

Impact of disaster-related mortality on gross domestic product in the WHO African Region

Abstract:

Background Disaster-related mortality is a growing public health concern in the African Region. These deaths are hypothesized to have a significantly negative effect on per capita gross domestic product (GDP). The objective of this study was to estimate the loss in GDP attributable to natural and technological disaster-related mortality in the WHO African Region. **Methods** The impact of disaster-related mortality on GDP was estimated using double-log econometric model and cross-sectional data on various Member States in the WHO African Region. The analysis was based on 45 of the 46 countries in the Region. The data was obtained from various UNDP and World Bank publications. **Results** The coefficients for capital (K), educational enrolment (EN), life expectancy (LE) and exports (X) had a positive sign; while imports (M) and disaster mortality (DS) were found to impact negatively on GDP. The above-mentioned explanatory variables were found to have a statistically significant effect on GDP at 5% level in a t-distribution test. Disaster mortality of a single person was found to reduce GDP by US\$0.01828. **Conclusions** We have demonstrated that disaster-related mortality has a significant negative effect on GDP. Thus, as policy-makers strive to increase GDP through capital investment, export promotion and increased educational enrolment, they should always keep in mind that investments made in the strengthening of national capacity to mitigate the effects of national disasters expeditiously and effectively will yield significant economic returns.