

Editorial Letter

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Vaccination Refusal During Pandemic Period

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Dear Editor,

Understanding the reasons behind vaccination refusal is crucial in formulating effective strategies to address this issue. A study investigating COVID-19 vaccine rejection based on the World Health Organization's 3C model, as proposed by the Vaccine Rejection Working Group (SAGE) in Malaysia, identified doubt regarding vaccine efficacy and safety as the most prevalent cause of refusal (1). The 3C model comprises confidence (trust in the vaccine), complacency (perceived necessity of the vaccine), and convenience (accessibility and suitability for the vaccine). Misinformation, particularly fueled by conspiracy theories and myths, was highlighted as a significant factor contributing to vaccine rejection (2).

Some individuals cast doubt on the existence of COVID-19, propagating conspiracy theories such as its connection to 5G technology, falsification of COVID-19 data by authorities, and the notion of COVID-19 being a biological weapon. Additionally, concerns about vaccines being linked to autoimmune diseases and autism persist. Alarming, these conspiracy theories can find support from healthcare professionals and authorities. Addressing this aspect of vaccine rejection requires evaluation, and concerted efforts are needed to promote reliable and verifiable information sources to counteract vaccine hesitancy effectively.

A 2021 study delved into the causes of COVID-19 vaccine rejection and factors influencing vaccine acceptance (3). While higher education levels were associated with increased vaccine refusal, there is no unanimous consensus in the literature. Individuals with higher education backgrounds might encounter more misinformation due to their reliance on critical thinking and selective information sources. Contrasting findings indicate that learning about vaccination from medical publications was more prevalent among high school graduates and above, while social media was a common source for those with varying educational backgrounds.

In a meta-analysis of 4299 publications examining factors affecting COVID-19 vaccine rejection, individuals with a master's degree were found to be at a lower risk of vaccine refusal compared to those without such qualifications (4).

In conclusion, vaccine refusal poses a global public health challenge, particularly highlighted during the COVID-19 pandemic. Regardless of societal or individual education levels, adopting an inclusive, evidence-based information policy is imperative. Educating students in medical faculties and health vocational schools about vaccine refusal and transferring their experiences to the next generation of healthcare professionals is crucial.

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References

1. Chan NN, Ong KW, Siau CS, et al. The lived experiences of a COVID-19 immunization programme: vaccine hesitancy and vaccine refusal. *BMC Public Health*. 2022;22(1):296. doi:10.1186/s12889-022-12632-z
2. Ullah I, Khan KS, Tahir MJ, Ahmed A, Harapan H. Myths and conspiracy theories on vaccines and COVID-19: Potential effect on global vaccine refusals. *Vacunas*. 2021;22(2):93-97. doi:10.1016/j.vacun.2021.01.001
3. Troiano G, Nardi A. Vaccine hesitancy in the era of COVID-19. *Public Health*. 2021;194:245-251. doi:10.1016/j.puhe.2021.02.025
4. Fajar JK, Sallam M, Soegiarto G, et al. Global Prevalence and Potential Influencing Factors of COVID-19 Vaccination Hesitancy: A MetaAnalysis. *Vaccines*. 2022;10(8):1356. doi:10.3390/vaccines10081356