

# Healthcare Workers' Vulnerability to SARS-CoV-2 in Western Romania: A Study on Incidence and Risk Factors for Non-Vaccination and Reinfection [Letter]

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#### Dear editor

We were very impressed with the article entitled "Healthcare Workers' Vulnerability to SARS-CoV-2 in Western Romania: A Study on Incidence and Risk Factors for Non-Vaccination and Reinfection". The results of this research have advantages, namely: 1) This study includes all confirmed cases of COVID-19 infection in medical staff during the period 01.01.2021-31.03.2022 in the western region of Romania, which is a professional group vulnerable to infection both in hospitals and in the community, 2) Provides important clinical implications, such as the need for intensive training on preventive behaviors for medical staff, as well as the importance of administering refresher doses to maintain and increase protection against circulating new variants of the coronavirus, 3) Provides practical implications that can be used to improve prevention and control strategies for COVID-19 infection among medical staff. 1

However, we have also discovered several limitations that need to be corrected in the future, namely: 1) This study did not include data related to clinical forms of infection, hospitalization rates, or long-COVID status, which could provide a more complete understanding of the impact of infection on medical staff, 2) Sequencing data was not included to confirm the type of viral variant causing the infection, which could provide insight into variants circulating among medical staff, 3) There was limited information on comorbidity data, which may affect the analysis of risk factors and severity of infection (indicating potential under-reporting), 4) The study did not monitor anti-spike/anti-nucleocapsid antibody levels for post-vaccination or post-infection protection, 5) The study did not include observations related to the type of vaccine used, level of adherence to hygiene protocols, or environmental factors that may influence infection risk.

To obtain better results, we recommend that further research be carried out by 1) Collecting more complete data on clinical forms of infection, hospitalization rates, long-COVID status, and comorbidities will provide a better understanding of the impact of infection on medical staff, 2) Incorporating sequencing data to confirm the type of viral variant causing the infection will provide insight into the variants circulating among medical staff,<sup>2</sup> 3) Monitoring anti-spike /anti-nucleocapsid antibody levels for post-vaccination or post-infection protection will provide additional information on medical staff immunity to COVID-19,<sup>3</sup> 4) More in-depth observations regarding vaccination history, type of vaccine used, level of adherence to hygiene protocols, and environmental factors that may affect infection risk will provide more comprehensive insights.

## **Disclosure**

The author reports no conflicts of interest in this communication.

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## References

1. Gal-Nădăşan E-G, Popescu I-M, Bădițoiu LM, et al. Healthcare workers' vulnerability to SARS-CoV-2 in Western Romania: a study on incidence and risk factors for non-vaccination and reinfection. Int J Gen Med. 2023;16:5621-5632. doi:10.2147/IJGM.S442098

- 2. Goswami C, Sheldon M, Bixby C, et al. Identification of SARS-CoV-2 variants using viral sequencing for the centers for disease control and prevention genomic surveillance program. BMC Infect Dis. 2022;22:1-12. doi:10.1186/s12879-022-07374-7
- 3. Dobaño C, Jiménez A, Rubio R, et al. Spike-based COVID-19 immunization increases antibodies to nucleocapsid antigen. Transl Res. 2022;240:26-32. doi:10.1016/j.trsl.2021.10.004

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