

Reply Letter – SARS-CoV-2 infection and H1N1 vaccination: does a relationship between the two factors really exist? A retrospective analysis of a territorial cohort in Ferrara, Italy

S. GRECO¹, A. DE GIORGI², N. FABBRI³, A. PASSARO¹

¹Department of Translational Medicine, University of Ferrara, Ferrara, Italy

²Medical Department, University Hospital of Ferrara Arcispedale Sant'Anna, Italy

³Department of General Surgery, Ospedale del Delta, Azienda Unità Sanitaria Locale Ferrara, Italy

Greco Salvatore and De Giorgi Alfredo equally contributed to the development of this letter

Dear Editor,

We thank Prof. Candelli and Pignataro for this letter. We read with interest also their article¹ about the role of influenza vaccination towards COVID-19. They analyzed 602 patients admitted to the Emergency Department of the “Policlinico Gemelli” in Rome, highlighting how the previous influenza vaccination resulted to be protective towards the 60-day death (OR=0.2; 95% CI 0.082-0.510, $p<0.001$) but not towards the need for endotracheal intubation. They examined exclusively hospitalized patients with COVID-19, differently from our work², which evaluates a cohort of both hospitalized and home-isolated patients. A substantial difference between the two studies concerns the correction factors applied: we could not collect anamnestic information from home-isolated subjects, and thus, we decided not to include comorbidities in the analyses. This surely represents a limitation, differently from Candelli's work¹, which considers also patients' comorbidities.

Another difference is about the age of subjects, the main cause of death in our patients; vaccinated patients are, undoubtedly, older and with a greater load of comorbidities and this was evident in our work (75±17 vs. 51±19 years; $p<0.001$); aging contributes to the higher mortality rate of vaccinated patients. In addition, the population examined in our study is that of a single province where “aging” represents a much more pressing indicator, compared with the province of Rome (aging index 262% vs. 164%; Italian average 179.4%)³.

We agree with Candelli et al in considering comorbidities among the most important items to evaluate in COVID inpatients; our group highlighted it in a previous article concerning COVID inpatients in March and April, 2020⁴. We also agree about the general importance and medical utility of vaccinations, as specified in our article; however, limitedly to our study, we cannot express ourselves positively about the protective role by influenza vaccination towards the prognosis of SARS-CoV-2 infection.

Conflict of Interest

The Authors declare that they have no conflict of interests.

References

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