

CENTRE OF EXCELLENCE FOR SCIENCE OF IMPLEMENTATION AND SCALE-UP (CoE-SISU)

Established in 2016, the main objective of the CoE-SISU is to timely generate and embed knowledge related to healthcare practice. The Centre aims to bridge gaps to allow successful scaling up and implementation of interventions by focusing on testing different methodologies, generating evidence-based interventions and innovations, and translating them into standard protocols for policy-makers in Bangladesh.

Research conducted at the Centre reviews potential evidence of successful interventions that can showcase the application of science of implementation for scaling-up. Guidelines and policy briefs are produced for policymakers on implementation of various health programmes and scale-up in Bangladesh. Advocacy efforts include the development of communication materials to showcase successfully implemented or scaled up programmes. Training and short courses are offered under the Centre on implementation research and, monitoring and evaluation to build capacity of development professionals, implementers, researchers and government officials.

RESEARCH PROJECTS IN 2020

- **4TH HEALTH POPULATION AND NUTRITION SECTOR PROGRAMME: MID-TERM REVIEW (MTR) 2020**

PI: Professor Malabika Sarker, Associate Dean and Director, CoE-SISU, BRAC JPGSPH.

Co-PI: Professor Syed Masud Ahmed, Director, CoE-HS&UHC, BRAC JPGSPH.

Focal: Dr Mrityika Barua, Assistant Scientist, BRAC JPGSPH.

Timeline: February 2020 - April 2020

Implemented by: Centre of Excellence for Science of Implementation and Scale-up (CoE-SISU)

Objective: To understand the perception of the users on health service utilisation from different tiers of the health system and constraints faced in accessing services, especially the rural and urban poor families, including hard to reach areas; to elicit views of the providers at different levels, including the frontline workers on availability and coverage of services, facility readiness including required HR and supplies, challenges faced on the ground and recommendations for improvement; to gather input from other stakeholders who are not direct users or providers but have a key role for the programme implementation to understand relevant issues and opportunities for improvements; to have discussions with the civil society including the NGOs, private sector and HNP experts in the country including researchers, academics and relevant people from other sectors on key challenges prevailing in the health sector, and if any course correction in the 4th HPNSP will be necessary to address the prevailing issues more effectively.

Methodology: Qualitative

Donor: World Bank

- **IMPLEMENTATION FIDELITY OF TUBERCULOSIS (TB) PROGRAMME IN DETECTING CHILDREN WITH TB**

PI: Professor Malabika Sarker, Associate Dean and Director, CoE-SISU, BRAC JPGSPH.

Co-PI: Professor Syed Masud Ahmed, Director, CoE-HS&UHC, BRAC JPGSPH.

Focal:

- Avijit Saha, Research Fellow, BRAC JPGSPH;
- Dr Mrityika Barua, Assistant Scientist, BRAC JPGSPH.

Timeline: May 2020 - December 2020

Implemented by: Centre of Excellence for Science of Implementation and Scale-up (CoE-SISU)

Objective: To investigate the implementation fidelity and the bottlenecks to identify Child-TB in Bangladesh.

Methodology: Mixed method

Donor: Global Fund

Partner: BRAC

- **EFFECTS OF AGE AT MARRIAGE AND EDUCATION ON HEALTH OF MOTHERS AND CHILDREN**

PI:

- Erica Field, Professor of Economics and Global Health, Duke University;
- Kate Vyborny, Associate Director, DevLab, Duke University;
- Malabika Sarker, Associate Dean and Director, CoE-SISU, BRAC JPGSPH;
- Nina Buchmann, PhD Candidate, Economics, Stanford University;
- Rachel Glennerster, Chief Economist, Foreign, Commonwealth and Development Office, UK;
- Shahana Nazneen, Consultant, Innovations for Poverty Action;
- Xiao Yu Wang; Assistant Professor Economics, Duke University; Chief Economist, CRI.

Coordinator: Fatema Mohammad, Senior Research Assistant, BRAC JPGSPH.

Timeline: September 2020 - August 2022

Implemented by: Centre of Excellence for Science of Implementation and Scale-up (CoE-SISU)

Objective: Assess the impact of increased marriage age and/or human capital on reproductive health, Women's long-term physical and psychological well-being, child health; and assess potential channels through which marriage age and/or human capital influence maternal and child health.

Methodology: Quantitative

Donor: National institutes of health, USA

Partner: Duke University

- **VALIDATION OF FINGER IMAGE: A MIXED-METHOD STUDY**

PI: Professor Malabika Sarker, Associate Dean and Director, CoE-SISU, BRAC JPGSPH.

Focal:

- Mushfiqur Rahman, Deputy Research Coordinator, BRAC JPGSPH.
- Saima Mehjabeen, Senior Research Associate, BRAC JPGSPH.

Timeline: September 2020 - October 2021

Implemented by: Centre of Excellence for Science of Implementation and Scale-up (CoE-SISU)

Objective: To measure the accuracy of finger image testing among children under five and explore the feasibility of the implementation in specific urban slums.

Methodology: Embedded mixed-method approach

Donor: Simprints Technology Limited

- **DEVELOPING AND TESTING A RISK STRATIFICATION APPROACH SCREENING USING GUIDELINES AND ARTIFICIAL INTELLIGENCE FOR DIABETIC RETINOPATHY (DR) IN PEOPLE WITH DIABETES IN BANGLADESH**

PI: Professor Malabika Sarker, Associate Dean and Director, CoE-SISU, BRAC JPGSPH.

Co-I:

- Professor Malay Kanti Mridha, Director, CNCND, BRAC JPGSPH;
- Mehedi Hasan, Senior Lecturer, BRAC JPGSPH;
- Ipsita Sutradhar, Senior Research Fellow, BRAC JPGSPH.

Focal: Ipsita Sutradhar, Senior Research Fellow, BRAC JPGSPH

Timeline: October 2020 - June 2021

Implemented by: Centre of Excellence for Science of Implementation and Scale-up (CoE-SISU)

Objective: Develop and validate a simple DR risk stratification score and tool in the Bangladeshi population with diabetes; pilot the use of the DR risk stratification approach for targeted screening in a real-world clinical setting in Bangladesh.

Methodology: Mixed-method

Donor: Fred Hollows Foundation Australia