

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.



Vacunas



www.elsevier.es/vac

Letter to the editor

Governments and vaccination against COVID-19[☆]



Los gobiernos y la vacunación contra la COVID-19

The process of immunization has brought a mild degree of hope to people around the globe who aspire to getting back to their pre-pandemic life; for example, interaction in different public spaces like: schools and universities, shopping centres, restaurants, concert halls, and cultural events, among other community meeting places.

Since the onset of the SARS-CoV-2^{1,2} pandemic, the number of fatalities recorded as of 8 February 2021, according to the World Health Organization (WHO), is 105,658,4763 worldwide. Furthermore, the COVID-19 genetic material is known to consist of a positive-strand RNA, in which proteins relevant for their transcription and replication are encoded.4 Identification of the S protein (spike) is especially pertinent, as it is in charge of binding to the cell it will infect. This is due to the fact that it possesses the cell receptor binding domain and the viral membrane fusion, enabling the viral genome to be released into the interior of human cell.⁵ From the very beginning, several laboratories undertook the task of developing vaccines to tackle COVID-19, using the vast body of existing knowledge acquired with marketed vaccines to the production of [new] vaccines. Some of the COVID-19 vaccines have been elaborated by means of innovative methods, such as messenger RNA technology, that increases both the volume and rate of production, compared to other types of vaccines, while enhancing product stability and generating robust immune responses. Other vaccines, in turn, used already existing methodologies for other vaccines, simplifying their large scale production, such as vaccines based on inactivated viruses that rely on previously attenuated viruses, so that they do not cause the disease, by means of innocuous protein or protein structure fragments that imitate the virus or vaccines with viral vectors, using a genetically modified virus that does not provoke the disease. The WHO⁶ has published press notes regarding the effectiveness and safety of the vaccines, such as the Pfizer-BioNTech (95%), Moderna mRNA-1273 (94%), Sputnik V (92%), Novavax (89.3%), Sinopharm (79.34%), AstraZeneca (70%), among others, but the public servants of each country are the ones in charge of approving their admission and application by means of their use policies.

In the case of Latin America, governments are the ones charged with procuring vaccines, given their financial capabilities and as part of public health policies. According to the Pan American Health Organization (PAHO), suitable distribution should be formulated by means of strategic, informed planning and should be rolled out in various phases, considering healthcare personal, such as physicians, nursing staff, aides, laboratory personnel, administrative staff, safety personnel, and janitorial staff at healthcare and socio-health centres to be priority, followed by seniors and people with underlying diseases that pose a risk of suffering serious complications in the event of infection, and, finally, the rest of the population. This would sidestep situations of apprehension or questioning by the community.

Let us not forget that in Latin America, corruption scandals have benefitted from the healthcare emergency, a situation that has alarmed international authorities, such as the United Nations (UN) that has created a regional observatory for medicine prices in Latin America in an attempt to prevent irregularities. In this scenario, we pose the following question, "Will drug procurement be free from this kind of endemic issue?" To avoid possible cases of corruption during the process, negotiations must be transparent, by ascertaining the costs involved in vaccine procurement, as well as the investment in logistic to execute [the program] via different virtual channels from contrasted sources. A policy of effective communication⁴ must be established at all times regarding the possible side effects of the process of immunization, thereby generating trust and avoiding fear among the people that are caused by disinformation campaigns.

DOI of original article: https://doi.org/10.1016/j.vacun.2021.03.001.

^{*} Please cite this article as: Javier Silva LA, Rosario Pacahuala EA. Los gobiernos y la vacunación contra la COVID-19. Vacunas. 2021;22:125–126.

At the governmental level, various processes must be flexible and expedient, such as public supply purchasing, drug and vaccine procurement, through open and transparent contracts, thereby preventing illegal price hikes, in the event that private company participation is chosen.

Finally, dialogue between the government and its citizens [is necessary] by means of a communication and participation plan⁷ that will enable radio, television, and virtual channels to be used so that people can be informed of this entire process. This will garner people's support in these circumstances as well as in the future, given that in the future, the costs associated with vaccine procurement to care for the common wellbeing will have to be undertaken through budgetary cutbacks and taxes.

REFERENCES

- Dawood AA. Transmission of SARS CoV-2 virus through the ocular mucosa worth taking precautions. Vacunas. 2021;22:56-7
 - https://www.elsevier.es/es-revista-vacunas-72-articulo-transmission-sars-cov-2-virusthrough-S1576988720300467 [Online] [Accessed: 30 Jan 2021].
- Durmuá V. Epidemic trends of COVID-19 in 10 countries compared with Turkey. Vacunas. 2021;22:10–9. Available from: https://www.elsevier.es/es-revista-vacunas-72-articuloepidemic-trends-covid-19-in-10-S1576988720300431 [Online] [Accessed: 10 Feb 2021].
- Organización Panamericana de la Salud. Actualización Epidemiológica. Enfermedad por coronavirus; 2021. Available from:

https://www.paho.org/es/documentos/actualizacion-epidemio logica-enfermedad-porcoronavirus-covid-19-9-febrero-2021 [Online] [Accessed: 17 Feb 2021].

- 4. Dawood Ali A. Glycosylation, ligand binding sites and antigenic variations between membrane glycoprotein of COVID-19 and related coronaviruses. Vacunas. 2021;22:1–9. Available from: https://www.elsevier.es/es-revista-vacunas-72-articulo-glycosy lation-ligand-binding-sites-antigenic-S1576988720300480 [Online] [Accessed: 13 Jan 2021].
- Lan J, Ge J, Yu J, Shan S, Zhou H, Fan S, et al. Structure of the SARS-CoV-2 spike receptor-binding domain bound to the ACE2 receptor. Nature. 2020;581:215–20. Available from: https://www.nature.com/articles/s41586-020-2180-5 [Accessed: 17 Mar 2021].
- 6. Veloza Romero AJ, Díaz Corredor DM, Rodríguez Guevara C, Estrada Orozco K, Ospina Lizarazo N. Eficacia y Seguridad de las vacunas en desarrollo contra la COVID-19. Instituto de Evaluación Tecnológica en Salud (IETS)/Ministerio de Salud y Protección Social; 2020. Available from: https://www.iets.org.co/Archivos/8.RSrapidaEficacia_y_ seguridad_de_VacunasCOVID-19(VA).pdf [Online] [Accessed: 30 Jan 2021].
- Organización Panamericana de la Salud (PAHO). Vacunas contra la COVID-19: Actividades de comunicación y participación de la comunidad; 2020. Available from: https://iris.paho.org/handle/10665.2/53238 [Online] [Accessed: 17 Feb 2021].

L.A. Javier Silva*, E.A. Rosario Pacahuala Universidad Privada del Norte, Lima, Spain

* Corresponding author.

E-mail address: lualjasigeo@gmail.com (L.A. Javier Silva). 2445-1460/

© 2021 Published by Elsevier España, S.L.U.