

# Interactive Voice Response Calling for Increasing Knowledge and Access to Family Planning Methods Among Maasai: Participatory Action Research

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**Introduction:** Maasai living in Arusha indicated difficulties in feeding their children because of decreasing grazing grounds for their cattle. Knowing and access to family planning (FP) to reduce their number of newborn children is highly recommended. We developed a mobile health platform (IVRC) for Maasai and health care workers (HCW) to create a venue for communication about FP.

**Methods:** We enrolled Maasai couples and HCW in Arusha and followed them for nine months. We used a participatory action research approach to develop and pilot a mHealth-platform with IVRC using Maa language. A basic assessment with quantitative and qualitative data collection was conducted to develop the system called Embiotishu. A toll-free number was provided for Maasai to interact with the system via mobile phone. The application provides pre-recorded voice responses for accessing information to educate Maasai about reproductive health and FP. The system records the number of calls and the type of information accessed. We measured the outcome by counting the number of clinic visits of Maasai for family planning for 2018-2020. This information was extracted from medical records. We conducted focus group discussions (FGDs) with Maasai and in-depth interviews (IDIs) with Nurses to explore user experience.

**Results:** We recruited 75 Maasai couples. The number of calls to the system was 2995, and primarily selected topics were family planning methods 1883, mainly calendar (994) and implant (92). The number of clinic visits was 137 in 2018, 344 in 2019, and 228 in the first six months of 2020. Feedback from IDI and FGD indicated the intervention was highly accepted and contributed to increased knowledge about and access to FP among Maasai.

**Conclusion:** IVR for education on family planning is feasible and can increase access to health information and dialogue between Health workers and Maasai.

