



AI4D

Helping people, especially women, manage STIs in Nigeria and beyond

The Public Health Threat

- Sexually Transmitted Infections (STIs) cause 374 million new cases worldwide per year.
- Around 40% are concentrated in sub-Saharan Africa.
- STIs can lead to infertility, cancers and pregnancy complications and can increase the risk of HIV.

"Questions like is kissing a means of contracting STIs... In the community that we serve [there is] the whole spate of misinformation." Solomon Chinedu, mDoc



An Innovative Solution

A chatbot that provides STI information and health clinic referrals, in both the English and Pidgin languages.

The Story of Kem

Kem began, in the pandemic years, as a technical approach by the mDoc team to people, especially women, who were self-employed, often in the market-place, struggled financially, and lacked up-to-date health information.

In a partnership between medical and technical experts, the chatbot Kem was born, capable of speaking in both English and Pidgin, widely used in sub-Saharan Africa. At first it focused on maternal health. Then, the team introduced STIs.

The Result

- Kem's new STI capacity has now been tested by over 500 users:

"During user testing... you see the younger population... is excited about the fact that they can chat freely with Kem. And then there's confidentiality... privacy. These young ones may not be able to say it out [loud]... So you don't judge them."

Solomon Chinedu, mDoc

Learning

- Innovations in Kem undergo up to six rapid user testing cycles and after each user testing cycle, the feedback from that session is integrated into the refinement of the model.
- The team found older users prefer less text, and speak rather than write - while younger users text freely and are happy with long answers. The team tries to balance these.

"Kem can identify emergency cases and refer to healthcare facilities as needed, and is able to prompt users to take risk assessments surveys and then provides health reports."

Aima Adebo, mDocu

Community Engagement

To ensure the project stays ethically sound and locally relevant, the team:

- works closely with local health authorities
- interacts with trial users directly
- ensures varied groups, and tries to balance the needs of younger and older users
- uses pre- and post-test surveys
- holds focus group discussions
- is exploring alternatives for low technology access (USSD)
- Is exploring integrating the Hausa, Igbo and Yoruba languages, as well as Pidgin

User Stories (focus groups)

"My question was about STI and the answer was swift... it was really nice talking to Kem."

"I liked all the responses that KEM gave to me because I actually asked specific questions on STI."

"I felt more comfortable talking with a chatbot because I felt like this is not human, so the chances of it judging me or being biased...were very slim."

Moving Forward

The team is further seeking support that will help them to:

- Add additional African languages
- Include more health conditions and areas
- Roll out a version for users without smartphones
- Enable Kem to become a general health coach
- Scale implementation further, to other African countries



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