

Comparison of the effect of vaccination on the incidence of coronavirus disease 2019 among biomedical and non-biomedical students in Spain.

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July 10, 2023

Abstract

Vaccination against coronavirus disease 2019 (COVID-19) in Spain began in the year 2020, starting by groups with high exposure, including biomedical students with clinical practices. It is suggested that these students could have a lower incidence of COVID-19 than other students of the same age group due to early vaccination, different exposure, and disease awareness. A cross-sectional observational study was conducted through a questionnaire distributed in February 2022. 536 people answered the questionnaire and 53 were excluded, making 483 evaluable (320 biomedical and 163 non-biomedical), 73.71% women, 98.55% vaccinated and 52.59% never infected. 67.81% of biomedical students had clinical practices. No differences were found in the incidence between biomedical and non-biomedical students (54.06% versus 53.99%, $p=0.952$); nor when classifying it specifically by periods, although there is a tendency towards significance in the third (July 2021-November 2021) period (9.20% non-biomedical and 4.38% biomedical, $p=0.051$). The students receiving the vaccine earlier than their age group have a lower incidence in this period (2.90% vs 8.18%, $p=0.014$). The booster dose reduced the incidence during period 4 (24% versus 34.4%, $p=0.017$). These data suggest that biomedical students are not at increased risk for COVID-19, but that early vaccination reduces the incidence of infection.

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