
i-MoMCARE – Innovative Mobile Technology for Maternal and Child Health Care in Cambodia: A Cluster Randomized Controlled Trial

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Project Description:

This 3-year digital health implementation research aims to implement and evaluate a community-based intervention to improve the performance of village health volunteer groups (VHSGs) through better support and supervision and increase the maternal and child health (MCH) service coverage in rural Cambodia. It will encompass three distinct phases. In phase 1, we will conduct a single-arm pilot study restricted to a single representative operational district, the organizational unit under the provincial health department. The pilot study will include four stages: (1) Identifying gaps in usual MCH care provided by the existing healthcare system, including roles and responsibilities of VHSGs; (2) Identifying components of the intervention or solutions to the bottleneck of MCH care provision; (3) Evaluating acceptability, feasibility, and usefulness of the components; and (4) Piloting operational delivery of the intervention in the single operational district. In phase 2, an open cluster randomized controlled trial will be conducted to test the mobile application utilization and the intervention's effectiveness in improving mobile application and MCH service coverage. We have estimated that approximately 250 VHSGs will be included in each intervention arm (500 in total) across 10 operational districts. Phase 3 will involve evaluating the intervention, looking at the intervention's effectiveness and cost-effectiveness, and disseminating the study's findings. The impact of the mobile application deployment will be evaluated based on the following criteria: utilization, impact, cost-effectiveness, and advocacy.