The changes of mortality pattern in a capital of Serbia in 2020

NATAŠA ROSIĆ¹, ALEKSANDAR STEVANOVIĆ^{2,3}, GORDANA BJELOBRK⁴, JOVANA TODOROVIĆ^{2,3}, MILENA ŠANTRIĆ-MILIĆEVIĆ^{,2,3}

¹City Institute of Public Health Belgrade, Belgrade, Serbia

²Institute of Social Medicine, Faculty of Medicine, University of Belgrade, Serbia

³Center – School of Public Health, Faculty of Medicine, University of Belgrade, Serbia

⁴Statistical Office of the Republic of Serbia, Belgrade, Serbia

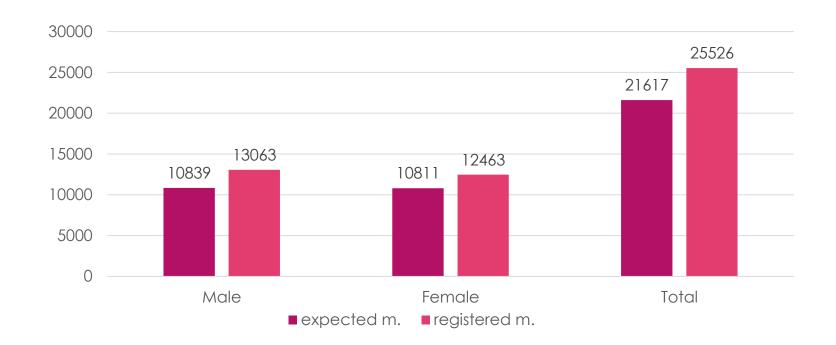
Background

► Current subject of widespread analysis is the influence of COVID-19 pandemic on mortality patterns and excess mortality. We aimed to identify the differences between the registered and expected mortality in 2020, in capital of Serbia, Belgrade.

Methods

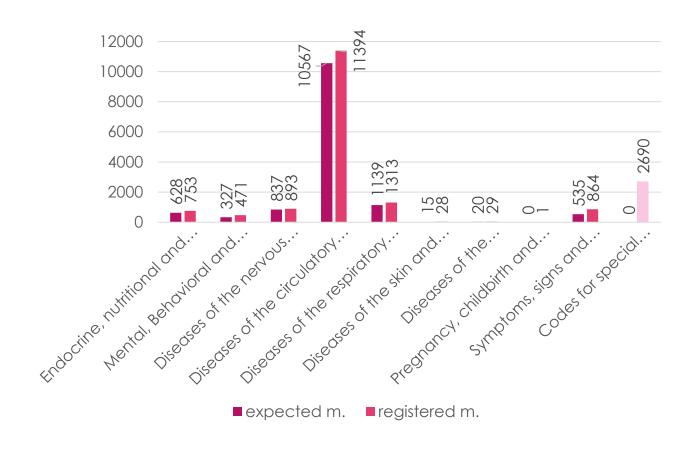
- ▶ A five-year period from 2015 to 2019 was considered as a baseline for estimating the expected number of deaths in 2020.
- ▶ The Statistical Office of Republic of Serbia provided the registered mortality data 2015 2020 disaggregated by cause and sex.
- Registered deaths were compared with estimates of all-cause mortality using percentage changes for all-causes and different causes of death for both sexes.

► Compared to expected, the increase in registered mortality from all causes in 2020 amounted to 3909 deaths (15.3%), of which 2224 (17.0%) in men and 1652 (13.0%) in women.

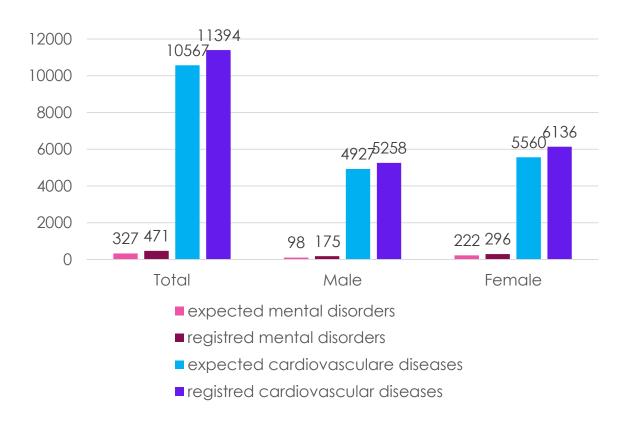


- Nine disease groups showed an increase in the number of deaths.
 - ▶ E00-E89 Endocrine, nutritional and metabolic diseases
 - ► F00-F99 Mental, Behavioral and Neurodevelopmental disorders
 - ► G00-G99 Diseases of the nervous system
 - ▶ 100-199 Diseases of the circulatory system
 - ▶ J00-J99 Diseases of the respiratory system
 - ▶ L00-L99 Diseases of the skin and subcutaneous tissue
 - ▶ M00-M99 Diseases of the musculoskeletal system and connective tissue
 - O00-O9 Pregnancy, childbirth and the puerperium
 - ▶ R00-R99 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified

- Of the total increase, 68.8 percent, or 2,690 deaths, were registered as deaths from COVID-19
- COVID 19 became the third leading cause of death in 2020



- Mental disorders had a significant increase of 30.6%.
- In the group of cardiovascular diseases, the increase in deaths was higher in women (576, 9.4%) than in men (331, 6.3%).



Conclusion

- ▶ In 2020, COVID-19 has changed the expected pattern of leading causes of deaths in Belgrade.
- Further research is needed to comprehensively assess the influence of COVID-19 pandemic on the burden of cardiovascular, malignant and mental diseases among different population groups.

Key messages

- ▶ In Belgrade, COVID-19 had a higher than expected mortality rate for men in 2020.
- Mortality from mental disorders during the pandemic in Belgrade requires further analysis.

Questions?

▶ Thank you for the attention!