

Determinants of COVID-19 Vaccine Acceptance among Nigerian Adults

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BACKGROUND

- The COVID-19 pandemic has significantly impacted Nigeria, posing immense challenges to Public Health, healthcare systems, and socioeconomic well-being.
- As of August 2021, WHO COVID-19 Dashboard global epidemiological indices revealed that Nigeria was the 5th most-affected African country, with 188,880 confirmed cases and 2,228 deaths that resulted from the infection.
- Studies have identified vaccine hesitancy as a significant barrier to COVID-19 vaccine acceptance in Nigeria.
- Research by Olagoke et al. (2021) found that concerns about vaccine safety, efficacy, and mistrust in government and pharmaceutical companies were common reasons for hesitancy among Nigerians
- Access to healthcare services, including vaccination centers and information about COVID-19, has emerged as a critical determinant of acceptance.

OBJECTIVES

- To determine vaccine risk perception and perceived safety among Nigerian adults.
- To determine the level of acceptance of COVID-19 vaccines among Nigerian adults.
- To identify the factors associated with acceptance of COVID-19 vaccine.

METHODS

Study Design and Sample Size:

- A descriptive-cross-sectional study.
- 384 respondents were enrolled.

Study population: Nigerian Adults aged 18 years and above.

Data Collection Procedure: A well-structured questionnaire was developed and sent out to all eligible participants who self-administered them through hand-written formats or Google forms.

Covariates: sociodemographic and socioeconomic characteristics, risk perception, perceived safety, and effectiveness of the vaccine.

Main Outcome: COVID-19 vaccine acceptance.

Statistical Analysis:

- Descriptive statistics was used to summarize respondents' characteristics.
- The risk perception scale section was scored, and the mean score was used as the cutoff point, < mean = "Low risk", >= mean score "High risk."
- The perceived safety section scale section was scored. The mean score was used as the cutoff point, < mean = "Not safe," >= mean score= "safe."
- Chi-square test and Univariate Logistic regression were used to assess the relationship between covariates and the outcome variable via bivariate analysis.
- Multivariable logistic regression was used to explore the relationships between respondents' characteristics, risk perception, perceived safety effectiveness of the vaccine, and COVID-19 vaccine acceptance.

Ethical Approval: Ethical approval for this study was obtained from the Institute for Advanced Medical Research and Training (IAMRAT), College of Medicine, University of Ibadan, Ibadan, Nigeria, with the reference number **UI/EC/21/0131**.

RESULTS

Figure 1: Acceptance of COVID-19 vaccine.

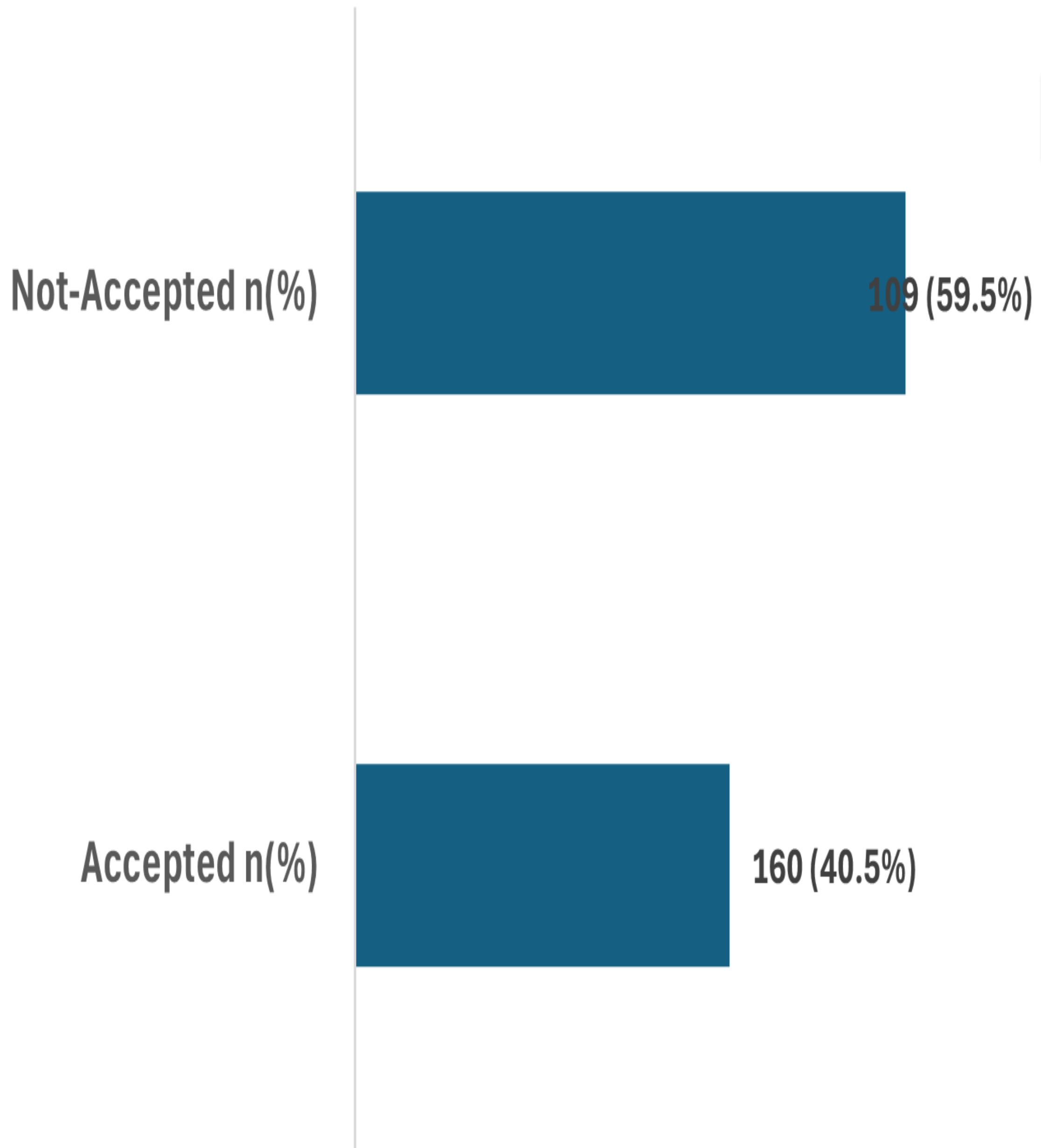


Figure 2: Perceived safety and effectiveness of vaccines.

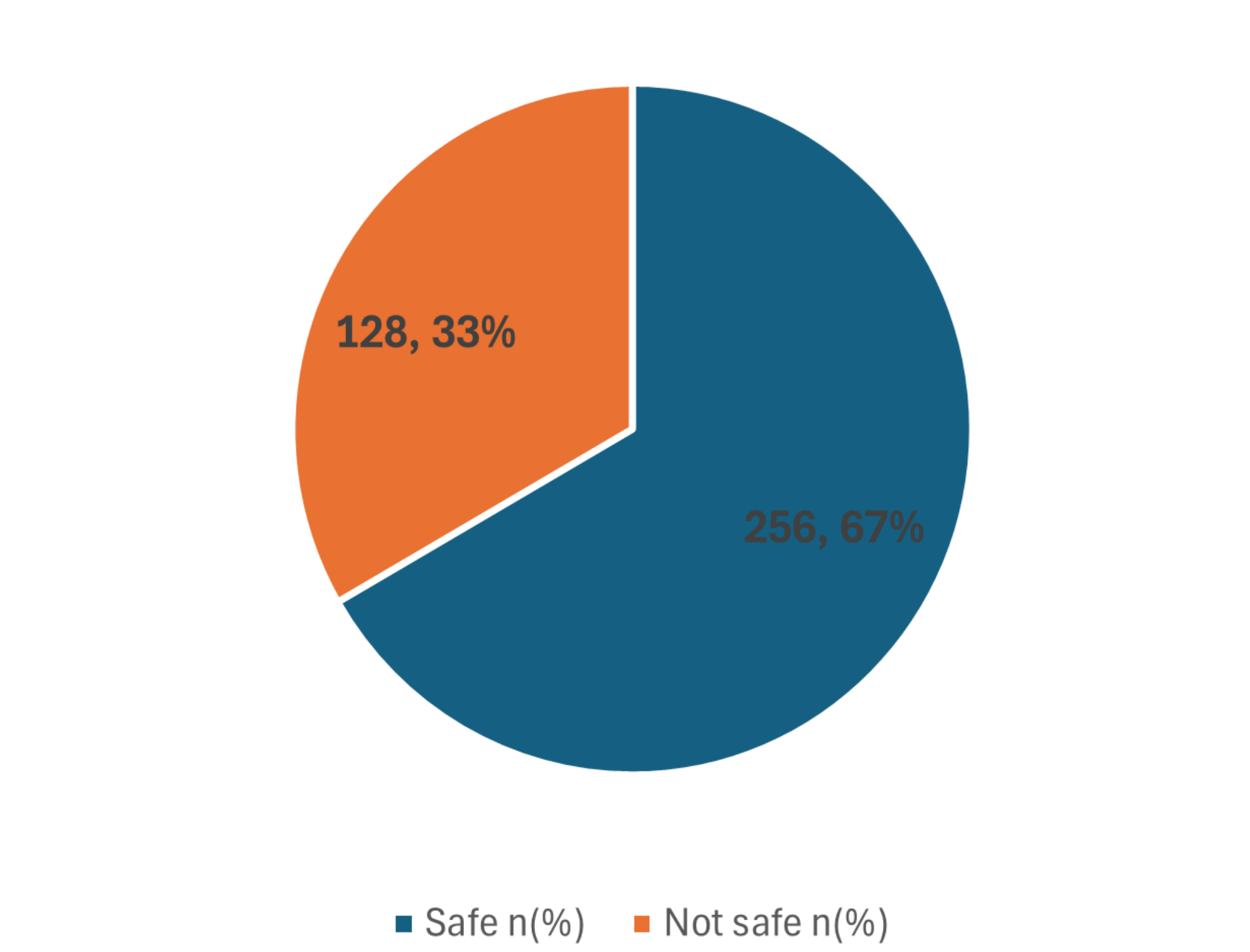


Figure 3: Respondent's risk perception on COVID-19.

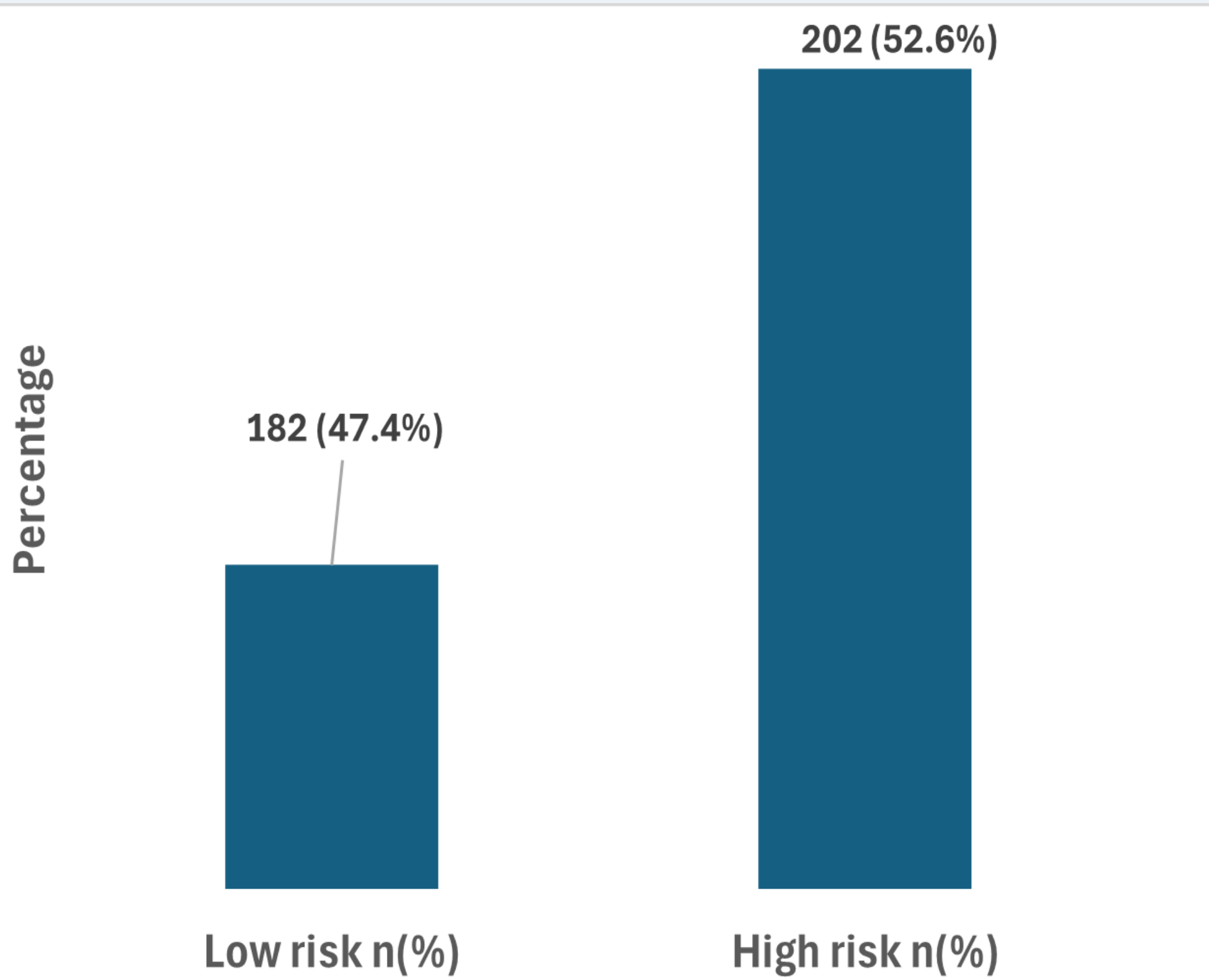


Figure 4.: Common side effects experienced from COVID-19 vaccine.

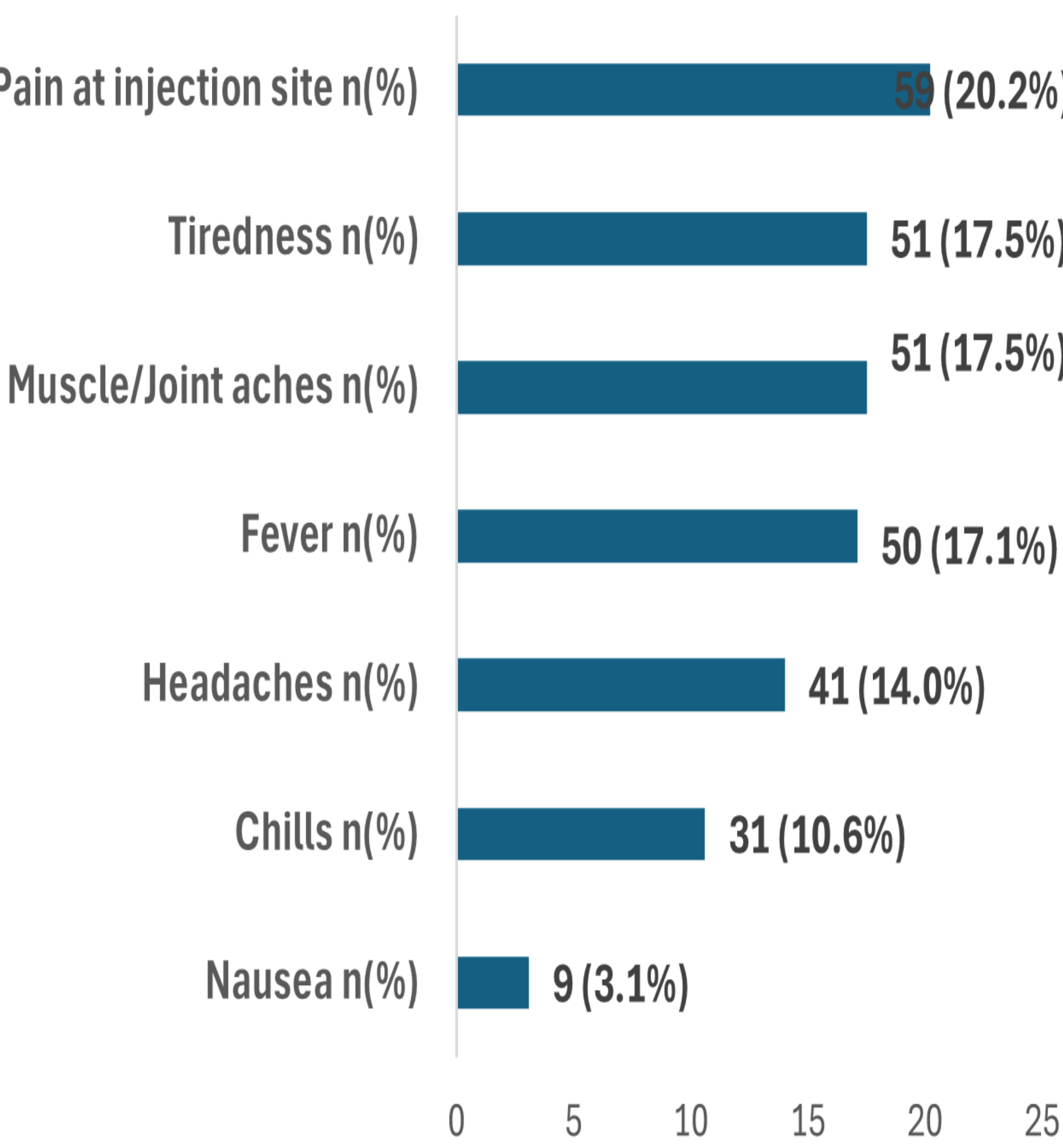
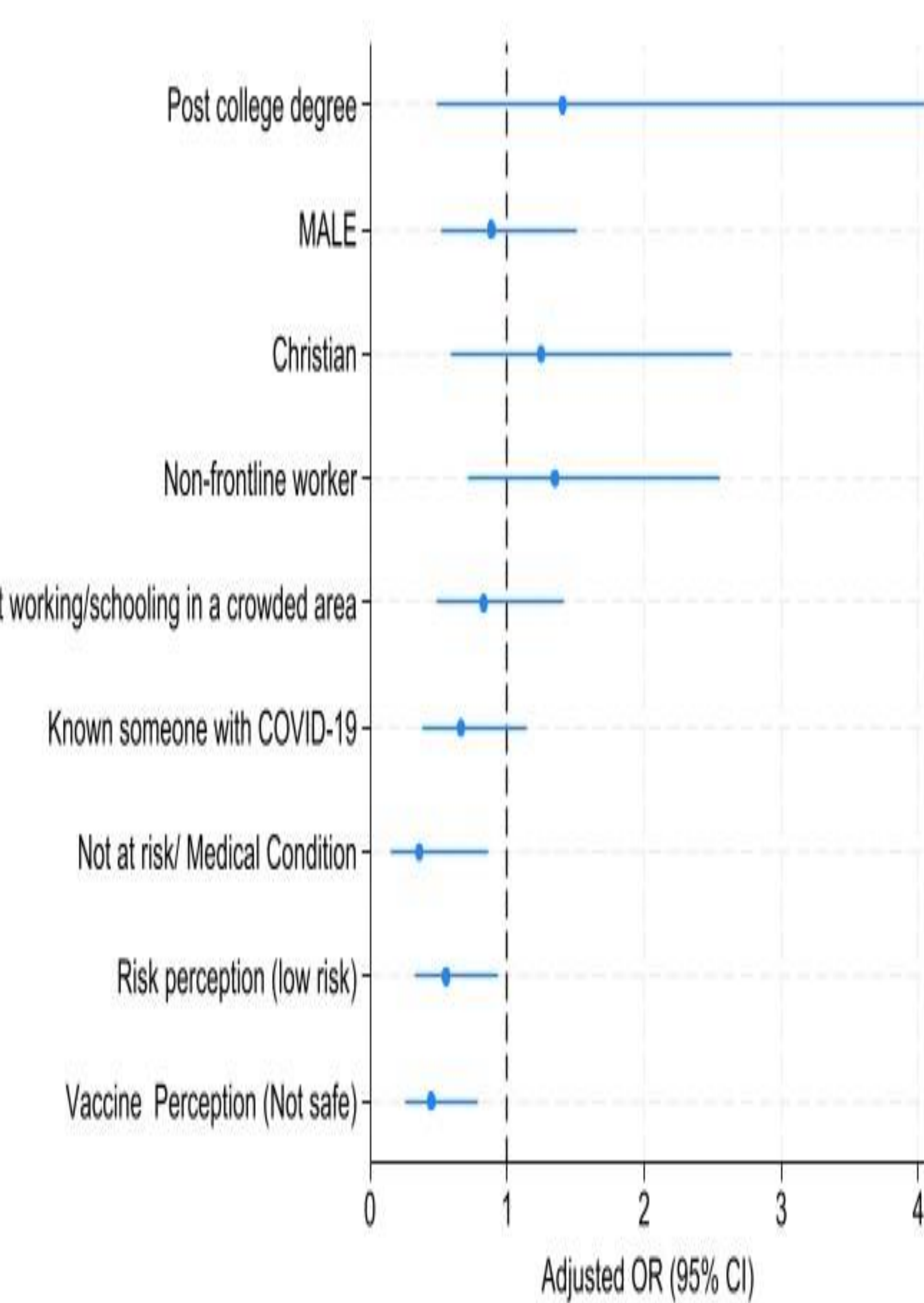


Figure 5. Association between respondents' characteristics and vaccine acceptance.



CONCLUSION

Findings in this study showed that vaccine acceptance among the Nigerian population is only 40.5% and that being infected with COVID-19 in the past is a predictor of vaccine acceptance. Thus, only people with direct experience of the disease may perceive the disease to be serious enough to get the vaccine. The statistics of vaccine acceptance from our study justify that herd immunity cannot even be achieved due to the fact that few people are vaccinated.

RECOMMENDATION

There is a need for improved efforts to promote vaccine acceptance in Nigeria. This could be achieved through increased availability of vaccines, transparency with issues concerning these vaccines, increasing and sustaining awareness of the importance of getting vaccinated.