COVID-19 analysis report

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Introduction

Through COVID-19 model data of 82,101 cases between 27/12/2019 and 27/07/2019 based in the U.S., we investigated the effect of age and gender on mortality and the severity of different symptoms. The 81,655 unique cases includes a total of 1,338 deaths.

Figures

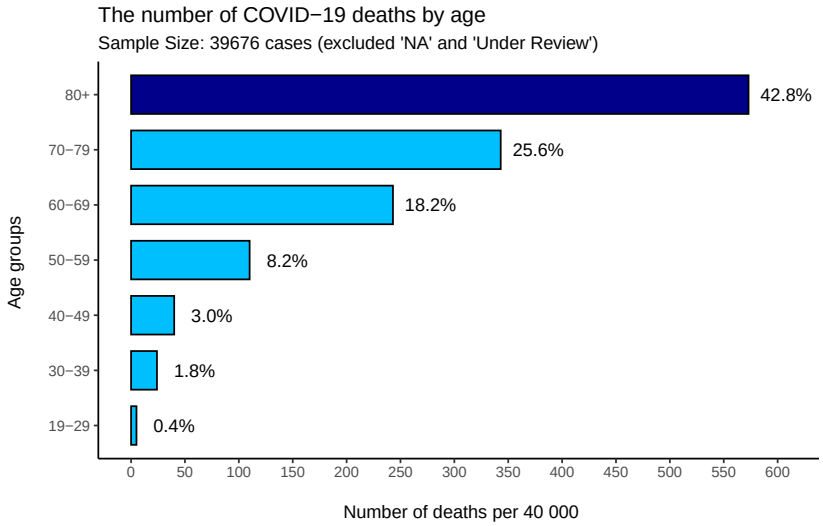

Figure 1. Mortality rate increases with age, with most deaths seen in the age category of over 80 years old.

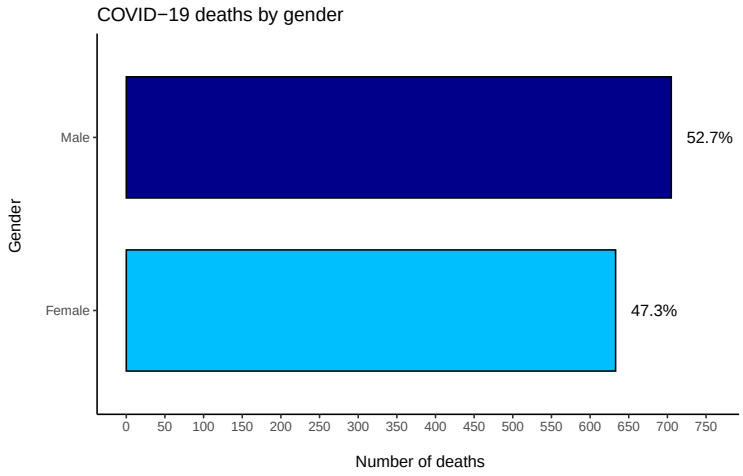

Figure 2. COVID-19 has a male bias in mortality despite less males were sampled (38,376 males and 43,279 females). In the 1,338 deaths, 633 were females and 705 were males.

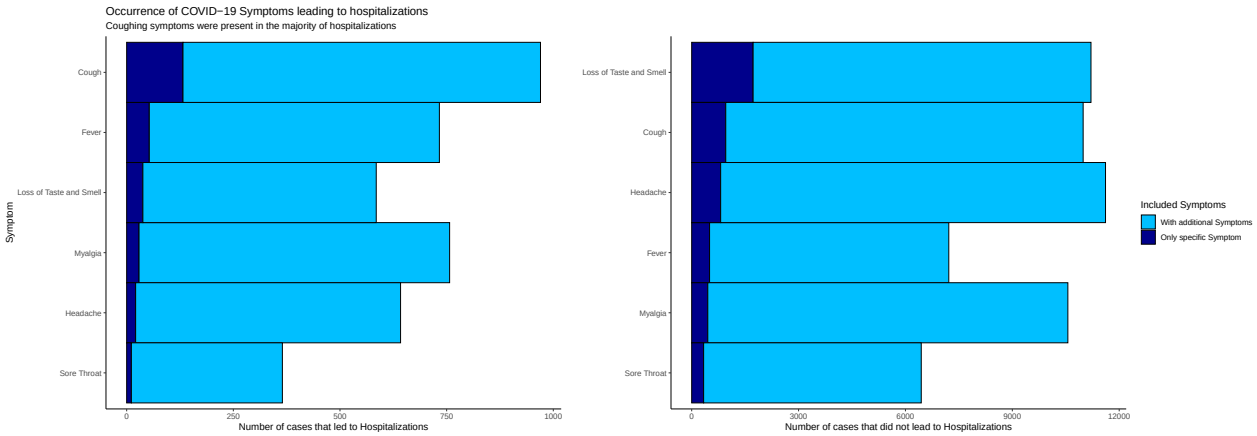

Figure 3. The different symptoms associated with COVID-19 vary in prevalence among cases where individuals were and were not hospitalized. Coughing was the most prevalent among those hospitalized both as an individual symptom and as a collective of symptoms. The loss of taste and smell was the individual most prevalent symptom among those who weren't hospitalized. Headache was the most prevalent collectively along with other symptoms.

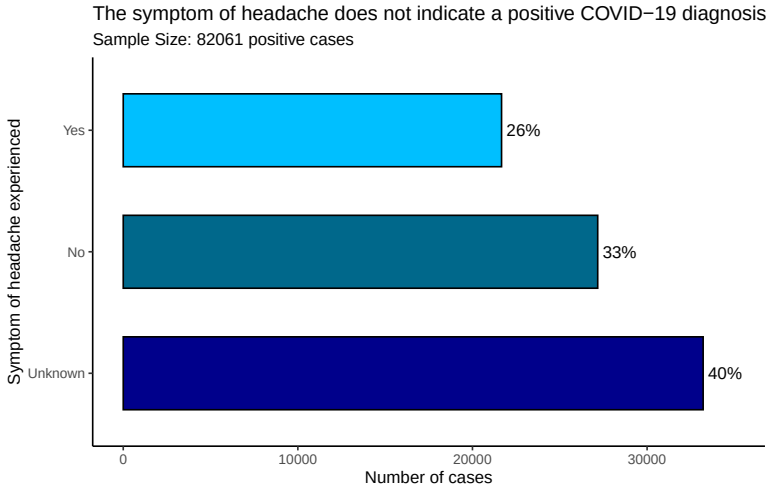

Figure 4. The symptom of headache does not indicate a positive COVID-19 diagnosis. Only 26% of the people with COVID-19 experienced headache(s), 33% did not, and the status for the remainder could not be confirmed, thus suggesting there is no positive correlation.

Conclusion

Human demographics have been shown to influence the mortality and prevalence of various COVID-19 symptoms. Consideration of different demographics and awareness of symptoms will be important in future global responses to worldwide diseases.