Silent Threats: Exploring the Prevalence and Drivers of Non-Communicable Diseases Among Older Adults in Bangladesh

Abstract

The rising prevalence of non-communicable diseases (NCDs) poses a significant health challenge, particularly for older adults in Bangladesh. These chronic conditions—such as hypertension, diabetes, and heart disease—account for over 70% of global deaths annually, disproportionately affecting older populations in low- and middle-income countries (LMICs). The demographic transition toward an aging population in Bangladesh underscores the urgency of addressing NCDs. By 2050, the proportion of older adults is projected to more than double, intensifying the need for effective prevention and management strategies.

Existing research on NCDs in Bangladesh has predominantly focused on general populations, with limited attention to the unique vulnerabilities of older adults. However, the specific determinants driving NCDs prevalence among older adults in Bangladesh—such as socioeconomic status, gender, lifestyle behaviours, and health condition—remain underexplored. This study leverages data from 5,046 individuals aged 45 and above from the Bangladesh Aging, Health, and Retirement Survey (BAHRS) 2022–23 to examine the prevalence and drivers of NCDs.[1] Thus, to estimate the prevalence of NCDs and explore factors determining NCDs, the study uses ordered and linear logistic regression models, respectively.

Findings indicate that around 82% of respondents are tested for NCDs of which 39% were diagnosed with at least one of the NCDS including hypertension (84%), heart disease (55%), and diabetes (48%). The study explores three key dimensions. Firstly, the study finds that modifiable behavioural factors including tobacco use, inadequate sleep, and lack of physical activity increase the likelihood of having more NCDs. Protective practices, such as gardening and restorative sleep patterns, emerged as critical for reducing disease prevalence. Financial support from family reduced the likelihood of multiple NCDs, highlighting the importance of social safety nets. Second, the study finds that physical and psychological impairments including elevated hypertension, physical disabilities, and obesity strongly and positively associated with multi-morbidity. Physical impairments, measured through Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs), and psychological distress, measured through the Kessler Psychological Distress Scale, increase the odds of having multiple NCDs. Third, the study shows that non-modifiable factors including age and gender are likely to determine the prevalence of NCDs. For example, women and older adults are more prone to NCDs. This finding aligns with global evidence suggesting gendered disparities in health outcomes. Social relationships also play a nuanced role in NCD prevalence. Close relationships with daughters or husbands significantly reduce the odds of having three diseases versus none. Surprisingly, close relationships with sons

[1] The study uses an extensive questionnaire by adapting existing instruments from internationally recognized datasets including the Indonesia Family Life Survey (IFLS), Japanese Study of Aging and Retirement (JSTAR), Malaysia Aging and Retirement Survey (MARS) and Longitudinal Ageing Study in India (LASI) to the Bangladeshi context while preserving international comparability.

increase the likelihood of having two or three diseases versus none. These findings suggest complex intergenerational dynamics that may influence health behaviours and stress levels within households. Individuals whose economic situation has deteriorated over the past five years show a higher likelihood of NCDs.

These findings underscore the interplay between modifiable and non-modifiable behavioural factors, and health conditions with the prevalence of NCDs, offering actionable insights for targeted, age-sensitive policies and interventions, focusing on lifestyle modification, protective health care, and enhanced social support. These measures are critical not only for improving individual health outcomes but also for mitigating the broader societal and economic impacts of NCDs. This research contributes to a deeper understanding of NCD dynamics in Bangladesh and provides actionable insights for developing tailored public health strategies to improve the quality of life for older adults.