



PARTNERSHIPS

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IMPLEMENTED BY

University of Cape Town
APIN Public Health Initiatives, Nigeria
One Cow Standing (OCS)
Florida State University



IDHI

Institute on Digital Health and Innovation



THE SHORT OF IT

Lu Dedoo is an app designed to increase antiretroviral therapy (ART) medication amongst youth in Benue state, Nigeria living with HIV. Historically, adolescents have struggled with remaining medication adherent and complying with a strict medicinal schedule. Lu Dedoo strives to address such barriers through adaptation of the HealthMpowerment app. The app promotes the importance of taking ART on a daily basis, along with other health topics, and provides users with medication reminders to stay on schedule.

32

Sixty-four participants will participate in beta testing over the span of two months

60

The RCT will take place over the span of two years and involve 60 participants



Participants are youth and young adults ages 15-24 living in Nigeria

BACKGROUND

As populations in sub-Saharan Africa approach epidemic control of HIV, there is a need to repivot from the population-based strategies and focus on a few lagging subpopulations, such as adolescents and paediatrics, through strategies targeted at improving their outcomes.

Recent evidence highlights some gaps in the HIV continuum for these subpopulations, including poor viral load suppression, poor adherence, and low retention in care, particularly in resource-poor, high-burden settings such as sub-Saharan Africa. This underscores the need to address two critical priorities: **first, PLWH at risk of treatment failure must be identified more rapidly than current systems allow, before they leave care or develop drug resistance; second, these patients need support to keep them in care at optimal adherence levels from the day they start ART.**

UNAIDS's 90:90:90 is a treatment target to help end the AIDS epidemic. It stated that by 2020, 90% of all people living with HIV will know their HIV status, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy and that 90% of all people receiving antiretroviral therapy will have viral suppression. Nigeria has met the 1st two 90s and is currently close to achieving epidemic control. The Nigerian HIV/AIDS Indicators and Impact Survey (NAIIS) has revealed that Nigeria can achieve 95:95:95 targets if all hands are on deck. As Nigeria gets close to achieving epidemic control, all efforts are focused on improving patients' outcomes and achieving the 3rd 95%. The most important determinant for achieving the 3rd 95% is adherence to antiretroviral therapy. At present day, despite the fact that coverage is much better with the adult population, children and youth are not doing as well, hence **youth are at a high risk of medication non-adherence**. There are several factors associated with why an individual may not be medication adherent. **Those factors can include stigmatization, age, financial status, psychosocial factors, lower levels of education and structural issues.**

The usage of mobile phones to access health information has exploded in popularity in Nigeria. In Nigeria, there are **76 mobile phones in use per 100 people** (www.gapminder.org). With an increase in access to technology, **Nigerian youth can now connect with health resources right at their**

fingertips. Furthermore, mobile phone solutions are increasingly being used in the detection, prevention, and treatment of HIV. The commonest and simplest mobile phone solution presently being utilized is use of SMS. With the advent of smartphones, there is an increase in access to technology, making this a viable support mechanism, especially for younger people.

Necessary research has been done to ensure the effectiveness of Lu Dedoo and the lasting impacts it will leave on the community. **The Lu Dedoo team has explored the most effective medication apps based on the available literature comparing the effectiveness of different medication adherence applications in use.** One of these medication adherence apps stood out to the Lu Dedoo team as a promising tool to leverage. **MASI, an app adapted from HealthMpowerment, has already been piloted in Cape Town, South Africa to support perinatally-infected HIV-positive adolescents.** Given the similarities to MASi, the Lu Dedoo pilot study will evaluate the feasibility, acceptability and effectiveness of a locally adapted version of MASi and an information only version of MASi on ART-naïve adolescent patients commencing ART in Makurdi local government area in Benue state, Nigeria.

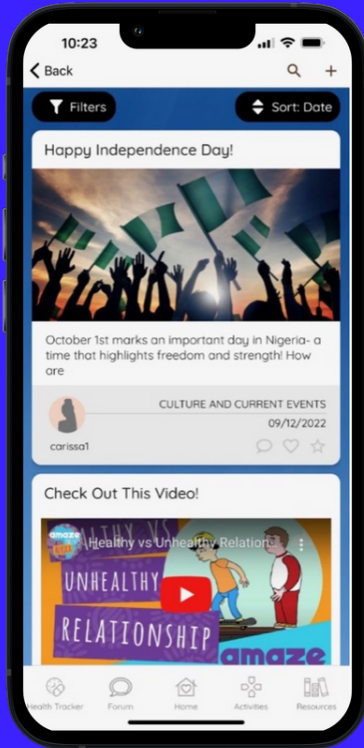
STUDY DESIGN

Lu Dedoo strives to **improve ART medication adherence among youth and young adults living in Nigeria between the ages of 15–24.** Lu Dedoo will adapt the HealthMpowerment platform to carry out the research. **Beta testing will take place over a span of 2 months with a total of 32 participants.** This includes a basic intervention arm. After the completion of beta testing, the study team will then continue with a **randomized control trial (RCT) featuring 60 participants and two study arms- a control information-only arm and an intervention arm.** The RCT will take place over the span of two years, with one year or less utilized for recruitment. Methods used to improve medication adherence include app gamification, an inbox feature to chat with study team members, a forum space to connect with peers in a welcoming online environment, health behavior and medication tracking, and an anonymous question asking feature for participants to use.

APP HIGHLIGHTS

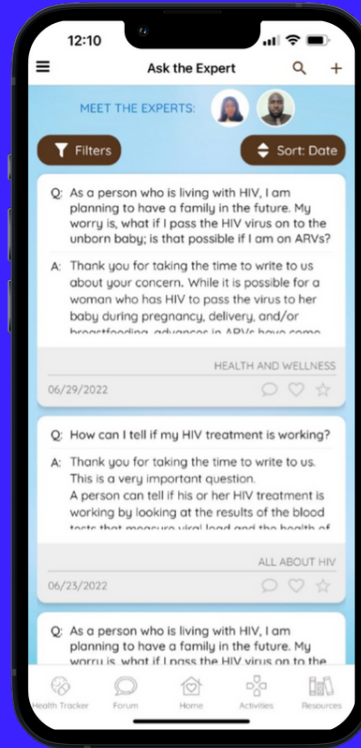
Forum

Space used to create community while allowing peer-to-peer interaction.



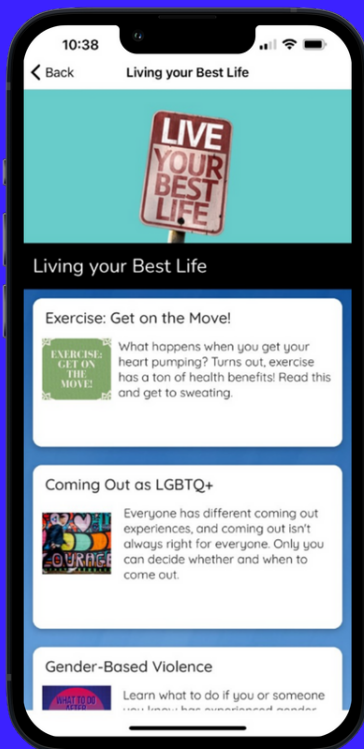
Ask the Expert

Answer anonymous health and wellness questions. Experts provide answers to both health-related and study questions.



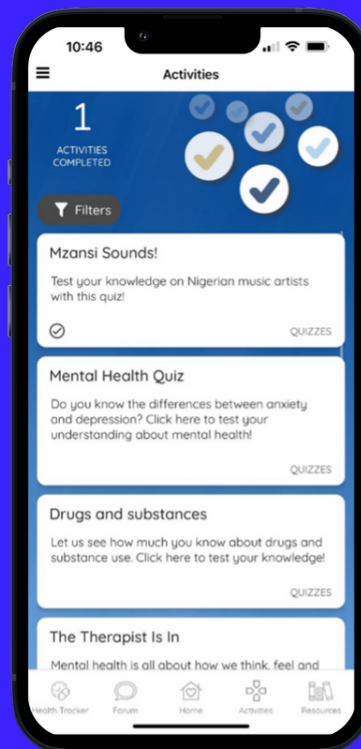
Resources

Articles provided on a myriad of topics such as love & relationships, HIV care and treatment, life skills, et.c for users to read at their leisure.



Activities

Users can complete activities to further their knowledge. Lu Dedoo features 7 different types of activities on a variety of subjects.



PRELIMINARY FINDINGS

Coming soon!

TAKEAWAYS

Coming soon!

WHAT'S NEXT

Coming soon!