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Relationship Between Health Coverage and Emergency Disease Burden

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Abstract : Objectives: This study examines the relationship between universal health coverage (UCH) and the burden of emergency diseases at a global level. Methods: Data on Disability-Adjusted Life Years (DALYs) from emergency conditions were extracted from the Institute for Health Metrics and Evaluation (IHME) database for the years 2015 and 2019. Data on UHC, measured using two variables, 1) coverage of essential health services and 2) proportion of population spending more than 10% of household income on out-of-pocket health care expenditure, was extracted from the World Bank Database for years preceding our outcome of interest. Linear regression was performed, analyzing the effect of the UHC variables on the DALYs of emergency diseases, controlling for other variables. Results: A total of 133 countries were included. 44.4% of the analyzed countries had coverage of essential health services index of at least 70/100, and 35.3% had at least 10% of their population spend greater than 10% of their household income on healthcare. For every point increase in the coverage of essential health services index, there was a 13-point reduction in DALYs of emergency medical diseases (95% CI -16, -11). Conversely, for every percent decrease in the population with large household expenditure on healthcare, there was a 0.48 increase in DALYs of emergency medical diseases (95% CI -5.6, 4.7). Conclusions: After adjusting for multiple variables, an increase in coverage of essential health services was significantly associated with improvement in DALYs for emergency conditions. There was, however, no association between catastrophic health expenditure and DALYs.

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