Mobile Phone Surveys for NCD Risk Factors in Low- and Middle-Income Countries

JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

BACKGROUND

- Non-communicable diseases (NCDs) are increasingly the leading causes of death and disability in low- and middle-income countries (LMICs)

- NCDs can be prevented by the reduction of exposure to major risk factors such as tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol

- With increasing mobile phone access in rural and hard-to-reach areas, mobile phone surveys (MPS) can be used to improve the efficiency, timeliness and cost-effectiveness of data collection in LMICs by interviewing respondents over their own personal mobile phone

- As part of the Bloomberg Philanthropies Data for Health Initiative (D4HI), Johns Hopkins Bloomberg School of Public Health (JHSPH) faculty are evaluating the viability of mobile phone surveys in order to gather NCD risk factor information

- This initiative will help guide design and delivery of future MPS that can help inform public health policy and program decisions

OBJECTIVES

The overall goal is to determine how to design and deliver effective MPS on NCD risk factors to help guide their future use in LMICs. These studies seek to:

- Evaluate the impact that providing small incentives have on a short message service (SMS) and an interactive voice response (IVR) survey's response, completion and refusal rates

- Compare the performance of SMS, IVR and call center NCD risk factor surveys

- Determine key ethical, legal and societal issues with using mobile phone surveys in LMICs and provide guidance on consent approaches

- Develop and test a system for continuous real-time mobile phone-based risk factor surveys (CoMPS)

Results thus far

- Established essential partnerships with colleagues from Bangladesh, Colombia, Tanzania and Uganda
- Conducted focus group discussions with community members to develop culturally appropriate surveys
- Collected NCD risk factor data from over 7,200 citizens in Bangladesh, Tanzania and Uganda
- Conducted and analyzed a global internet survey of 100+ respondents on key ethical/legal/societal issues (ELSI) of MPS
- Body of work on mobile health published in a special issue of the *Journal of Medical Internet Research:* http://www.jmir.org/themes/475

Partners

Colombia: Pontificia Universidad Javeriana (ISP)

Bangladesh: Institute of Epidemiology, Disease Control and Research (IEDCR)

Tanzania: Ifakara Health Institute (IHI)

Uganda: Makerere University School of Public Health (MakSPH)

ABOUT DATA FOR HEALTH

The Data for Health Initiative (D4HI) is a Bloomberg Philanthropies-funded project that seeks to improve vital registration systems, expand current non-communicable disease (NCD) surveillance efforts, and provide data analysis training to governments in low- and middle-income countries (LMICs).

BLOOMBERG DATA FOR HEALTH INITIATIVE

CONTACT US

Dr. George Pariyo
Senior Scientist, Health Systems
Department of International Health
gpariyo1@jhu.edu
410-502-5790

Dr. Dustin Gibson
Assistant Scientist, Health Systems
Department of International Health
dgibso28@jhu.edu
443-287-8763

Facebook: Health Systems Program
Twitter: @HopkinsIHHS

Email: healthsystems@jhu.edu
Website: www.jhsph.edu/healthsystems