

Making COVID-19 vaccinations accessible for people with disabilities

Sara Rotenberg, BS., Jane Cooper, BSc., MBE., Matthew B Downer, BSc., MSc.

Highlights

- People with disabilities should be prioritized for the COVID-19 vaccine given the disproportionately higher mortality rates and social impacts
- Equitable access is achieved when governments address barriers in booking, communication, physical, and environmental accessibility.
- Easy-to-read information, no or low burden of proof, multiple formats and ways of communicating, and physical and sensory considerations are the critical ways to enhancing access for people with disabilities.

Introduction

People with disabilities represent approximately 15% of the world's population [1]. Many people with disabilities experience high rates of comorbidities, poor social determinants of health, and/or have weakened immune systems [1]. Place of residence, inaccessibility of public health messaging, and in-person care requirements have further exacerbated existing health inequities and placed this population at higher risk of SARS-CoV-2 infection and death from COVID-19 [2]. For example, data from the United Kingdom (UK) found people with disabilities made up 60% of COVID-19 deaths, with mortality rates 3.7 times higher than the general UK population [3]. US studies have also shown that intellectual disability is the second greatest risk factor for COVID-19 mortality behind age [4], and people with Down syndrome have reportedly experienced mortality rates as high as ten times the general population [5].

The overarching goal of COVID-19 vaccination programs is to reduce mortality and morbidity, and therefore people with disabilities must be prioritized. Yet, despite alarming infection and mortality rates and advocacy from the WHO, Disabled People's Organizations [6], and disabled advocates [2], governments and policymakers have often failed to include this population in their vaccination programmes explicitly. Even in countries where people with disabilities have been prioritized, there have still been accessibility barriers. However, these are not insurmountable: the UK's specialized, low-sensory clinics to vaccinate people with intellectual disabilities and campaigns to reach people with learning disabilities have bridged the considerable vaccine gap between the general population and people with learning disabilities [7]. Unfortunately, these clinics and accessible strategies are exceptions, not the norm.

It is critical that policymakers not only prioritize people with disabilities for vaccination, but also ensure that the vaccination locations are universally accessible. Ideally, governments should implement a 'twin-track' approach to inclusion. That is, having universal accessibility embedded within vaccination programs, locations, and communications, but also more targeted approaches to meet the specific needs of people with disabilities. Regardless of where vaccination takes place, accessibility must be applied from start to finish-- from deciding to get vaccinated, to booking systems, to the location and vaccination process itself. Governments can implement universal accessibility by focusing on four key segments along the vaccination pathway: communications, booking, physical accessibility, and environmental accessibility.

Communications

Accessible communication is required throughout the vaccination process. Information about vaccines, how to book, and possible side effects must accommodate all literacy levels and sensory impairments. Clear, large, high-contrast signs, clear masks for staff [8], and multiple easy-to-read formats streamlines the process for everyone at a vaccination location. At the

clinic, communication with staff must also be accessible, through interpreters, communications cards, and whiteboards/pen and papers to ensure everyone's questions and concerns are answered and informed consent is given. These considerations benefit everyone attending a vaccination site, including second language learners and older persons--not just people with disabilities.

Another important aspect of communication surrounds promoting vaccine confidence. Similar to the general population, people with disabilities may be hesitant to obtain vaccination for various reasons. A recent survey conducted by the American Association on Health and Disability of 4,131 adults with disabilities found that 27% of respondents would not become vaccinated or were hesitant. [9] The most common concern for people with disabilities were: the safety and/or effectiveness of the vaccine with regards to the respondent's disability (63% of persons not willing to get vaccinated); the safety and/or effectiveness of the vaccine on respondent's underlying health condition (58%);, and lack of reliable information on the impact of the vaccine on a respondent's underlying health condition (42%). Thus, to increase vaccine uptake and reduce hesitancy, communication that specifically focuses on vaccine disability- and co-morbidity-specific safety information. This communication must be both fully accessible, and presented across a range of mediums.

Accessible Booking

Quick and easy to use booking formats and eligibility criteria ensure that people with disabilities can acquire vaccination appointments. First, booking processes should be available in multiple formats. For instance, if websites are used as the main booking modality, the site should be high contrast, with easy-to-read translations and accessible formats, and telephone options should be available for those who are unable to use the web to book an appointment. Second, many people with disabilities may be required to demonstrate eligibility to book priority

vaccination appointments. Requirements to prove disability and burden of proof should be minimized. Where this is necessary, providing verification documentation should be a streamlined process of providing the minimum information necessary to ensure quick and accessible vaccination prioritization.

Physical Accessibility

Physical accessibility is central to selecting vaccination locations. Sites should have accessible entrances (wide doorway, low-force or automatic doors, no steps, ramp, etc.) with clear signage indicating accessibility and how to request accommodations (wheelchairs, tactile guidance, etc.). Sites need to also consider “first-mile, last-mile” access, as accessible transport, parking, and locations facilitate accessibility, but do not guarantee the entire trip is accessible. In many high-income countries, health clinics, primary care clinics, or pharmacies are being used to distribute the vaccine. While many of these locations may already have strong accessibility considerations, it is important to consider that temporary displays, sensory-unfriendly lighting, and inaccessible exam tables or clinic spaces do not ensure universal access. Therefore, there should be multiple locations available where possible, so that people with various impairments can be accommodated.

Environmental Accessibility

Accessibility also includes the environment where tests or vaccines are administered. Loud, bright, or otherwise sensory-heavy environments may be inaccessible to people with certain disabilities. Contact details for specific sites, expedited lines for those with disabilities, caregivers allowed to accompany, greeters to assist, ASL interpreters, privacy curtains, and specialized sites or low-sensory hours all enhance access. For individuals who may be high-risk, trouble seeing others get needles, or have difficulty wearing a mask, specialized centers or at-home vaccinations should be made available [10]. For example, Chile utilized their primary

care system to provide in-home vaccinations for those with mobility impairments, and clinics offered specific days for people with disabilities to ensure the clinic environments accommodated any impairments [11].

Lastly, delivering vaccines directly to residential and congregate living settings where people with disabilities live is a key strategy to reducing accessibility barriers in this population.

Similarly, ensuring vaccination of staff in residential care centres or carers is needed to ensure a safe living environment for people with disabilities.

Additional Pop-up or Temporary Clinic Considerations

In addition to these elements, there are particular considerations for pop-up sites. For instance, pop-up/walk-in sites have been used to target high-risk neighborhoods in some countries. While this is a key strategy to reach the highly impacted geographic communities, they may lack accessibility considerations innate in more formalized settings, leaving many with disabilities in high-prevalence areas unprotected. Long lines, lack of formal appointment booking, sensory-heavy environments, limited communication support, and lack of seating are some features hinder access to pop-up clinics for people with disabilities. Therefore, pop-up clinics should consider providing information to assist people with disabilities; block off accessible hours by appointment or have a shortened line to reduce wait-times; seating available in line; and clear-masks and accessible communication options (outlined above).

Conclusion

People with disabilities have been profoundly impacted by the COVID-19 pandemic. While initial public health responses largely failed to include this population, vaccines have the potential to reduce mortality and protect people with disabilities worldwide--but only if there is sufficient

equitable access. Therefore, governments must implement programs centered on these four principles to ensure vaccination is accessible to all people with disabilities.

Conflicts: The authors declare no competing interests.

References

[1] World Bank, WHO. World Report on Disability [Internet]. 2011 p. 350. Available from:

https://www.who.int/disabilities/world_report/2011/report.pdf?ua=1

[2] Rotenberg S. We need equitable access to the covid-19 vaccine for disabled people. The BMJ [Internet]. 2021 Feb 2 [cited 2021 Apr 5]; Available from:

<https://blogs.bmj.com/bmj/2021/02/02/sara-rotenberg-we-need-equitable-access-to-the-covid-19-vaccine-for-disabled-people/>

[3] Office for National Statistics. Updated estimates of coronavirus (COVID-19) related deaths by disability status, England [Internet]. London: Government of the United Kingdom; 2021 Feb [cited 2021 Apr 5]. Available from:

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronaviruscovid19relateddeathsbydisabilitystatusenglandandwales/24januaryto20november2020>

[4] Gleason J, Ross W, Fossi A, Blonsky H, Tobias J, Stephens M. The devastating impact of Covid-19 on individuals with intellectual disabilities in the United States. NEJM Catalyst Innovations in Care Delivery. 2021 Mar 5;2(2).

[5] The OpenSAFELY Collaborative, Williamson EJ, McDonald HI, Bhaskaran K, Walker AJ, Bacon S, et al. OpenSAFELY: Risks of COVID-19 hospital admission and death for people with

learning disabilities - a cohort study [Internet]. *Infectious Diseases (except HIV/AIDS)*; 2021 Mar [cited 2021 Apr 30]. Available from: <http://medrxiv.org/lookup/doi/10.1101/2021.03.08.21253112>

[6] WHO, UNICEF. Disability considerations for COVID-19 vaccination: WHO and UNICEF policy brief [Internet]. 2021 Apr [cited 2021 Apr 30]. Available from: <https://www.who.int/publications-detail-redirect/who-2019-ncov-vaccination-and-disability-policy-brief-2021.1>

[7] Hatton C. COVID-19 vaccination and people with learning disabilities in England - how is it going? [Internet]. Chris Hatton's blog. 2021 [cited 2021 Apr 30]. Available from: <https://chrishatton.blogspot.com/2021/04/covid-19-vaccination-and-people-with.html>

[8] Rotenberg S, Downer MB, Brown H, Cooper J, Campanella S, Safar Y, Katz GM, Bell S, Porch W, Razak F, Rochon PA. COVID-19 vaccination for people with disabilities. *Science Briefs of the Ontario COVID-19 Science Advisory Table*. 2021 Jun 8;2021(2).

[9] The American Association on Health and Disability (AAHD). COVID-19 Vaccine & Disability Survey: Vaccine Hesitancy Among Adults with Disabilities [Internet]. The American Association on Health and Disability (AAHD); 2021 May [cited 2021 Aug 13]. Available from: <http://www.advancingstates.org/hcbs/article/covid-19-vaccine-disability-survey-vaccine-hesitancy-among-adults-disabilities>

[10] McKee M, Okanlami O, Zazove P. Everyone Can Use Ramps, So Don't Forget These "Steps": Disability Accessibility at COVID-19 Vaccination Sites.

[11] Kirby J. How Chile built one of the world's most successful vaccination campaigns. *Vox* [Internet]. 2021 Mar 10 [cited 2021 Apr 30]; Available from: <https://www.vox.com/22309620/chile-covid-19-vaccination-campaign>