Letter to the Editor Regarding Nogueira et al “Excess Mortality Estimation During the COVID-19 Pandemic: Preliminary Data from Portugal”

Carta ao Editor Sobre Nogueira et al “Excess Mortality Estimation During the COVID-19 Pandemic: Preliminary Data from Portugal”

Keywords: COVID-19; Coronavirus Infections; Disease Outbreaks; Mortality; Pandemics; Portugal

Palavras-chave: COVID-19; Infecções por Coronavírus; Mortalidade; Pandemia; Portugal; Surtos de Doenças

Nogueira et al showed a counterintuitive consequence of Portugal’s response to the COVID-19 pandemic: the non-COVID-19 excess mortality outnumbered the COVID-19 mortality. As international experts have warned, the fear of becoming infected can cause delays in patients seeking healthcare services, and the reallocation of healthcare resources can decrease the availability/accessibility of timely healthcare for other diseases. After reading the article, two questions arose to me:

(1) Did the reduced emergency department (ED) attendance/delays in healthcare-seeking de facto increase mortality? Was a reduction in life-threatening visits to the ED (STEMI, stroke, sepsis, ...) and a reciprocal increase in out-of-hospital deaths by the same causes observed during the pandemic? Given that a significant amount (sometimes > 50%) of ED visits in Portugal are due to non-urgent medical conditions, which are associated with low mortality rates (and were the ones that decreased the most during the State-of-Emergency), and that ED mortality rates decrease when occupancy decreases (because treatment can be offered more timely and accurately, assuming a similar number of healthcare professionals), could the mortality net result of an ED attendance decrease have been lower than estimated? Did the authors analyze ED mortality rates of the non-COVID-19 ‘orange’ and ‘red’ bracelet patients during the pandemic? Furthermore, did the authors withdraw an estimated number of reduced ED visits caused by a reduction of ‘outside activities’ (e.g. fractures, sports injuries, car accidents) from their calculations? Were any healthcare-seeking delay indicators (e.g. symptom onset to ED admission time), and their effects on mortality, assessed?

(2) Did the re-allocation of healthcare resources contribute to the excess mortality? Even small delays in treating some acute conditions increase mortality (e.g. a 4.4-minute increase in myocardial-infarction or cardiac-arrest patient transport time). Did the allocation of resources to COVID-19-patients leave the non-COVID-19-patients with lower healthcare-professionals-to-patient ratios, fewer ambulances (higher ambulance waiting times), fewer OR slots or hospital/ICU beds and higher ED waiting times? Did the authors analyze any indicators (e.g. STEMI-door-to-needle-time) regarding this issue? Have the authors assessed data from canceled elective surgeries and appointments in order to predict a possible increase in future mortality from the undertreatment of non-urgent conditions (e.g. cancer)? And was the resource-allocation-related estimated excess mortality greater than the estimated COVID-19-related mortality avoided by Portugal’s pandemic strategy?

Both factors probably contributed to the non-COVID-19 excess mortality. However, as those factors are curbed by different approaches (public service announcements versus different resource allocation policies), further research on this issue would be invaluable in order to minimize overall mortality in future pandemics.

REFERENCES