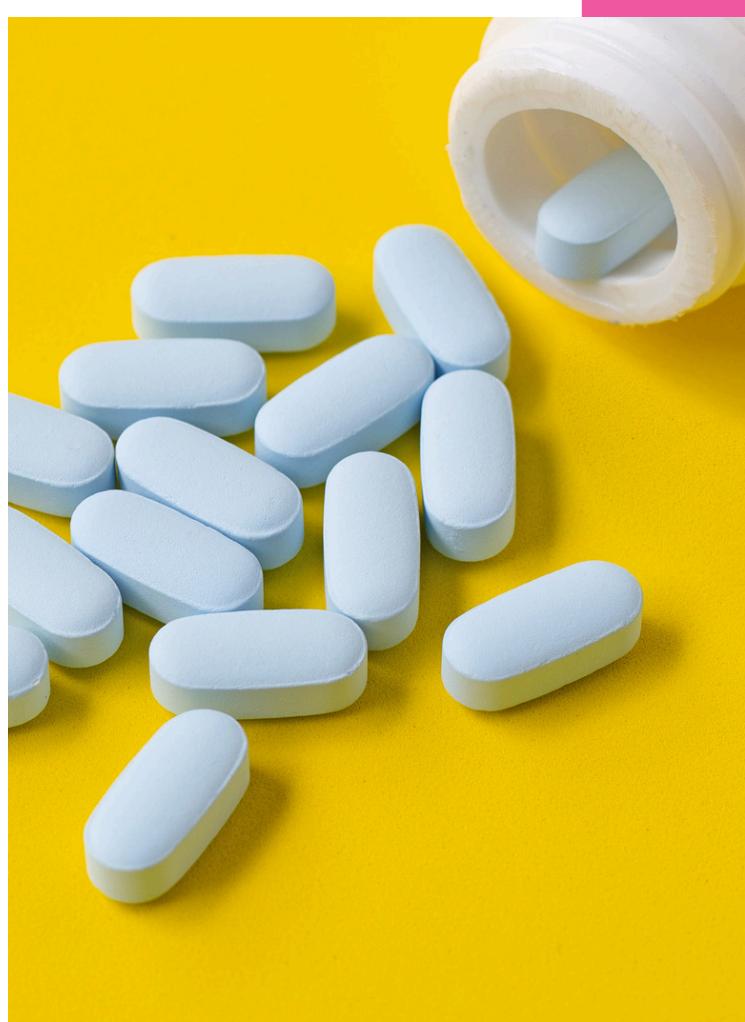
BACKGROUND

HIV disproportionately impacts young women in Sub-Saharan Africa. PrEP is a powerful prevention tool but is currently underutilized, particularly by women in low-resource settings.

Barriers to PrEP use for Sub-Saharan Africa AGYW include low awareness, stigma, low HIV risk perception, side effects, adherence and maintenance, limited youth friendly services and clinical support and other psychosocial factors (1-4).

Adherence to PrEP as prescribed is critical for achieving adequate levels of protection (5, 6), however, typical approaches are not sufficiently personalized or tailored to engage AGYW (1). Mobile health (mHealth) tools – such as smartphone delivered pill alarms, appointment reminders, and health information – provide an opportunity for widespread daily PrEP support particularly in settings where women may be far from health clinics and lack family or social support for PrEP uptake and continued use (8).

Apps in young populations are highly acceptable and efficacious in improving adherence (9-12). App-based support optimizes clinical visit time and engages participants outside of the clinic on their own schedule. mHealth platforms allow real-time assessment of user behavior and adaptive delivery of tailored content to fit individual PrEP management challenges (7, 10-12).



STUDY DESCRIPTION

The Vuka Study Team developed the first multi feature PrEP adherence smartphone app (Vuka+) for adolescent girls and young women (AGYW) in Sub-Saharan Africa.

From 2020-21, we adapted the app for sub-Saharan African AGYW, including conducting user immersion experiences, in-depth interviews, and focus groups among current and previous PrEP users and PrEP-naïve AGYW. We added features based on AGYW's stated needs and updated the app's look and feel and added new engagement features. The updated app was branded as Vuka+ and beta-tested in a 2-week period among 25 AGYW in Cape Town, South Africa (results not yet published).

From 2021-22, another round of revisions was made to the app following beta-testing to integrate lessons learned and optimize app functionality for a low-bandwidth setting. A pilot RCT was conducted with approximately 30 PrEP-eligible AGYW in Cape Town, South Africa, who were provided daily Truvada as PrEP. Participants were asked to use the app for at least 5-10 minutes a day for one month at which point a follow-up visit occurred to assess women's experience using the app, as well as their acceptability of the app and its content.

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PrEP-eligible adolescent girls and young women participated in the pilot RCT



Pilot RCT enrolled in Cape Town, South Africa



Participants were asked to use the app for at least 5-10 minutes a day for one month

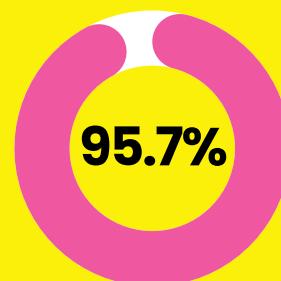
FINDINGS FROM BETA TESTING

Exit interview feedback suggests that the app may help mitigate PrEP stigma through its educational content and through the ability to ask questions and discuss PrEP and sexual health openly. Most women – 22/23 (95.7%) – agreed the app would help them make healthy life choices and help them deal with health challenges. In the follow-up survey, 17/23 (73.9%) of women agreed or strongly agreed that the app would help them remember to take a daily pill.

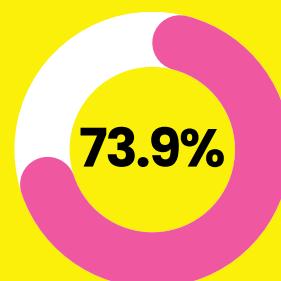
The number of participants who reported being very confident in their ability to protect themselves from HIV increased from 13 at baseline to 15 at follow up. The number of participants who reported not being concerned about contracting HIV in the next 12 months increased, from 11 at baseline, to 16 at follow-up. However, neither of these changes were statistically significant given the small sample size.

Use of the app's engagement features was mixed. There were two Forum posts and 12 comments and replies written by participants during the two-week beta testing period. Topics that participants wrote about mainly dealt with issues around PrEP and love and relationships. Six participants submitted questions to the Ask the Expert feature, and one participant commented on an Ask the Expert response.

One of the largest impacts on usage was the level of technology (phone model/type and operating system) used, and the state of internet connectivity that participants accessed during the Beta Test. Older or less advanced phone models, as well as unreliable data connection resulted in some participant's experiencing the app freezing or encountering glitches in the app's image content.



Agreed the app would help them make healthy life choices and help them deal with health challenges



Agreed or strongly agreed that the app would help them remember to take a daily pill

FINDINGS FROM PILOT RCT

Coming soon!

TAKEAWAYS

Offline functionality is crucial to success in settings with unreliable data connection and suboptimal mobile phone quality.

Tech and app literacy plays a role in participant engagement.

WHAT'S NEXT

The Vuka+ Study Team will analyze the phase 1 pilot RCT data to further inform the next iteration of the Vuka app and study.

Phase 2 is a 6-month, 2-arm effectiveness and implementation trial (standard of care [SOC] vs. intervention app) to assess acceptability, feasibility and effectiveness. In addition, we will gather information on intervention delivery and barriers and facilitators for real-world delivery to inform future implementation and scale up.

The main RCT is scheduled to begin Fall 2022.

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