

Risks, inequalities, and problems of people with Disabilities in the COVID-19 pandemic and the role of ICTs

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Abstract. The risks, the inequalities, and problems of people with Disabilities in the COVID-19 pandemic are analyzed in this article. The focus is on the impact of pandemic on health issues of the people with disabilities, on the health services access, on the higher probabilities of infections, on the higher rates of mortality, on difficulties of taking supporting services, on social isolation and finally on the positive supportive role of ICTs

Keywords. Risks, inequalities, problems SEN, disabilities, COVID-19 pandemic, ICTs

1. Introduction

People with disabilities have been disproportionately affected by COVID-19 due to three factors: the increased risk of poor outcomes from the disease itself reduced access to routine health care and rehabilitation, and the negative social impact of pandemic mitigation efforts. Older age, deprivation, and coexisting conditions are also associated with an increased risk of severe outcomes from COVID-19 (Pijls et al., 2021). The risk of dying from COVID-19 between 24 January and 30 November 2020 in England was 3.1 times higher for men with a disability and 3.5 times higher for women with a disability than for men and women without a disability. People with an intellectual disability living in housing estates, mainly associated with high-income settings, had a higher risk of death from COVID-19 than people without a disability. But even in home settings, people with intellectual disabilities have an increased risk of death from COVID-19 (Glynn et al., 2020).

Globally, disasters and emergencies often disproportionately affect the disability community, and this pandemic is no exception. People with disabilities have faced many barriers to inclusion in the response to COVID-19. The quarantine measures taken by societies during the COVID-19 pandemic have resulted in people with disabilities being worse off and more excluded. If lockdowns and curfews are enforced through aggressive actions by security forces, as in some countries in Southern Africa, then people with disabilities who may need to access health care or pharmacies are penalized. Cancelling or postponing routine health care or rehabilitation will affect those with additional health needs differently (Theis et al., 2021).

When assistive technology is not prescribed, maintained, or repaired, people with disabilities become dependent. When social care is put on hold, cancelled, or reduced, people with disabilities are cut off from family support if they have it. When it is not possible to attend day centers or volunteer projects, people with disabilities may have no one to meet. When people are expected to use face masks and keep their distance, people with hearing loss who cannot read lips or visually impaired people who use guide dogs may find it difficult to follow these rules and may be stigmatized as a result. In addition, home confinement increases the risk of physical or sexual violence and abuse, to which children and adults with disabilities are additionally vulnerable (Fang et al., 2022).

The lack of preparation for the impact of the COVID-19 pandemic on people with disabilities was well known. People with disabilities have been overlooked as an afterthought in the provision of education for children with special educational needs, the provision of personal protective equipment in social care, or the inclusion of sign language in government communications. In Uganda, school closures have resulted in the exclusion of many youths with disabilities, as educational materials are

not in an accessible format and access to assistive technology, including the Internet, has been challenging (Landes et al., 2020).

In a public health crisis like the COVID-19 pandemic, clear communication becomes more important than ever. In the UK, messages were confusing or complicated, which was difficult for people with an intellectual disabilities to understand. In other countries, there may be low confidence in public health messages. Increased isolation and uncertainty or fear about the pandemic have also affected the mental health of people with disabilities. People with mental illness can find isolation and fear particularly debilitating. People with physical disabilities are also disproportionately at mental health risk. For many people, this pandemic was generally bad for mental health (Jalali et al., 2020).

However, the pandemic has seen some positive developments for people with disabilities. Wherever they can access the Internet, people with disabilities have been able to participate in society like never before because physical and communication barriers have largely disappeared as education, work, shopping, and many leisure activities are driven online. Moreover, there are reassuring signs in some places that people are looking out more for each other, often replacing the dominant individualism of high-income settings with neighborliness and mutual aid. People with disabilities do much better in societies with strong social protection and where people support each other (Noh et al., 2016).

However, participation - whether digital or in-person - usually requires financial and other resources. The economic shocks of this pandemic are particularly affecting the poorest in society, who are often the elderly, disabled, or women. About 80% of the poorest people with disabilities live in low- and middle-income countries, where there is either insufficient social security protection or no welfare state. The consequence is that disabled people often have to rely on family or charity.

2. Risks and inequalities for people with disabilities in the time of the pandemic

People with disabilities (PWDs) already suffer from different challenges in life because of their medical condition and the way they interact with people or their environment. Even under normal circumstances, they are more likely to live in poverty and are more likely to experience violence, abandonment, and abuse. This situation has been exacerbated by the COVID-19 pandemic. Despite various efforts being made to ensure their rights and equality, they still suffer the most during various crises such as conflicts, natural disasters, and pandemics. This is due to the unavailability or disruption of health services, support groups, rehabilitation services, employment opportunities, etc.

People with disabilities include people who experience, at any given time in their lifetime, any mobility, mental, cognitive, developmental or sensory impairment which, in interaction with environmental factors, may impede their daily functioning and social participation on an equal basis with others (Jesus et al., 2020). People with disabilities may be disproportionately affected by the COVID-19 pandemic. This disproportionate impact implies a greater risk of infection (especially for people with disabilities living in residential institutions or long-term care) or greater risks of serious health consequences once infected, including unethical disadvantages in accessing life-saving treatments (Kamalakaran et al., 2021).

In addition, people with disabilities often require routine health and rehabilitative care (eg, at home, outpatient) to maintain or regain health and function. However, many of these services were deemed unnecessary, closed, or operated with significant limitations on human and physical resources during the initial lockdowns to contain the pandemic (Vieira et al., 2020). There are well-documented long-term health outcomes and healthcare access disparities faced by people with disabilities (Rowland et al., 2014). However, these forms of health disparities have widened and worsened during the COVID-19 pandemic (Sabatello et al., 2020).

In addition, people with disabilities are historically a socially vulnerable and marginalized group whose social participation and well-being may be disproportionately affected by the COVID-19 pandemic. Quarantine and other public health and policy measures aimed at containing the pandemic are often necessary. However, when not carefully designed, these measures can have negative educational, occupational, and socio-economic consequences, which may hit the most socially vulnerable, including some people with disabilities, the most (Glover et al., 2020). Therefore, the impact of the pandemic may widen existing health and socioeconomic inequalities if protective actions focused on the most vulnerable social groups are not taken as countermeasures (Rotarou et al., 2021).

People with disabilities may disproportionately experience the negative health and socio-economic impacts of lockdown-related measures. For example, people with disabilities as a group are more often resource-poor, have lower employment rates, additional health care and living costs, and have less disposable income than people without disabilities (Mitra et al., 2017).

In addition, many people with disabilities often rely on formal and informal caregivers and social support networks to meet basic needs or live independently in the community. These supports may be disrupted during lockdowns or as a result of self-quarantine of disabled people or their carers (Guidry-Grimes et al., 2020).

Finally, telehealth or remote education solutions were often not prepared to meet the needs of people with disabilities, including children with special educational needs and their families, who may be particularly affected by school closures (Masonbrink & Hurley, 2020).

Overall, people with disabilities regularly face inequalities of social participation when they are denied, excluded, or denied equal opportunities to pursue meaningful occupations, social roles, and social inclusion, compared to people without disabilities. In turn, these inequalities in social participation directly contribute to wider inequalities in health, as participation in meaningful occupations is a key determinant of human health and well-being (Hammell, 2020).

3. Disability, health inequalities, and COVID-19

The lack of attention to people with disabilities during the COVID-19 pandemic is strange, but not surprising. Despite laws requiring equal treatment and prohibiting discrimination, people with disabilities often remain an afterthought, living as invisible citizens. People with disabilities are equally marginalized in health care. Compared to their nondisabled peers, they are less likely to have private or employer-sponsored health insurance and access to preventive services, and more likely to report unmet healthcare needs, have lower social determinants of health (from poverty to unemployment, social isolation), and therefore have worse health outcomes (Yee et al., 2018).

Many of these health outcomes, including obesity, diabetes, acute and chronic respiratory disease, and cardiovascular disease, are preventable and are risk factors or serious outcomes of COVID-19 (Krahn et al., 2015). Importantly, the prevalence of disability and relatively poorer health outcomes are higher among Blacks/African Americans, Latinos, and other minorities (Yee et al., 2018), communities with disproportionately high rates of infection and mortality from COVID-19.

The COVID-19 pandemic has highlighted another systemic vulnerability of the system for people with disabilities: the inaccessibility of health information. Contrary to best practices that require the provision of reliable prevention and treatment advice, accessible information about COVID-19 (eg, Braille, plain language, American Sign Language) was neither readily nor consistently available. Whether medical clinics and hospitals have adopted policies to ensure the accessibility of services and reasonable accommodations is unknown, but questionable. Many healthcare facilities fail to provide such measures regularly, in part due to clinicians' lack of knowledge and insufficient training in the

needs and rights of people with disabilities (Agaronnik et al., 2019; Sabatello, 2019). These systematic deficiencies are further exacerbated for people with disabilities residing in centralized care centres.

4. General impacts of COVID-19 on people with disabilities

The pandemic has put the lives of people with disabilities at higher risk, as they are more vulnerable than ever. Some of them need care staff at all times and some cannot live in isolation due to psychosocial disabilities. The pandemic has added much to the worries of the less privileged as even care staff has been reduced.

The laws were passed to deal with the pandemic and its effective handling, which affected the lives of people with disabilities. This act caused health personnel to focus entirely on people affected by the disease in hospitals, diverting their attention from the disabled who were most vulnerable to the virus. The measures were not effective in caring for the most vulnerable section of the community. And that put both the disabled and the medical staff who cared for them at risk.

The coronavirus pandemic has forced businesses to close and this has affected people with disabilities financially. Lack of resources made them unable to purchase the equipment or follow the health code implemented during the pandemic (Goggin & Ellis, 2020).

The lack of personal protective equipment (PPE) in the countries also caused great distress to such people, as a significant number of deaths appeared to involve people with disabilities. And non-availability of PPE in them makes them prone to contracting the disease. Therefore, people with disabilities are facing the worst time of their lives during this pandemic period.

In addition to all these issues at the government level, the urban landscape is not suitable for people with disabilities to survive the pandemic. Cities provide a better standard of living, but to take advantage of these facilities and high lifestyle, money plays an important role. Most of disabled people, being economically less stable, cannot hope to get a proper lifestyle even in the cities (Klest et al., 2020). And, since then things have taken a wrong turn and it is now difficult to maintain a healthy, manageable lifestyle for everyone, while people with disabilities have not even been able to meet their needs.

Of all the measures taken to stop the spread of the virus, social distancing has had the biggest impact on people's mental health. The feeling of loneliness scared people, especially those who are more at risk of getting sick. Psychological problems increased due to the isolation of people. They couldn't talk to other people and the constant fear of death made things worse.

A report from the National Academies of Sciences, Engineering, and Medicine says social distancing measures have caused heart disease, dementia, and other health problems. This makes it clear as people are not only suffering from the disease itself but also from the safety measures taken. Therefore, it is important to consider health authorities' safety measures to ensure the highest effectiveness for people with disabilities, in particular, and the public in general (Andrews et al., 2020). According to the situations mentioned above, it is clarified that people with disabilities are affected the most. They have not been able to respond positively to the pandemic because not much has been done in terms of supportive care or medical support for these people.

5. Greater risk of infection from COVID-19

Some PWDs may be at higher risk of contracting COVID-19. Several factors may contribute to this threat. First, the risk is increased due to reduced access to personal protective equipment such as

face masks and hygiene kits. People with mental and physical disabilities may not be able to wash their hands even if soap and water are available. Due to their illnesses, some of them cannot turn on a tap and wash their hands independently. In addition, disabled people may not be able to maintain physical distance without support from others. For some people with disabilities, touching objects for physical support or receiving information may be required, which increases the risk. Second, their disability may cause barriers to accessing public health information to prevent COVID-19 or prevent them from communicating their symptoms. For example, people who are blind or visually impaired cannot access information provided as graphs. Similarly, health instructions provided via television will not be understood by the deaf unless augmented with captions or sign language interpreters (Sabatello et al., 2020).

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6. Reduced access to health services

One of the most common challenges faced by people with disabilities is reduced access to health care although they have greater needs than other people. A rapid review conducted among people with physical disabilities to assess the impact on their lives due to the pandemic showed that they faced multiple problems due to the reduction in the provision of health facilities. While some of them had problems with their regular medication, others suffered due to a lack of availability of ambulances and transport to reach health facilities, as well as interruption of physiotherapy sessions at home (Lebrasseur et al., 2021).

Some PWDs who need specific medical services daily have suffered due to the closing or reduced capacity of rehabilitation centers (Bettger et al., 2020). In addition, others have suffered because of the change in the way of treatment such as the use of telemedicine. Although telemedicine has proven to be very effective during lockdown to provide treatment while maintaining physical distance, it poses many challenges for people with disabilities (Annaswamy et al., 2020).

7. Conclusions

There is an urgent need to take steps to ensure that people with disabilities have access to public health information, health care services, and services they need daily. These people are already stigmatized and marginalized by the community because of their disabilities, and the pandemic has increased their vulnerability to further inequalities. An article of the United Nations Convention on the Rights of Persons with Disabilities requires countries to take all necessary measures to ensure the rights of persons with disabilities in the national response to health emergencies such as the current pandemic. This includes measures that include provision for general well-being and the highest

possible level of health without discrimination, protection from negative attitudes, isolation, and stigma related to the pandemic. As these clauses are legally binding, the fulfillment of these obligations protects the rights of people with disabilities.

People with disabilities do not want a return to the pre-pandemic status quo, which was a world filled with complex barriers to inclusion, especially in low- and middle-income countries. The COVID-19 pandemic has increased risks, exacerbated unmet health needs and disproportionately affected the socio-economic lives of people with disabilities around the world. As the evidence evolves, strategic thinking is needed about how society, social inclusion, and public health can best reach 15% of the world's population who are disabled.

The inclusion of people with disabilities in the COVID-19 response should be remembered at all stages after their recovery, assessing their needs and ensuring that they are consulted and able to participate in policymaking, program planning, and implementation. A better future must be developed through lessons learned, by listening to the lived experiences of people with disabilities, and by making meaningful investments that improve the well-being and socio-economic conditions of people with disabilities.

Finally we underline the importance of the digital technologies in education as well as in inclusion and support of people with disabilities domain, that is very productive and successful, facilitates and improves the assessment, the intervention, the educational and inclusion procedures via Mobiles which brings educational activities and support everywhere [28-37], various ICTs applications which are the core supporters of education [38-73], AI, STEM & ROBOTICS which raise educational and inclusion procedures into new levers of performance [74-92], and games which transforms the education in a very friendly and enjoyable interaction [93-101]. Additionally the enhancement and combination of ICTs with theories and models of metacognition, mindfulness, meditation and emotional intelligence cultivation [102-148] as well as with environmental factors and nutrition [24-27], accelerates and improves more over the educational and inclusion practices and results, especially in COVID-19 pandemic.

8. Bibliography

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