

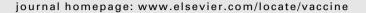
Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Contents lists available at ScienceDirect

Vaccine





Reply to Letter to the Editor

Acceptance of a COVID-19 vaccine: A multifactorial consideration



The individual decision process of whether or not to vaccinate against COVID-19 is multifactorial and must be considered in the design of any vaccination campaign. Specifically, the willingness to vaccinate against SARS-COV-2 depends on: (a) Availability, i.e. the actual existence of an effective vaccine and its country of origin; (b) Access to the vaccine, which could be limited by individual or governmental budgetary restrictions to finance preventive public health measures; (c) Perceived health risk, which depends on the intensity and severity of side effects and COVID-19 prevalence; (d) Information on benefits, risks and access pathways; (e) Previous experience with other vaccines and exposure to diseases, as this affects risk perception; and (f) Sociodemographic factors including age, education level, gender and more.

In fact, the preliminary results of a Chilean case study on COVID-19 vaccine perception in the country, with a nationwide representative sample of 1097 individuals, shows that 87% are willing to vaccinate, a relatively high proportion and slightly lower than the rate found by García and Cerda [1], 90.6% for Chile. It must be said that the Chilean case is unique, as the infection rate per million inhabitants is one of the highest on Earth (20986.05), but the lethality rate is the lowest (572), both of which have opposite effects on vaccination intention.

This illustrates that circumstantial conditions such as the pandemic context, specifically disease prevalence in a particular population can also impact vaccination intention. In fact, Feleszko, Wojciech and Lewulis [2] show that there are important differences between countries in the percentage of individuals who declare a positive intention towards vaccination against COVID-19, which varies between 41% and 89%. These differences could reflect individual preferences, influenced by the plethora of factors mentioned above.

This is why each country must design its own vaccination strategy based on the characteristics of its population and prevalence, considering a holistic vaccination design that effectively considers all the factors that influence vaccination decisions. According to Paakkari [3], Schaffer et al. [4] and Harrison [5], a transparent educational and communicative campaign is needed, one that considers interaction between health policymakers in a way that allows

people to value the personal and social benefit of being vaccinated against COVID-19, reducing hesitation.

Therefore, it is necessary for each government to take the public health measures necessary for its culture, its perceptions and the demographic characteristics of its population. The same international applicability framework must also be considered to design the vaccination campaign based on information, education and awareness towards social benefit.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- [1] García LY, Cerda AA. Contingent assessment of the COVID-19 vaccine. Vaccine 2020;38:5424–9. https://doi.org/10.1016/j.vaccine.2020.06.068.
- [2] Feleszko, Wojciech and Lewulis, Piotr and Czarnecki, Adam and Waszkiewicz, Paweł, Flattening the Curve of COVID-19 Vaccine Rejection—A Global Overview (June 20, 2020). doi: 10.2139/ssrn.3631972.
- [3] Harrison EA, Wu JW. Vaccine confidence in the time of COVID-19. Eur J Epidemiol 2020;35:325–30. https://doi.org/10.1007/s10654-020-00634-3.
- [4] Paakkari L, Okan O. COVID-19: health literacy is an underestimated problem. Lancet Public Heal 2020. https://doi.org/10.1016/S2468-2667(20)30086-4.
- [5] Schaffer DeRoo S, Pudalov NJ, Fu LY. Planning for a COVID-19 Vaccination Program. IAMA 2020. https://doi.org/10.1001/jama.2020.8711.

Leidy Y. García* Arcadio A. Cerda

Faculty of Economics & Business, Universidad de Talca, 1 Poniente 1141, Talca, Chile

* Corresponding author.

E-mail addresses: lgarcia@utalca.cl (L.Y. García), acerda@utalca.cl (A. A. Cerda)

Received 26 August 2020

Received in revised form 22 September 2020

Accepted 6 October 2020