

Complications following COVID-19 infection or vaccination in LIMU's students and their families.

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Introduction

- Coronavirus disease (COVID-19), an infectious disease, caused by a novel strain belonging to the genus Beta Coronavirus named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).
- It is a single-stranded RNA (ssRNA) virus with a crown-like appearance, hence the name (Corona is the Latin term for "crown").
- It was dramatically spread worldwide, emerging as a major pandemic.
- The initial outbreak was first reported in Wuhan, China, in early December 2019 and has since spread to every country worldwide, resulting in more than 1.45 million deaths globally as of November 2020.

- The official declaration of the first case of COVID-19 in Libya was made on March 24, 2020.
- The vaccination program began in early December 2020. There have been at least 13 different vaccinations delivered across four platforms.
- As of October 2, 2022, a total of 3,716,080 vaccination doses has been delivered in Libya.
- As a result of COVID-19 infections and vaccines, the population had numerous major problems, including psychological, cardiac, neurological, respiratory, and other disorders.

- Since the emergence of COVID-19, there have been no previous published studies regarding vaccination outcomes or post- COVID-19 complications in Libya; however several studies have been constructed in countries such as Saudi Arabia, America, and Sudan.
- This study aims to highlight the important associations between SARS-CoV-2 infection, vaccination, and the possible complications at the Libyan International Medical University, Benghazi.

Methodology

- A cross-sectional survey took place at the Libyan International Medical University (Benghazi) among the students and their families from February 24 to March 10, 2023.
- A 15-item questionnaire was used to collect the data designed by the team. It was provided in English on campus. The participants were noted that their participation was entirely voluntary and that their replies would be kept anonymous and confidential.
- The sample size was 100 participants. After the data was collected, it was analysed using IBM SPSS Statistics version 21.

Results

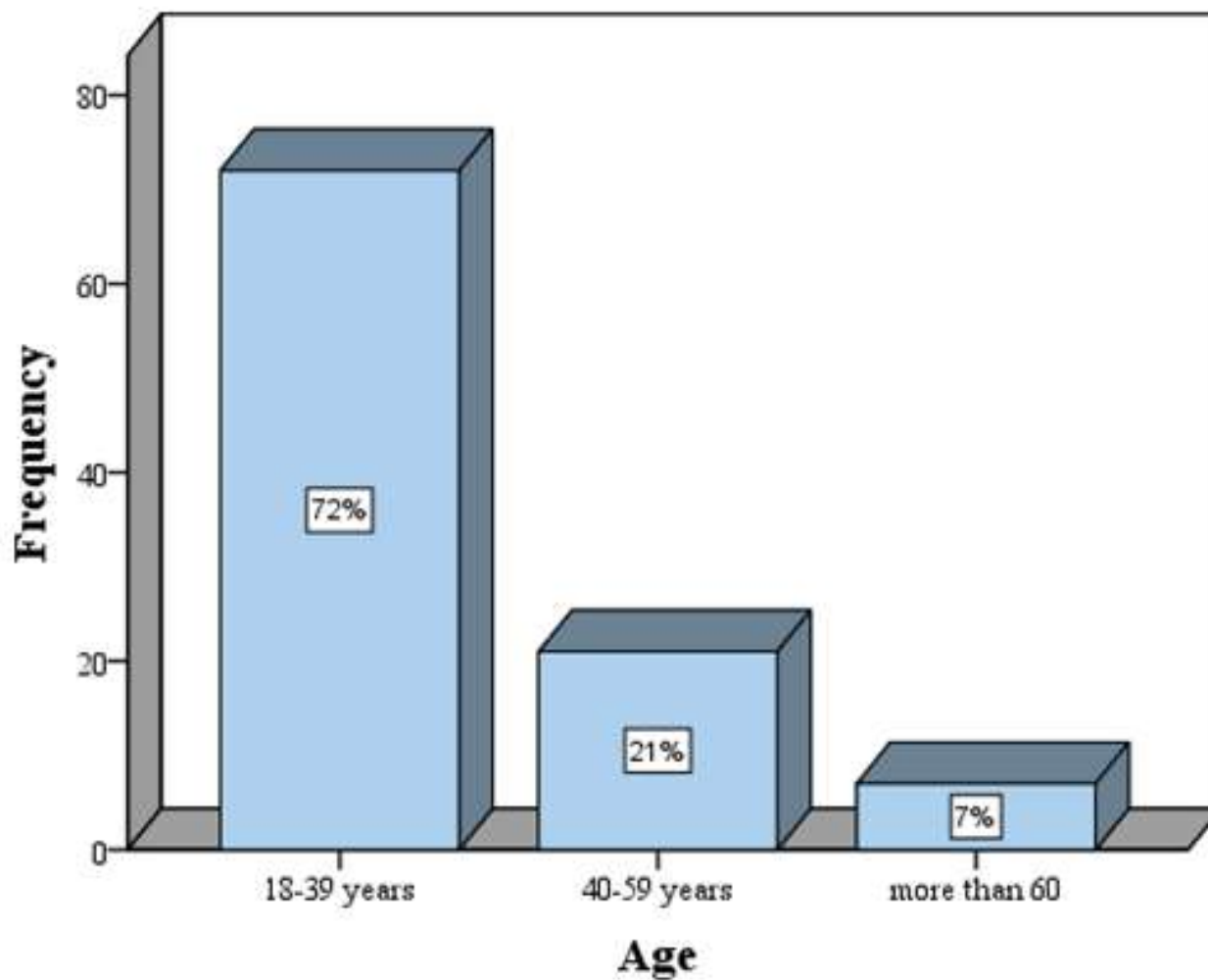


Figure 1. Demonstrate the age group in years.

Results

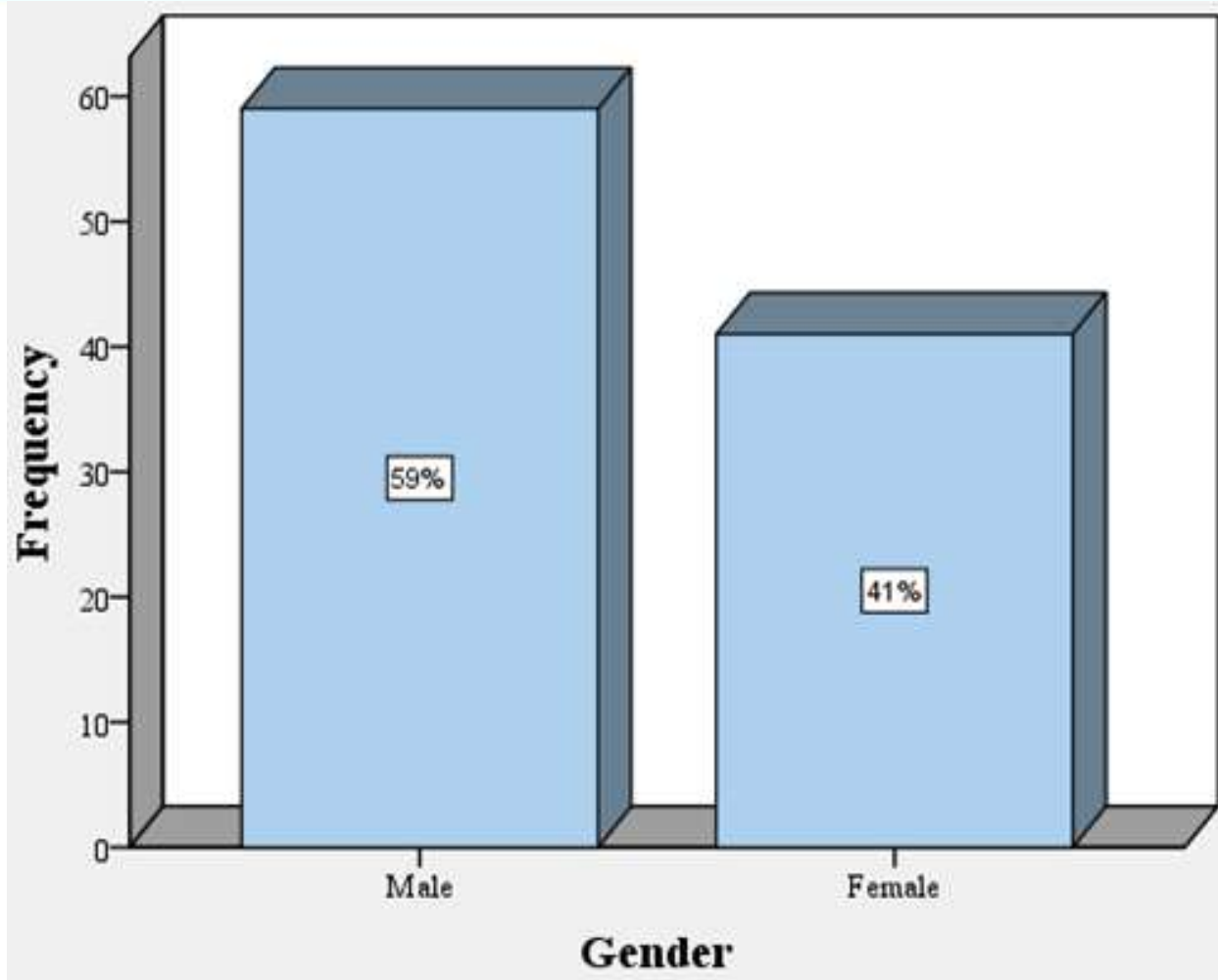


Figure 2. Demonstrate the gender – specific.

Results

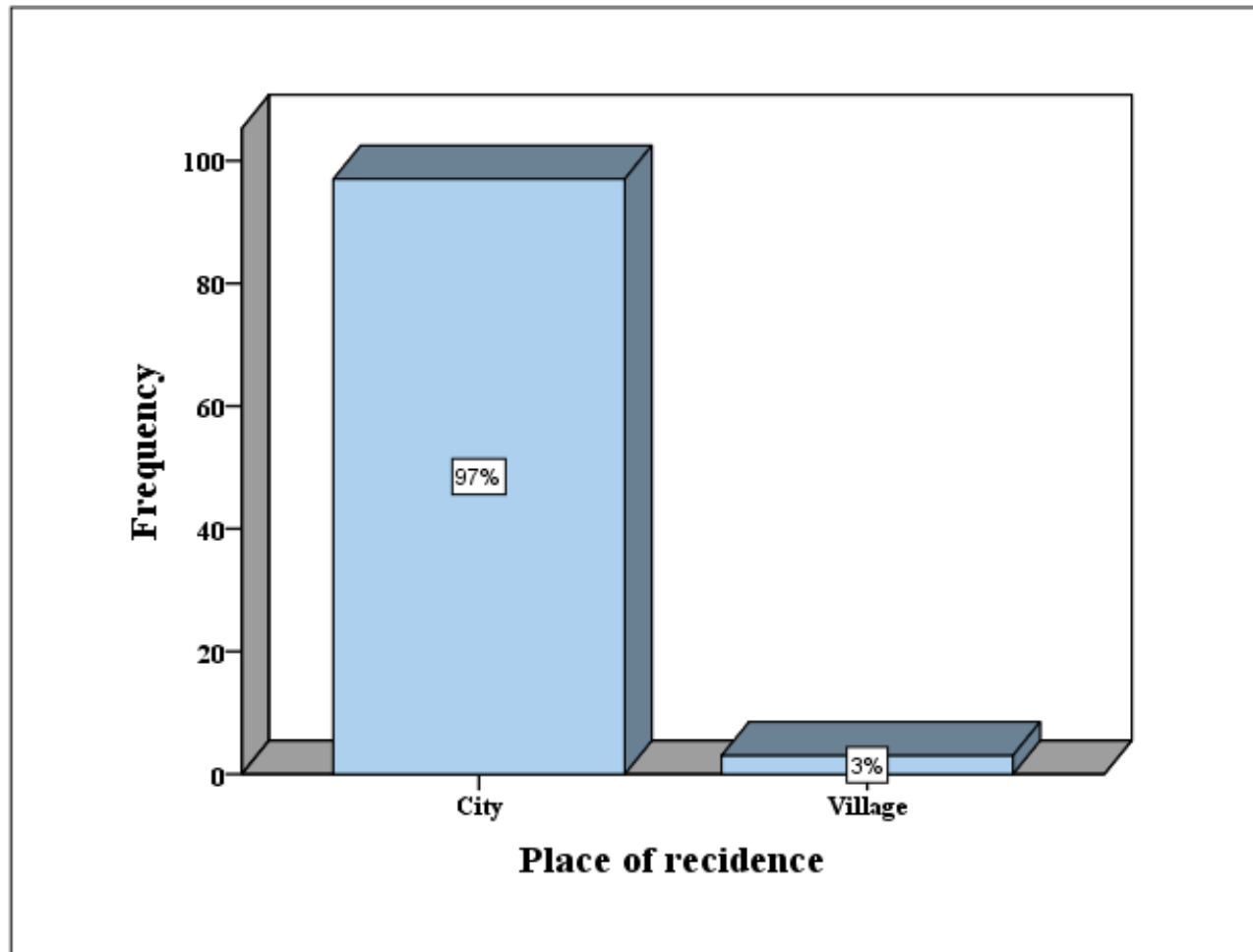


Figure 3. Demonstrate the place of residence.

Results

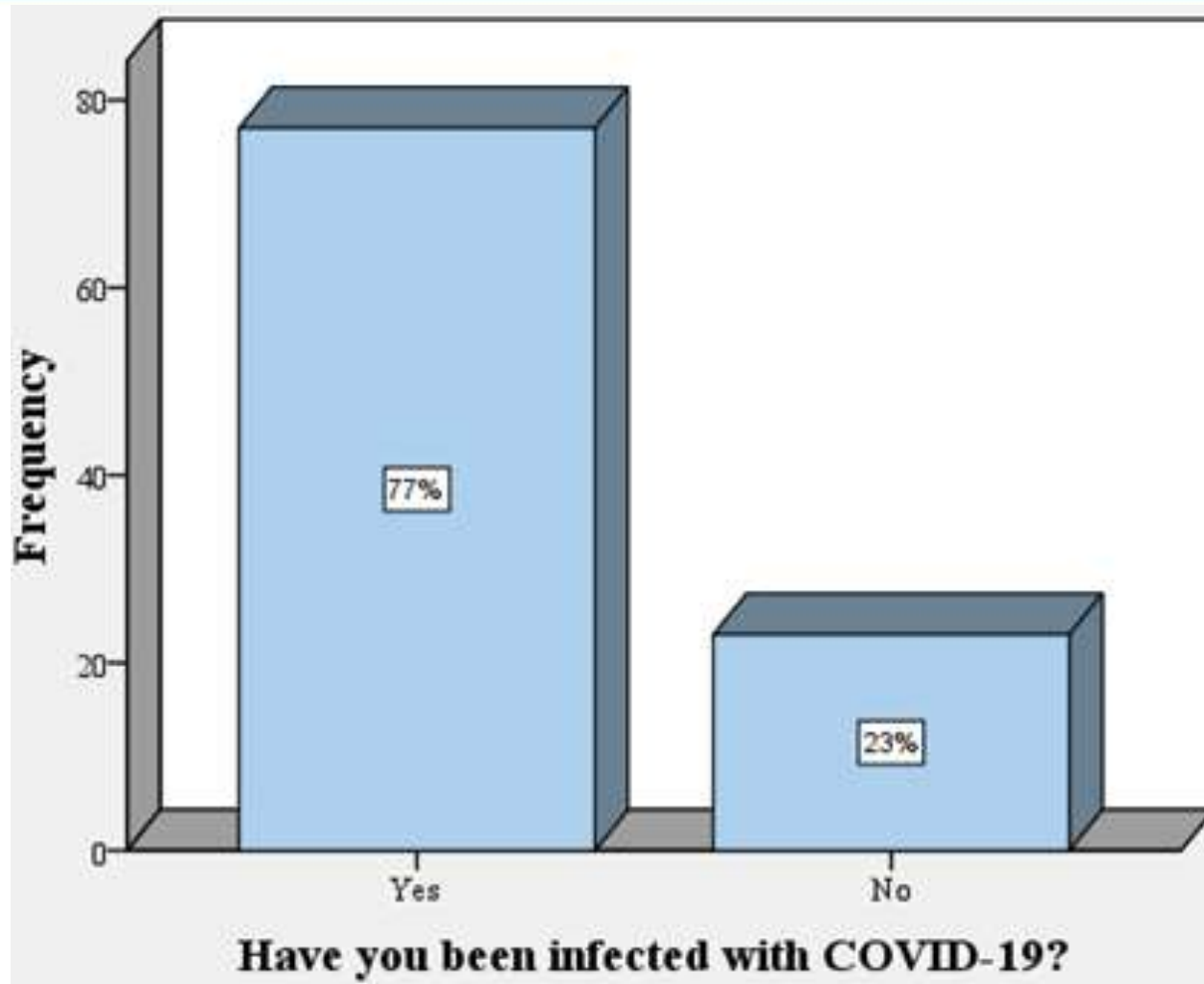


Figure 4. Demonstrate how many people were infected with COVID 19.

Results

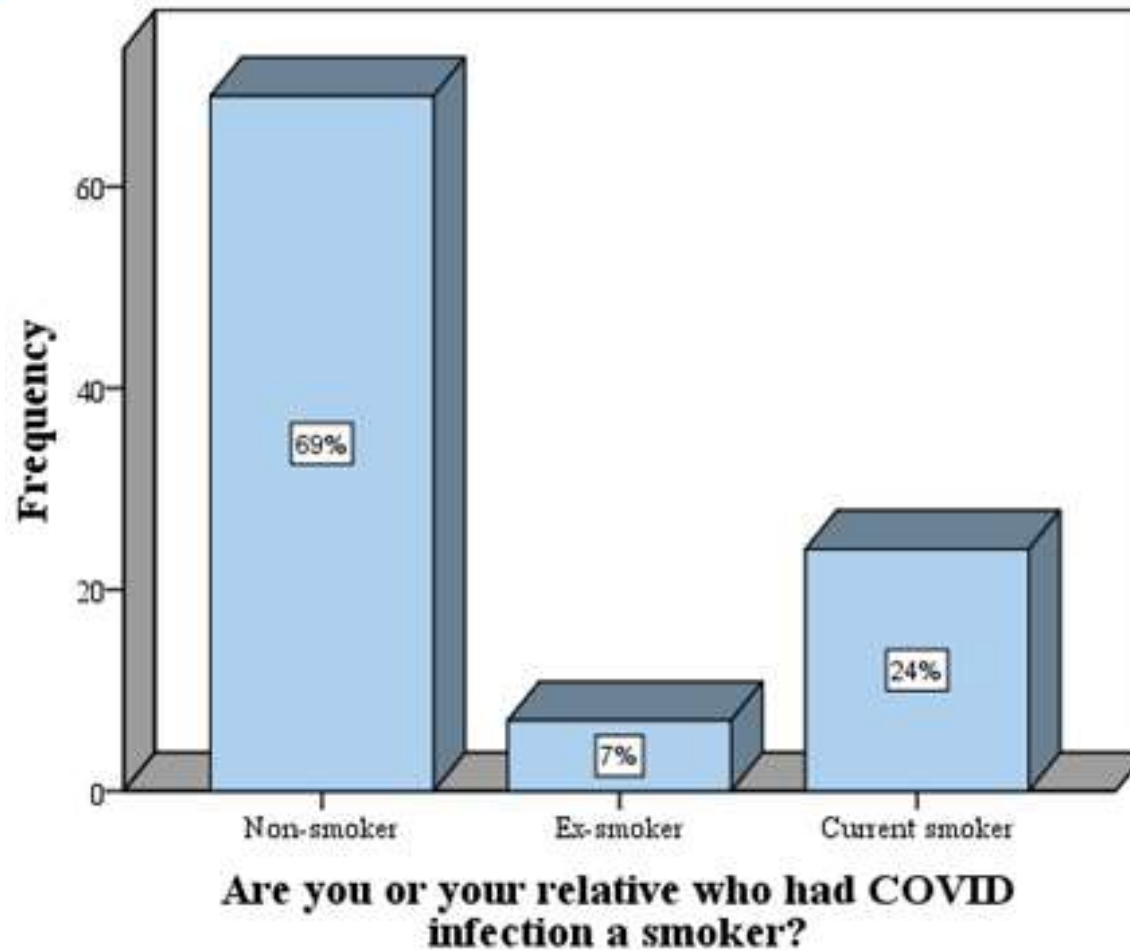


Figure 5. Demonstrate the smoking status of participants.

Are you or your relative who had COVID infection suffering from any chronic disease?

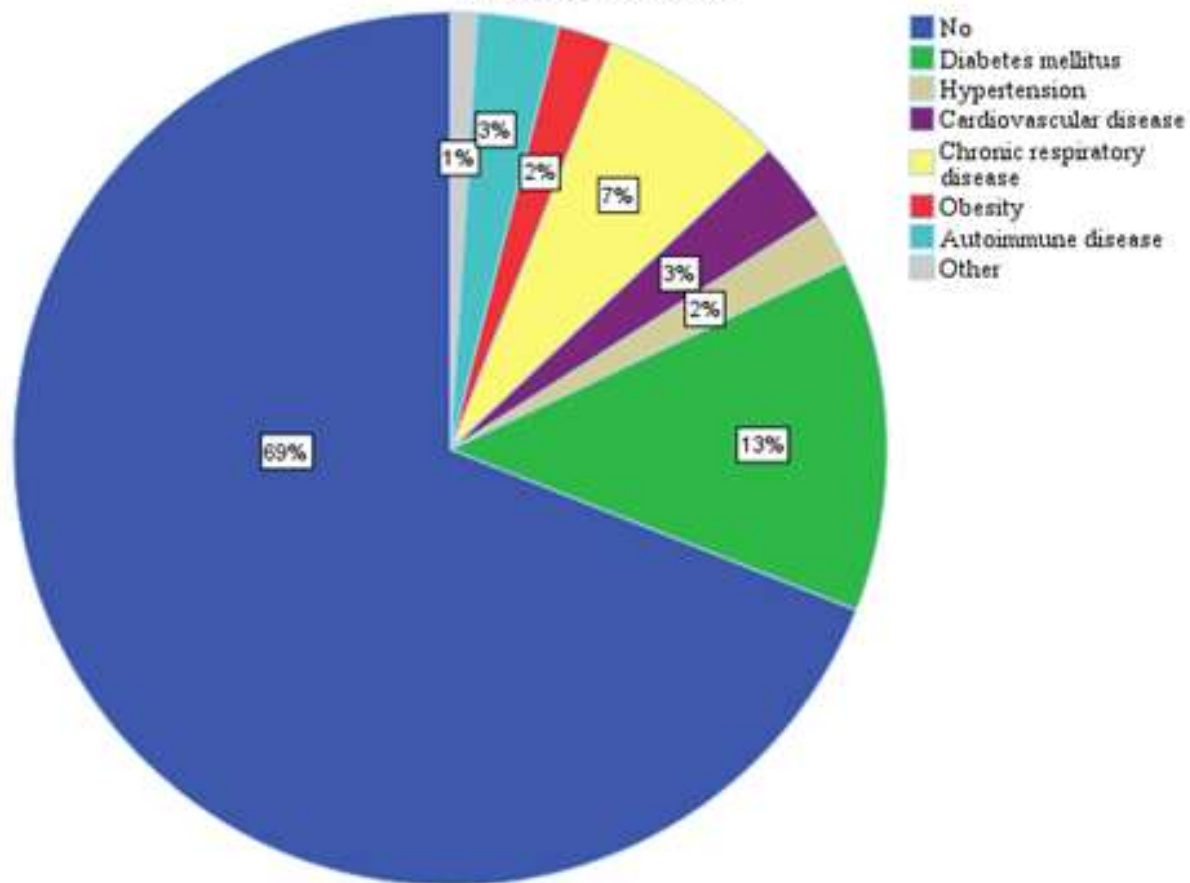


Figure 6. Demonstrate the number of people suffering from chronic diseases.

Results

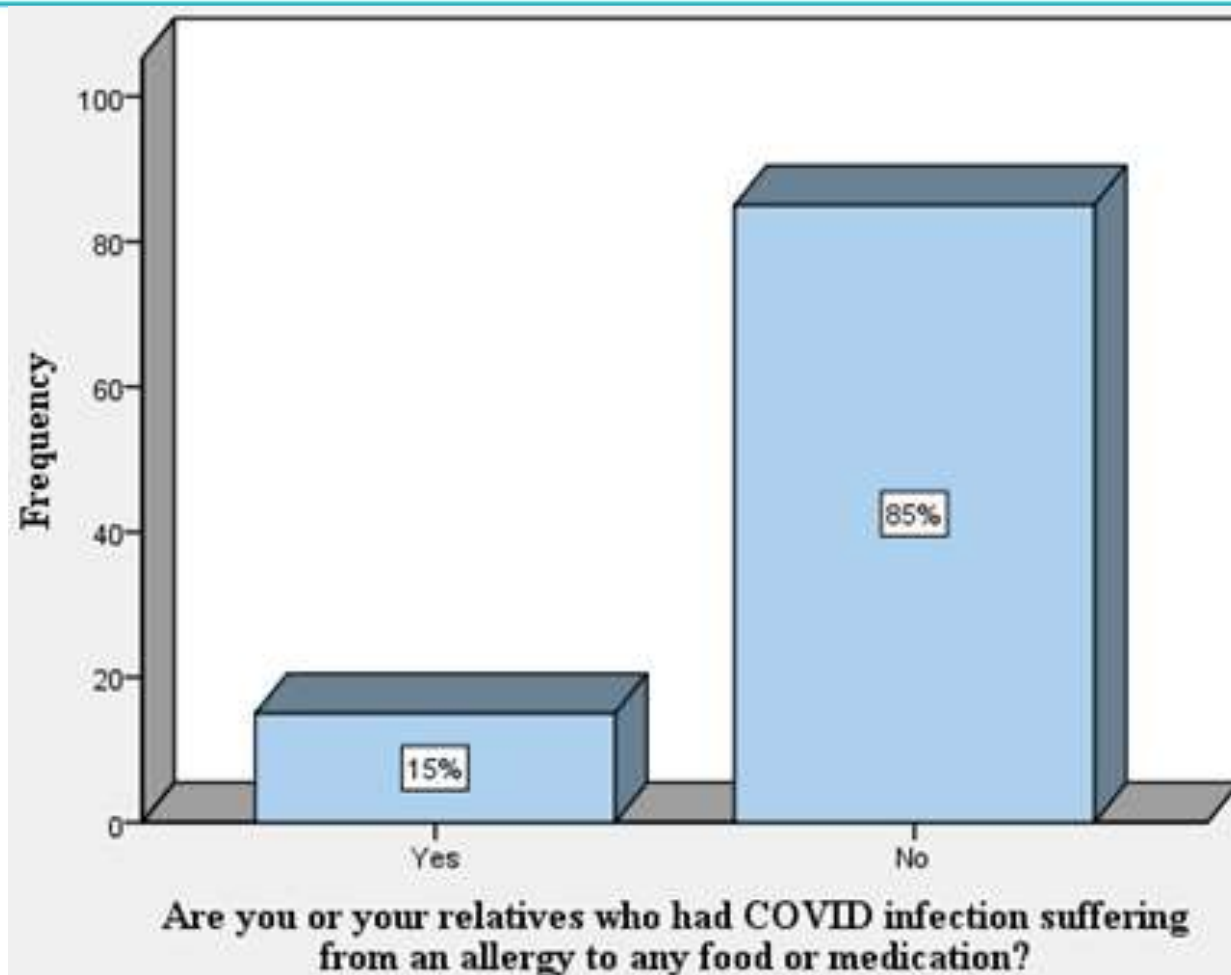


Figure 7. Demonstrate the number of people suffering from allergies to any food or medicine.

Results

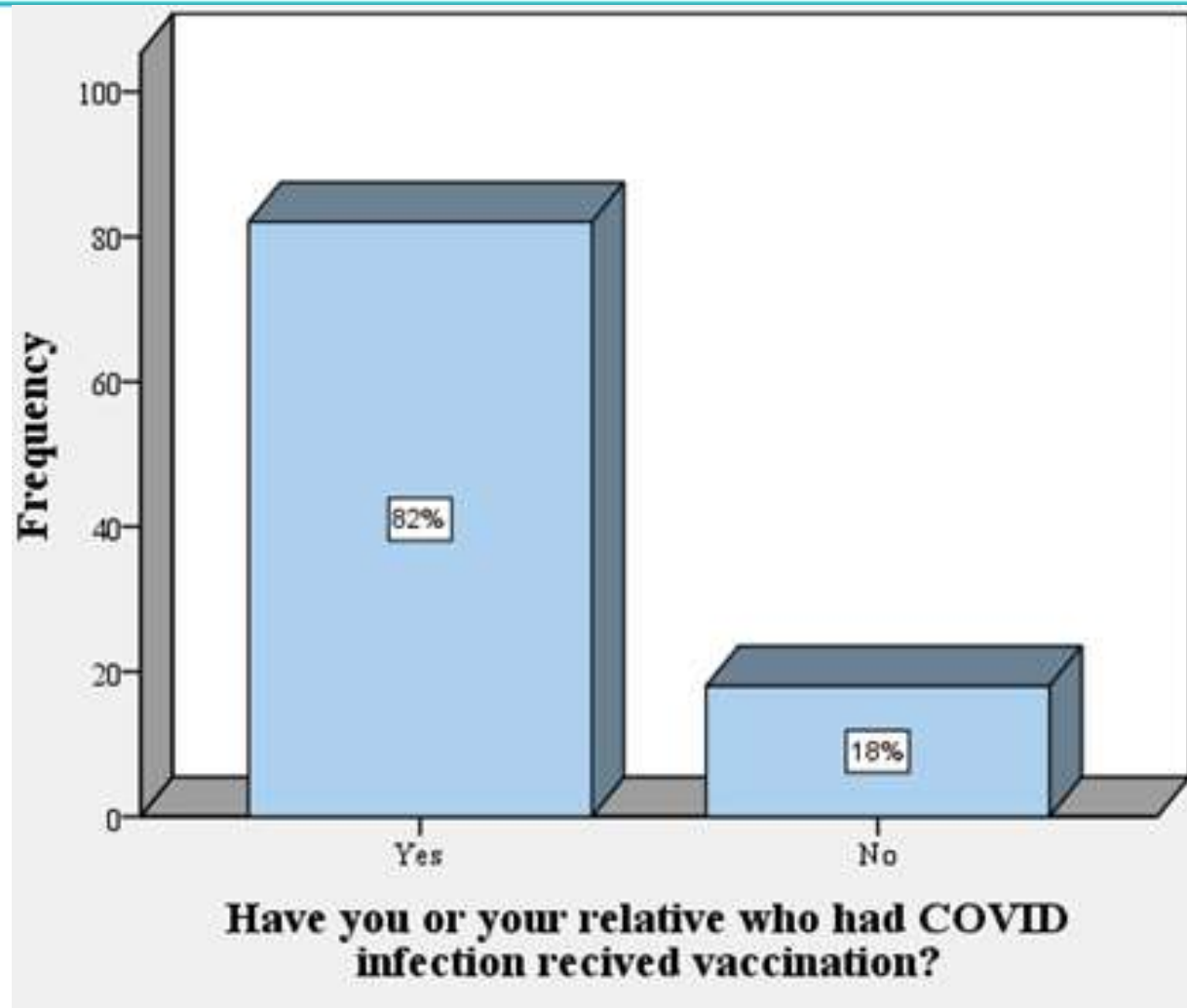


Figure 8. Demonstrate the number of people who received the vaccination.

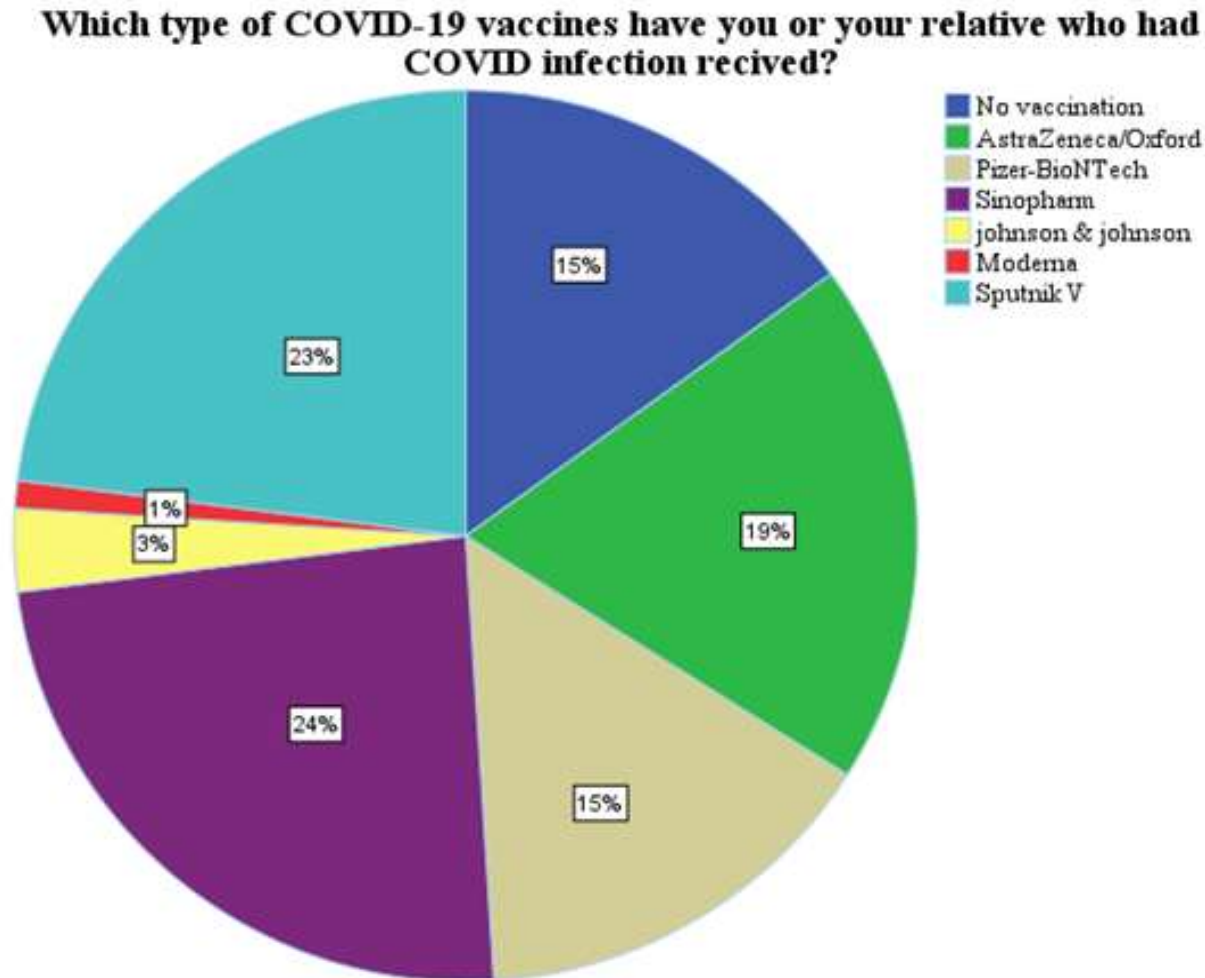


Figure 9. Demonstrate the type of vaccine received.

Results

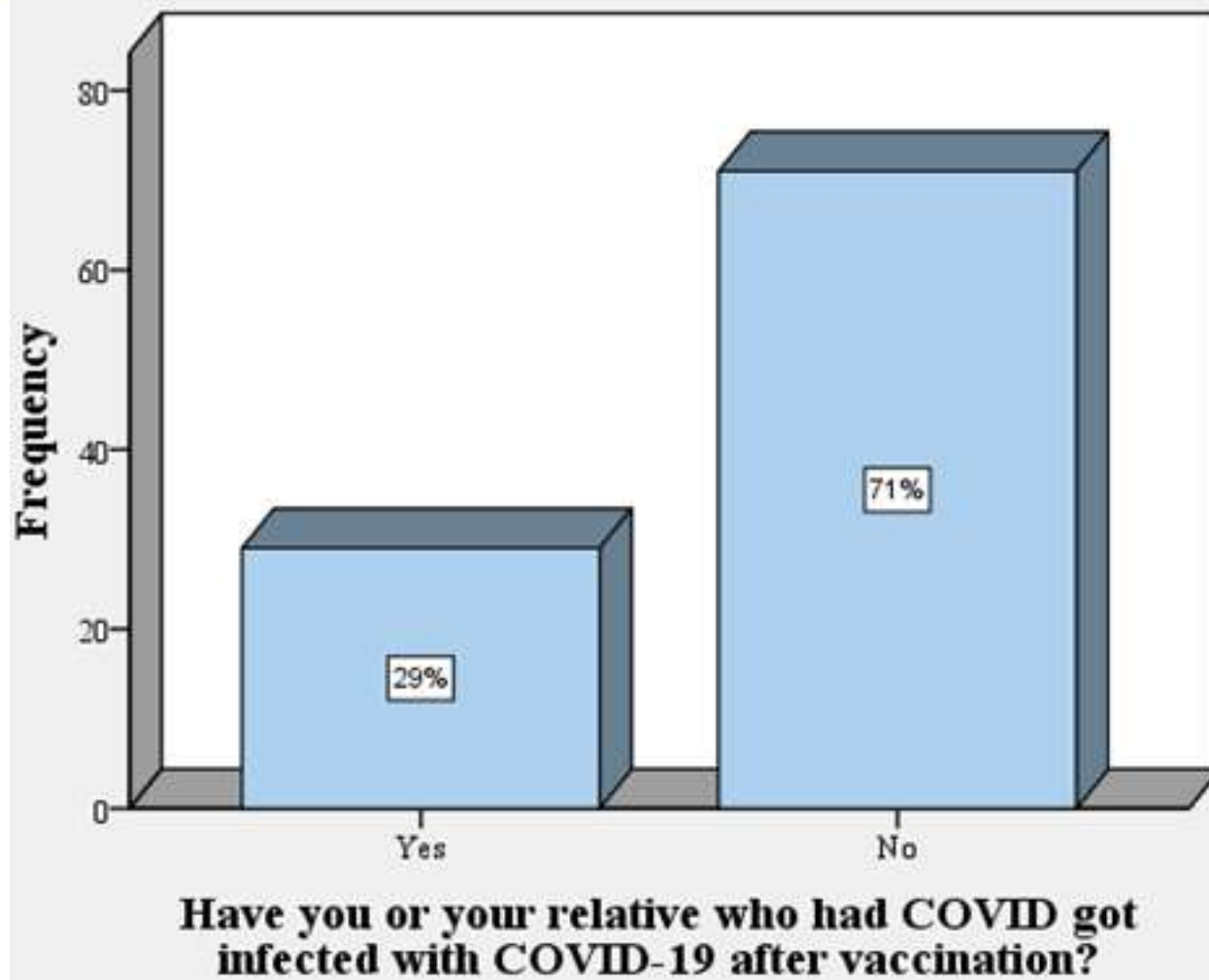


Figure 10. Demonstrate the number of people who were infected after the vaccination.

Results

Have you or any of your relative noticed any complications following covid infection?

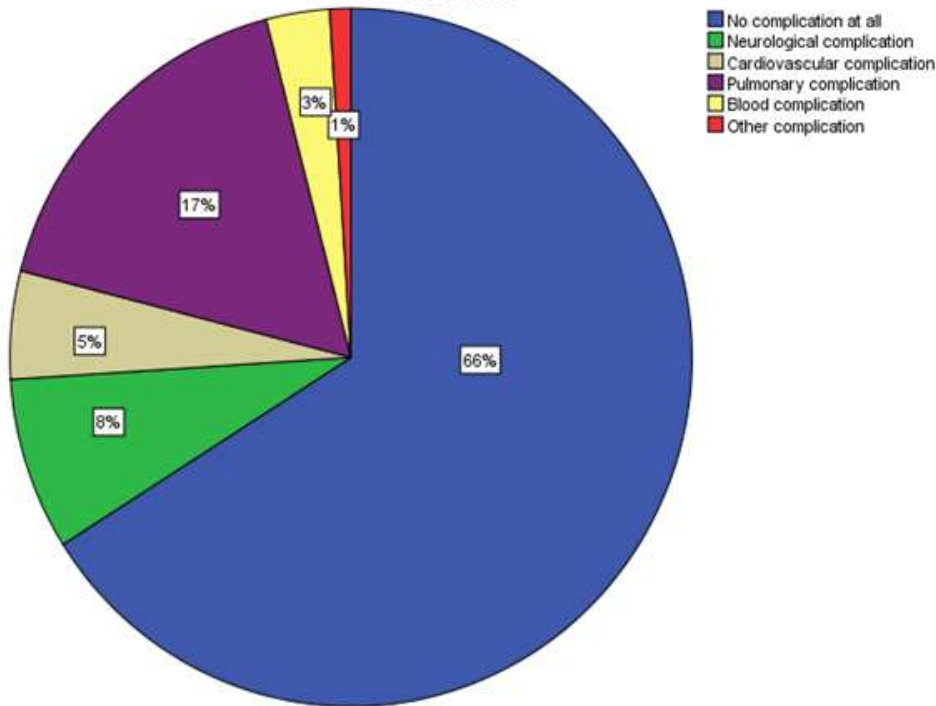


Figure 11. Demonstrate the number of people who had complications after COVID-19 infection .

Have you or any of your relative noticed any complications following COVID vaccination?

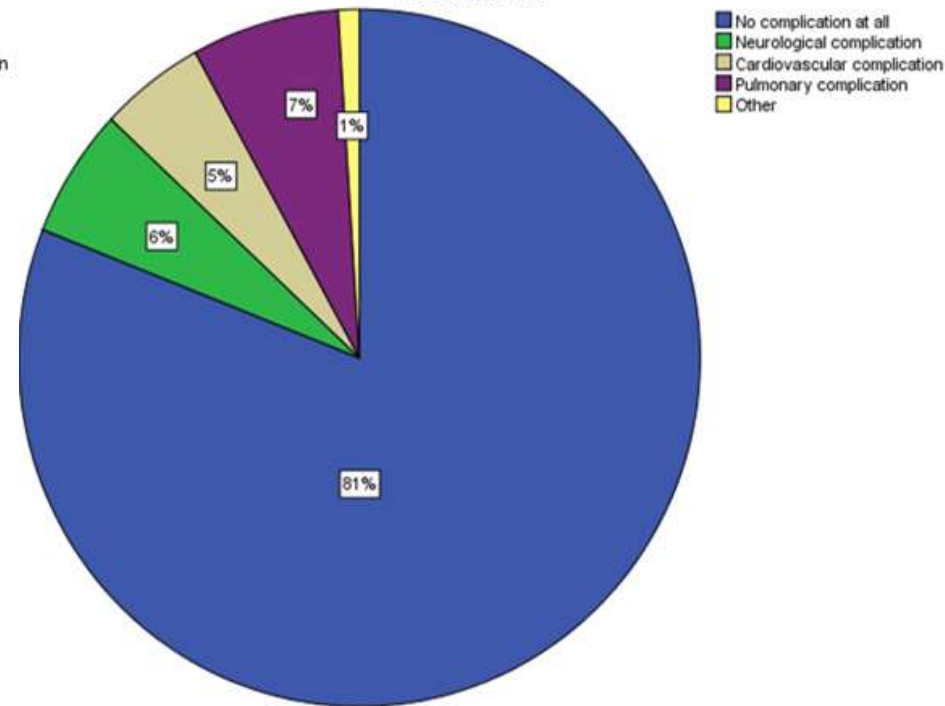


Figure 12. Demonstrate the number of people who had complications after COVID-19 vaccination.

Conclusion

- According to the results presented in this study, the average age of participants was between 18-39 years.
- Males contribute somewhat more than females, and city residence exceeds the others.
- 69% of the applicants were non-smokers, and 24% are current smokers.
- Approximately 70% had already been infected with COVID, and the majority also got the vaccination.

- Sinopharm and Sputnik vaccines were most commonly administered. After vaccination, less than 30% suffered from Covid-19, and over 70% were Covid-free.
- When questioning the chronic disease they suffered from, the majority had no comorbidities, whereas out of the others listed, diabetes mellitus was also high.
- Only 15% of participants had some type of allergy, penicillin being the most noted.

- Interestingly, our results demonstrated that most of the participants had no complications, and of those who did, pulmonary complications were the most prevalent.
- More complications were noted post-covid compared to post-vaccination.
- Lastly, the future perspective of this study would be to encourage further studies in Libya and obtain more data to ensure general health post-COVID-19 infection and post-vaccination.

Reference

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Thank you.