BACKGROUND AND IMPORTANCE

Although clinical trials of the BNT162b2 mRNA vaccine against COVID-19 (Pfizer-BioNTech) have shown acceptable levels of safety, continuous monitoring of the reactogenicity of the vaccine outside of controlled settings in clinical trials can provide additional information for patients, health professionals and the general population on local and systemic reactions after vaccination.

MATERIAL AND METHODS

295 tertiary hospital workers who received the BNT162b2 vaccine against COVID-19 between January and March 2021 answered a questionnaire on sociodemographic variables, previous COVID-19 infection, and local and systemic reactions after the first and second dose of the vaccine.

AIM AND OBJECTIVES

To analyze the reactogenicity of the first and second dose of the mRNA vaccine against COVID-19 BNT162b2 (Pfizer-BioNTech) in a sample of tertiary hospital workers.

RESULTS

Prevalence of adverse reactions after the first and second dose of the BNT162b2 vaccine against COVID-19

- Dose 1
  - Pain at the injection site: 74.6%
  - Headache: 11.3%
  - Fever: 1.4%
  - Insomnia: 2.7%
  - Arthralgia or mialgia: 5.5%
  - Sickness: 1.4%
  - Fatigue: 9.3%
  - General malaise: 6.9%
  - Other reactions: 9.3%

- Dose 2
  - Pain at the injection site: 64.8%
  - Headache: 26.8%
  - Fever: 13.2%
  - Insomnia: 7.3%
  - Arthralgia or mialgia: 18.5%
  - Sickness: 8.7%
  - Fatigue: 25.1%
  - General malaise: 30.7%
  - Other reactions: 23.4%

81.8% of people experienced at least one adverse reaction.

Average number of adverse reactions by gender, age and previous COVID-19 infection

CONCLUSION AND RELEVANCE

The distribution of reactogenicity in the present study is consistent with the data reported in the studies conducted with the BNT162b2 vaccine, especially in terms of association with the characteristics of the participants. These findings can facilitate the identification of people with a higher probability of having a high reactogenicity to the vaccine, allowing to anticipate its appearance.