

Expanding my research toolbox: Reflections from a human-centered design fellowship

By Njeri Wairimu | May 23, 2024



As a researcher trained in and practicing more traditional qualitative methods, I am used to following a carefully planned protocol and topic guide, transcribing interviews verbatim, taking time – sometimes months – to analyze the data, and all this within strict standard operating procedures. Working with and being a part of MATRIX’s Design to Delivery (D2D) Pillar 1 team as a CaSE (Capacity Strengthening Engagement and Mentorship) Scholar opened my eyes to new ways of doing research, such as in the use of human-centered design strategies. When I first heard about human-centered design, I did not think much of it because I thought the research that I was doing, and most research in general, is already centered around human beings. It did not immediately sound like an exciting or novel methodology. Instead, it sounded like a fancy term for what I was already doing as a social scientist. But I quickly changed my view of this!

MATRIX aims to develop a range of HIV prevention products for women and is committed to getting input early in the development process – really early – through responsive feedback from those who might eventually use these products. Given the array of choices that could potentially be available, MATRIX believes there should be something for everyone! Among those products in their early development are long-acting methods that would be provided in clinical settings, monthly methods that would be self-administered, and on-demand methods intended to be used only when needed. To get early feedback, MATRIX is using a human-centered design approach to ensure that we are developing HIV prevention products for women, *with* women.

I have had the opportunity to moderate design consultations, which are one of the human-centered design methods we are using; they are similar to focus group discussions but

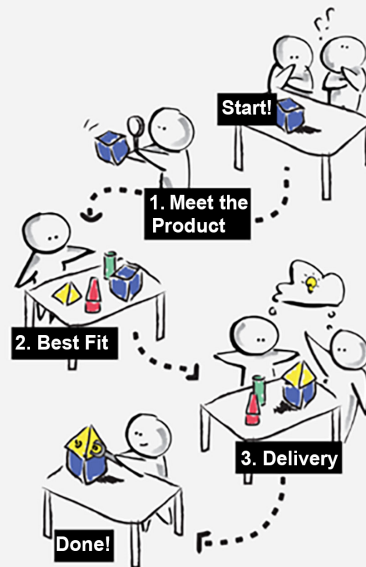
are more interactive and informal. We really want end users, in this case, women, to be able to visualize these products in the context of their lives.

Human-centered design data collection tools are unlike the usual black and white interview guides. In our consultations we use different kinds of visual and prototype materials (we call them “collateral”) that are beautiful and vibrant, keeping the participants fully engaged throughout the process. In one of our sessions, small groups engaged with a “Journey Map” activity, where they assumed the role of a character – they gave her a name and backstory and described her HIV risk. Then they were guided to think about her opinions, needs, wants, and desires as they relate to HIV prevention.

The Journey Map was divided into four sections: an ice breaker to ease participants into the discussion; “meet the product,”

Journey Map Overview

Through a series of interactive activities, we will meet and explore a MATRIX product (currently in development)



Visual depiction of the Journey Map, a tool used in the human-centered design approach for eliciting participants' views and opinions of different MATRIX products in their early development.

Image credit: Quicksand Design Studio

when the character gives her first impression of the product; “best fit,” when participants give their opinions on who is most likely to use it; and “delivery,” during which participants discuss where the character is likely to access the product.

As a moderator, I had a facilitator guide, which was color-coded to show the different sections of the journey map and included “light bulb” icons to highlight the most important questions to be asked. The participants had activity sheets which mirrored the facilitator guide but included fun activities, like using post-its and stickers to vote for what they would prefer in order to reach a consensus. We also had prototypes of products that participants could touch, see and smell; and for products for which a prototype was not available, we had pictures of similar-looking products that they would have likely seen before. Having prototypes and pictures makes the experience more real, spontaneous and as relatable as possible, unlike traditional methods with no props that rely on the participant’s imagination and willingness to respond to a series of pre-set questions.

The small group activity ended with participants making a poster of the products they discussed and giving the product a new name, a tag line and the top “selling” points. I was amazed at how really creative they were with this exercise, even coming up with clever commercial jingles for their products. For example, in one of the design consultations,

young women assigned to a vaginal ring used the lyrics from Beyonce’s hit song ‘Single Ladies’ - *If you like it then you shoulda put a ring on it!*

In my experience as a qualitative interviewer, I’ve often felt a slight power imbalance between me and the person I’m interviewing. The participant doesn’t know all the questions I’ll be asking or what’s next. I’m the one holding the interview guide, operating an audio recorder, and possibly taking short notes. I’ve had participants call me “Dr. Njeri,” even though I am not a doctor. When I took part in the design consultations, I felt very little power imbalance, because we both had tools and I wasn’t the only one asking questions.

Given the novelty of MATRIX products, participants had a number of questions, which I could not always answer, because I did not know what the answer was. I had a healthcare provider in one design consultation ask me, “What is the bioavailability of this product?” Although I work in a clinical research site, I am a social scientist, so I had no idea how to answer this question.

I have really enjoyed being part of design consultation activities and also learned that things move fast – from developing collateral to recruiting diverse groups of participants and managing (or orchestrating) rapid, interactive

collection processes, to documenting participant feedback and synthesizing findings. Data collection is an intense yet fun experience that makes participants feel like their opinions matter. This whole process was not only fun for the participants, but for me as a moderator as well. It could also get hectic, as I really got pulled into the moment and had to keep track of different material, trying to figure out which collateral piece to use next and what goes where.

I now have a deeper understanding of the human-centered design approach and have learned how to keep things organized while still being flexible. Adding these skills to my existing ones is not a substitute for the slower, more deliberate and structured approaches I have used, but rather a complement to them. I look forward to being able to further develop my skills by training others and adding human-centered design as another methodology that I can easily reach for in my research toolbox.



A poster created by participants in a MATRIX design consultation depicting their branding ideas for one of the products they had discussed.

About the author



Njeri Wairimu is a social scientist at the Kenya Medical Research Institute (KEMRI), Thika Project working on clinical trials that focus on HIV prevention and sexual and reproductive health. She has experience with differentiated models of delivering PrEP and has a passion for working with Adolescent Girls and Young Women. Njeri has a bachelor's degree in sociology from Moi University and is currently studying for her master's in medical sociology at the University of Nairobi. During her one year as a MATRIX CaSE (Capacity Strengthening and Engagement) Track 2 Scholar, Njeri received hands-on training and mentorship while working within Pillar 1 (End-User Product Preferences) of the Design to Delivery (D2D) activity hub. Her primary mentor was Kenneth Ngure, Ph.D., Associate Professor and former Dean, School of Public Health at Jomo Kenyatta University of Agriculture and Technology (JKUAT) in Kenya, and co-lead of D2D Pillar 1.

MATRIX Matters is an occasional series featuring the work being conducted by MATRIX, a USAID-funded program to advance the research and development of HIV prevention products for women, and the people who aim to make a difference.

MATRIX

MATRIX is made possible by the generous support of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the United States Agency for International Development (USAID) under the MATRIX program. The contents in this document are those of the author and do not necessarily reflect the views of the U.D. President's Emergency Plan for AIDS Relief, the U.S. Agency for International Development or the U.S. Government.

