Abstract

Introduction: Approximately 43906 human lives were lost to COVID-19 by July 2, 2020, in theUnited Kingdom (UK). This study estimated the total present value of human lives lost due to COVID-19 in the UK as of July 2, 2020.

Background: The ongoing global COVID-19 pandemic has disrupted external trade and negatively impacted on all the socioeconomic sectors in the UK. Objectives: The objective of this study was to estimate the total present value of human lives lost due to COVID-19 in the UK as of July 2, 2020.

Methods: The human capital approach was employed to value human lives lost into money, assuming a 3% discount rate and an average life expectancy of 81.8 years in the UK. The economic model was re-estimated using (a) 5% and 10% discount rates, and (b) the average world life expectancy of 72 years, and (c) the world's highest life expectancy of 88.1 years to test the robustness of the total present value of human lives lost.

Results: The human lives lost had a total present value of the international dollar (Int$) of 9883426226 and an average present value per human life of Int$ 225104. Approximately 76.2% of the total present value was sustained by those aged 30 and 79 years. Re-estimation of the model with discount rates of 5% and 10% instead of 3% reduced the total present value by Int$ 1158424570 (11.7%), and Int$ 3058724257 (31.0%), respectively.

Conclusion: The average present value per human life was almost five-fold the UK's GDP per person in 2020. The presented evidence could be used to advocate for increased investments into the British National Health Service and other health-related systems to optimize Universal Health Coverage, International Health Regulations capacities, and secondary education coverage to better mitigate economic and human suffering during future pandemics.