

Coronavirus and People with Intellectual Disabilities: A Special Perspective

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ABSTRACT The attention of the world is focused on the coronavirus disease-2019 (COVID-19) pandemic. There is a general awareness that certain population groups are at greater risk. However, some other populations may be transparent and may not be receiving the attention they warrant. We focused on those with intellectual disability explaining why they are vulnerable during the current pandemic and require special attention.

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The pandemic triggered by coronavirus disease-2019 (COVID-19) is a global phenomenon necessitating a macro-perspective on the part of public health specialists and governments to reduce the risk of infection. A major goal of epidemiologists is to identify specific populations at risk and afford them greater protection. The challenge is different for physicians caring for populations at risk. Working at the individual level, medical professionals are required to advise individuals and families at risk as to how best to protect themselves. One population at high risk is that of individuals with intellectual and developmental disabilities (IDD). Not only are they at greater medical risk, but because of their disabilities, they are limited in their ability to protect themselves. As a unique group, special recommendations tailored to their needs must be formulated and appropriate methods for counseling must be developed.

The challenge is significant and has ramifications for society as a whole. People with IDD consist of 1–2% of the general population. As a group, they are more vulnerable to disease [1]. Many of those with IDD, such as those with Down syndrome, present with various medical conditions and often receive medications that suppress their immune system [2]. When infected with respiratory viruses, they have an increased chance of hospitalization and intensive care admissions, as well as a higher mortality rate when compared to the general population. Individuals with IDD are frequent visitors to clinics and hospitals where they may be exposed to carriers of coronavirus. Many adults with IDD live in institutions or group homes. Close quarters, poor hygienic practices, and inadequate nutrition increase

the risk of contracting infectious diseases.

Lack of awareness and fear are major considerations in this population. People with IDD are exposed to news reports and social media. Unbalanced reporting, visually charged material, and even random overheard conversations may generate unbridled panic for which they or their caregivers are inadequately prepared to cope. What is the impact on children with IDD exposed to coronavirus who see their parents in masks avoiding interactions with them? Explanations that suffice for other children may be insufficient for them.

Individuals with IDD may have difficulty expressing how they feel or discussing specific symptoms. They may come to medical attention late, and even when diagnosed, identification of warning signs such as dyspnea may be delayed with catastrophic consequences including those with rapid deterioration often characteristic of COVID-19 [3].

Given the challenges for individuals with IDD during the current pandemic, we recommend the following steps for caregivers and health professionals.

HIGH INDEX OF SUSPICION

Any complaint or clinical manifestation that may be related to COVID-19 demands immediate attention and rapid diagnostic evaluation. The condition of patients with COVID-19 infection can deteriorate rapidly and even more so for those with IDD. When diagnostic resources are limited, those with IDD, because of their increased risk, should be given priority.

ACCESSIBILITY

Increased efforts should be made to ensure that those with IDD have expeditious access to medical care. This may mean bringing the care to those with IDD instead of waiting for them to come to healthcare centers.

INCLUSIVITY AND PREPARING FOR THE WORSE

Many individuals with IDD have limitations regarding self-care. With more people being quarantined, it is important that contingency plans be formulated to take care of these individuals either when they are in isolation or their caregivers are unavailable. As unimaginable as it sounds, it is possible for individuals with IDD to be abandoned or neglected.

MEDICATIONS AND THERAPEUTICS

Ensure that there is sufficient inventory of medicines, nutritional supplements, and therapeutics needed for the duration of isolation. The health system should ensure that these supplies are available and easily obtained. Because of the high level of coronavirus contagion, non-essential medical visits should be delayed so as to minimize exposure.

PROTECTION

Counsel Individuals with IDD *repeatedly* about the importance of protective practices, such as avoiding large gatherings, and hygiene measures. Continued surveillance and supervision are important to ensure that safety practices are assimilated and enforced. With the availability of vaccines, priority should be given to those with IDD.

ADVOCACY

Healthcare professionals working in the field of intellectual disability need to advocate for those with IDD. When medical resources are limited or lacking, meeting the special needs of those with IDD is of utmost importance. During times of crisis, human behavior often changes and not always for the better. All efforts should be made to ensure that individuals with IDD are

not subject to discrimination based on their disability.

We have much more to learn about coronavirus as a medical threat. However, coronavirus also threatens us as a society, especially with regard to providing equitable care to both those who are strong and those who are weak. As Pearl Buck wrote, "...the test of a civilization is the way that it cares for its helpless members."

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You cannot teach anybody anything.

You can only help them discover it within themselves.

Galileo di Vincenzo Bonaiuti de Galilei (1564–1642), Italian astronomer, physicist, and engineer

There is no greatness where there is not simplicity, goodness, and truth.

Leo Tolstoy (1828–1910), novelist and philosopher

Capsule

Restoring vision by stimulating the brain

Electrical stimulation of the visual cortex has long been proposed as an approach to restoring vision in blind people. Previous studies positioned electrodes on the surface of the brain and thus required delivery of relatively high currents. However, this approach limits the number of electrodes that can be safely stimulated simultaneously, and such surface electrodes activate several millimeters of cortex, which results in a low spatial resolution. **Chen et al.** demonstrated

that the simultaneous stimulation of multiple intracortical electrodes in the monkey primary visual cortex gives rise to the perception of shape and successive stimulation to the perception of motion. This major improvement provides proof of concept for the use of electrical microstimulation to create a form of artificial vision in the blind.

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