

EDITORIAL

Covid-19 vaccination among people with disability—Statement from the iADH scientific committee

Scientific evidence is the best resource available to make health decisions either at individual or at community levels. To build such evidence, time is a key factor. The COVID-19 global pandemic has challenged scientists' and clinicians' ability to produce and test sufficient sound evidence regarding different strategies to limit the spread of coronavirus and its consequences. Having scrambled in the dark at the beginning of the pandemic, the facts are now becoming clear. We benefit day by day from the innovations and understanding that science has brought to the front line in the war against COVID-19. The bulwark of our ongoing defenses against this viral enemy is vaccination. The evidence shows great promise that COVID-19 vaccination conveys many individual and population-level benefits (see Box 1).

It remains that most of this evidence comes from general population data, due to exclusion from research for people with disability, severe mental illnesses and other high-risk vulnerable populations. This lack of evidence may result in additional barriers to predictable and successful vaccination among vulnerable groups,⁵ who already tend to be less likely to avail of immunization services in general, for reasons that are not fully understood.^{6,7}

The pursuit of health equity for vaccine guidance requires a roadmap to navigate health inequities with interventions that uphold the ethical principle of justice with the socially just distribution of limited resources. It should be applied within and between countries and regions so that supplies of COVID-19 vaccines are effectively distributed globally based on a gradient of risk rather than a gradient of wealth.⁸ With this in mind, it is known that adults with wide a range of disabilities and medical conditions, who typically attend special care dental teams, are at higher odds of hospitalization and mortality due to COVID-19 infection than the general population.⁹ In fact, so great is the increased risk to our population with disabilities that in England, 60% of people who died from COVID-19 in 2020 had a disability.¹⁰ Personnel working with populations requiring Special Care Dentistry must advocate the effectiveness of vaccination for all people to ensure equitable outcomes for the world's most vulnerable citizens.

BOX 1 What evidence supports COVID-19 vaccine use?

- All COVID-19 vaccines validated by the WHO demonstrated efficacy (range 65%–95%) against symptomatic, laboratory-confirmed COVID-19 in adults ≥ 18 years; high efficacy ($\geq 89\%$) against COVID-19 severe enough to require hospitalization and COVID-19-associated death. No head-to-head trials have compared efficacy between vaccines.¹
- All these COVID-19 vaccines appear to be effective (range 74%–95%) and safe and double-dose vaccination is recommended. However, more research is needed to investigate the long-term efficacy and safety of the vaccines and the influence of dose, age, and production process on the protective efficacy.²
- All the COVID-19 vaccines that have published the data of phase III clinical trials have excellent efficacy, and the risk of adverse events is acceptable. The mRNA vaccines appear to be the most effective against COVID-19, with the risk and grade of adverse events being minimal, compared to that of severe symptoms induced by COVID-19.³
- The adenovirus-vectored and mRNA-based vaccines for COVID-19 have the highest efficacy after first and second doses, respectively. However, the mRNA-based vaccines have higher side effects. Remarkably few people have experienced extreme adverse effects, and all resulted in stimulated robust immune responses.⁴
- Transmission risk is likely to be substantially reduced among vaccinated people.¹

This requires advocacy and the iADH would like to add its voice to support prioritization of people with disabilities

for vaccination, based on the existence of risk factors/comorbidities.^{11–16}

1 | FUTURE CONSIDERATIONS

“Normal life” is still a long way off and it appears that COVID-19 will remain in circulation for years to come. Advice is emerging about how to handle the next stage of the pandemic, as vaccination or herd immunity is unlikely to halt the virus and the World Health Organization has warned that COVID-19 may never go away. There have been calls for wider distribution of and enhanced coordinated vaccination and testing regimes including rapid testing systems, and yearly boosters for those most at risk. Positive measures must be taken across a range of areas to ensure that all groups of people with disabilities transition out of the emergency phase on an equal basis with each other and the rest of the population. The alternative risks a permanent erosion of the human rights and equality of people with disabilities.

COVID-19 has already given rise to significant risk of discrimination and the undermining of rights for persons with disabilities. The pandemic has clearly highlighted that if an equal standard of dignity and participation is not met in ‘normal’ times, it rapidly becomes a casualty in times of crisis. Experience and evidence suggest that collective living arrangements and congregated care settings render vulnerable people more susceptible to COVID-19. Furthermore, many with disabilities who live at home encounter environmental and behavioural factors, on top of their compromised health conditions, that increase the risk of contagion, complications and hospitalisation.

At this time of global vaccine inequity, people with disabilities are not consistently recognized as a vulnerable group in emerging documents, which continue to focus on age, immune status, and profession. Priority lists should be responsive to new data and feedback from disability organizations to ensure that they give sufficient priority to people with disabilities and their support networks, such as personal assistants, family caregivers, and people working in disability-related services.¹⁷

The iADH recommends that an equality-based approach be taken to build a transition out of COVID-19 that is fully inclusive to the needs and wishes of people with disabilities¹⁸ and includes clear messages and information in a variety of formats. The vaccine rollout must not exacerbate existing inequalities. Strategies should be devised through consultation with people with disabilities in order to assure that they are affordable and accessible and reach people with disabilities in rural and isolated areas.

Health reforms are needed within the public health arena to ensure recruitment of people experienced in deliv-


ering care to people with disabilities and that are willing and able to deliver a rolling vaccination strategy across the whole population, leaving no-one behind.

ACKNOWLEDGEMENTS

The authors would like to acknowledge fellow members of the IADH Scientific Committee and IADH Executive for their wise counsel.

DISCLOSURE

Authors declare no conflict of interest with the contents of this manuscript. No funding sources are related to the production of the present statement.

Alison Dougall¹
Gustavo Molina² 
Caoimhin Mac Giolla Phadraig³

¹ *Department of Public and Child Dental Health, International Association for Disability and Oral Health, Dublin Dental University Hospital and Trinity College Dublin, Dublin, Ireland*

² *Department of Special Care Dentistry, International Association for Disability and Oral Health, The Dental School, Universidad Católica de Córdoba, Córdoba, Argentina*

³ *Department of Public and Child Dental Health, International Association for Disability and Oral Health, Dublin Dental University Hospital and Trinity College Dublin, Dublin, Ireland*

Correspondence

Gustavo F. Molina, iADH (International Association of Disability and Oral Health), Av. Maipú 177 4to B (5000) Córdoba, Argentina.
Email: gfmolina@hotmail.com

[Correction added on October 26, 2021, after first online publication: The last author’s given name was corrected to “Caoimhin”.]

ORCID

Gustavo Molina  <https://orcid.org/0000-0002-9244-7306>

REFERENCES

- <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/fully-vaccinated-people.html> Science Brief: COVID-19 Vaccines and Vaccination
- Xing K, Tu XY, Liu M, et al. Efficacy and safety of COVID-19 vaccines: a systematic review. *Zhongguo Dang Dai Er Ke Za Zhi*. 2021;23(3):221-228. <https://doi.org/10.7499/j.issn.1008-8830.2101133>.

3. Cheng H, Peng Z, Luo W, et al. Efficacy and safety of covid-19 vaccines in phase III trials: a meta-analysis. *Vaccines (Basel)*. 2021;9(6):582. <https://doi.org/10.3390/vaccines9060582>.
4. Pormohammad A, Zarei M, Ghorbani S, et al. Efficacy and safety of covid-19 vaccines: a systematic review and meta-analysis of randomized clinical trials. *Vaccines (Basel)*. 2021;9(5):467. <https://doi.org/10.3390/vaccines9050467>.
5. Yang Y, Li W, Zhang Q, et al. Should people with severe mental illness be prioritized for the COVID-19 vaccination?. *Int J Biol Sci*. 2021;17(6):1443-1445. <https://doi.org/10.7150/ijbs.57750>.
6. O'Neill J, Newall F, Antolovich G, Lima S, Danchin M. Vaccination in people with disability: a review. *Hum Vaccin Immunother*. 2020;16(1):7-15. <https://doi.org/10.1080/21645515.2019.1640556>.
7. Iacobucci G. Covid-19: GPs opt to prioritise all patients with learning disabilities for vaccination. *BMJ*. 2021;372:n510. <https://www.bmj.com/content/372/bmj.n510>.
8. Ismail SJ, Tunis MC, Zhao L, Quach C. Navigating inequities: a roadmap out of the pandemic. *BMJ Glob Health*. 2021;6(1):e004087. <https://doi.org/10.1136/bmjgh-2020-004087>.
9. Clift AK, Coupland CAC, Keogh RH, et al. Living risk prediction algorithm (QCOVID) for risk of hospital admission and mortality from coronavirus 19 in adults: national derivation and validation cohort study. *BMJ*. 2020;371:m3731. <https://doi.org/10.1136/bmj.m3731>.
10. Office for National Statistics. Updated estimates of coronavirus (COVID-19) related deaths by disability status, England: 24 January to 20 November 2020. 11 Feb 2021. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronaviruscovid19relateddeathsbydisabilitystatusenglandandwales/24januaryto20november2020>
11. Eberhardt CS, Balletto E, Cornberg M, Mikulska M. Coronavirus disease 2019 vaccination in transplant recipients. *Curr Opin Infect Dis*. 2021. <https://doi.org/10.1097/QCO.0000000000000739>. Epub ahead of print.
12. Faundes V, Pardo R, Cammarata-Scalisi F, Alarcon P, Lay-Son G, San Martin E. Consenso de la Rama de Genética de la Sociedad Chilena de Pediatría sobre priorización de personas con Síndrome de Down y otras condiciones poco frecuentes en la Campaña de Vacunación COVID-19 [Consensus of the Genetics Branch of the Chilean Society of Pediatrics on the prioritization of people with Down syndrome and rare diseases for vaccination against SARS-CoV-2]. *Andes Pediatr*. 2021;92(2):309-315. <https://doi.org/10.32641/andespediatr.v92i2.3716>. Spanish.
13. Korth J, Jahn M, Dorsch O, et al. Impaired humoral response in renal transplant recipients to SARS-CoV-2 vaccination with BNT162b2 (Pfizer-BioNTech). *Viruses*. 2021;13(5):756. <https://doi.org/10.3390/v13050756>.
14. Saibene AM, Allevi F, Ayad T, et al. Appropriateness for SARS-CoV-2 vaccination for otolaryngologist and head and neck surgeons in case of pregnancy, breastfeeding, or childbearing potential: yo-IFOS and CEORL-HNS joint clinical consensus statement. *Eur Arch Otorhinolaryngol*. 2021:1-9. <https://doi.org/10.1007/s00405-021-06794-6>. Epub ahead of print.
15. Santosa A, Xu C, Arkachaisri T, et al. Recommendations for COVID-19 vaccination in people with rheumatic disease: developed by the Singapore chapter of rheumatologists. *Int J Rheum Dis*. 2021;24(6):746-757. <https://doi.org/10.1111/1756-185X.14107>.
16. https://www.mscbs.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/covid19/docs/COVID-19_Actualizacion7_EstrategiaVacunacion.pdf
17. American Academy of Developmental Dentistry and Medicina. Joint Position Statement on Equity for People with Intellectual and Developmental Disabilities Regarding COVID-19 Vaccine Allocation and Safety. https://www.arcnj.org/file_download/inline/3374de28-76c0-4949-abb1-e0e8630bceee
18. <https://www.leonardcheshire.org/sites/default/files/2021-04/COVID-19-vaccine-programme.pdf>