CENTRE FOR NON-COMMUNICABLE DISEASES AND NUTRITION (CNCDN)

Research Projects (2020-2021)

1. Delivery of training on World Health Organization Bangladesh Package of Essential Noncommunicable Disease Interventions (PEN) for Primary Health Care (Phase II)

PI: Dr. Malay Kanti Mridha, Professor and Director, CNCDN

Co-PI: Rina Rani Paul, Consultant

Coordinator: Nushrat Jahan Urmy, Clinical Medical Officer

Implemented by: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: June 2020 - 31 December 2020

Objective:

- To increase the capacity and skills of health care providers (doctors/nurses/paramedics) in Cox's Bazar district on the implementation of PEN for primary health care in low resource settings, using a team-based approach
- To build the capacity of community health volunteer supervisors in Cox's Bazar district on healthy lifestyle promotion related to risk factors for NCDs.

Methodology: Quantitative

Donors: World Health Organization

Partners:

- Non-Communicable Disease Control, DGHS
- Community Health Working Group
- 2. Assessment of the food safety characteristics and risks associated with edible oil transported and sold in drums

PI: Abu Ahmed Shamim, Associate Scientist, CNCDN

Co-PI: Prof. Malay Kanti Mridha, Professor and Director, CNCDN

Coordinator: Fahmida Akter, Senior Research Fellow

Implemented by: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: 20 October 2020 - 31 May 2021

Objective:

• To quantitatively assess the food safety of different edible oil brands sold in drums and bottles and ascertain value/supply chain factors (handling, storage, environmental) associated with food safety risk

Methodology: Quantitative

Donors: Global Alliance for Improved Nutrition (GAIN)

Partners:

- Institute of Nutrition and Food Science, Dhaka University
- 3. Training and digital care coordination for improved prevention of Type 2 Diabetes and Cardiovascular disease by primary health care teams in Bangladesh

PI: Dr. Malay Kanti Mridha, Professor and Director, CNCDN

Co-PI: Professor Malabika Sarker, Associate Dean and Director, CoE-SISU

Coordinator: Abu Abdullah Mohammad Hanif, Sr. Research Fellow

Implemented Under: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: 1 September 2019 - 30 September 2021

Objectives:

- To develop and evaluate platforms for training and care-coordination by the PHC team in Bangladesh
- To improve prevention of Type 2 Diabetes (T2D) and Cardiovascular disease (CVD)

Methodology: Mixed method

Partners: Imperial College London, NCDC, DGHS, BRAC

Donor: National Institute of Health Research (NIHR)

4. Scaling up nutritional, psychosocial and environmental interventions for child growth and development through Government system or health system (RINEW-G)

PI: Dr Malay Kanti Mridha, Professor and Director, CNCDN

Co-PI: Abu Abdullah Mohammad Hanif, Sr. Research Fellow

Coordinator: Md. Mokbul Hossain, Analyst (Statistics)

Implemented by: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: September 2019 - May 2021

Objective:

- To implement an integrated package of interventions (maternal nutrition, infant and young child nutrition, early child stimulation, water, sanitation, hygiene and prevention of arsenic and lead) through the government health system in one sub-district
- Assess uptake by government personnel, impact on target mother's knowledge and practices, and barriers, prospects and pathways for broader scale-up.

Methodology: Quantitative

Donor: Bill and Melinda Gates Foundation

Partners:

- Stanford University
- Johns Hopkins University
- University of California, Davis
- University of California, Berkeley
- icddr,b

5. Impact Evaluation of the UNICEF Multisector Integrated Program for Improved Nutrition in Urban Slums

PI: Esther Heesemann

Co-PI: Dr. Malay Kanti Mridha, Professor and Director, CNCDN

Coordinator: Fahmida Akter, Sr. Research Fellow

Implemented Under: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: December 2019 - March 2022

Objectives: To provide evidence on the effectiveness of the UNICEF urban slums nutrition program targeting children and caregiver living in the Sylhet City Corporation.

Methodology: Quantitative

Donor: UNICEF, Bangladesh

Partners:

- Sylhet City Corporation
- UNDP
- Center for Evaluation and Development (C4ED)

6. Understanding the patterns and determinants of health in South Asians People-South Asia Biobank

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

Co-PI: Dr. Malay Kanti Mridha, Professor and Director, CNCDN

Coordinator: Mehedi Hasan, Research Fellow

Implemented by: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: May 2018 - April 2021

Objective:

- To strengthen NCD surveillance systems in Bangladesh by establishing 30 surveillance sites across the country. And complete structured assessments on a representative sample of up to 30,000 Bangladeshi men and women aged 18+ years, living at the 30 surveillance sites using standardized approaches.
- To provide nationally representative data on the burden of T2D, CVD and their risk factors, and on the quality of care for these major NCDs to quantify needs, in Bangladeshi populations.

Methodology: Quantitative

Donor: National Institute of Health Research (NIHR)

Partners:

- Imperial College London,
- Directorate General of Health Services (DGHS)
- National Institute of Cardiovascular Diseases (NICVD)
- Bangladesh Institute of Research and Rehabilitation in Diabetes
- Endocrine and Metabolic Disorders (BIRDEM)
- Bangladesh University of Health Science (BUHS)
- BRAC
- 7. Enhancing nutrition services to improve maternal and child health in Africa and Asia (Enrich)-midline evaluation, Bangladesh

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

Co-PI: Avijit Saha, Research Fellow

Coordinator: Avijit Saha, Research Fellow

Implemented by: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: January 2016 - June 2020

Objective: To determine the effectiveness of ENRICH program's monitoring and evaluation (M&E) plan (MEP) that guides a coordinated approach to measuring the effectiveness and impact of ENRICH program interventions across the whole implementation cycle- including achievements of immediate and intermediate outcomes and impact evaluation at end-line as identified within the Performance Measurement Framework (PMF).

Methodology: Quantitative

Donor: World Vision

Partner: University of Toronto

8. Baseline Survey of Strengthening Health Systems through Organizing Communities (SHASTO)

PI: Dr. Malay Kanti Mridha, Professor and Director, CNCDN

Co-PI: Mehedi Hasan, Research Fellow

Coordinator: Moyazzam Hossain

Implemented by: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: 15 February 2018 - 30 June 2020

Objective: To report the current situation of NCDs and their behavioural and clinical risk factors in selected intervention (Narsingdi district and Dhaka City North) and control sites (Gazipur district and Dhaka City South).

Methodology: Mixed method

Donor: Japan International Cooperation

Partner: Noncommunicable disease control, DGHS

9. Efficacy of zinc-bio fortified rice in improving zinc status in young Bangladeshi children

PI: Dr. Malay Kanti Mridha, Professor and Director, CNCDN

Co-PI: Professor Sabina Faiz Rashid, Dean and Director CGSRHR

Coordinator: Md. Rabiul Islam, Sr. Field Coordinator

Implemented by: Centre for Non-Communicable Diseases and Nutrition (CNCDN)

Timeline: January 2017 - December 2020

Objective: To determine the efficacy of newly developed zinc biofortified rice on plasma zinc concentrations in children between 12-36 months of age in a rural area of Bangladesh, using a double blind randomized controlled trial, in an effort to alleviate public health problems, such as impaired child growth or diarrhoea-related morbidity, in a sustainable way.

Methodology: Quantitative

Donors: HarvestPlus

Partners:

• ETH Zurich

• Bangladesh Rice Research Institute

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