

Comment

Supplementary information to:

Count the cost of disability caused by COVID-19

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Assumptions used in estimating the health burden of COVID-19

We use simple assumptions to estimate illustrative DALYs lost for each case of COVID across the same age groups in Pakistan and the United Kingdom, separately identifying DALYs lost through mortality and morbidity (disability).

We calculate DALYs lost for three types of COVID episode: long COVID, a COVID-related long term condition (LTC) and death. DALYs due to deaths (years of life lost) are calculated by comparing age at death to standard life tables and adjusting for background comorbidity that increases susceptibility (such as obesity) following a standard approach [1].

DALYs lost due to acquiring a COVID-related long term condition (LTC) are calculated using the same method, assuming a standardized mortality ratio (SMR) of 1.5 for the LTC and a 10% reduction in quality of life [1].

LTCs arise from hospitalisation, and hospitalisation is approx. 10% cases ([UK ONS data: https://go.nature.com/3hM8avz](https://go.nature.com/3hM8avz)) and 20% of those result in LTC [2]. Finally, long COVID is assumed to result in a DALY loss of 0.5 DALYs at any age, but we assume that only 10% cases result in long COVID [3]. Summing across the age groups gives the total DALY burden of each COVID case split into the disability and mortality (disability) components.

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3. NIHR. Living with Covid19 – Second review. Published on 16 March 2021. doi: https://doi.org/10.3310/themedreview_45225