

Estimated direct costs of COVID-19 pandemic high in Turkey, but true costs "undoubtedly higher"

An analysis based on 11 months of real-world data from a hospital in Turkey has found that the direct costs of the COVID-19 pandemic was around 2.0% of the overall health care spending, but the "true total cost of the pandemic is undoubtedly significantly higher than the direct medical costs", say the researchers.

The retrospective cohort study, published in *Health Economics Review*, was conducted between March and July 2020 in a tertiary hospital in Istanbul. Patient demographics, clinical and treatment characteristics at admission, comorbidities, and disease severity were collected from the record system, and bottom-up and micro-costing methods were used to evaluate the costs* (from a payer perspective) and healthcare resource use. Outcomes were length of stay (LOS) and hospital costs. Data were extrapolated to yield country-level estimates.

Of the 1056 patients included in the study, 55% were male and the mean age was 56.6 years; 6% presented with mild disease, 41% with moderate and 36% with severe symptoms. The mean LOS was 9.1 days, ranging from 8.0 days for patients hospitalised in wards versus 14.8 days for those in the intensive care unit. Univariate analysis found several factors that were significantly associated with longer LOS, including oxygen therapy (+3.7 days), CRP >41.8 mg/L (+3.8 days), and elevated ferritin (+3.5 days; all $p < 0.05$). The direct annual medical cost of COVID-19 was estimated at \$PPP2.1 billion, and a direct medical burden corresponding to 2.0% of the government health expenditures and 0.8 per 1000 of Turkey's gross domestic product.

"This study also only estimated the direct cost to the health care system and not the substantial mental health burden on society and, in particular, health care professionals during the pandemic. This is also worth investigating further", note the authors.

* Costs were presented in 2019 purchasing power parities (PPP) using Organisation for Economic Co-operation and Development rates.

Oksuz E, et al. COVID-19 healthcare cost and length of hospital stay in Turkey: retrospective analysis from the first peak of the pandemic. *Health Economics Review* : 8 Oct 2021. Available from: URL: <https://doi.org/10.1186/s13561-021-00338-8> 803603920