

Pharmacists' vaccine basic knowledge and attitudes in the RN Macedonia

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Introduction

Immunization is an important part of the public health and primary health care system. It is the most cost-effective health investment from a financial point of view. There are more than 20 vaccine preventable diseases life-threatening diseases, which allow people to live longer and better lives.

According to International Pharmaceutical Federation (FIP) community pharmacy based vaccinations are available in at least 36 countries and territories, indicating that 1.8 billion people can access vaccination services at a community pharmacy (FIP, 2020).

The aim of the conducted study was to evaluate the basic knowledge of pharmacists and pharmacy technicians in RN Macedonia related to the vaccines and vaccination

Materials and methods

The questionnaire was designed and structured and clarity, complexity and understanding of questions and answers in form of pilot survey were performed in period of one week beginning on 10.04.2022. The final form of questionnaire was distributed as on-line survey between 18.04-05.05.2022 via Google forms platform. The 34 questions were assigned in 2 categories, RN Macedonia pharmacists' socio-demographic characteristics and knowledge, opinions and attitudes related to vaccines.

Results and discussion

The survey was completed by 116 pharmacists and pharmacy technicians of whom 91.4% were female. The average age was 34.7±8.6 years. Graduated pharmacists were 53.4%, while 21.6% and 23.3% were with postgraduate and secondary level of education, respectively. Almost half of the responders (46.6%) were community pharmacists while 27.6% were pharmacy technicians employed at community pharmacies

More than 2/3 of the respondents in this survey considered that vaccines against COVID-19 should not be mandatory. From the total number of vaccinated (~ 73%) around 27% received Sinovac/Sinopharm, 24% are vaccinated with Sputnik and 21% received the Pfizer/BioNTech vaccine. Nearly half of the survey respondents (54.3%) did not have opportunity to choose the type of vaccine. (Fig.1)

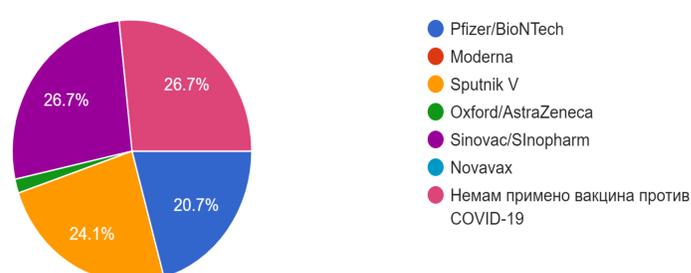


Figure 1. Vaccine received by the respondents

Approximately one fourth of the surveyed answered that they are not vaccinated. (Fig. 2) The most common reason (~26%) for the refusal is anticipation that despite the vaccine they would still face the risk for COVID-19 infection. Other reasons were: short time for vaccine development (18.1%), small number of people enrolled during clinical testing (19%), concerns about vaccines' safety and possible long term side effects (17.2%) and disbelief in vaccine efficacy in general (9.5%).

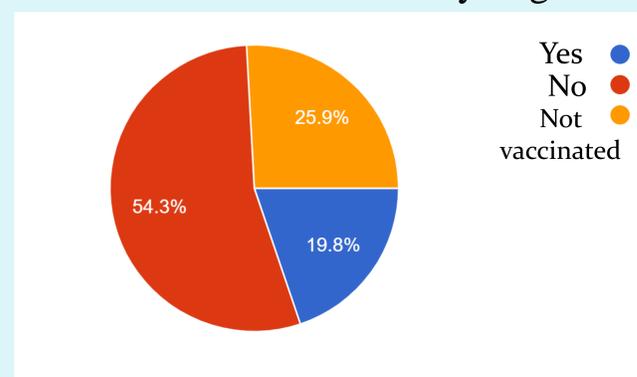


Figure 2. Presentation of respondents that have opportunity to choose the type of Covid-19 vaccines and respondents that claimed that are not vaccinated

Out of 116 respondents, 76.7% strongly agree or agree that they want to help in improvement of COVID-19 prevention. High percentage of responders (69.8%), won't accept enrolment in COVID-19 vaccines clinical trial. (Fig. 3)

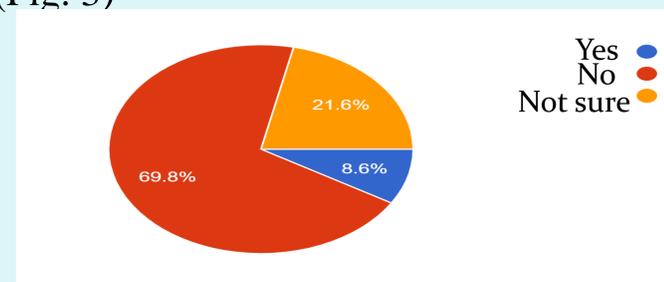


Figure 3. Respondents that would participate in clinical trial for Covid-19 vaccines

Conclusion

According to the obtained results, the surveyed population acknowledges benefits of vaccination for public health. Generally, they are familiar with the new vaccine types available at the market. However, large majority do not appraise vaccination in the community pharmacy setting. Instead, they have positive consent to perform other non-invasive services to patients in a pharmacy.

References

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