

Appendix 1: Review of the literature on adolescents with disabilities during the COVID-19 pandemic

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
Allison and Levac, 2022	Cross-sectional survey	<ul style="list-style-type: none"> Continuity of rehabilitation and medical care 	<ul style="list-style-type: none"> Among a sample of children and adolescents with disabilities in the U.S. during the first four months of the pandemic (March-June 2020), 42% lost all access to therapeutic services. Children who were receiving a greater number of distinct therapeutic services prior to the pandemic onset were more likely to receive any teletherapy in the first four months of the pandemic. More than 40% of parents reported declines in their child’s motor skills, social or behavioral skills, or communication, which they attributed to lack of access to therapeutic services. 	<p>Children and adolescents (age 5-17) with disabilities and their parents.</p> <p>Including those with multiple diagnoses, disabilities included: attention deficit disorder (37%); autism spectrum disorder (31%); cerebral palsy (16%); developmental coordination disorder (7%); developmental delay (36%); Down Syndrome or another genetic disorder (16%); or other (23%).</p>	USA	402 parents/guardians
Alqraini and Alasim, 2021	Qualitative – semi-structured interviews	<ul style="list-style-type: none"> Educational impacts of the pandemic 	<ul style="list-style-type: none"> The majority (69%) of parents of children who are deaf/Deaf or hard of hearing (d/Dhh) reported that their child had difficulty with the Saudi Arabian Madrasati e-learning platform. Parents also reported children had difficulties communicating with their teachers, and that teachers did not consistently use sign language and that videos did not provide closed captioning. Parents expressed the desire for teachers to be in contact with and provide support and motivation/encouragement for their children during periods of distance learning. 	Children (age 7-15) who are deaf/Deaf or hard of hearing (d/Dhh) and their parents	Saudi Arabia	37 parents/guardians
Ariapooran and Khezeli, 2021	Cross-sectional survey	<ul style="list-style-type: none"> Psychosocial impact on parents and children 	<ul style="list-style-type: none"> This study finds that the prevalence of anxiety disorders in adolescents with hearing loss during the early stages of the pandemic was 37.5%, with higher rates among deaf adolescents than those who were hard of hearing (HH). 	Adolescents (age 12-18) with hearing loss	Iran	56 adolescents
Battle, 2020	Commentary	<ul style="list-style-type: none"> Pre-pandemic inequalities 	<ul style="list-style-type: none"> This commentary reviews pre-pandemic barriers to healthcare and education for people 	N/A	Kenya	N/A

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
		<p>exacerbated by pandemic shocks</p> <ul style="list-style-type: none"> • Educational impacts of the pandemic • Continuity of rehabilitation and medical care 	<p>with disabilities in Kenya, and identifies how these can be exacerbated by the pandemic</p> <ul style="list-style-type: none"> • People with disabilities in Kenya were more likely to live below the poverty line than those without disabilities prior to the pandemic; children with disabilities are underrepresented among enrolled students in both primary and secondary school. • Pandemic disruptions cut children with disabilities off from existing special education and rehabilitation services because distance learning strategies were generally not accessible and meeting in person with professionals was often restricted. 			
Bıyık, et al. 2021	Cross-sectional survey	<ul style="list-style-type: none"> • Psychosocial impact on parents and children • Health impacts of the pandemic • Continuity of rehabilitation and medical care • Physical activity or sedentary behavior and barriers to access to physical activity 	<ul style="list-style-type: none"> • This study on children and adolescents with cerebral palsy found that more than 40% of children experienced increased anxiety during the pandemic. • The researchers also found that many children with cerebral palsy had experienced increased levels of pain sensation (34%), increased tonus (67%), and decreased range of motion (60%) during the pandemic, linked to decreased levels of physical activity (55%) and suspended or reduced support from rehabilitation services (83%) while staying at home. 	Parents of children and adolescents (age 2-18) with cerebral palsy	Turkey	103 parents/guardians
Cacioppo et al. 2021	Cross-sectional survey	<ul style="list-style-type: none"> • Psychosocial impact of the pandemic on parents and children • Continuity of rehabilitation and medical care 	<ul style="list-style-type: none"> • Survey results found that children's access to medical follow-up and rehabilitation services were severely disrupted, with less than a quarter of children maintaining medical follow-up services and less than half continuing physiotherapy and/or occupational therapy. • The majority of parents reported feeling a lack of help and support (60%). 	Parents of children (age 0-18) with physical disabilities, including cerebral palsy; genetic diseases or congenital malformations; neuromuscular diseases; other neurological lesions; orthopedic diseases, or another physical disability	France	1,000 parents/guardians

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
Faccioli et al, 2021	Cross-sectional survey	<ul style="list-style-type: none"> • Psychosocial impact on parents and children • Continuity of rehabilitation and medical care 	<ul style="list-style-type: none"> • This study finds that adolescents with disabilities were more likely to identify any positive impacts of the pandemic compared to parents of children with disabilities; adolescents were likely to report positive impacts such as: spending more time with their families (64%); more time for favorite at-home activities (51%); more time to play games (23%); and more time to chat with friends electronically (23%). • However, adolescents reported difficulty with not being able to see their friends (74%). Parents were more likely than adolescents themselves to report insufficient access to disability-related rehabilitative services for their children. • Among both parents and adolescents, anxiety symptoms were associated with an increase in financial difficulties as well as increase in fear of contracting COVID-19. 	<p>Adolescents (age 13-18) with disabilities and parents of children and adolescents with disabilities</p> <p>Included those with multiple disabilities, disabilities included: motor (81%); cognitive (48%); visual (14%); hearing (4%); and autism spectrum disorder (7%)</p>	Italy	53 adolescents, 239 parents/guardians
Garcia, et al. 2021	Cross-sectional survey	<ul style="list-style-type: none"> • Physical activity or sedentary behavior and barriers to access to physical activity • Screen time • Impacts of the pandemic on sleep patterns 	<ul style="list-style-type: none"> • Comparing data collected immediately before and after the onset of the COVID-19 pandemic, researchers found that adolescents with autism spectrum disorder (ASD) reported significant decreases in physical activity and significant increases in screen time, with no change in sleep time. 	Adolescents (mean age 16.8, SD 1.36) with autism spectrum disorder	USA	9 adolescents
Gothwal, et al. 2022	Qualitative interviews	<ul style="list-style-type: none"> • Educational impacts of the pandemic • Physical activity or sedentary behavior and barriers to access 	<ul style="list-style-type: none"> • Children with higher levels of near visual acuity (NVA) were more likely to report being able to continue schooling online better than children with low levels of NVA, because they were better able to see and work with small screens. Only a small number of children with low NVA continued learning by listening only to classes over an internet-enabled device. 	Children (age 7-19) with visual impairment and their parents.	India	48 children, 48 parents/guardians

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
		<p>to physical activity</p> <ul style="list-style-type: none"> • Supports provided to students with visual impairment 	<ul style="list-style-type: none"> • More than half of parents expressed concerns that the increase in time spent on electronic devices would contribute to further vision deterioration. • The study also found that continuing distance learning for children often required great time and effort from parents, and that low-income families struggled to afford the technology needed for distance learning. 			
Hearst et al. 2021	Qualitative interviews	<ul style="list-style-type: none"> • Economic impacts of the pandemic • Safety impacts of the impact • Psychosocial impact on parents and children • Continuity of rehabilitation and medical care 	<ul style="list-style-type: none"> • Families of children with disabilities reported major consequences of loss of income, including food insecurity (79%) and housing instability (67%) • Families also reported increase in stress and increased likelihood of child separation (as an economic coping strategy) as a result of the pandemic. • Finally, information on COVID-19 is widely circulated and understood by families, but some children with disabilities were unable to use PPE and available handwashing resources due to lack of accessibility. Information on the pandemic was also more difficult to access for children with hearing impairment. 	Children (age 3-20) with moderate-to-severe disabilities (64% physical disabilities; 15% cognitive disability; 13% hearing impaired; 10% both physical & cognitive disabilities)	Zambia	39 families 15 key informants
Kaczynski et al., 2021	Longitudinal survey (before and after the pandemic)	<ul style="list-style-type: none"> • Health impacts of the pandemic 	<ul style="list-style-type: none"> • This study found that children and adolescents with ongoing, chronic pain experienced an overall reduction in pain intensity and pain catastrophizing during the early stages of the pandemic. Researchers postulated that this may have been due to decreased functional demands that came with school closures and stay-at-home orders. 	Children and adolescents (age 8-18) with chronic pain	USA	47 children and adolescents and their parent/guardian
Lindsay and Ahmed, 2021	Qualitative – in-depth interviews	<ul style="list-style-type: none"> • Economic impacts of the pandemic • Educational impacts of the pandemic 	<ul style="list-style-type: none"> • In this study, adolescents and youth with and without disabilities reported difficulty transitioning to work- and learn-from-home during the pandemic due to the cost of technology, mental health impact of social isolation and stay-at-home orders, and anxieties about the future. 	Adolescents and youth (age 16-29) with and without disabilities	Canada	35 adolescents and young adults (18 with a disability)

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
		<ul style="list-style-type: none"> Concerns about the future 	<ul style="list-style-type: none"> However, challenges appeared to be exacerbated for adolescents and youth with disabilities, including lack of accessible technology in school and work spaces (such as closed captioning on video calls). In the workplace, adolescents and youth with disabilities reported experiencing discrimination against people with disabilities looking for work that may have been exacerbated by the pandemic (i.e., employer concerns about workers' health risks and vulnerability to COVID-19 as an obstacle to finding a job for those with disabilities and chronic health conditions), as well as canceled or delayed disability-related job supports. 			
Mann, et al. 2021	Scoping review	<ul style="list-style-type: none"> Health and wellbeing of children with disabilities following traumatic exposure to disaster (including the SARS-CoV-2 pandemic) 	<ul style="list-style-type: none"> This review finds that relatively few students focus on children with disabilities in the context of disaster or terrorism Existing studies on children with disabilities in these contexts suggest that this population has lower levels of disaster preparedness and lower levels of recovery support following a disaster, due to existing discriminatory practices that exclude those with disabilities in various settings. 	Children (age 0-17) with disabilities	Global	<p>67 studies related to COVID-19 pandemic</p> <p>15 studies related to other disasters or terrorism</p>
MacEachern, et al. 2022	Cross-sectional survey	<ul style="list-style-type: none"> Physical activity or sedentary behavior and barriers to access to physical activity 	<ul style="list-style-type: none"> This study found that 91% of sampled children with disabilities did not meet national recommendations for physical activity in an average week, with physical activity time decreasing with age. Parents reported that access, defined as "environments and programmes not able to handle nature of disability," was the primary barrier to physical activity for their children. Data was collected immediately prior to the COVID-19 pandemic, with commentary on its potential impact 	Parents of children and adolescents (age 2-18) with physical and/or intellectual disabilities	USA	45 parents/guardians

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
Mbazzi et al. 2021.	Qualitative interviews	<ul style="list-style-type: none"> • Knowledge and attitudes around COVID-19 pandemic • Economic impacts of the pandemic • Educational impacts of the pandemic • Psychosocial impact on parents and children 	<ul style="list-style-type: none"> • This study found that parents of children with disabilities were well-informed about the COVID-19 pandemic. • Children with disabilities struggled to participate in distance learning during school closures due to the lack of accessible learning platforms and resources. • Children with disabilities and their families reported struggling with affording basic needs due to the economic impacts of the pandemic, as well as feeling cut off from social support networks 	Children (age 8-15) with disabilities (including hearing, visual, physical, intellectual, and neurodevelopmental disabilities) and their parents.	Uganda	39 parents/guardians; 9 children
Mitwalli, Abdul-Samad, and Giacaman, 2022	Qualitative interviews	<ul style="list-style-type: none"> • Exclusion/lack of access to essential services • Continuity of rehabilitation and medical care • Health impacts of the pandemic 	<ul style="list-style-type: none"> • This study found that people with disabilities in the West Bank already faced substantial barriers for access to essential services and public spaces prior to the pandemic, but that these barriers were stressed and exacerbated in the time of COVID-19. For example, children and adolescents with disabilities (age 6-17) had low underlying rates of school enrollment (49%), and then those who were enrolled faced barriers to engaging in remote schooling due to lack of accessible technology and support. • People with disabilities in the West Bank identified a number of existing and exacerbated challenges in their daily lives, including stigma and discrimination in public spaces, poor access to public transportation, health services, and educational opportunities, and difficulties based on the ongoing occupation and travel restrictions (resulting in barriers to specialized medical care). 	People with disabilities (including children and adolescents) in the West Bank.	State of Palestine (the West Bank)	16 people with disabilities (including adults and children/adolescents interviewed with their parents/guardians)

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
Montirosso et al. 2021	Cross-sectional survey	<ul style="list-style-type: none"> • Psychosocial impact of the pandemic on parents and children 	<ul style="list-style-type: none"> • Parents report increased stress and increased problems in behavioral regulation among children with neurodevelopmental disabilities (NDD); however, parental resilience is a protective factor against both parental stress and children's behavioral problems. 	Children (age 0-18) with neurodevelopmental disabilities and their parents	Italy	1,632 children and adolescents; 1,472 parents/guardians
Palestinian Centre for Human Rights, 2021	Report	<ul style="list-style-type: none"> • Exclusion/lack of access to essential services • Continuity of rehabilitation and medical care • Education impacts of the pandemic • Economic impacts of the pandemic • Health impacts of the pandemic 	<ul style="list-style-type: none"> • This report found that the COVID-19 pandemic exacerbated conditions for people with disabilities living in Gaza, finding that hundreds of people with disabilities were: 1) denied access to physical therapy, rehabilitative services, and specialized medical care during pandemic-related closures, suspension of health services, and travel restrictions; 2) unable to access remote learning during the pandemic due to lack of suitable, accessible lessons; 3) cut off from economic support as sources of aid normally available from international organizations were reduced during the pandemic. 	People with disabilities (including children and adolescents) living in Gaza	State of Palestine (Gaza)	N/A
Sharpe et al. 2021	Cross-sectional survey	<ul style="list-style-type: none"> • Psychosocial impact on parents and children • Educational impacts of the pandemic • Economic impacts of the pandemic • Concerns about the future 	<ul style="list-style-type: none"> • This study found that remote learning was largely inaccessible to students in the study in Zambia and Sierra Leone. • The majority of respondents (72%) were practicing social distancing by staying home during the survey period; however, most reported feeling anxious/worried about their future educational and work trajectories. • Poor mental health outcomes were more common among women and girls as well as among those with visual impairments and intellectual disabilities. Further, mental health was worse among those who reported not having close, supportive friendships, and those who reported not being socially connected to others during the pandemic lockdown. 	Children and youth (age 12-25) who are disadvantaged or living with a disability (including physical, visual, hearing, mental health, intellectual, learning, or multiple disabilities)	Zambia and Sierra Leone	468 children and youth

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
Spurr et al, 2022	Mixed methods (semi-structured questionnaire)	<ul style="list-style-type: none"> • Psychosocial impact on parents and children • Continuity of rehabilitation and medical care • Health impacts of the pandemic 	<ul style="list-style-type: none"> • Most respondents (70%) reported being very or extremely worried about contracting COVID-19, with many (57%) concerned that clinicians may not prioritize their care (or their child's care) for severe COVID-19 illness during the health crisis (i.e., full escalation of care, ICU admission, or resuscitation) due to their underlying medical condition. • Respondents reported that support from family and healthcare services had positive psychosocial effects. Many respondents reported symptoms of anxiety and depression, but this was more common among those with existing mental health conditions. 	People with early-onset neuromuscular and neurological disorders (age 2-48) and their parents (for those age 2-17).	UK	30 adolescents and adults with disabilities (age 17-48); 10 parents/guardians of adolescents and children (age 2-17)
Stadheim, et al. 2022	Qualitative – structured interview	<ul style="list-style-type: none"> • Psychosocial impact on parents and children • Protective factors 	<ul style="list-style-type: none"> • Many parents of children and adolescents with autism spectrum disorder (ASD) reported that disruptions in routines and supports (including therapeutic and educational services and reduced opportunities to socialize) had a negative effect on their children during the pandemic, resulting in skill regression and increased or new maladaptive behaviors. • Parents identified important protective factors that supported the children and adolescents during the pandemic, including: continuity of educational interventions and supports; access to environmental resources (such as public parks, public pools, and a strong internet connection to facilitate socialization and games); and the child's own resilience and adaptability. 	Parents of children and adolescents (age 3-18) with autism spectrum disorder	USA	122 parents/guardians

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
Sutter et al., 2021	Cross-sectional survey	<ul style="list-style-type: none"> • Psychosocial impact on parents and children • Continuity of rehabilitation and medical care • Health impacts of the pandemic 	<ul style="list-style-type: none"> • Parents reported that the receipt of any therapies (occupational, physical, etc.) for their children with mobility impairment decreased from 90% before the pandemic to just 54% during May-June 2020 • Parents reported decreased physical activity, increased mental distress (in both children and parents), and some reported a decline in the child or adolescent’s mobility. 	Children (age 0-18) with motor impairments (most commonly cerebral palsy) and their parents/guardians	USA	102 parents/guardians
Valicenti-McDermott et al. 2022	Qualitative – structured interviews	<ul style="list-style-type: none"> • Educational impacts of the pandemic • Continuity of rehabilitation and medical care 	<ul style="list-style-type: none"> • Among students with developmental disabilities in New York City, this study finds that immigrant families and those that spoke limited English had the most difficulty adapting to remote learning. • Those with more severe disabilities reported joining less than 2 hours of learning per day during school closures. • The shift to remote learning also caused “gaps in therapeutic services” for children with developmental disabilities. 	Children (mean age 9, SD 3) with development disabilities and their families	USA	50 families
Wright et al, 2021	Cross-sectional survey	<ul style="list-style-type: none"> • Psychosocial impact on parents and children 	<ul style="list-style-type: none"> • More than half (60%) of deaf children and young people reported that their mental health was worse after the onset of the COVID-19 pandemic and reported “feeling isolated and lonely.” 	Children and young people (age 13-25) who are deaf	UK	135 children and young people
Yazcayir and Gurgur 2021	Qualitative – semi-structured interviews	<ul style="list-style-type: none"> • Educational impacts of the pandemic 	<ul style="list-style-type: none"> • This study found that students with special education needs “could not follow the lessons on TV regularly, many of them did not attend online lessons, and their teachers did not give feedback about their activities” • Further, parents reported their children were not receiving special education support services during school closures. 	Parents of children (age 9-14) with special education needs including: specific learning impairments; intellectual disabilities; ADHD; pervasive developmental disorder; speech and language disorders; or multiple disabilities.	Turkey	15 parents/guardians

Citation	Type of study	Areas of focus	Summary of findings	Population	Location(s)	Sample Size
Yuan, et al. 2021	Cross-sectional survey	<ul style="list-style-type: none"> Physical activity or sedentary behavior and barriers to access to physical activity 	<ul style="list-style-type: none"> This study found that children and adolescents with intellectual disabilities in Shandong province engaged in an average of just 10 minutes per day of moderate-to-vigorous physical activity during the pandemic lockdowns (April 2020), while sedentary behavior averaged about 530 minutes per day. 	Parents of children and adolescents (age 6-18) with intellectual disabilities	China	837 parents/guardians
Zahakis et al., 2021	Cross-sectional survey	<ul style="list-style-type: none"> Psychosocial impact on parents and children Continuity of rehabilitation and medical care Health impacts of the pandemic Economic impacts of the pandemic 	<ul style="list-style-type: none"> This study found that caregivers of children and adolescents with disabilities—and particularly those with children and adolescents with disabilities who have low ability to care for themselves—have faced increased financial, physical, and psychological strain during the pandemic. Parents/caregivers also reported that the pandemic reduced access to rehabilitative and physical therapy services and facilities, contributing to a decrease in physical activity and even decreased mobility for the children. 	Parents of children and adolescents (age 0-15) with disabilities (including cerebral palsy (18%), Down’s syndrome (15%), autism spectrum disorder (22%), and multiple disabilities (45%).	West Bank and Jerusalem	130 parents/caregivers
Zhang et al., 2022	Cross-sectional survey	<ul style="list-style-type: none"> Psychosocial impact on parents and children Continuity of rehabilitation and medical care 	<ul style="list-style-type: none"> More than two thirds of children with developmental disabilities in the study experienced a reduction in therapeutic services compared to before the pandemic, and one third of children lost services for more than two months total as of the time of the survey (August-October 2020). Parents rated telehealth services lower than in-person services for diagnostic accuracy, treatment effectiveness, and rapport building. 	Children (age 0-17) with developmental disabilities and their parents/guardians	USA	101 parents/guardians

References

- Allison, K.M., Levac, D.E. Impact of the COVID-19 pandemic on therapy service delivery and functioning for school-aged children with disabilities in the United States, *Disability and Health Journal* 2022; 15(2): 101266. <https://doi.org/10.1016/j.dhjo.2021.101266>
- Alqraini, F.M., Alasim, K.N. Distance education for d/Deaf and hard of hearing students during the COVID-19 pandemic in Saudi Arabia: challenges and support. *Research in Developmental Disabilities* 2021; 117: 104059. <https://doi.org/10.1016/j.ridd.2021.104059>
- Ariapooran, S., Khezeli, M. Symptoms of anxiety disorders in Iranian adolescents with hearing loss during the COVID-19 pandemic. *BMC Psychiatry*. 2021; 21:114. <https://doi.org/10.1186/s12888-021-03118-0>
- Battle Dolores E. The Impact of COVID-19 on Health Care, Education, and Persons with Disabilities in Kenya. Perspectives of the ASHA Special Interest Groups 2020;5(6):1793-1796. https://pubs.asha.org/doi/10.1044/2020_PERSP-20-00097
- Bıyık, K.S., Özal, C., Tunçdemir, M., Üneş, S., Delioğlu, K., et al. The functional health status of children with cerebral palsy during the COVID-19 pandemic stay-at-home period: a parental perspective *The Turkish Journal of Pediatrics* 2021; 63(2): 223-236. DOI:10.24953/turkjped.2021.02.006 <https://pubmed.ncbi.nlm.nih.gov/33929112/>
- Cacioppo M, Bouvier S, Bailly R, Houx L, Lempereur M, Mensah-Gourmel J, et al. Emerging health challenges for children with physical disabilities and their parents during the COVID-19 pandemic: the ECHO French survey. *Ann Phys Rehabil Med* 2021;64(3):101429. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7434423/>
- Faccioli, S., Lombardi, F., Bellini, P., Costi, S., Sassi, S., Pesci, M.C. How did Italian adolescents with disability and parents deal with the COVID-19 emergency? *Int J Environ Res Public Health* 2021; 18(4):1687. doi: 10.3390/ijerph18041687 <https://pubmed.ncbi.nlm.nih.gov/33578678/>
- Garcia, J.M., Lawrence, S., Brazendale, K., Leahy, N., Fukuda, D. Brief report: The impact of the COVID-19 pandemic on health behaviors in adolescents with Autism Spectrum Disorder. *Disability and Health Journal* 2021;14(2): 101021. <https://doi.org/10.1016/j.dhjo.2020.101021>
- Gothwal, V.K., Kodavati, K.P., Subramanian, A. Life in lockdown: impact of COVID-19 lockdown measures on the lives of visually impaired school-age children and their families in India. *Ophthalmic Physiol Opt*. 2022; 42:301–310. <https://doi.org/10.1111/opo.12928>
- Hearst M, Hughey L, Magoon J, Mubukwanu E, Ndonji M, Ngulube E, et al. Rapid health impact assessment of COVID-19 on families with children with disabilities living in low-income communities in Lusaka, Zambia. *PLoS ONE* 2021;16(12):e0260486. <https://doi.org/10.1371/journal.pone.0260486>
- Kaczynski, K.J., Chang, C.Y.H., Chimoff, J., et al. Initial Adjustment to the COVID-19 Pandemic and the Associated Shutdown in Children and Adolescents with Chronic Pain and Their Families. *Front Pain Res (Lausanne)*. 2021;2:713430. doi: 10.3389/fpain.2021.713430 <https://pubmed.ncbi.nlm.nih.gov/35295442/>
- Lindsay, S., Ahmed, H. School and Employment-Related Barriers for Youth and Young Adults with and without a Disability during the COVID-19 Pandemic in the Greater Toronto Area. *Adolescents* 2021; 1:442–460. <https://doi.org/10.3390/adolescents1040034>
- Mann, M., McMillan, J.E., Silver, E.J., Stein, R.E.K. Children and adolescents with disabilities and exposure to disasters, terrorism, and the COVID-19 pandemic: a scoping review. *Curr Psychiatry Rep* 2021; 23(12): 80. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8511280/>

- MacEachern, S., Forkert, N.D., Lemay, J., Dewey, D. Physical Activity Participation and Barriers for Children and Adolescents with Disabilities, *International Journal of Disability, Development and Education*, 2022; 69(1):204-216, DOI: 10.1080/1034912X.2021.1952939 <https://doi.org/10.1080/1034912X.2021.1952939>
- Mbazzi FB, Nalugya R, Kawesa E, Nimusiima C, King R, van Hove G, et al. The impact of COVID-19 measures on children with disabilities and their families in Uganda. *Disability & Society* 2021. <https://doi.org/10.1080/09687599.2020.1867075>
- Mitwalli, S., Abdul-Samad, L., and Giacaman, R. Impact of COVID-19 on persons with disabilities in the West Bank of the Occupied Palestinian Territory: Case Study Report. Institute of Community and Public Health, Birzeit University; 2022. <http://icph.birzeit.edu/sites/default/files/references/2022-04/3.pdf>
- Montirosso R, Mascheroni E, Guida E, Piazza C, Sali ME, Molteni M, et al. Stress symptoms and resilience factors in children with neurodevelopmental disabilities and their parents during the COVID-19 pandemic. *Health Psychol* 2021;40(7):428-438. <https://psycnet.apa.org/record/2021-79075-003>
- Palestinian Centre for Human Rights. Persons with disabilities under the Covid-19 pandemic: Special report on protection mechanisms for persons with disabilities under the Covid-19 pandemic. Palestinian Centre for Human Rights; 2021. <https://pchrghaza.org/en/persons-with-disabilities-under-the-covid-19-pandemic/>
- Sharpe D, Rajabi M, Chileshe C, Joseph SM, Sesay I, Williams J, et al. Mental health and wellbeing implications of the COVID-19 quarantine for disabled and disadvantaged children and young people: evidence from a cross-cultural study in Zambia and Sierra Leone. *BMC Psychology* 2021; 9(1):79. <https://doi.org/10.1186/s40359-021-00583-w>
- Spurr, L., Tan, H.L., Wakeman, R., Chatwin, M., Hughes, Z., Simonds, A. Psychosocial impact of the COVID-19 pandemic and shielding in adults and children with early-onset neuromuscular and neurological disorders and their families: a mixed-methods study. *BMJ Open* 2022; 12(3):e055430. doi: 10.1136/bmjopen-2021-055430. <https://pubmed.ncbi.nlm.nih.gov/35354630/>
- Stadheim, J., Johns, A., Mitchell, M., Smith, C.J., Braden, B.B., Matthews, N.L. A qualitative examination of the impact of the COVID-19 pandemic on children and adolescents with autism and their parents. *Research in developmental disabilities* 2022; 125: 104232-104232. <https://doi.org/10.1016/j.ridd.2022.104232>
- Sutter, E.N., Smith Francis, L., Francis, S.M., et al. Disrupted Access to Therapies and Impact on Well-Being During the COVID-19 Pandemic for Children with Motor Impairment and Their Caregivers. *Am J Phys Med Rehabil* 2021; 100(9):821-830. doi:10.1097/PHM.0000000000001818. <https://pubmed.ncbi.nlm.nih.gov/34091465/>
- Valicenti-McDermott M, O'Neil M, Morales-Lara A, Seijo R, Fried T, Shulman L. Remote learning experience for children with developmental disabilities during COVID-19 pandemic in an ethnically diverse community. *J Child Neurol* 2022;37(1):50-55. <https://pubmed.ncbi.nlm.nih.gov/34628963/>
- Wright, B., Carrick, H., Garside, M., et al. The impact of COVID-19 on deaf children in the United Kingdom. *International Journal on Mental Health and Deafness* 2021; 5(1). <http://www.ijmhd.org/index.php/ijmhd/article/view/67>
- Yazcayir G, Gurgur H. Students with special needs in digital classrooms during the COVID-19 pandemic in Turkey. *Pedagogical Res* 2021;6(1):em0088. <https://doi.org/10.29333/pr/9356>

Yuan, Y.Q., Ding, J. N., Bi, N., Wang, M. J., Zhou, S.C., Wang, X.L., et al. Physical activity and sedentary behaviour among children and adolescents with intellectual disabilities during the COVID-19 lockdown in China. *Journal of Intellectual Disability Research*, 2021. doi: <https://doi.org/10.1111/jir.12898>

Zahaika D, Daraweesh D, Shqerat S, Arameen D, Halaweh H. Challenges facing family caregivers of children with disabilities during COVID-19 pandemic in Palestine. *Journal of Primary Care & Community Health*. January 2021. doi:10.1177/21501327211043039.

Zhang, S., Hao, Y., Feng, Y., Lee, N.Y. COVID-19 Pandemic Impacts on Children with Developmental Disabilities: Service Disruption, Transition to Telehealth, and Child Wellbeing. *Int J Environ Res Public Health* 2022;19(6): 3259. doi: 10.3390/ijerph19063259. <https://pubmed.ncbi.nlm.nih.gov/35328947/>