



COVID-19 VACCINE ACCEPTANCE, HESITANCY AND RESISTANCY AMONG UNIVERSITY STUDENTS IN FRANCE

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Introduction. Young adults, specifically college students, are at risk of being infected with COVID-19 and transmitting the infection to others owing to their sense of invulnerability and can be a source of transmission to at-risk populations and could be the public acceptance of a new vaccine for COVID-19 developed within a short period remains uncertain despite the forthcoming availability. The objectives were to explore, among university students, the level of COVID-19 vaccine acceptance, hesitancy and resistancy and to determine the motivations and barriers, and the reasons that may change student vaccination decision making.

Material and methods. An online cross-sectional study was conducted among students of a French university in January 2021 with questions about the intention to be vaccinated against COVID-19, the motivations and the barriers: "Do you intend to be vaccinated against COVID-19 (when it is possible for you to do so)?" with the choice answers of: "Yes, absolutely"; "Yes, probably"; "No, probably not"; "No, certainly not" and "I don't know". Students reported the motivations or the reasons of hesitations with several possible answers.

Results. A total of 3089 students were included, with a mean of age of 20.3 (SD=1.9). A total of 3089 students were included, with a mean of age of 20.3 (SD=1.9), and 71.4% were female. The self-estimated knowledge of conventional vaccines and COVID-19 vaccines was 5.9/10 (2.3) and 4.9/10 (2.3), respectively. Confidence in the efficacy and safety of conventional vaccines (excluding COVID-19 vaccines) was 8.0/10 (2.3) and 7.7/10 (2.3), respectively. To the question on the intention to vaccinate against the COVID-19, 58.0% of students reported that they would choose to have a vaccination, 17.0% reported that they would not and 25.0% were not sure. The main motivation for vaccine acceptance were "I don't want to transmit COVID-19 to others", the main barrier for vaccine resistance or hesitancy were "I prefer to wait until I have more experience with these new vaccines". Age, female gender, being in first three years of study, studied sciences courses and neither sciences nor healthcare courses were significantly associated with a higher risk of vaccine hesitancy or resistancy. Self-estimated knowledge of conventional vaccines and COVID-19 vaccines, and confidence in efficiency and safety of conventional vaccination were associated with a lower risk of vaccine hesitancy or resistancy.

Conclusions. Our study shows that, in January 2021, before students have the opportunity to be vaccinated against COVID-19 in France, more than half of the students were vaccine acceptance, a quarter were hesitant, and one in five students were resistant. It is relevant to disseminate evidence-based interventions to promote COVID-19 vaccine acceptability for college students, especially for the students in neither sciences nor healthcare, as college students will soon be eligible to receive a COVID-19 vaccine. Preventive university medicine, campus-based student organizations, and college students could be consider designing educational programs and messaging that promotes behavioral confidence among college students to receive the COVID-19 vaccine.