

Impact of vaccination on the spread of SARS-CoV-2 infection in north-east Italy nursing homes. A propensity score and risk analysis

Age and Ageing, afab224, <https://doi.org/10.1093/ageing/afab224>, 14 December 2021

Pierobon S, Braggion M, Fedeli U, Nordio M, Basso C, Zorzi M

Background

In the Veneto Region, 421,000 coronavirus 2019 disease (COVID-19) cases and 11,000 deaths have been reported since 21 February 2020. The pandemic spread particularly in nursing homes (NH).

Objective

This study estimated the impact of SARS-CoV-2 infection among NH residents, focusing on the risk of hospitalisation and death due to COVID-19 compared with the general older population. It also provided evidence of risk changes over time.

Methods

Older people, resident in Veneto, were enrolled from the regional registry of the population. We collected also information about demographic characteristics, chronic diseases, COVID-19 positivity, NH institutionalization, hospitalisation and date of death. Patients were assigned to NH or non-NH residents groups through a propensity score 1:1 matching. The follow-up period was defined as 21 February 2020 – 3 May 2021 and then divided into three waves. Risk ratios (RRs) and 95% confidence interval were estimated by using Poisson models with robust estimation of variance.

Results

NH residents showed a higher risk of COVID-19 infection (RR = 6.28; 6.03–6.54), hospitalisation for COVID-19 (RR = 2.20; 2.05–2.36) and death with COVID-19 (RR = 6.07; 5.58–6.61).

Conclusion

NH residents shared common spaces with other patients and healthcare professionals and were more exposed to infections. Nonetheless, in Italy from late December 2020 to May 2021, 95% of NH residents and their healthcare professionals received at least one vaccine dose and RRs for all outcomes decreased in NH.

Keywords

nursing homes, COVID-19, older people, vaccination, north-east Italy

FULL TEXT PER GLI UTENTI REGISTRATI ALLA RIVISTA

<https://academic.oup.com/ageing/advance-article-abstract/doi/10.1093/ageing/afab224/6424572>