

Financial hardship associated with non-communicable diseases (NCDs) and impact of National Health Insurance Program (NHIP) and Community Based Mitigation Strategies (COBIN) in Nepal

Simrin Kafle¹, Per Kallestrup¹, Shiva Raj Adhikari², Dinesh Neupane³, Ulrika Enemark¹

¹Department of Public Health, Aarhus University, ²Department of Economics, Tribhuvan University,

³Bloomberg School of Public Health, Johns Hopkins University

Background

People in LMICs including Nepal experience high out of pocket (OOP) and catastrophic expenditures in health especially due to NCDs. The current study is designed to assess financial hardship associated with NCDs and impact of National Health Insurance Program and COBIN model.

Methods

To estimate the financial hardship of households and analyse associated factors including NCDs, secondary data analysis from IV NLSS will be done, where OOPHE for the past 12 months will be calculated. Presence of CHE will be determined using threshold values of OOP above 10% and 25% of total consumption and 40% of non-food consumption. For impoverishment impacts, we will measure (i) poverty headcount (ii) poverty gap, and (iii) normalized poverty gap.

To evaluate the impact of the NHIP on the financial hardship of households in relation to NCDs, primary data sets from COBIN intervention and non-intervention group will be compared with and without active enrollment (with renewed insurance card since last 12 months) in the NHIP controlling the impact of COBIN on OOPHE and other factors using logistic regression.

To assess the impact of the COBIN model on the OOP of households in relation to NCDs, we will follow the same questionnaire as mentioned under objective 2 and will analyze the differences statistically using logistic regression analysis controlling the impact of NHIP and other factors. We will explore the possibility of using propensity score matching or similar type of analysis using estimates for the non-COBIN cohort to predict the counterfactual OOP expenditures in the COBIN cohort.

Perspectives in the research

It is expected that this study will generate valuable information on the financial burden due to NCDs and contribute to design, implement and scale effective community based strategies to reduce associated high OOP and catastrophic expenditure in Nepal and beyond with similar socio-economic situations.