

Background

The COVID-19 hit the world population significantly, causing a great impact on the Burden of Disease (BoD) increase in many countries worldwide. This study aimed to estimate the disease burden of COVID-19 in Vojvodina, the northern province of Serbia, for the period 01/07/2020-14/04/2021.

Methods

The overall disease burden caused by COVID-19 in Vojvodina was expressed by Disability Adjusted Life Years (DALYs) metric. The Protocol for country studies given by the European Burden of Disease (BoD) Network was used for the burden estimation [1]. The Incidence of 65535 new COVID-19 cases was extracted from the Institute of Public Health of Vojvodina database. The gender and age classified cases were divided into 3 groups with different Disability weights (DW): 1. COVID–primary health care (DW=0.051); 2. COVID – hospitalized (no ICU) (DW=0.133); 3. COVID– ICU support (DW=0.655), as suggested by Burden_EU authors. The unregistered cases, as well as postcovid cases, were not included in the Years Lived with Disability (YLD) estimation, due to insufficient data. The average duration of the disease depending on its severity was extracted from study [2]. Life Expectancy for Year of Life Lost (YLL) was taken from the Regional Life table for 2017.

Results

The total disease burden was 23 181 DALYs per 1 840 852 population. Expressed per 100 000, the burden was 1259.26 DALYs, with a slightly higher burden in men – 732.05 than in women – 527.21 DALYs. YLD (per 100 000) was 4.54 for females and 4.43 for males, but the YLL was significantly higher in men – 727.62 than in women – 522.67. Age and gender-stratified DALYs is presented by Figure 1.

Conclusion

COVID-19 has been posing an increasing challenge for the health system in Serbia over the past year. DALY metric, composed mainly of the YLL component, depicts well the condition of the affected population.

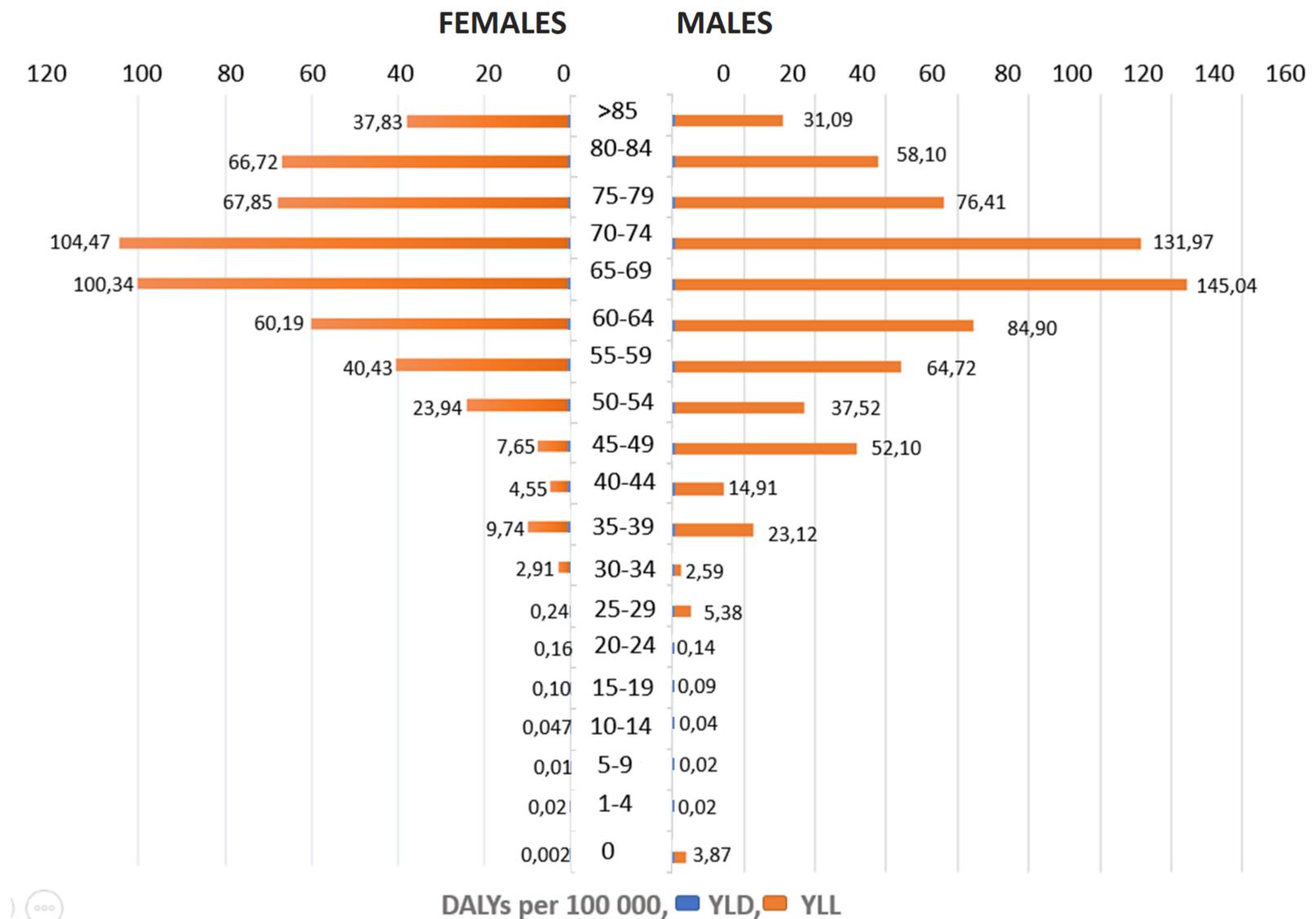


Figure 1. DALYs per 100 000, and its YLD and YLL components

References:

- <https://doi.org/10.3389/ijph.2021.619011> ;
- <https://doi.org/10.1186/s12879-021-06371-6>