Developing a feature-phone based female community health volunteer program for hypertension management in rural Nepal (BASS)

Background
- In Nepal, the reported prevalence of HTN varies from 22.4% to 38.6%, experiencing a triple increase in the last 25 years. Hypertension control remains inadequate.
- Feature phone based intervention enables larger coverage especially in low-income countries.

Study Focus
Hypertension, female community health workers, feature phone application

Status
Active

Location
Nepal

Duration
January 1, 2018 - June 30, 2019

Milestone
05/01/2018: Field study
07/01/2018: Beta version development
02/01/2019: Roundtable discussion

Co-principal Investigators
- Dr. Lijing L. Yan, Duke Global Health Institute, Duke University and Global Health Research Center, Duke Kunshan University
- Dr. Ryan J. Shaw, School of nursing, Duke University and Duke Mobile App Gateway Investigator
- Dr. Janet Bettger, Associate professor at Duke University

Main Collaborators
- Medic Mobile, Inc.
- Kathmandu University, Nepal

Funder
Duke BASS Connection brings together Duke faculty and students to explore real-world issues in interdisciplinary research teams.

Study Overview
The overall goal of the project is to establish a dynamic collaboration among students of different levels in two Duke Campuses and faculty from diverse disciplines for developing a low-cost user-centered digital solution to reduce blood pressure among hypertensive patients in rural Nepal. The specific objectives are:
1) to conduct interviews with FCHVs, patients and policy actors to understand existing work flows, needs and challenges around hypertension care coordination in Nepal, including access and adherence barriers;
2) to prepare a detailed feasibility, design and technical specification report (including final mHealth workflow sketches) and beta version of FPB-FCHV program to inform the future configuration and implementation of the software tool;
3) to organize a round table discussion including BASS faculty and students and local stakeholders to harness lessons learned in the app development phase and to explore the challenges and solutions of using FPB programs in low-income settings.

Impact
- A beta version of FPB-FCHV application to be pilot-tested by FCHVs in rural Nepal and be scaled up in the future;
- A report on challenges, opportunities, and solutions in adopting and scaling up mHealth technology in rural Nepal and other low-income settings.