COVID19 analysis report

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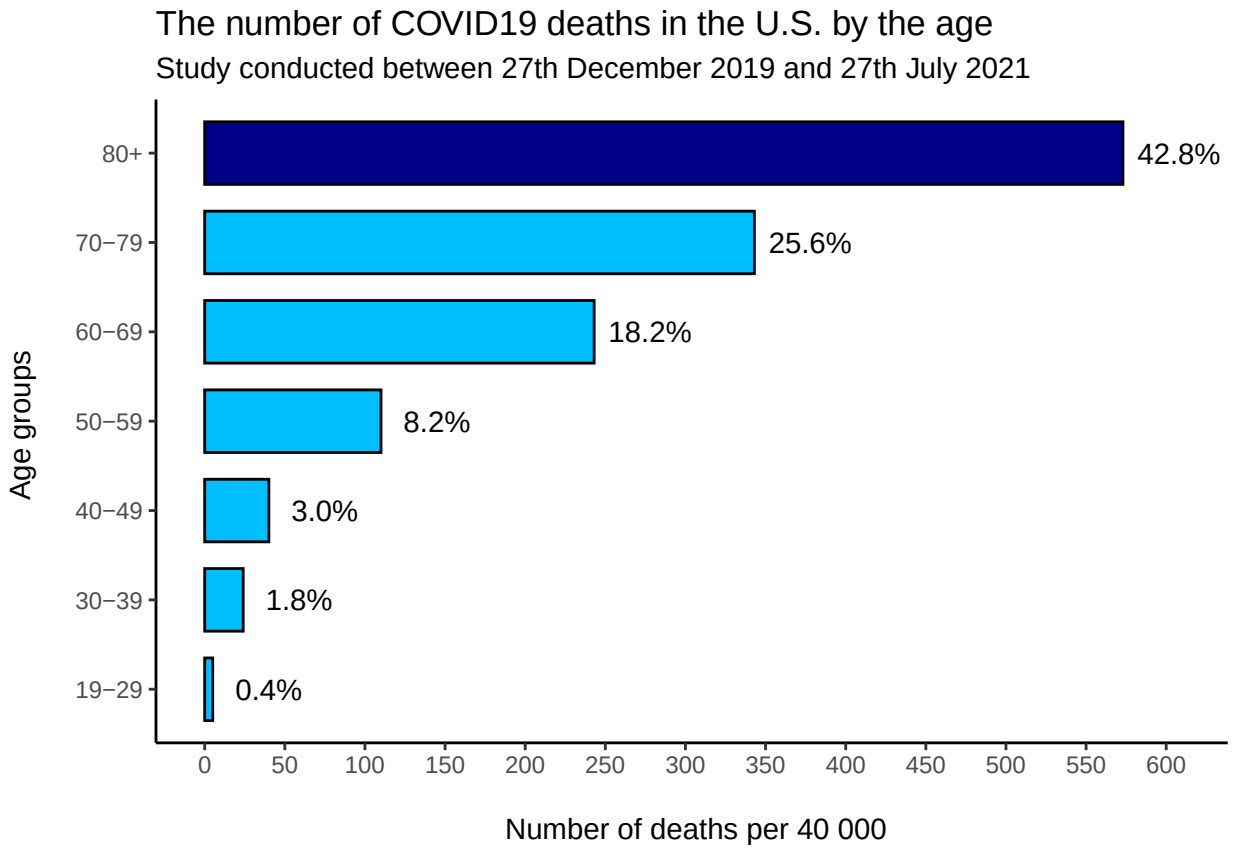

Figure 1: As the age increases the mortality rate rises, with the most significant deaths seen in the 80+ category. The assumed reason for the observations can be due to deteriorating immunity with the age.

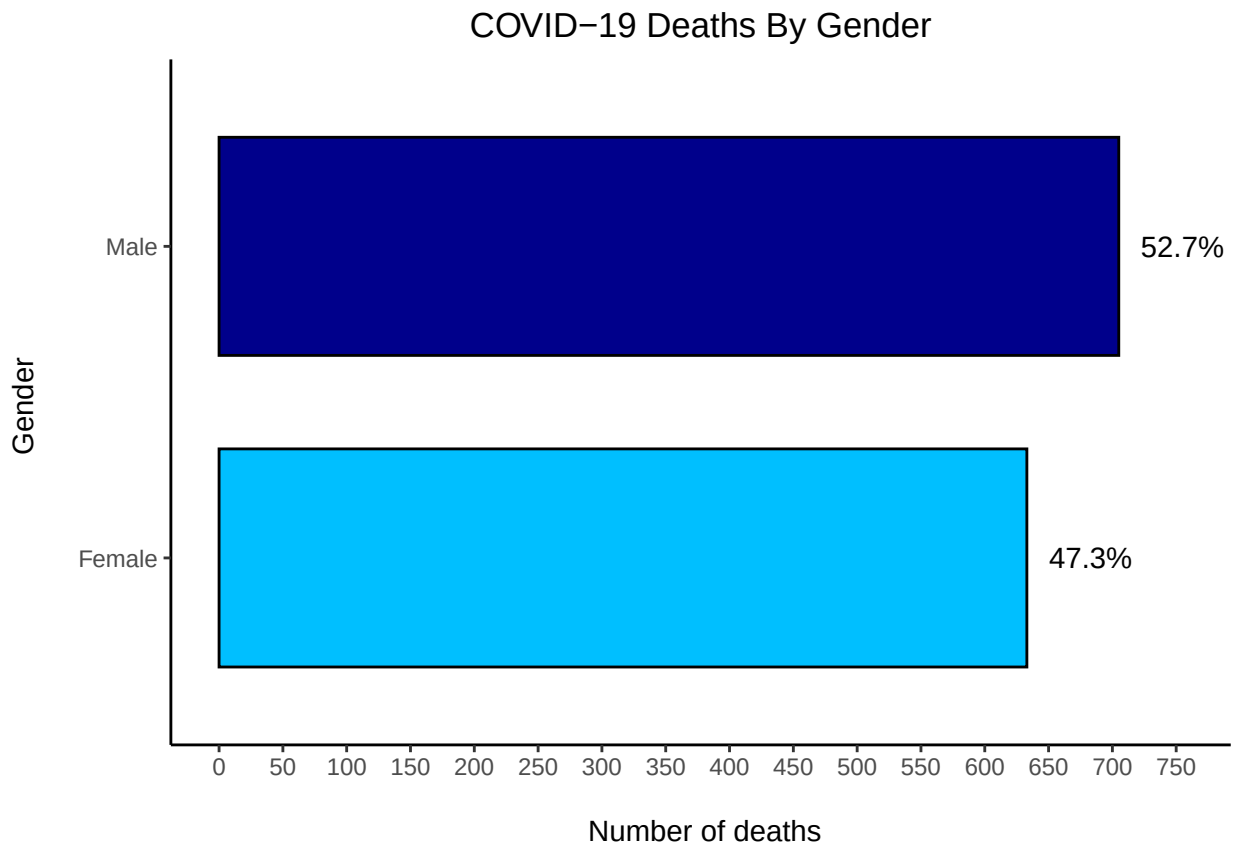

Figure 2: COVID-19 has a male bias in mortality. Males have higher mortality rate despite being sampled less. 1338 total deaths, 633 females and 705 males. 43279 females and 38376 males were sampled with confirmed cases of COVID-19. A potential reason for this bias could be the higher rate of high-risk behaviors and comorbidities in males (Singh *et al.*, 2020). Studies suggest that low testosterone levels in males is associated with increased COVID-19 mortality however there is a need for further research (Giagulli *et al.*, 2021; Yassin *et al.*, 2022).

Reference List:

Giagulli, V.A., Guastamacchia, E., Magrone, T., Jirillo, E., Lisco, G., De Pergola, G. and Triggiani, V., 2021. 'Worse progression of COVID-19 in men: is testosterone a key factor?', *Andrology*, 9(1), pp. 53-64.

Singh, S., Chowdhry, M., Chatterjee, A. and Khan, A., 2020. 'Gender-based disparities in COVID-19 patient outcomes: A propensity-matched analysis', *MedRxiv*.

Yassin, A., Sabsigh, R., Al-Zoubi, R.M., Aboumarzouk, O.M., Alwani, M., Nettleship, J. and Kelly, D., 2022. 'Testosterone and Covid-19: an update', *Reviews in Medical Virology*, 33(1).