

## Impact of the COVID-19 pandemic on people living with disabilities: A review

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### Abstract

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**Introduction:** The global COVID-19 pandemic had a profound impact on people worldwide, with some countries experiencing more severe consequences than others. Vulnerable populations, such as individuals living with disabilities, faced pre-existing disparities and inequities, making it crucial to examine the specific effects of the pandemic on this group. This review aims to analyze articles discussing the effects of the COVID-19 pandemic on people living with various disabilities.

**Methods:** A comprehensive search for articles was conducted on Google Scholar using keywords such as "COVID-19 and disability," "COVID-19 and ADHD," "COVID-19 and blindness," and "COVID-19 and developmental disabilities." A total of thirteen (13) relevant articles were carefully selected and reviewed.

**Results:** People living with disabilities were significantly impacted by the COVID-19 pandemic. The effects faced by individuals with disabilities varied, depending on the specific type of disability they had. This underscores the importance of recognizing and addressing the unique challenges faced by each disability group during the pandemic.

**Conclusion:** The COVID-19 pandemic exacerbated the difficulties faced by individuals living with disabilities. It is crucial for governing bodies, policymakers, and decision-makers to consider the needs and experiences of people with disabilities, taking into account the added challenges they encountered during the pandemic. By incorporating disability-inclusive policies and initiatives, we can work towards a more equitable and supportive society for all, especially during times of crisis.

**Keywords:** Covid 19, Disability, SARS-CoV-2

## INTRODUCTION

The COVID-19 pandemic, caused by the novel coronavirus SARS-CoV-2, has had a profound impact on societies worldwide, causing widespread illness, loss of life, and significant disruptions to daily life. Vulnerable populations, including people living with various disabilities, have been disproportionately affected by the pandemic due to existing disparities and inequities that existed long before the emergence of COVID-19. People with disabilities face unique challenges and barriers in accessing healthcare, social services, and employment opportunities even under normal circumstances [1,2,3]. These challenges can be exacerbated during times of crisis, such as the COVID-19 pandemic, when health systems are overwhelmed, resources are limited, and vulnerable populations may experience further marginalization [2].

Different types of disabilities, such as physical, sensory, cognitive, and developmental disabilities, can impact individuals' abilities to navigate and cope with the challenges posed by the pandemic. For example, individuals with physical disabilities may face difficulties in adhering to public health guidelines like social distancing, while those with sensory disabilities may encounter barriers in accessing information or communicating with healthcare providers. Furthermore, the pandemic's effects on people with disabilities extend beyond health considerations. Lockdowns, restrictions, and disruptions to support services have the potential to exacerbate social isolation, anxiety, and mental health issues among this population [4,5].

Recognizing and understanding the specific impacts of COVID-19 on people with disabilities is crucial for developing targeted interventions and support systems to address their unique needs during and after the pandemic. Policymakers, healthcare providers, and all those involved in decision-making must consider the needs and experiences of people with disabilities to ensure equitable access to resources, services, and support during these challenging times [6,7]. This review aims to explore existing literature discussing the effects of the COVID-19 pandemic on people living with various disabilities. By gaining insights from the research, we can better advocate for inclusive policies and programs that mitigate

the challenges faced by individuals with disabilities and foster a more equitable and supportive environment for them amidst the ongoing global health crisis.

## MATERIALS AND METHODS

**Literature Search:** To conduct this review, a systematic search for relevant articles was performed on Google Scholar. The search was carried out using specific keywords, including "COVID-19 and disability," "COVID-19 and ADHD," "COVID-19 and blindness," and "COVID-19 and developmental disabilities." The purpose of this search was to identify articles that explored the effects of the COVID-19 pandemic on people living with different types of disabilities.

**Inclusion and Exclusion Criteria:** The articles obtained from the initial search were screened based on inclusion and exclusion criteria. Inclusion criteria consisted of articles that were published in peer-reviewed journals, written in English, and discussed the impact of the COVID-19 pandemic on people with disabilities. Articles focusing on various types of disabilities, such as physical, developmental, sensory, and cognitive disabilities, were included.

**Selection of Articles:** After applying the inclusion and exclusion criteria, a total of thirteen (13) relevant articles were selected for this review. These articles covered a wide range of disability types and discussed the effects of the pandemic on people with disabilities from different perspectives.

### Data Extraction and Analysis:

The selected articles were thoroughly reviewed, and key information related to the impact of COVID-19 on people with disabilities was extracted. The data extracted included the type of disability studied, the effects observed during the pandemic, and any specific challenges faced by individuals with disabilities. The findings from each article were analyzed to identify common themes and trends across different disability groups.

## RESULTS AND DISCUSSION

The literature search yielded a total of thirteen (13) relevant articles that investigated the effects of the COVID-19 pandemic on people living with disabilities. These articles

covered various types of disabilities, including physical, developmental, sensory, and cognitive disabilities, and provided valuable insights into the challenges faced by individuals within these diverse groups.

### **Living with Attention Deficit Hyperactivity During the COVID-19 Pandemic**

Living with Attention Deficit Hyperactivity Disorder (ADHD) during the COVID-19 pandemic has been particularly challenging for individuals with this disability. ADHD is the most common mental health disorder among children worldwide, characterized by symptoms such as high levels of energy, impulsiveness, and difficulty paying attention [1]. However, the COVID-19 pandemic brought forth a new set of challenges for people with ADHD, as health officials implemented various restrictions to contain the spread of the virus.

Measures such as social distancing, face mask mandates, social isolation, and lockdowns significantly impacted daily routines and activities. For individuals with ADHD, following these guidelines became even more challenging due to the nature of their condition, which often involves difficulties in adhering to rules and seeking out activities that allow for movement and stimulation [8]. Spending long periods at home and limiting physical interactions with others posed significant difficulties for those with ADHD, leading to increased feelings of restlessness and frustration.

Research indicates that individuals with ADHD were more susceptible to contracting COVID-19 and experiencing its severity compared to those without the disability [9, 10]. Moreover, some individuals with ADHD found it challenging to continue their medication regimen due to the disruptions caused by COVID-19 restrictions. Studies revealed that those who could not access their medication were at a considerably higher risk of developing severe side effects from COVID-19 infection, highlighting the importance of continuous treatment [11].

As the COVID-19 restrictions persisted for an extended period, mental health providers specializing in child and adolescent care had to develop innovative strategies to support and serve young people with ADHD. Addressing the unique needs of individuals with this disability during a global pandemic required creativity and flexibility in providing mental

health services.

It is evident that the COVID-19 pandemic has disproportionately impacted individuals with disabilities like ADHD, underscoring the need for policymakers and healthcare providers to consider the specific challenges faced by this population. Creating disability-inclusive policies and support systems becomes crucial to ensure that no one is left behind during future health crises. By recognizing the diverse needs of people living with disabilities and incorporating their perspectives into decision-making, we can work towards a more inclusive and resilient society. This understanding will play a vital role in mitigating the adverse effects of future health emergencies and promoting the well-being of all individuals, regardless of their abilities [12].

### **Living with Dyslexia during the COVID-19 Pandemic**

The COVID-19 pandemic had a significant and detrimental impact on children with learning disabilities, particularly those with dyslexia, a condition characterized by reading difficulties. Typically, dyslexic children attend special schools where they receive personalized support from trained teachers to aid in their learning [13]. Interactions with teachers and peers play a crucial role in their educational progress and overall well-being. However, the outbreak of COVID-19 resulted in the implementation of policies that mandated the closure of schools and other facilities, depriving these children of essential support systems.

The closure of schools and the disruption of regular routines severely affected dyslexic learners' ability to access quality education. Without the assistance of teachers and the opportunity to interact with peers, their learning progress slowed down, leading to academic setbacks and a negative impact on their mental health [13, 14]. During the quarantine period, parents of dyslexic children reported increased hyperactivity, inattention, and behavioral problems in their children. Moreover, research indicated higher levels of anxiety and depression among dyslexic children during this time [14].

Parents of dyslexic children faced additional challenges as they tried to meet their children's intellectual, emotional, and physical needs during the pandemic. Many parents lacked the specialized expertise possessed by qualified teachers, making it difficult for them

to assume the role of educators effectively. This added burden of responsibility increased parents' anxieties, as they feared that their children's academic progress would be hindered by the pandemic [14].

The negative consequences experienced by dyslexic learners and their families during the pandemic underscore the importance of implementing measures to accommodate students with learning disabilities in future crises. As we move forward, those responsible for the well-being of entire populations, including children with disabilities, should prioritize the development of inclusive education policies and support systems. Providing accessible and personalized learning opportunities for dyslexic learners during emergencies will be essential to ensure that they do not fall behind and have equitable access to education and well-being support. By addressing the specific needs of dyslexic children and other learners with disabilities, we can create a more resilient and inclusive educational system that supports the diverse needs of all students, regardless of their learning abilities [15].

#### **Living with Blindness during the COVID-19 Pandemic**

The COVID-19 pandemic widened gaps amongst persons with impairments that already existed. People who were blind or had other visual impairments experienced this. These folks rely heavily on their ears to be able to hear what other people are saying because their vision is impaired. As a result, although other viewers of television were able to learn about COVID-19 through both audio and video, individuals who were blind could only do so through audio. This indicated that they could view the COVID-19 information's visual presentations that others could. For instance, in order for people to understand how to wear a face mask properly, they needed to observe someone who was doing it right [15]. To prevent COVID -19 infection, people also required to be shown the proper technique for washing their hands.

The blind and visually impaired individuals, however, were unable to notice all of these things, making it difficult for them to follow the COVID-19 preventive procedures. According to one study, those who were blind or visually impaired were less likely to wash

their hands or wear a face mask than those who were not blind or visually impaired [15]. However, they also reported that they had no trouble finding eye medications. The study also found that many people, particularly those who were visually impaired, found it more difficult to access an optician. The epidemic had a negative impact on the mental health of those who were blind or had vision impairment because they were anxious about becoming infected [16]. This was acceptable because touching surfaces that are COVID-19-infected is one of the ways that people can get the virus. The sense of touch is extremely important for the blind and visually handicapped to assist them navigate their surroundings. As a result, individuals had a higher chance of contracting COVID-19.

#### **Living with Deafness during the COVID-19 Pandemic**

People who are deaf or hard of hearing faced significant challenges during the COVID-19 pandemic. As individuals who primarily rely on sign language and visual cues for communication, they encountered obstacles in understanding and accessing crucial information about COVID-19 [17, 18]. With many people, including medical professionals, lacking proficiency in sign language, it became difficult to effectively inform deaf individuals about the virus and necessary preventive measures. Furthermore, the widespread use of face masks hindered lip-reading, making it harder for the deaf to understand spoken language, even if they were capable of doing so.

The lack of accessible information and communication put deaf individuals at greater risk of contracting COVID-19, as they were unable to adopt appropriate protective measures. Additionally, some research indicated that deaf people were less likely to use social distancing as a preventive measure, further increasing their vulnerability to the virus [18]. As a result, it became essential to bridge the communication gap and ensure that vital COVID-19 information reached the deaf community effectively. Measures such as sign language interpretation during official announcements and accessible written materials were crucial in promoting their safety and well-being.

#### **Living with Cerebral Palsy during the COVID-19 Pandemic**

Children with cerebral palsy faced considerable

challenges during the COVID-19 pandemic, particularly regarding access to essential medical services. Cerebral palsy, a congenital condition affecting mobility and muscle tone, often requires frequent medical attention, rehabilitation, and therapies to manage and improve the condition [9]. However, the closure of healthcare institutions due to the pandemic limited access to these crucial services.

With healthcare facilities being used to treat COVID-19 patients, children with cerebral palsy were left with canceled or rescheduled therapy appointments, disrupting their ongoing care and monitoring [19]. Consequently, many experienced a decline in their physical and mental well-being, including increased stiffness, reduced mobility, and deteriorating health. The interruption of their daily routines and limited physical activity due to lockdowns further compounded the challenges they faced.

Both the children with cerebral palsy and their caregivers experienced heightened levels of stress and emotional strain during the quarantine period. The parents, who usually rely on specialized medical professionals and support services for their children's care, found themselves overwhelmed with the responsibility of providing adequate care amidst the pandemic restrictions [19]. This situation led to increased anxiety and sadness among parents and had potential repercussions on the well-being of both the children and their caregivers.

### **Living with Autism Spectrum Disorder during the COVID-19 Pandemic**

Individuals with autism spectrum disorder (ASD) confronted unique difficulties during the COVID-19 pandemic. ASD affects social interaction and communication, making children with this condition dependent on structured routines and support from caregivers and educators [20]. The closure of special needs schools and limited social interactions disrupted the routines and support systems that these children heavily relied upon.

The sudden change in routines and reduced opportunities for social interaction resulted in increased stress and anxiety among children with ASD, leading to the display of stereotypical and problematic behavior [20]. Moreover, parents and caregivers faced additional challenges in juggling work responsibilities with the needs of their children with ASD. The absence of outside support services, such as therapists and educators,

further compounded their difficulties in providing the necessary care.

The pandemic's impact on both the children and caregivers emphasized the importance of having comprehensive crisis plans that account for the specific needs of individuals with developmental disorders. Effective crisis planning must consider the challenges faced by those with ASD, ensuring access to essential support and services even during emergencies. **Living with Developmental Disorders during the COVID-19 Pandemic**

Children with developmental disorders, including physical, language-learning, or behavioral impairments, heavily relied on regular attendance at school and specialized medical institutions for their therapies [21]. The pandemic's limitations disrupted many of these essential treatment sessions, impacting the well-being of these children.

While some individuals benefited from E-health and remote healthcare services, these methods did not adequately support children with developmental disorders who require face-to-face interactions during classes and therapy sessions [22]. As schools and institutions closed, parents had to assume the roles of teachers and therapists, which often resulted in challenges with compliance and understanding.

Children with developmental disorders were particularly vulnerable to the psychological effects of the pandemic due to their difficulty in comprehending the reasons for the disruptions in their routines. Conditions such as OCD and anxiety disorders were exacerbated, leading to increased obsessive behaviors and psychological distress [23]. Moreover, the closure of schools and limited access to support services placed additional stress on caregivers, impacting their quality of life.

### **Violence against the Disabled during the Pandemic**

People with disabilities, especially those reliant on family support for their basic needs, faced increased risks of abuse and neglect during the pandemic [24]. The pandemic's preventive measures, including stay-at-home orders and closure of institutions, amplified the dependence of disabled individuals on their abusers for care and support.

The reduced access to external support systems, such as specialized caregivers and teachers, made disabled individuals more

vulnerable to abuse, with caregivers often the sole providers of care during the pandemic [25]. Many disabled individuals refrained from reporting abuse due to fear of retaliation, blame, or lack of privacy.

The increased risks of abuse and neglect negatively impacted the well-being of disabled individuals, leading to deterioration in their physical and mental health. Children with disabilities, in particular, faced higher rates of psychological and physical abuse compared to children without disabilities [26]. The pandemic further strained these vulnerable families, increasing stress levels and potentially leading to an escalation of abuse.

Addressing the unique challenges faced by disabled individuals during the pandemic requires comprehensive crisis planning that goes beyond clinical aspects of COVID-19. Ensuring accessible communication, support services, and protection measures are essential to safeguard the rights and well-being of disabled individuals during such emergencies.

## CONCLUSION

In conclusion, the COVID-19 pandemic brought about significant changes in people's lives and interactions, aimed at safeguarding public health. However, it also revealed the disproportionate impact on vulnerable segments of society, particularly those with disabilities. Throughout the quarantine, individuals with disabilities faced numerous challenges, from limited access to essential medical care to increased health risks due to poor health literacy. The pandemic also took a toll on their mental health, as disruptions in routines and support systems led to heightened stress and anxiety. Additionally, the closure of schools and support facilities left many individuals with disabilities isolated and vulnerable to abuse and neglect, further exacerbating their suffering.

The experiences of people with disabilities during the pandemic underscore the urgent need to address inequities and ensure that their unique needs are adequately considered in crisis planning and response efforts. Measures must be taken to improve access to healthcare services, promote health literacy, and enhance support systems for individuals with disabilities. As we move forward, it is crucial for policymakers, healthcare providers, and society as a whole to be more inclusive and proactive in addressing the challenges faced by people with

disabilities. By prioritizing their well-being and implementing comprehensive support mechanisms, we can work towards reducing the disparities that the pandemic has highlighted and build a more equitable and resilient future for all members of society. Only through concerted efforts and understanding can we create a society where everyone, regardless of ability, can thrive and be protected during times of crisis.

## DECLARATION

**Competing interests** There were no competing interests from all authors in this study.

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