

## Antivaccination attitudes and intention to take COVID-19 vaccine in Croatian adult population

Ivan Miskulin

M Miskulin<sup>1</sup>, K Gavranic<sup>1</sup>, T Domacinovic<sup>1</sup>, N Pavlovic<sup>1</sup>, I Vukoja<sup>1</sup>, I Miskulin<sup>1</sup>

<sup>1</sup>Department of Public Health, Faculty of Medicine Osijek, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia  
Contact: ivan.miskulin@mefos.hr

### Background:

COVID-19 vaccine is an effective choice to stop the pandemic. To improve COVID-19 vaccination coverage the better understanding of factors influencing individual intention of vaccination is needed. Antivaccination attitudes (AAs) are important predictors of vaccination behaviour. The aim of this study was to investigate the intention to take COVID-19 vaccine in Croatian adult population and to evaluate factors that influence such intention with emphasis on AAs.

### Methods:

This cross-sectional questionnaire study was conducted during the June 2020 to December 2020 in convenient sample of adults from Split-Dalmatia County at the primary health care setting. Vaccination Attitudes Examination scale (VAX) was used to assess AAs.

### Results:

The study sample consisted of 632 subjects (52.7% males and 47.3% females). The median age of all subjects was 38.0 (interquartile range (IQR) 29.0 - 48.0) years. The overall prevalence of intention to take COVID-19 vaccine was 46.8%. Males and subjects living with the partner more frequently expressed intention to take COVID-19 vaccine ( $P=0.001$  and  $P=0.015$  respectively). The study revealed fair negative correlation between AAs and intention to take COVID-19 vaccine ( $\rho=-0.453$ ;  $P<0.001$ ). Subjects who did not intend to take COVID-19 vaccine demonstrated larger mistrust of vaccine benefits, more worries over unforeseen future effects, more concerns about commercial profit and larger preference for natural immunity ( $P<0.0001$ ,  $P<0.0001$ ,  $P<0.0001$ ,  $P<0.0001$ , respectively).

### Conclusions:

The study showed fairly low proportion of subjects who intended to take COVID-19 vaccine. The study revealed that gender, marital status, and AAs are good predictors of intention to take COVID-19 vaccine in study population. The good predictors of intention to take COVID-19 vaccine in Croatian adult population should be considered during COVID-19 vaccination popularization strategies development.

### Key messages:

- The structured communication campaigns on COVID-19 and COVID-19 vaccines should be developed and directed specifically to all target groups for vaccination.
- Understanding the factors that could improve the acceptance of COVID-19 vaccination is crucial to design effective vaccination program.