Using Human-Centered Design to Develop and Evaluate a Web Platform to Improve Access to HIV Pre-exposure Prophylaxis among Adolescents and Young Adults in Lagos, Nigeria

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Background

Nigerian youths are at the heart of a growing HIV crisis, with the second-highest rate of new infections globally. HIV pre-exposure prophylaxis (PrEP) offers great opportunities to reduce the risk among youths. This study assessed the delivery of HIV PrEP through the first-of-its-kind co-developed web platform for youths in Lagos, Nigeria.

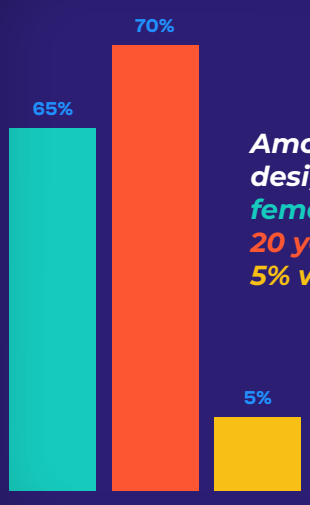
Method

The study comprised five phases, including:

- *scoping review*
- *design research*
- *rough prototyping*
- *live prototyping*
- *a pilot intervention study*

A total of 21 youths (15-24 years old) and 12 expert providers participated in interviews, focus groups, and co-design sessions. An additional 106 youths filled out the self-administered questionnaires. The final intervention design, Binta!, was evaluated qualitatively for feasibility and acceptability during a six-month pilot using structured interviews with 42 youths at-risk of HIV and 5 community pharmacists who were a major part of the intervention.

Results



Among the youths we designed with, 65% were female, 70% were at least 20 years old, and less than 5% were currently on PrEP.

Four key factors emerged as barriers to PrEP access and uptake among Nigerian youth:
- long distances to HIV clinics
- confidentiality issues
- low knowledge of PrEP and
- high costs.

Features of the web platform, co-developed with youths and providers, include: a reddit-like community to foster safe, anonymous, and open conversations around PrEP and HIV/AIDS; a robust FAQ section with visual media; a PrEP eligibility section; and a pharmacy locator.

The pilot study revealed widespread desirability of the web platform among youth at-risk of HIV/AIDS, including female sex workers. Overall, 88% (n = 37) of youths interviewed in the pilot phase were comfortable with the platform's user interface and design, and 95% (n = 40) were satisfied with the integrated features. 100% (n = 42) of the youths used the PrEP eligibility feature and more than 80% (n = 34) used the pharmacy locator to pick up their PrEP bottles

Conclusion

Digital health technologies have the potential to expand PrEP services and show great promise in delivering health services to meet the needs of Nigerian youths. Engaging youths as partners in the design of interventions can help facilitate uptake and should always be considered.

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