# COVID-19 and Persons with Disabilities: Perspectives from Saudi Arabia

Maher Saad Al-Jadid<sup>1</sup>, Abdullah Al Ahmeri<sup>2</sup>, Feras Al Turki<sup>3</sup>

<sup>1</sup> MBBS, DMR, JBPMR, FAFRM (Hon), Consultant and Clinical Professor, Physical Medicine and Rehabilitation Director of Functional Health Care Services & Rehabilitation Medicine Departments, Department of Rehabilitation Medicine, Prince Sultan Military Medical City, Riyadh, Saudi Arabia Email: msjadid[at]yahoo.com Tel: 966-11-477-7714 Ext 43751 / 43802

<sup>2, 3</sup>Department of Rehabilitation Medicine, Prince Sultan Military Medical City, Riyadh, Saudi Arabia

Abstract: Populations across the globe have experienced serious health impacts due to Coronavirus disease 2019 (COVID-19) and disability. Since the COVID-19 pandemic broke out, individuals affected by disabilities were found to exhibit greater susceptibility to the infection and face a higher risk of admission to hospital. In Saudi Arabia, because disability is one of the critical health issues, the present work elucidates the many aspects of COVID-19 in disabled individuals, as well as the measures implemented by the government to reduce itsill effects. A substantial number of COVID-19 patients in Saudi Arabia reported only mild symptoms, unlike those individuals with disabilities who showed a heightened risk of the disease in terms of severity and mortality. Several steps were taken by the Saudi ministry to control the negative effects of COVID-19 among this specific population, which include extensive guidelines overall and vaccinations as a priority measure. Over the course of the COVID-19 pandemic, rehabilitation clinics in Saudi Arabia experienced a sharp escalation in the use of telehealth services. However, at present, only limited studies are available from Saudi Arabia on COVID-19 which focused on this people group (individuals with disabilities) and the value that such interventions provided. Comprehensive research is a crucial requirement to ensure clarity on the incidence of COVID-19 and its relationship with disabilities for the development of proof-based programs and policies in this nation.

Keywords: COVID-19, disabilities, rehabilitation, pandemic, Saudi Arabia

## 1. Introduction

It was March 2020 when the World Health Organization (WHO) announced the novel coronavirus disease, COVID-19, was assigned the status of a pandemic because of the rapidity and magnitude of transmission. Actions continue to be taken globally to restrain the COVID-19 outbreak, particularly by organizations like WHO and other public health authorities. The rapid escalation in the number of people across the world infected with novel COVID-19 has been observed [1].

The sweep of the COVID-19 disease strikes entire populations, regardless of its segments, but particularly affects specific social groups caught in vulnerable situations, such as those eking a living under conditions of poverty, the elderly, disabled or otherwise abled, as well as the young and indigenous peoples [2, 3]. A new analysis offers a rough and more realistic estimate of those who succumbed due to the COVID-19 pandemic, as three times greater than the official figures reported [4]. However, particular populations, including disabled individuals, may experience a higher COVID-19-induced impact than others [3].

People with disabilities have been differentially affected by COVID-19 because of the increased risk of poor outcomes from the disease itself, reduced access to routine health care and rehabilitation, and the adverse social impacts of efforts to mitigate the pandemic. The disability may be impacted more significantly by COVID-19. This impact can be mitigated if appropriate actions and protective measures are taken by key stakeholders [5]. In Saudi Arabia, at present, only limited studies are available on COVID-19 which focused on this people group (individuals with disabilities) and the value that such interventions provided. In this current review, we explain the current status of COVID-19 among people with disabilities in Saudi Arabia.

### Search strategy

Data were collected using PubMed, Google, and Scopus with specific keywords until September 24, 2022. No criteria for publication data were set, and all relevant articles published in the English language were retrieved and reviewed. The keywords like epidemiology, COVID-19, SARS-CoV-2, Coronavirus, people with disability, comorbidities, government actions, clinical characteristics, pandemic, and Saudi Arabia were used to find the relevant articles. We used these words either individually or in combination in order to reach a comprehensive literature search.

#### People with disabilities and COVID-19

Disability has multidimensional and complex aspects and poses major limitations on a plethora of life activities in an individual. In fact, not only the persons concerned but their families too, are strongly affected. This will negatively influence the individual person, family, and society as a whole unless the system supports them [6]. In fact, nearly every individual will experience temporary or permanent impairment at some point in life, and the survivors will be left with several limitations in terms of function and participation in society. Disabled individuals may need uninterrupted health care support, periodic medical checkups, and home-based support, besides supportive services such as providing equipment, and these will raise the cost of the care programs. Depending upon their

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conditions and the absence of proper home care, some percentage of patients may require relocation to nursing homes. Proper management of such disabled persons may necessitate specialized medical, social, psychological, vocational, and other types of rehabilitative care [7, 8].

As 15% of the global population has disabilities, this group is observed to be marginalized with respect to the social, economic and health aspects, as well as the limitations to access them through public services. Their health conditions definitely place them at higher risk of contracting COVID-19 [9]. From a recent study, individuals with disabilities revealed three factors that caused them to be differentially affected by COVID-19, viz., greater risk of seeing poor results arising from the disease itself, lowered accessibility to routine health care and rehabilitation, and the negative social influences of the measures used to minimize the pandemic. One decade ago, the World Report on Disability put forward by WHO indicated that disabled individuals were found to possibly fall under the categories cited here: more advanced in age, poorer, with comorbidities present, and of the female sex [5, 10]. The factors of older age, deprivation and comorbidities were related to the higher risk of severe COVID-19-induced outcomes [11]. One study also reported that in men with disabilities, the risk of COVID-19-related death was 3.1 times greater, while in women with disabilities, it was 3.5 times greater than it was for able men and women [12]. Individuals having intellectual disabilities, and placed in group residential environments, particularly in the case of the high-income groups, displayed a higher risk of death from COVID-19 than the able population (both male and female) [13, 14]. However, even when they are in household environments, those with intellectual disabilities reveal a high risk of death due to COVID-19 [5, 15, 16].

Sadly, the inadequacy of being prepared to counteract the impact of the COVID-19 pandemic on individuals with disabilities has been horrifying and, sadly, quite a common occurrence. Largely, this specific population has been ignored or is, at best, given only secondary importance, observed especially in making available education for children having special educational needs, [17, 18]providing personal protective equipment in social care, or including sign language as mandatory in government announcements. In Uganda, the closing down of schools has denied access to education for several young persons with disabilities. This is because of the lack of educational materials in accessible formats and assistive technology, like the internet, and this continues to pose a challenge [5].

### Disability-inclusive response to COVID-19

In his address on May 6, 2020, on the launch of the Policy Brief on Persons with Disabilities and COVID-19, the UN Secretary-General António Guterres insisted that the response and recovery must include those with disabilities, as well as protect their rights and requirements and, in fact, all efforts need to be focused on this population, in accordance with the Convention on the Rights of Persons with Disabilities and 2030 Agenda for Sustainable Development [19]. To carry on the fight against the spread of the coronavirus, the National Council of People with Disabilities (NCPD) in Rwanda championed the call for inclusive communication of various steps and guidelines, as well as insisted that all broadcasting channels across the nation employ sign language interpreters to ensure the spread of the message to the disabled or differently abled population [20].

### **Targeted social protection measures**

From the current pandemic, the crucial part played by social protection in drawing attention to the huge effect of the crisis induced by COVID-19 is very evident. Countries possessing widely extensive and inclusive social protection systems were able to give urgent care to individuals with disabilities. In fact, until May 2020, a minimum of 60 countries, including Saudi Arabia, had taken specific steps to provide relevant help to this specific population [21].

Many countries gave additional or higher payments for individuals with disabilities, regardless of whether they were already recipients of disability benefits. A few countries like France, the Kyrgyz Republic, and Saudi Arabia have eased off on administrative requirements to enable these individuals to receive uninterrupted disability benefits. In fact, Rwanda and Sri Lanka extended their coverage to embrace an even larger number of such persons. In order to maintain their support, other countries opted to give paid leave for parents or family members of people with disabilities [22].

In-kind support, several countries distributed food or nonfood items and made home-based support services available. Many help lines were created for people with disabilities in countries like Jordan, Morocco and several states in India. Delivery systems were put in action to circumvent contamination risks, as well as get around the lockdown restrictions. A few of the measures included the way South Africa set up specific dates on which benefits could be withdrawn to prevent over-crowding; however, in Albania and Armenia, cash transfers were done by home delivery, and in Russia, online registration and remote access to disability certificates were allowed [10].

### In Saudi Arabia

The eastern region of Saudi Arabia reported the first ever case of infection (COVID-19) in the country in March 2020. Thereafter, this disease rapidly spread across the length and breadth of the kingdom. The official data stated that the COVID-19 infection in the country advanced in two waves. March 2020 saw the appearance of the first wave, which lasted until December 2020; however, the second wave commenced in January 2021, showing a slowdown in the spread since August 2021 [23]. Several proactive measures were adopted by the healthcare authorities, to ensure the prevention of the spread of the disease, which involved enforcing bans on international travel, restricting social gatherings, stipulating mandatory usage of facemasks, and strictly maintaining social distancing in public places. Restrictions were enforced by refusing entrance to all public places, namely educational institutions, shopping malls, and hospitals, to individuals who did not adopt governmentapproved health and vaccination status apps [24]. Until 24<sup>th</sup> September 2022, Saudi Arabia recorded a total of 815, 743

COVID-19 cases; of these, 803, 035 were recovered, and 9, 341 were confirmed dead [25].

The Labor and Workman Law of Saudi Arabia defines persons with disability as any person whose capacity to achieve and continue a suitable job has actually diminished as a result of a physical or mental infirmity. Sadly, in a majority of extended families there is at least one disabled person, and the non-disabled persons accept responsibility and care for their well-being throughout their lives [12, 24, 26].

The General Authority for Statistics (GaStat) was drawn up on the amplified definition of the Washington Group on Disability Statistics, which includes the degrees of difficulty namely, mild, severe, and extreme, in Disability. From the survey results, 2.9% of the Saudi population reveals disability with extreme difficulty. The survey results indicate that the region of Riyadh registered a 25.13% disability rate, the highest percentage of disabled persons in the entire country. The Najran region, however, reported 0.87%, which was the lowest disability rate. From the survey results, it was clear that the commonest difficulty among the disabled Saudi population, among those with only one difficulty, was visual impairment. Individuals with disability among the disabled population in Saudi Arabia who experienced visual impairment alone accounted for 46.02% but displayed different degrees: mild (67.8%), severe (28.5%), and extreme (3.7%) [27]. In terms of the most widespread difficulties among the Saudi disabled population with multiple difficulties, physical difficulties were reported to show the highest value at 29.13%, and in different degrees: mild (54.07%), severe (29.22%), and extreme (16.71%).

The Education Ministry of Saudi Arabia in 2019, released numbers showing that the special needs students in the kingdom exceeded 76, 000. These students are entitled to avail of special education services specially designed to enable them do well at school. However, such services could not always be transferred easily to distance learning or even in-person learning, with social distancing being followed [28].

## Actions are taken for People with Disabilities

- As part of normal practice, the government of Saudi Arabia offers general eServices for all citizens and residents, regardless of gender, age, religion, ethnicity, or other personal traits or qualities. However, in order to ensure that the rights of People with Disabilities are protected, as well as to address their requirements, special initiatives and eServices were established by the government.
- The guidelines for the Nabghak Murtah initiative were issued with the assistance of the General Administration for Medical Rehabilitation and Long-Term Care, represented by the Department of the Affairs of Persons with Disabilities. The objective was to evaluate and prepare the quarantine facilities of the MOH to satisfy the international standards for the services intended for individuals with disabilities; to enhance the skills of the workers in quarantine facilities to handle people with disabilities; to ensure that sign language translations for the hearing impaired persons (and deaf) are available; as

well as to offer physiotherapy to the inpatients, and clarify its significance to the specialists, in light of the rapid spread of the COVID-19 pandemic [29].

- Up-scaling of the health hotline center (no.937) was done and now includes an excess of 2000 employees. They were to: (i) supply prompt support to the public and take care of their needs; (ii) offer medical advice to the general population, as well as to those at risk; and (iii) give psychological support to circumvent anxiety and panic among the citizens. This is an around-the-clock service which all individuals can utilize. It is supplemented by other communication channels, namely, the Sehaty (Ministry of Health application (App)), WhatsApp and chatbots services. The special needs population and their requirements were not ignored; for instance, the Sign Language app was developed to ensure that people with hearing disabilities could receive effective messages [30].
- In order to reduce the risk of cross-infection, some public health protection measures were implemented, and the telemedicine center at the MOH aided the With You (MAKOM) initiative. The objective of this initiative is to provide telemental health services via a secure platform that will maintain the confidentiality of the end-users.
- The Ministry of Education in Saudi Arabia implemented one of the most sophisticated and diverse electronic systems, which includes completely interactive technology alternatives via the platforms listed here: the Madrasati School, IEN National Education Portal, IEN educational television, and virtual kindergarten. Students with disabilities can access the same platforms; it was found that these students can avail equal advantages from these systems after some modifications are made, in accordance with the individual needs of the special students [31].

# 2. Recommendation

The highest achievable standards of health for individuals with disabilities can be attained by considering the incorporation of the actions listed: buttress the health care policies and national legislation; recognize and remove all impediments and barriers to accessibility in the health-care facilities; raise the level of health-care coverage and lower the costs for people with disabilities as a norm in the universal approach to health care; provide health-care personnel with proper training that includes giving care to those with disabilities and improve the service delivery for these persons; encourage individuals with disabilities to exert control over their own decisions regarding healthcare, based on informed consent; prevent or ban discriminatory practices in health insurance and ensure that assistive products and rehabilitation services fall under health insurance coverage; and improve research and data to record and oversee, assess and facilitate the health systems to include and deliver care to this special population of individuals with disabilities.

# **3.** Conclusions

Several steps were taken by the Saudi ministry to control the negative effects of COVID-19 among people with disability,

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which include extensive guidelines overall and vaccinations as a priority measure. Over the course of the COVID-19 pandemic, rehabilitation clinics in Saudi Arabia experienced a sharp escalation in the use of telehealth services. As disability ranks high among the major health issues in Saudi Arabia, we emphasize that the necessity for comprehensive research is urgent need to provide an enhanced understanding of COVID-19 and its relationship with disability to develop and implement evidence-based program policies in the country.

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## References

- [1] A. A. Khan, H. M. Alahdal, R. M. Alotaibi, H. S. Sonbol, R. H. Almaghrabi, Y. M. Alsofayan, S. M. Althunayyan, F. A. Alsaif, S. S. Almudarra, K. I. Alabdulkareem, A. M. Assiri and H. A. Jokhdar, Controlling COVID-19 Pandemic: A Mass Screening Experience in Saudi Arabia, *Front Public Health*, vol.8, pp.606385, 2020.
- [2] J. A. Patel, F. B. H. Nielsen, A. A. Badiani, S. Assi, V. A. Unadkat, B. Patel, R. Ravindrane and H. Wardle, Poverty, inequality and COVID-19: the forgotten vulnerable, *Public Health*, vol.183, pp.110-111, 2020.
- [3] World Heath Organization. Disability considerations during the COVID-19 outbreak.26 March 2020 | Technical document.
- [4] COVID-19 Excess Mortality Collaborators. Lancet https: //doi. org/10.1016/S0140-6736 (21) 02796-3 (2022).
- [5] T. Shakespeare, F. Ndagire and Q. E. Seketi, Triple jeopardy: disabled people and the COVID-19 pandemic, *Lancet*, vol.397, no.10282, pp.1331-1333, 2021.
- [6] World Health Organization. International classification of functioning, disability and health. Geneva (CH): World Health Organization; 2001.
- [7] Mishra AK, Gupta R. Disability index: a measure of deprivation among the disabled. Economic and Political Weekly 2006; 41: 4026-4029.
- [8] Kingdom of Saudi Arabia Healthcare Overview. (Updated 2012. Accessed 27 March 2022). Available from URL: http: //www.colliers. com/~/media/files/emea/emea/research/ speciality/2012q1-saudi-arabia-healthcare-overview. ashx.
- [9] COVID-19 Outbreak and Persons with Disabilities. Department of Economic and Social Affairs Disability. United Nations. https: //www.un. org/development/desa/disabilities/.
- [10] WHO, World report on disability. World Health Organization, Geneva 2011.
- [11] B. G. Pijls, S. Jolani, A. Atherley, R. T. Derckx, J. I. R. Dijkstra, G. H. L. Franssen, S. Hendriks and A. Richters, Demographic risk factors for COVID-19 infection, severity, ICU admission and death: a meta-analysis of 59 studies, vol.11, no.1, pp. e044640, 2021.

- [12] Updated estimates of coronavirus (COVID-19) related deaths by disability status January to 20 November 2020. Office for National Statistics, London2021.
- [13] Daly M. COVID-19 and care homes in England: what happened and why?. Soc Pol Admin.2020; 54: 985-998.
- [14] S. D. Landes, M. A. Turk, M. K. Formica, K. E. McDonald and J. D. Stevens, COVID-19 outcomes among people with intellectual and developmental disability living in residential group homes in New York State, *Disabil Health J*, vol.13, no.4, pp.100969, 2020.
- [15] Learning Disabilities Mortality Review (LeDeR) Programme Deaths of people with learning disabilities from COVID-19. University of Bristol, Bristol 2020.
- [16] Standards of medical care in diabetes-- 2013, *Diabetes Care*, vol.36 Suppl 1, no. Suppl 1, pp. S11-66, 2013.
- [17] Lee S Kim J. A country report: impact of COVID-19 and inequity of health on South Korea's disabled community during a pandemic. Disabil Soc.2020; 35: 1514-1519.
- [18] Jalali M, Shahabi S, Lankarani KB, Kamali M, Mojgani P. COVID-19 and disabled people: perspectives from Iran. Disabil Soc.2020; 35: 844-847.
- [19] Human Rights indicators on the Convention on the Rights of Persons with Disabilities in support of a disability inclusive 2030 Agenda for Sustainable Development. United Station.2022.
- [20] COVID-19 impact on persons with disabilities by UNFPA.
- [21] How social protection can help countries cope with COVID-19. World Bank. https://blogs. worldbank. org/voices/how-social-protection-can-help-countries-cope-covid-19.
- [22] COVID-19 and the World of Work: Ensuring the inclusion of persons with disabilities at all stages of the response. https://www.ilo.org/wcmsp5/groups/public/---ed\_emp/---ifp\_skills/documents/publication/wcms\_746909.pdf.
- [23] COVID 19 Dashboard: Saudi Arabia. https://covid19. moh. gov. sa/.
- [24] S. M. B. Asdaq, S. I. Rabbani, M. K. Alshammari, R. S. Alshammari, M. Kamal, M. Imran, N. A. AlShammari, M. F. Al Twallah and A. H. Alshahrani, Burden of COVID-19: a preliminary analysis in the population of Saudi Arabia, *PeerJ*, vol.10, pp. e13219, 2022.
- [25] General Authority for Statistics (GaStat). Saudi Arabia. https://www.stats.gov.sa/en/news/230.
- [26] M. S. Al-Jadid, Disability in Saudi Arabia, *Saudi Med J*, vol.34, no.5, pp.453-460, 2013.
- [27] Ferguson PM. Mapping the family: disability studies and the exploration of parental response to disability. In: Albrecht G, Seelman KD, Bury M, editors. Handbook of Disability Studies. Thousand Oaks (CA): Sage; 2001. p.373-395.
- [28] COVID-19 in Saudi Arabia: the national health response. EMHJ Vol.27 No.11 2021.
- [29] Pandemic puts spotlight on special needs education in Saudi Arabia. https: //www.arabnews. com/node/1808316/saudi-arabia. Arab News June 12, 2022..

# Volume 12 Issue 3, March 2023

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- [30] THE KINGDOM OF SAUDI ARABIA, S EXPERIENCE in Health Preparedness and Response to COVID-19 Pandemic. https: //www.moh. gov. sa/en/Ministry/MediaCenter/Publications/Documents/ COVID-19-NATIONAL. pdf.
- [31] Alsamiri, Y. A.; Alsawalem, I. M.; Hussain, M. A.; Al Blaihi, A. A.; Aljehany, M. S. . Providing accessible distance learning for students with disabilities in Saudi Arabia. International Journal of Advanced and Applied Sciences; 9 (1): 34-40, 2022.

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