

Towards A Digitally-Enabled, Community-Based Responsive Health System in Tanzania: A Formative Study for the Afya-Tek Digitised Health Initiative

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Background: Health care outcomes in child, adolescent, and maternal health in Tanzania, are flawed and partly due to fragmented service provision, lack of clinical guidelines to aid decision-making processes, and limited use of data. The Afya-Tek initiative aims to digitally link community members with community health volunteers, public health facilities, and private accredited drug dispensing outlets (ADDOs) to improve decision-making processes, quality of care and reduce inefficiency in referral systems. In this mixed-methods study, we aimed to investigate how digital innovation can best be integrated into the local health system in the Kibaha urban and rural districts in the Pwani region of Tanzania.

Methods: We carried out quantitative and qualitative situational analyses of a child, adolescent, maternal health outcomes, and related health-seeking behavior. Additionally, we assessed the perceived need and acceptability of digitally linking community health volunteers, public health facilities, and ADDOs.

Results: Respondents perceived the main disease burdens for children younger than five years to be diarrhea, malaria, pneumonia, and urinary tract infections. Among pregnant and post-partum women, these included anemias, back, and foot pain, headache, and bleeding. Sick children younger than five years were taken directly to a health facility. In contrast, other community members primarily sought treatment and advice from ADDOs and only attended the health facility for 'serious' health problems. Adolescents preferred family planning services at ADDOs rather than at a health facility for reasons of privacy and stigma. Workers from within the health system considered that digital technology could improve prompt treatment-seeking, reduce over-dispensing of medication by ADDOs, and minimize double registrations of patients.

Conclusion: Our findings have informed the subsequent phases of the Afya-Tek project in the co-development of the digital health intervention and its implementation in order to ensure best practices and sustainable approaches in bringing preventive and curative care closer to communities

