Strategies for Addressing the Special Needs of People with Visual Impairments During the COVID-19 Pandemic

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Nearly a year and a half has passed since the world has been coping with the coronavirus disease (COVID-19). As of April 13, 2021, about 138 million people with COVID-19 had been identified across 220 countries, areas, and territories, and about 3 million of those afflicted have died of it. To slow the spread of COVID-19, the World Health Organization (WHO) recommended preventive strategies such as wearing face masks, washing hands regularly, social distancing, avoiding touching surfaces, and staying at home (WHO, 2020). These strategies have been effective in slowing the spread of COVID-19 (e.g., Cheng et al., 2020; Ortega-Garcia et al., 2020).

In the COVID-19 pandemic, people with visual impairments (i.e., people who are blind or have low vision) have several additional complications: (1) they may be more vulnerable to be infected by the disease, (2) they have more difficulties implementing the preventive strategies against COVID-19 and also need to implement additional strategies, and (3) they may have more mental health problems due to COVID-19 and its consequences. Thus, more than 253 million people with visual impairments throughout the world are at an increased risk regarding COVID-19 and its consequences (WHO, 2019). The United Nations Convention on the Rights of Persons with Disabilities underscores the rights of these individuals to receive the highest attainable standard of health care without any discrimination related to their disabilities (United Nations, 2006). Therefore, it is the duty of the health care system and society to address the special health conditions and needs of people with visual impairments during this ongoing pandemic.

Health conditions

Several potential factors may make people with visual impairments more vulnerable to COVID-19. Having an underlying medical
illness is a risk factor for a severe COVID-19 infection (Clark et al., 2020). Previous research has shown that people with visual impairments have higher rates of medical illnesses compared to the general population (i.e., Lieberman et al., 2019). According to WHO (2019), two-thirds of people with visual impairments live in low- and middle-income countries that have limited health care resources, which may result in delayed or insufficient health care. In addition, research has indicated that people with visual impairments practice positive health behaviors to a lesser extent compared to the general population (i.e., Dunbar & Ozsoy, 2020; Solanski et al., 2013), which may also be true for health behaviors related to COVID-19.

**Access to Information about Preventative Strategies**

The preventive strategies for avoiding COVID-19 infection may be difficult for people with visual impairments to access and implement. Many websites do not support or do not work properly with screen readers (Sarwar & Eika, 2020), thus barring people who are blind from some web-based information. The lower literacy rates of people with visual impairments, compared to the general population (Zheng et al., 2011), can make it more difficult for this group to access and interpret information related to COVID-19. Easy-to-understand information about COVID-19 and its preventative strategies need to be created for people with visual impairments, preferably through sound clips rather than text.

**Wearing face masks and washing hands.** Although wearing face masks and washing hands are highly effective preventative strategies against COVID-19, incorrectly implementing these strategies is common among all people (Batheja et al., 2020). Learning how to wear face masks and wash hands correctly depends highly on visual function; therefore, simple, stepwise, and tactile-based (rather than visual-based) instructions on how to wear face masks and wash hands correctly would benefit people with visual impairments. Wearing face masks and eyeglasses simultaneously leads to foggy eyeglasses, a frustrating experience that may lead people with low vision to underuse face masks—the more difficult a health behavior is to do, the less probable it is that a person will do it (Feist et al., 2018, p. 108). This problem could be avoided if people with visual impairments were assisted in buying face masks that fit well or if they were taught a strategy used by surgeons, who often place a strip of tape along the top of their surgical masks to prevent their eyeglasses and microscopes from fogging.

People with visual impairments depend on tactile information to perceive their environment (Ravenscroft, 2019, p. 18), which places them at an increased risk of contracting COVID-19. Since people with visual impairments may not be able to locate alcohol-based hand sanitizer dispensers or handwashing stations provided by the government in public places, people in this group may need to carry their own hand sanitizers. In addition, local government should consider ways to help people with visual impairments locate and use these facilities more easily.

**Social distancing.** WHO (2020) recommends “social distancing” as a preventive strategy against COVID-19, where individuals need to maintain at least 1 meter (6 feet) of distance from others. Since maintaining social distancing depends on visual function, people with visual impairments may accidentally violate this strategy, particularly in crowded places. If going outdoors is necessary, people with visual impairments should avoid crowds. In crowded places, the long
white cane may be a useful tool in helping people with visual impairments maintain a safe distance from others. People with visual impairments sometimes need help from members of the public (e.g., when crossing a busy street). Since it is not possible to utilize the human guide technique while also maintaining 6 feet of separation, in this situation, the sighted person could hold the bottom of the white cane to help guide the person with visual impairment.

CONCERNS ABOUT MENTAL HEALTH

The COVID-19 pandemic has negatively influenced the mental health of all individuals (Pfefferbaum & North, 2020). However, several potential factors may place people with visual impairments at an increased risk of stress, anxiety, and depression, an issue that is highly concerning because these mental health problems can weaken the immune system and lead to more susceptibility to COVID-19 (Kim & Su, 2020). According to a survey led by the American Foundation for the Blind (Rosenblum et al., 2020), some people with visual impairments felt stress because they thought they may be barred from treatment if there were not sufficient health care resources (e.g., lack of ventilators), a fear that could be rooted in the fact that society devalues people with disabilities.

People with visual impairments often need the support of others for daily living activities (Senjam, 2020). These support systems have been affected by government policies regarding COVID-19 (e.g., social distancing, quarantine, and lockdown), which has the potential to elevate stress levels in people with visual impairments. In addition, organizations, institutions, banks, transportation systems, education systems, and so many other aspects of daily life have been altered by COVID-19 policies, which may lead to difficulties for people with visual impairments, even when they are in familiar places. Adjusting to these changes, combined with less support from others, may cause additional stress to people with visual impairments. Regular eye examinations and care by ophthalmologists is critical for people with visual impairments, but COVID-19 restrictions have limited access to eye health care (Gegundez-Fernandez et al., 2020), which can lead to vision loss and stress. Unfortunately, additional vision loss may lead people with visual impairments to lose their sense of control over their lives (Abbasi Jondani, 2021).

CONCLUSION

The COVID-19 pandemic has affected all of us. However, people with visual impairments are facing more difficulties regarding COVID-19 and its consequences, making them a high-risk group. According to United Nations (2006) guidelines, providing standard health care for all groups of society without any discrimination is the duty of governments and communities. To achieve this goal, they must consider the special needs and health conditions of people with visual impairments during the COVID-19 pandemic. Recently, Haug and colleagues (2020) analyzed the effectiveness of many different governments’ interventions against COVID-19 across 79 territories worldwide. They found that the provision of governmental assistance to vulnerable populations (e.g., people with visual impairments) is one of the most effective ways to mitigate the spread of COVID-19. We hope that this call to action regarding the special needs of people with visual impairments during this pandemic allows for institutions to make changes that will allow people with visual impairments to enjoy the highest possible quality of life.
Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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