

## Does Income inequality matters for accessing health facility? Evidence from Bangladesh

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### Abstract

Accessibility to health facilities is the key for improving the worldwide public health scenario. This paper investigates whether micro-level health status improves gradually for every income class despite the existence of growing income inequality as the macro-level economy flourishes. In this paper, Bangladesh is chosen as a sample for assessing the hypothesis. Bangladesh Demographic and Health Surveys (BDHS) of 2007, 2011 and 2014 were applied in this paper.

Three different models were applied for robustness. The proportional odds model showed the highest Pseudo- $R^2$  and it was fitted to determine the relationship between wealth index and various health components.

The direction of the relationship between wealth index and various health components over the years was explored by the trend of the odds ratios. The fitted models showed that most of the health components (e.g. family health consciousness, women's empowerment and reproductive health) significantly influenced wealth index at 5% level for all three data sets. However, the odds showed a shift towards one (Odds = 1), which reflects a reduction of influence on household economic status from 2007 to 2014. From 2007 to 2014, Bangladesh has doubled its per-capita GDP and showed remarkable achievements in Millennium Development Goals (MDGs) despite increasing inequality. Most health parameters showed less influence on wealth as the economy progressed.

The pattern suggests that health accessibility increases as the country advances economically even though high inequality exists. Therefore, overall development of a country is beneficial even for the most vulnerable part of the economic quantile because it enables access to health service despite their insolvency.

**Keywords:** Public health, Reproductive health, Economic Growth, Measure DHS, Ordinal Outcome Scale, Bangladesh