# CENTRE OF EXCELLENCE FOR NON-COMMUNICABLE DISEASES AND NUTRITION (CNCDN)

Established in 2017, the Centre aims to reduce mortality and complications related to Non-Communicable Diseases (NCDs) and malnutrition in Bangladesh through prevention, treatment and control. The Centre conducts research and works with the government of Bangladesh to develop guidelines for prevention, treatment and control, and perform evidence-based advocacy around NCDs and malnutrition.

Research at the Centre includes identifying evidence-based practices in clinical and population settings, implementing health system research to optimise delivery of interventions, and conducting economic evaluation of novel and evidence-based interventions. Health care providers are trained on risk stratification for NCDs through prevention and management. The Centre also strengthens capacity of programme managers and policy makers on evidence-based policy and interventions for prevention and control. To further promote and advocate for the prevention, treatment and control of NCDs and malnutrition, and encourage people to adopt healthier lifestyles, the Centre also develops communication materials based on their research.

### **RESEARCH PROJECTS ONGOING IN 2022**

## - UNDERSTANDING THE PATTERNS AND DETERMINANTS OF HEALTH IN SOUTH ASIANS PEOPLE-SOUTH ASIA BIOBANK

PI: Professor Malabika Sarker, Associate Dean and Director, CoE-SISU, BRAC JPGSPH, BRAC University and Professor Malay Kanti Mridha, Director, CNCDN, BRAC JPGSPH, BRAC University. Coordinator: Ali Ahsan Hemel, Research Medical Officer, BRAC JPGSPH, BRAC University Timeline: May 2018 - December 2022

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

#### 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 for Health Research (NIHR)

### Partners:

- Imperial College London, UK
- Noncommunicable Disease Control, 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
  - Process documentation on building Rohingya refugee and host community resilience in Cox's Bazar, Bangladesh: A mixed method cross section study

PI: Professor Malay Kanti Mridha, Professor and Director, CNCDN, BRAC JPGSPH, BRAC University Coordinator: Dr. Rina Rani Paul, Consultant; BRAC JPGSPH, BRAC University Timeline: May 2022- April 2024

Objectives: provide support to project information and knowledge management, including process documentation to provide recommendations for strengthening multi-sectoral nutrition coordination at the district level and recommendations for national and subnational rolling out of Multi-Sectoral Minimum Nutrition Package (MMNP) in support of the effort of BNNC as part of the implementation of NPAN2.

Methodology: Mixed method

Donor: DEVCO/INTPA, UNICEF

Partners: United Nations Children's Fund (UNICEF) Bangladesh

- Assessment of the nutrition status and pre-COVID-19 and two years into the pandemic comparison

PI: Professor Malay Kanti Mridha, Professor and Director, CNCDN, BRAC JPGSPH Coordinator: Dr Sakib Rahman, Research Associate; BRAC JPGSPH

Timeline: May 2022- August 2022

Objective: The overall objective of the proposed action is to institutionalize nutritional surveillance into a national framework with the support of the National Nutrition Services (NNS). The specific objectives of the surveillance are

- 1. To assess household socio-economic status, food security and water, sanitation and hygiene practices from household head
- 2. To assess under 5 children's feeding practice
- 3. To assess dietary diversity and diet quality from the adolescents (boy and girl), women in reproductive age, adult male and elderly persons (male and female)
- 4. To determine nutritional status of through measurement of:
- i. Height, weight, and Mid Upper Arm Circumference (MUAC) of <5 children
- ii. Height and weight for adolescent boys and girls (10-19 years)
- iii. Height, weight, and waist circumference for women of reproductive age (20-59 years), adult male (20-59 years) and elderly person (>60 years male and female)
- 5. To identify behavioral risk factors (Inadequate consumption of fruits and vegetables, smoke/smokeless tobacco, insufficient physical activity) of adolescent, adult male, female, and elderly people (male and female)
- 6. To identify the proportion of adult and elderly participants who are hypertensive
- 7. To compare selected health and nutrition indicators between pre- and post-Covid-19 pandemic

Methodology: Quantitative

Donor: UNICEF Bangladesh

Partner: Institute of Nutrition and Food Science (INFS), University of Dhaka

 Global Health Research Unit on Diabetes and Cardiovascular Diseases in South Asians (Phase II)

PI: Professor Malay Kanti Mridha, Professor and Director, CNCDN, BRAC JPGSPH, BRAC University Coordinator: Professor Malay Kanti Mridha, Professor and Director, CNCDN, BRAC JPGSPH, BRAC University

Timeline: Octobar 2021- September 2026

Donor: NIHR, UK

Impact evaluation of the project titled 'Implementation of the World Health
Organization's Framework for Working with Individuals, Families, and Communities
(IFC) to Improve Maternal and Newborn Health in Bangladesh.'

PI: Professor Malay Kanti Mridha, Professor and Director, CNCDN, BRAC JPGSPH, BRAC University Coordinator: Fahmida Akter, Senior Research Fellow, BRAC JPGSPH, BRAC University; Timeline: December 2021- December 2024

Objectives: The primary objective of the study is to measure the effect of the package of WHO IFC interventions on MNCH awareness, capacities, and practices of women, husbands, and families. As the 2021-2024 programme also includes ECD interventions, assessment of family care environment will also be included. More specifically, the general objectives of this study are:

- 1) To measure the effect of the 4-year implementation (2017-2021) of the package of WHO IFC interventions on MNCH awareness, and practices of women, husbands and families.
- 2) To measure the effect of a package of health promotion interventions on MNCH awareness and practices of women, husbands, families, and communities for the second phase of the IFC project (2021-2024).

Methodology: Mixed method

Donor: Enfants du Monde (EdM), BRAC

 Impact Evaluation of the UNICEF Multisector Integrated Program for Improved Nutrition in Urban Slums (Midline Assessment)

PI: Agathe Rivière, Qualitative Research and Evaluation Manager; Center for Evaluation and Development (C4ED)

Co-PI: Professor Malay Kanti Mridha, Professor and Director, CNCDN, BRAC JPGSPH, BRAC University Coordinator: Fahmida Akter, Senior Research Fellow, BRAC JPGSPH, BRAC University; Timeline: May-22 to Jul-23

Objectives: The process evaluation of the "UNICEF Multisector Integrated Programme for Improved Nutrition in Urban Slums" located in the Sylhet City Corporation (SCC) aims to provide evidence for the effectiveness of a comprehensive intervention package targeting the "first 1,000 days of life" of children living in urban slums. Hence, the goal of process evaluation is to examine how the programme was implemented (mechanisms, channels) and whether interventions were designed based on sound evidence and adequate needs assessment (relevance).

Methodology: Mixed Method

Donor: Center for Evaluation and Development (C4ED), Germany

Partners: Center for Evaluation and Development (C4ED), UNICEF Bangladesh, UNDP Bangladesh