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## National lockdown not cost effective in Israel during COVID-2 pandemic

A nationwide lockdown during the COVID-2 (SARS-CoV-2) pandemic would save lives in Israel but would not be cost effective, according to findings of a study published in *Value in Health*.

A modified Susceptible, Exposed, Infectious, Recovered, and Deceased (SEIRD) model was used to evaluate the cost effectivness of a nationwide lockdown (with essential shopping or medical treatment permitted, and 14-day isolation in exposed individuals) to prevent COVID-19-related deaths in Israel (population nine million), compared with social distancing and focussed testing, tracing and isolation in people at high risk of exposure to COVID-19, from the perspective of the Israel Ministry of Health over a 200-day time horizon.

The estimated number of deaths was lower under nationwide lockdown than under the strategy of testing, tracing and isolation of high-risk people (n=303.5 vs 577.8), but estimated costs for nationwide lockdown were much greater (\$12 495 million vs \$122.9 million), resulting in incremental cost-effectiveness ratios (ICERs) of \$45.1 million per death averted, and \$4.5 million per QALY gained (assuming that one death was equivalent to a QALY loss of 10).

"We show that over time a strategy of national lockdown is moderately superior to a strategy of focused isolation in terms of reducing death rates but involves extremely high economic costs to prevent 1 case of death. These economic costs might add to the future economic consequences of this pandemic; thus these options should be carefully considered and balanced," said the authors.

Shlomai A, et al. Modeling Social Distancing Strategies to Prevent SARS-CoV-2 Spread in Israel: A Cost-Effectiveness Analysis. Value in Health : 9 Dec 2020. Available from: URL: https://doi.org/10.1016/j.jval.2020.09.013