

Depicting the Healthcare Landscape Around a Community for a m-health Intervention: A Look into Maternal Health in KaTembe, Mozambique

Cintia Banze^b, Humberto Muquingue^{a,*}, Vania Banze^b, Ivan Mutacate^{c,a}, Mikko Korpela^{c,b}

^a Eduardo Mondlane University, Maputo, Mozambique

^b Cape Peninsula University of Technology, Cape Town, South Africa

^c University of Eastern Finland, Kuopio, Finland

Background and Purpose: This work-in-progress is part of a larger project that aims at developing methods for information systems developers to support local communities in Africa to develop their life situations in the way they decide. The focus is on maternal and newborn health – how can the maternal and newborn healthcare services available to communities be improved by means of appropriate information and communication processes, particularly using mobile phone technology and computer-based information systems. To that end, information technology (IT) analysts and developers must first learn about the communities in question and the setting around them. The purpose of this study is to test and further develop an existing method for analysing the “healthcare landscape” around a given geographic community. The results of the analysis should be useful as a basis for the community, their healthcare providers, local authorities, and IT analysts to identify relevant stakeholders for a collaborative needs analysis and solutions development project. The main focus is on maternal health and mobile technology but within a holistic view.

Methods: The “community” in case is the rural KaTembe district in Maputo, the capital city of Mozambique. The landscape depicting method of Korpela et al. (2008) was used as the starting point. The research was partly based on public sources of information, partly on interviews with local government and healthcare personnel as well as with individual community members, mainly pregnant women and mothers of new-borns. We sought opportunities for technology mediated approaches to problems identified by interviewees.

Results: The first observation: instead of “the community” there are many, partly overlapping communities based on geography, means of livelihood, ethnicity, and so forth. The method used must be expanded to guide the analysis in such a situation: what are the essential pieces of information that should be presented about a community? How can they be obtained? How to describe such a complex setup with sufficient detail in view of the project aims?

The second observation: public healthcare services and political-administrative structures are relatively easy to depict, if we start from what is officially assumed as the official “standard” of infrastructures, resources and services to be provided. However, the actual layout and performance vary tremendously, as providers tend to construct scenarios based on what they perceive as adequate. Example 1: although clinics should start at 7:30AM, clients at the largest facility informed that nurses would start effectively seeing clients or delivering health education at 8:30 or 9:00AM. This was justified by the nurses has a necessary measure to ensure the concentration of a significant number of clients - they had assumed that most clients were peasants who had to tend to their fields before coming to the clinic.

*Corresponding author: Faculty of Medicine, Eduardo Mondlane University, 702 Salvador Allende, Maputo, Mozambique. Email: hmuking@gmail.com, Tel: +258 82 315 0780

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The third observation: traditional providers of care needed to be identified as powerful opinion leaders and respected members across distinct communities, as they may derail or endorse technology mediated approaches, particularly in sensitive areas like maternal/reproductive health.

The fourth observation: the effects of development challenges, such as the case of a new road being built as well as other major construction (a deep water harbour, a cement company) within and around KaTembe required extensive preparation of the researcher in order to pinpoint and assess undocumented and obscure impacts on the existing livelihoods and ways of doing things by KaTembe residents.

Conclusions: When the aim is to empower people with health information systems development, it is crucial to have a holistic view of their communities and the landscape around them. This view has to be continuously updated and not be taken as static in time, given that geographic, economic and social challenges induce considerable changes in the communities. We provide methodological suggestions for creating such an overall view in a given case. We also identify areas for deeper analysis by other methods.

Keywords: Research methods, Community, Healthcare system, Maternal health, Mozambique

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