

# Disabling COVID: An Exploration of the COVID-19 Pandemic and the Forgotten Needs of Persons with Disabilities

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## **ABSTRACT**

The COVID-19 outbreak has impeded upon the lives of individuals across the globe in unprecedented ways, leaving government officials, healthcare personnel, and researchers struggling to find ways to alleviate its adverse impacts to citizens. Thousands of research studies have been published since the spring of 2020 to disseminate more information about COVID-19 to the public. Concerningly, research regarding one of the largest and most marginalized groups of individuals, individuals with disabilities, has been severely lacking. It is important to determine how COVID-19 has impacted disabled people's lives both individually and as a community. Disabled populations statistically have some of the highest rates of adverse life outcomes, such as impoverishment and underemployment. Thus, during a global pandemic, it is crucial that this population is centered in research that could help find ways to potentially alleviate any exacerbation of these negative outcomes as a result of such an easily transmissible and deadly virus. The present paper examines the medical, psychological, and social impacts that the COVID-19 pandemic has had specifically on the disability community. It also explores potential ways to alleviate these negative outcomes, utilizing historical

reference (such as the polio epidemic) and examples of effective social protection programs within low- and middle- income countries.

*Keywords:*

COVID-19, Pandemic, Disability, Medicine, Social Justice

The Center for Disease Control and Prevention (CDC, n.d.-a) defines disability as “any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions).” The term “disability” covers a wide range of mental, physical, and psychological disorders with various spectrums and levels of severity. People with disabilities make up the world’s largest minority group, encompassing an estimated 15% of the world’s population (United Nations, n.d.). Despite their abundance, people with disabilities face disproportionately high rates of unemployment, impoverishment, under-education, and abuse (American Psychological Association [APA], 2010; U.S. Bureau of Labor, 2021). With such a large prevalence and increased potential for adverse life experiences, it would be expected that disabled populations would be the first to receive attention, aid, and care in the event of global catastrophes, such as the COVID-19 pandemic. However, this has largely not been the case.

Systemic ableism has exacerbated the effects of the COVID-19 pandemic on the lives of disabled individuals. The present paper will explore how disabled people have been adversely impacted medically, psychologically, and socially by the Coronavirus pandemic, exemplifying an urgent need for prioritized research on disability as it relates to COVID-19.

## Medical Impacts of COVID-19

### *The Medical Model of Disability and Limitations*

The medical model of disability, first coined and critiqued by Thomas Szasz in the mid- 1950s (Benning, 2016; Hogan, 2019), is a theoretical approach that involves viewing a person with a disability as someone who needs to be cured through medicine and treatment to successfully progress in society (Brisenden, 1986; Haegele & Hodge, 2016). Life issues that an individual with a disability faces are seen as stemming directly from the disability itself and not being able to function in a (subjectively) “normal” fashion rather than as the result of centuries of systemic barriers stemming from institutional ableism (Brisenden, 1986; Goering, 2015; Haegele & Hodge, 2016; Shakespeare, 2010). In recent decades, the medical model has been more widely criticized. Specifically, the enormous power medical professionals hold over the diagnoses and labelling of disabled individuals (Haegele & Hodge, 2016), the ignoring of social stigmatization of disability within society outside of physical and mental impairment (Bunbury, 2019; Goering, 2015), and the devaluation of disabled lives within a capitalistic society that upholds able-bodied ideals about functionality and productivity (Anastasiou & Kauffman, 2013; Bunbury, 2019; Terzi, 2004) have all been well-documented critiques of the medical model of disability. If a person with a disability is unable to be medically cured, the medical model aids in the perpetuation of the myth that the disabled are victims that should be pitied as there is seemingly no way they will be able to enjoy life to its fullest extent (Bunbury, 2019; Goering, 2015). Goering (2015) notes that many disabled individuals do not classify their disability as their biggest hardship, but rather the discouraging and demeaning reactions they receive from the able-bodied as a result of this widespread stereotyping. It is with these limitations in mind that the social model of disability has been offered as an alternative to the medical model by disability activists, scholars, and theorists.

### *The Social Model of Disability*

Coined and principally theorized by Michael Oliver (1983), the social model of disability contextualizes disability as a social construct and makes a sharp distinction between impairment and disability (Anastasiou & Kauffman, 2013; Bunbury, 2019; Goering, 2015). “Impairment,” according to the social model, is identified as a non-standard state of the body, such as a person missing a limb or possessing a defective organ, which may or may not be negatively viewed by the possessor of said impairment (Goering, 2015). The idea of “normal” is relative to the possessor of the impairment as they may have already fully accepted and adapted to their impairment in a way that is normative to them. In contrast, “disability” specifically refers to the structural oppression of disabled persons where appropriate accommodations for impairments are not made, thus excluding disabled people from a variety of daily opportunities (Goering, 2015; Anastasiou & Kauffman, 2013). The social model of disability focuses the importance on how society disables the individual rather than the impairment itself. The mistreatment of people with disabilities is therefore a result of society’s preference for able-bodied people, and in turn, causes the ableist rhetoric and actions that bar the disabled from being able to participate in everyday activities (Bunbury, 2019) fully and actively. Such ableist actions can vary from prolonged stares that make visibly disabled people feel uncomfortable in public spaces, or refusal to provide reasonable accommodations, such as ramps, braille, or sign language interpreters. While the social model of disability does offer a more complex and nuanced framework for looking at disability within a societal context (particularly when compared to the medical model), it is not without its own theoretical limitations. These limitations must be addressed to create a more well-rounded viewpoint of disability that encompasses biological, psychological, and social elements, particularly if such a framework is to be applied to contemporary issues (i.e., the COVID-19 pandemic).

### *Limitations of the Social Model of Disability.*

Thomas (2004) outlines various critiques of the social model of disability that have been growing within disability discourse. Firstly, the denial of a causal relationship between impairment and disability by social constructionists is inherently problematic. While defining disability as little more than a social creation has historically been used as a powerful tool to advance disability rights and fight systemic oppression (Shakespeare, 2010), this perspective denies the lived daily experiences of those with disabilities. The idea that having an impairment is no longer an issue once systemic barriers are lifted ignores scientifically-proven biological and psychological facets of disability as well as anecdotal evidence directly from disabled people that their physical impairment prevents them from doing certain activities. For example, studies examining individuals living with chronic pain or illness have found that their impairment can halt their participation in certain activities regardless of societal barriers being present in the outside world (Owens, 2015). Societal barriers in the outside world may prove to be “irrelevant” to individuals attempting to manage their internal physical and psychological symptoms related to their chronic pain or illness as their own body may halt them from being able to fully participate within society (Owens, 2015).

Additionally, defining disability in terms of its societal consequences then creates a monolithic viewpoint of disability that, again, ignores individualized experiences (Owens, 2015). Particularly, those who face fluctuating illnesses or have invisible disabilities could be excluded underneath this definition as they may not have the same social reactions or experiences as someone with a visible disability. This leads into another problem as separating disability from the person and pushing blame solely onto societal circumstances strips disabled people from a disability identity and culture in which they may strongly take pride in. Lastly, the social model focuses on and centers oppression faced by disabled populations as the main facet of disabil-

ity and utilizes this idea as a tool for liberation, which decenters the lived and embodied experiences of individuals with impairments. This monolithic viewpoint of disability is thus an inadequate theoretical basis to look at how impairment, in a nuanced way, encompasses individual experiences, struggles, and triumphs related to disability.

Several scholars have suggested abandoning the social model altogether, while others fear that this would put historic gains in disability rights in jeopardy as individualized and medicalized models of disability became reinvigorated. Some scholars have suggested viewing the relationship between impairment and disability as a continuum considering that the possibility of creating a distinct line between impairment and disability will more than likely always be a difficult task (Thomas, 2004). Regardless, the dichotomies between the medical model and the social model both indicate one overarching theme of disability: it is a complex social, emotional, and biological experience that can impact every facet of an individual's life in a multitude of ways. As the COVID-19 pandemic unfolded, these nuances were lost as disabled people were medicalized in ways that explicitly demonstrated the harms of the medical model of disability, and where a more all-encompassing social model could have been beneficial. This paper will examine the COVID-19 pandemic and responses towards disabled populations through a more integrationist lens, considering the biological, psychological, and social facets of disability.

### *Early COVID-19 Messaging*

The consequences of not having a well-rounded theoretical framework for discussing and viewing disability can be best illustrated by the continuous medicalization of disabled people seen during the COVID-19 pandemic. For example, the World Health Organization concluded during the early stages of the COVID-19 pandemic that the elderly and those with pre-existing conditions were more susceptible to both contracting and dying from the illness (Begley, 2020;

Chappell, 2020). While this was (and still is) invaluable information, there were some government officials who used these facts in an attempt to alleviate the worries of able-bodied citizens worldwide, such as former White House science Advisor Scott Atlas who claimed that younger populations had nothing to worry about in regard to the pandemic (Thompson, 2020). This not only completely misconstrued the original points of healthcare officials by insinuating that able-bodied and younger people were unlikely to catch and die from COVID-19, but it also led to blatant devaluation of the lives of the chronically ill and elderly.

Terms such as “Boomer Remover” and “Senior Deleter” were used as “comedic” social media euphemisms for COVID-19 in response to the the deadliness of the virus towards those from the Baby Boomer generation who would have been in their late 50s and upwards during 2020 (Meisner, 2020; Previtali et al., 2020). The possibility of “culling elderly dependents” via death was described by an article in the Telegraph as a potential economic benefit of the pandemic as public aid resources would no longer have to be allocated towards them (Warner, 2020). Lieutenant Governor of Texas Dan Patrick, in defense of ending social distancing protocols earlier than recommended by public health experts, argued that he and many other elders were willing to sacrifice their health to keep the economy from collapsing. Within a Fox News interview (Livingston, 2020), Governor Patrick explained:

I just think there are lots of grandparents out there in this country like me...that what we all care about and what we all love more than anything are those children. And, I want to, you know, live smart and see through this, but I don't want to see the whole country to be sacrificed, and that's what I see...I've

talked to hundreds of people and just in the last week, and making calls all the time and everyone says the pretty much the same thing, that we can't lose our whole country. We are having an economic collapse.

Governor Patrick's statements demonstrate the narrative of expendability found within media and government officials as it relates to elderly, disabled, and chronically ill individuals during the early stages of the pandemic. The potential of American economic collapse was heavily centered as the main concern within popular media during this time rather than the physical, emotional, and mental consequences that COVID-19 could have on vulnerable populations. This also provides a look into the way intersectionality, or the unique intertwining of social characterizations (Coaston, 2019), was largely ignored during the messaging displayed early in the COVID-19 pandemic. The definition of "high-risk" was largely relegated to elderly populations as age and disability are typically associated with one another. However, this messaging completely ignored disabled and chronically ill individuals who were not elderly, leaving them largely voiceless and negating their worth to society during a time of worry and panic.

Additionally, the idea that elderly and disabled people dying due to COVID-19 should not be a global concern led to many social media users taking to public online platforms such as Twitter to challenge this problematic rhetoric and set up online support groups for those affected (Mastroianni, 2020; Ryan, 2020). Disabled people across the world also expressed their concerns about how the pandemic would limit their occupational opportunities (Webster, 2020), access to critical daily care and assistance (Abrams, 2020), and, most notably, access to life-saving medical services in the event they were infected with COVID-19 (D'Anna, 2020; Kittay, 2020; Shapiro, 2020a). When interviewed about the COVID-19 pandemic for USA Today News (D'Anna, 2020), disability activist Valerie Novack remarked:

I'm very, very scared, particularly for our community, that people will die, not because they contract COVID-19, not because of physical distancing or quarantining or because they didn't get access to food or a home health aide or something like that, but because they're being refused treatment, because we don't have enough things like ventilators or hospital beds.

Novack's comments indicate that fears of improper medical rationing within the disability community are not new. The pandemic, however, has seemingly brought this issue to the forefront of public consciousness. The analysis and critique that follows will explore the history of medical rationing, and explain how its practice is often ableist or discriminatory towards disabled people, particularly during the COVID-19 pandemic

### *Medical Rationing*

Medical rationing is best described as the allocation and withholding of beneficial medical resources and treatments to certain individuals (Scheunemann & White, 2011). Medical rationing is by no means a new concept in the American healthcare system. For example, as of February 2021, there are around 107,000 patients on the national organ transplant list (Health Resources and Service Administration, n.d.), many of whom will die due to a lack of available organs to transplant, which is made very clear by transplant organizations. However, the ableist implications of who gets an organ has long been challenged by disability advocates. As recent as 2019, the National Council of Disability submitted a five-report series to the White House aimed at exposing how often disabled people are denied organ transplants such as hearts based on unfounded stereotypes about their quality of life and competency levels regarding post-operation care.

This illustrates a larger and pervasive issue regarding the mistreatment disabled people face at the hands of medical rationing.

The Scarce Resource Management and Crisis Standards of Care manual for the Washington State Department of Health (2020) gives explicit details as to what types of patients should be approved for ICU care during times in which medical resources are scarce. Such screening criteria for medical personnel to judge eligibility of potential patients to receive medical care like ventilatory support include “significant underlying disease process that predicts poor survival given the current circumstances which make crisis triage necessary,” such as “severe congestive heart failure” or “severe chronic lung disease” (p. 35). Most interestingly, there is also criteria for degree of “frailty,” explicitly defined by the manual as “as a syndrome of physiological decline in life, characterized by marked vulnerability to adverse health outcomes. For example: frail adults are less able to adapt to stressors such as acute illness or trauma than non-frail adults” (p. 35). It is here where we see that “frail” adults (or those with chronic illnesses and disabilities) are treated as less worthy of life-saving medical resources in favor of those without any impairments. The explosive nature of the pandemic has left hospitals and other healthcare organizations with shortages of medical supplies worldwide. Thus, doctors and nurses being are being forced to choose which and what type of patients to extend these resources to.

Disabled people have already suffered greatly underneath the prejudices of medical rationing since the beginning of the pandemic across the globe. An interim report published by Inclusion London (2020), a London-based disability advocacy organization, conducted a survey where several respondents reported being asked by healthcare providers to sign “Do Not Resuscitate” (DNR) notices in the event that they need life-saving medical services. Turning Point, a national provider of health and social care within the United Kingdom, reported receiving 22 complaints of unlawful “Do Not Resuscitate” or-

ders being placed on the records of disabled patients during in April of 2020 in the event they are infected with COVID-19 and require medical care, an unprecedented amount in one month (Alexiou, 2020). Northwell Health, New York's largest healthcare system, released a crisis management memo in April of 2020 instructing hospital personnel that scarce critical care resources such as ventilators should be allocated to those "most likely to benefit," particularly those without a history of illnesses (Einsenberg & Goldenberg, 2020). NPR reported an instance in Oregon in which an intellectually disabled woman who contracted COVID-19 and was denied a ventilator she needed due to her "low quality of life," as cited by a doctor; the woman was then asked to sign a legal form that would allow the hospital to deny her life-saving medical care (Shapiro, 2020b).

Misperceptions about disability as it relates to "quality of life" and the "benefits" of not being disabled can be the difference between life and death for individuals with disabilities. The Washington State Department of Health (2020) referring to the chronically ill as "frail" and having a "decline in life" reiterates the idea that a life with disability is one that is not worth living, and certainly not one worth saving. Thus, it is imperative to look at this type of underlying ableist rhetoric within the healthcare field as it relates to medical rationing in order to better service such an underserved community.

**Approaches to Medical Rationing.** Scheunemann and White (2011) offered three foundational approaches to distributive justice in an attempt to guide medical rationing and make it more "fair:" utilitarianism, egalitarianism, and prioritarianism. Looking at these proposed approaches from a disability justice point-of-view allows for a more nuanced conversation surrounding medical rationing and how (if possible) to make it more equitable for those with disabilities. Andrews et al. (2020) outlines the problems within each of Schuemann and White's three approaches to medical rationing through the lens of disability, which will be further expounded upon within this paper.

**Utilitarianism.** Firstly, “utilitarianism” involves the distribution of resources to save the most quality-adjusted life years. This definition is already inherently problematic as the “quality of life” of disabled people has been well-documented to be automatically undervalued on the basis of them having mental, physical, and/or intellectual differences, often dubbed the “disability paradox.”

The “disability paradox” can be described as the phenomenon in which disabled people tend to perceive their own quality of life to be higher than that of what nondisabled people would expect (Albrecht & Devlieger, 1999). Nondisabled people may focus on the stereotypically negative aspects of disability, therefore ignoring any possible positive happenings within the life of a disabled person outside of the context of physical functionality. Nondisabled people also widely do not take into account, or greatly underestimate, the power of adaptation in regard to physical limitations (Amundson, 2010; Ubel et al., 2005). Some studies have shown that disabled people may even define broad terms such as “quality of life” and “healthy” much differently than their able-bodied counterparts (Drum et al., 2008), signifying baseline discrepancies as to what it means to have a “high” quality of life.

There are also arguments that the idea of “quality of life” has several components that disabled people have a tendency to perceive on different levels. For example, despite having lower rankings of physical quality of life, studies suggest that the perception of quality of life in regard to psychosocial, mental, and spiritual aspects remain high amongst moderate to severely disabled individuals and even terminally ill disabled hospice patients (Albrecht & Devlieger, 1999; Kutner, et al., 2003). Additionally, health-related quality of life measures tend to confound functionality with health, lowering self-perceived rates of quality of life amongst disabled populations (Schwartz et al., 2007). All of these factors compound to lower nondisabled people’s perceptions of a disabled person’s quality of life, making the

utilitarian approach to distributive justice (and medical rationing) particularly deadly to disabled populations. For example, as recently as February of 2021, a study of 714 practicing US physicians found that 82.4% of them reported believing that people with significant disabilities have a lower quality of life compared to nondisabled individuals, and only 40.7% of physicians were very confident that they provided the same quality of care to both disabled and nondisabled patients (Iezzoni et al., 2021).

Internalized biases about disability amongst healthcare providers need to be further researched and thoroughly addressed to ensure that disabled communities are left with inequitable care and treatment, especially during such a deadly pandemic.

***Egalitarianism.*** Secondly, “egalitarianism” proposes the idea that everyone should be provided equal opportunity to have access to help and care in an unbiased way, such as a medical lottery (Scheunemann & White, 2011). Another tier of egalitarianism is the idea of “first come, first served,” meaning people are provided care and help based on the order in which they arrive. The latter method of distributive justice systemically bars disabled people from access to life-saving treatments as it would give those with more means, money, and prestige access to the best and most frequent medical care while others who are more economically disadvantaged (such as disabled people) are left unprioritized.

Poverty and disability have often been characterized as a cycle that reinforces one another. A systematic literature review conducted by Banks et al. (2017) concluded that 81% of studies involving disability and poverty found a statistically significant, positive correlation between the two. A lack of access to healthcare, food, and safe living conditions are all aspects of poverty that can lead to disability (Banks et al., 2017; Palmer, 2011). Disability has been linked to negative outcomes such as devalued social roles, increased difficulty in obtain-

ing and maintaining employment, and increased difficulty in accessing, navigating, and properly utilizing social service systems, all of which then reinforce impoverished states of being (Lustig & Strauser, 2007).

For example, across all age groups in the United States, disabled people are much less likely to be employed compared to their nondisabled counterparts (U.S. Bureau of Labor, 2021). Unemployment rates in the United States during the COVID-19 have declined since its peak in April of 2020 (14.8% to 6.7% as of December 2020), but research has rarely included statistics over the economic effects of the virus on disabled populations (Falk et al., 2021). As the population with the highest unemployment rates (which increases the risk of poverty, in turn increasing the risk of inadequate access to healthcare), utilizing the egalitarian method of distributive justice is arguably insufficient.

***Prioritarianism.*** Lastly, “prioritarianism” emphasizes the prioritization of those who have not had as much opportunity to experience life, such as favoring younger patients over elder ones. However, again, this makes assumptions about people’s livelihoods and experiences in an inherently ableist manner. As previously explained, healthcare providers often make implicit assumptions about what disabled people have and have not experienced as well as their quality of life (Iezzoni et al., 2021), making their subjective opinion about disabled people’s life experiences irrelevant and inaccurate. Almost half of all disabled persons within the United States are over the age of 65 (U.S. Bureau of Labor, 2021). Being viewed as both old and disabled adds in another layer of complexity as these individuals are seen as expendable in order to save the lives of the young and able-bodied. Thus, the prioritization model encourages ableism and ageism, making it an inappropriate choice for healthcare providers.

**Solutions to Ableism Within Medical Rationing.** Andrews et al.

(2020) offers a compilation of possible solutions to medical rationing that incorporate different aspects of disability justice and advocacy. It is argued that overworked and stressed front-line healthcare workers should not be the ones left to make decisions of life and death for others, but rather to diverse sets of committees that have representation for disabled people. Additionally, healthcare training on disability and treatment needs to be accompanied with information about the social and cultural aspect of disability specifically highlighting the systemic barriers that often keep disabled people from thriving to their full potentials (Andrews et al., 2020; Goering, 2015). This has the potential to lessen implicit biases about disability for the sake of decreasing instances of medical mistreatment towards disabled people.

## **Psychological Impacts of COVID-19 on Disabled Populations**

### *Depression*

A key argument for prematurely reopening public spaces against the advisement of public health officials has been the serious psychological impacts associated with quarantine protocols.

While quarantine and social distancing measures are vital components to lowering COVID-19 cases, they do not come without side effects. For example, rates of depression among US adults reportedly tripled from 8.5% to 27.8% between March 31 and April 13 (Ettman et al., 2020), a period in which almost 96 percent of the U.S. population were under mandatory stay-at-home orders. Ettman et al. (2020) collected data from 1,441 respondents examining rates of depressive symptoms and COVID-19 stressors and found that women, racial minorities, and those with lower incomes were the most affected. Interestingly, demographic information on disability (present

or not present) was not collected in the study, despite previous findings that 32.9% of disabled adults reported experiencing frequent mental distress, including depression, even prior to the COVID-19 pandemic (CDC, n.d.-b). This is consistent with previous findings that physically, intellectually, and developmentally disabled individuals have historically been severely underrepresented in health research (Krahn et al., 2015; Spong & Bianchi, 2018), and the pandemic has only magnified their absence.

With an increased baseline of depressive symptoms even prior to quarantine restrictions among disabled populations, the lack of studies specifically focusing on individuals with disabilities and adverse mental health outcomes amidst a global pandemic is concerning (Burns, 2009; Mojtabai et al., 2011). A rapid review of COVID-19 literature (Lebrasseur et al., 2021) found that only 11 out of 1,621 individual original published studies focused specifically on physically disabled populations when looking at the impact COVID-19 and subsequent isolative protective measures on mental health. Most studies focused on this population's lack of access to healthcare, but there needs to be specialized focus on the psychological ramifications (i.e., depression) that COVID-19 has had on disabled populations.

### *Stress*

Stress, while a natural aspect of life for most, can have long-term negative effects on both the brain and body, particularly if such stress is prolonged due to one's living or working environment (Yaribeygi et al., 2017). The sudden nature of the COVID-19 pandemic left people wholly unprepared for the subsequent stressors, such as job loss, forced isolation, and news of increasing death tolls. An MTurk study conducted during the early stages of sweeping lockdown measures found that 96.6 percent of respondents were consistently exposed to worrying news about the contagiousness and deadliness of the virus and 88.3 percent of respondents were reportedly stressed

about not knowing how long extremely restrictive quarantine measures would last (Park et al., 2020). Disabled people are at higher risk of both being exposed to and contracting COVID-19, which has the potential to further increase perceived stress levels amongst this population compared to the nondisabled. Furthermore, this stress could potentially manifest or exacerbate other health issues (i.e., anxiety, depression). People with intellectual and developmental disabilities are at the greatest risk of both contracting and dying from COVID-19 compared to nondisabled individuals (FAIR Health, 2020; Landes et al., 2020), yet are hardly present in research investigating the harmful effects of COVID-19 related stressors on one's physical and mental health.

A limited number of studies, however, have demonstrated that moderate exposure to COVID-related stressors can facilitate effective coping strategies among individuals with disabilities. An online study of 269 individuals with self-reported disabilities, for example, found that moderate levels of stress related to the COVID-19 pandemic positively correlated with coping mechanisms such as acceptance of one's situation and self-distraction (Umucu & Lee, 2020), which is consistent with previous research (Burker et al., 2005). Further research quantifying the psychological impact of COVID-19 on those with disabilities is vital in order to identify potential stress factors, subsequent coping mechanisms, and ways to minimize long-term consequences of stress.

## **Social Impacts**

### *Abuse*

People with disabilities in general face alarmingly high rates of violence perpetuated against them, ranging from intimate partner violence, sexual abuse, and assault (Dembo et al., 2018). Quarantine and social-distancing measures have unintentionally created unique and sometimes deadly challenges for individuals with disabilities that

must be addressed by both researchers and public-policy makers in an effort to protect such vulnerable populations. Lund (2020) conducted an extensive literature review outlining the myriad of ways protective measures associated with COVID-19 have exacerbated instances of abuse amongst disabled populations. It is not uncommon for some disabled individuals to have to rely on others to assist them with daily activities (i.e., getting dressed, bathing), which increases their chances of victimization as they may feel they must endure the abuse in order to receive the care they need.

Disability-related abuse often involves the abuser not providing necessary medical care to the disabled victim or destroying their vital medical equipment (i.e., wheelchair, crutch, etc.) out of malice or neglect. An anecdote from a physically disabled mother detailing the abuse she endured at the hands of her husband from a qualitative study conducted by Nosek et al. (2001) best illustrates this type of abuse:

After my child was born, he [spouse] became jealous and didn't want me to get up and take care of her. He would take away my chair from me and tied me up when I pulled myself out of bed . . . He was also physically abus[ive] while I was pregnant.

Lund (2020) explains how disability-related abuse manifests and persists during times of crisis, such as a pandemic. For example, backup caregivers are oftentimes advised for disabled people in the event that their primary caregiver is either unable or unwilling to assist them any longer. However, the pandemic may decrease the chances of finding a backup caregiver (i.e., concerns about exposure, social distancing measures, etc.). Additionally, the disabled individual may not be able to risk being exposed to an outsider given the heightened chances of COVID-19 transmission, particularly when considering what types of assistance is needed. Lastly, the effects of equipment damage at the hands of abusers may be heightened and

last longer when considering production and delivery delays due to COVID-19, lessened access to outside equipment technicians due to risk of exposure, and new financial barriers because of the devastating effects COVID-19 has had on jobs and finances.

People with disabilities also face significant barriers to reporting abuse. Disability-related abuse is rarely acknowledged or screened for by healthcare professionals (Lund, 2020). This is particularly concerning given the rise of domestic violence cases globally amidst COVID-19 restrictions (Bradbury-Jones & Isham, 2020). Additionally, halts on face-to-face interactions with healthcare providers and an increase in telehealth services leaves disabled people with fewer chances to report abuse in a safe manner (i.e., away from abusers). There are also fewer opportunities for healthcare workers to take heed to signs of abuse (Courtenay & Perera, 2020; Lund, 2020).

Previous research has found that the psychological consequences of victimization are often more severe and linger longer amongst disabled survivors of abuse compared to nondisabled ones. Dembo et al. (2018) found that women with disabilities reported more instances of severe and long-term distress following violence perpetuated against them compared to nondisabled women. Men with disabilities also reported higher instances of severe distress following violent acts compared to nondisabled men, but not at the same rates as disabled women. This abuse-related trauma that individuals with disabilities suffer from can be predicted to have more significant impacts on their mental health. Thus, extra safeguards for disabled populations during national crises such as the COVID-19 pandemic, need to be put into place.

## **Lessening the Negative Impacts of COVID-19 on Disabled Individuals**

### *Poverty*

Poverty has historically been linked to many adverse psychological

and social outcomes, such as depression (Heflin & Iceland, 2009; Joshi et al., 2017; Ridley et al., 2020), stress (Evans & English, 2002; Evans & Schamberg, 2009; Haushofer & Fehr, 2014), and instances of abuse and domestic violence (Bywaters et al., 2016; Slabbert, 2017). As a group that already has disproportionately high rates of impoverishment (APA, 2010), economic interventions are needed to possibly prevent the short- and long-term effects of poverty that may result from the pandemic. People with disabilities must be centered in these conversations so that these implementations are disability-inclusive. Banks et al. (2021) outlines several methods to create inclusionary economic intervention systems.

First, eligibility for COVID-19 relief must be considerate of the circumstances impacting disabled people. For example, means of determining poverty rates (means-testing and proxy-means-testing) often underestimate poverty rates of people with disabilities because they do not factor in extra costs that are related to disability, such as the cost of equipment or medication (Banks et al., 2017; Braithwaite & Mont, 2009; Emerson, 2007; Mitra et al., 2013). Utilizing a more disability-inclusive measure of determining whether or not someone is impoverished that takes the lived experience of disability into account would greatly benefit disabled populations who are in need of financial assistance. Determining who qualifies as “disabled” and are eligible to receive relief and assistance can also be a generally time-consuming and costly process as many disability assessments require medical documentation of one’s impairment (Banks et al., 2021). As a population that has historically had multiple issues with adequate access to healthcare (World Health Organization), the added complication of a global pandemic that may further inhibit a disabled person’s access to seeing a medical professional makes medical assessment a barrier to much needed economic relief. Banks et al. (2021) recommends a functioning-based assessment done by trained community informants rather than standardized measures of poverty to

ensure that disabled individuals are not underfunded during a world-wide pandemic.

Additionally, Banks et al. (2021) advocates for accessible application procedures.

Globally, many people with disabilities do not enroll in certain governmental programs that they are eligible for simply because they do not know they exist (Banks et al., 2021). COVID-19 relief applications should not only actively target disabled populations to bring awareness to the programs, but they should also offer accessible informational sessions, disability-sensitivity training for staff working at application offices, and offer accessible accommodations for a wide variety of disability types.

## **Implications for Future Research**

### ***“COVID Long-Haulers”***

An aspect of the COVID-19 pandemic that has not been adequately addressed involves the new subsection of disabled individuals that will exist as a result of lingering COVID-19 effects after contracting the virus. Dubbed “COVID Long-Haulers,” an estimated 10 to 30 percent of people who contract COVID-19 experience prolonged symptoms of COVID-19 such as neurocognitive difficulties and physical weakness (Greenhalgh et al., 2020; Logue et al., 2021), but further peer-reviewed research has yet to be done to reinforce the accuracy of this statistic. Most of what is known about COVID Long-Haulers has come from personal testimonies provided by the victims themselves. One high school teacher from Georgia (Nath, 2020) described her symptoms in a poem-like format:

My chest hurts and head pounds  
The body aches and heart races  
I can hardly move, it's extreme fatigue  
Brain's in a fog, can't remember the name of my dog  
Lost my sleep and my appetite  
Feet are tingling and ears are ringing  
It's the Long-Haul COVID

Many individuals claim that they have experienced long-term COVID symptoms like the ones described above and, as of yet have not received the medical, financial, and social support that they require (Ables, 2020; Nath, 2020; Reddy, 2020). Many of these testimonials come from healthcare workers, who had massive exposure to the virus during its earlier stages and have been experiencing symptoms for months (Nath, 2020).

COVID Long-Haulers have not been sitting silently amidst their struggles, however. Social media sites such as Facebook and Reddit have served as breeding grounds for COVID Long-Hauler support groups. It is there where people who are experiencing persistent COVID-19 symptoms can find a community of others in similar situations, particularly during a time in which healthcare providers are still puzzled as to why there are some healthy and young adults experiencing long-term COVID symptoms while others are making full recoveries in reasonable amounts of time (Rubin, 2020). These symptoms have the potential of making it harder to work or move around independently on a daily basis, which creates what are essentially temporary disabilities that may or may not become permanent. This classifies COVID- Long-Haulers as a population now vulnerable to the risks associated with disability (i.e., poverty, unemployment), and research over them must be prioritized to aid in their reintegration into society.

## *“Silver Linings” of the COVID-19 Pandemic for Disabled Populations*

Despite the severe implications of the negative impacts the COVID-19 pandemic has had on disabled populations, it is worth noting that not all the impacts have been adverse.

Particularly, increased opportunities to work from home (also called “teleworking”) has opened up accessible spaces for numerous disabled adults to earn wages for themselves and their families remotely, breaking down some of the prior barriers they faced when having to work in- person.

Parker et al. (2020) found that 71% of employed Americans were working from home during October of 2020 amidst the COVID-19 pandemic, a striking increase compared to the meager 20% of adults were working from home prior to it. Additionally, more than half of employed adults (54%) claimed that they would like to continue working from home once the pandemic ends (Parker et al., 2020). Encouraging conversations about the possibility of incorporating telework as a viable accommodation for employees has the potential to open up employment opportunities for disabled populations in ways never previously seen.

People with disabilities who are working-age are more than three times as likely to be unemployed compared to nondisabled working-age people (U.S. Bureau of Labor, 2021). Studies have suggested that factors such as employer bias against applications featuring disabled workers, negative stereotyping and microaggressions from managers and co-workers, and the underpayment of employees with disabilities all play a role in high rates of unemployment amongst disabled individuals (Schur et al., 2020).

Telework has long been a desired tool by disabled populations to further integrate themselves into the workforce as it can eliminate the

necessity of travel accommodations for those with physical limitations or aid in reducing symptoms of pain and fatigue, which are not usually recognized as being formally related to disability (Schur et al., 2020). Historically, very little empirical research has been done on the potential positive benefits that telework could have on disabled workers compared to purely theoretical research (Schur et al., 2020). Courts prior to the pandemic have usually ruled in favor of employers arguing that telecommunication was not a reasonable accommodation underneath the Americans with Disabilities Act (Schur et al., 2020), which has now been greatly undermined as large portions of the country have been forced to work from home.

Schur et al. (2020) utilized three representative surveys featuring disabled populations conducted by the U.S. Census Bureau between 2009 and 2018 to analyze the impact of telework on disabled adults. The researchers outline several important results, only a few of which will be discussed here. Firstly, disabled workers were more likely to work at home compared to nondisabled workers regardless of gender, race/ethnicity, and educational background.

Additionally, people with mobility impairments, difficulty caring for oneself, and difficulty going outside were more likely to work at home compared to those with other disabilities. Lastly, the underpayment experienced by disabled teleworkers was only slightly higher than those experienced by disabled employees who work in-person. The researchers suggest that these results underscore the opportunities for disabled populations that broadening the scope of telework could lead to considering the increased likelihood of disabled adults being teleworkers even prior to the pandemic. Telework could potentially lessen the impact of employer biases as home-based positions may lower the chances of needing workplace accommodations and lower the impact of ableist attitudes amongst co-workers and higher-ups against disabled employees.

However, the wage-gap finding suggests that home-based disabled employees may face even more substantial instances of underpayment, indicating a need for governmental interventions to criminalize their underpayment.

Of course, there have been concerns about increasing the prevalence of teleworking amongst disabled populations. As Schur et al. (2020) points out, people with disabilities are more likely to be working blue-collar jobs that absolutely require face-to-face interaction (i.e., waitressing, factory work), many disabled people may not benefit from the possibility of increasing telework opportunities. In addition, disabled people already face higher rates of social isolation and fewer friendships compared to nondisabled populations (Emerson et al., 2021), and increasing rates of telework amongst disabled people may further serve to widen that gap.

Regardless, job opportunities that had once largely excluded disabled populations are now available to them in ways that had been seen as unrealistic just a year prior. This type of inclusivity has the potential to integrate disabled people into society, but without centering the voices of disabled people within the conversations, this progress could be easily lost and forgotten post-pandemic.

**Resilience.** It is important during times of uncertainty such as a deadly pandemic that disabled populations are occasionally presented with images of positivity and hope in the face of such adversity. A possible avenue for this could be looking at ways in which disabled populations have historically coped with and overcame this sort of trauma and stress during times of crisis and how this can be cross-applied to the COVID-19 pandemic to support disabled populations. Looking at disability icons who still prospered in the face of pandemic-related adversity, such as Ed Roberts and Judy Huemann, could be beneficial in boosting the morale of disabled individuals during this time.

Edward “Ed” Roberts is considered the father of the disability rights movement due to his trailblazing work in disability rights. Roberts contracted polio at the age of fourteen, leaving him mostly paralyzed from the neck down (Edelstein, 2010). After becoming the first disabled student to rely on a wheelchair at Berkeley University in 1962, Roberts was met with increasing resistance from school administrators to let him live in on-campus housing due to his 800-pound iron lung that he needed to keep with him at night. Following mass vaccination of the Salk vaccine that essentially ended the polio epidemic in 1955, many American polio survivors were left chronically and severely disabled with a government that did not have widespread protections for disabled populations. This is evidenced by the legal and common practice in the 1960s for collegiate institutions to reject disabled students on the basis of alleging that they could not accommodate their physical and intellectual needs (Edelstein, 2010).

In response to the discrimination, Roberts and other physically disabled friends he had bonded with on Berkeley’s campus (dubbed the “Rolling Quads”) pushed back against the University’s ableism until the institution agreed to supply funding for the student to live independently while attending college (Shapiro, 1994). The Rolling Quads would go on to establish a program dedicated towards helping disabled individuals live independently and efficiently (also known as the Physically Disabled Students’ Program) that would achieve great success and notoriety as well as lead to the establishment of Centers for Independent Living nationwide. Hundreds of these programs still exist today and continue to benefit disabled people on a daily basis, demonstrating the impact and legacy that Roberts left.

Similarly, Judy Heumann, a prominent disability rights activist, has spent her entire life advocating for disability rights. After contracting polio as a baby in 1949, Heumann faced widespread opposition from public schools about being allowed to receive an education as a wheelchair-user. Public school policies at the time made it legal

for her to be discriminated against and turned away from attending schools that did not wish to deal with a disabled child. This pattern of educational ableism continued throughout her life, including when she was denied her New York teaching license in 1970 because the Board of Education were wary that she would be able to safely get both herself and students out of a school building if it caught on fire. Heumann sued the Board, and they chose to settle out of court, eventually making Heumann the first wheelchair user to teach in New York City. Heumann would go on to co-found the Berkeley Center of Independent Living, be appointed by two presidents (Clinton, Obama) to serve as an Assistant Secretary for the Office of Special Education and Rehabilitative Services as well as the Special Advisor for International Disability Rights and play major roles in the development and implementation of sweeping disability rights legislation, such as the Americans with Disabilities Act (ADA Live).

Both Roberts and Heumann represent the resilience that disabled people in previous medical epidemics have had to muster up in the face of rampant and blatant ableism. Their stories of hardship are not meant to be seen as “inspiring” in the eyes of condescending able-bodied audiences. Instead, to disabled audiences, Roberts and Heumann represent a sense of hope and empowerment in the wake of what feels to be bleak for some disabled individuals. These types of stories revolving around disabled icons who have made it through similar situations as the COVID-19 pandemic could be critical in boosting the esteem and mental resilience of disabled populations during these times.

## **Conclusion**

As has been outlined within this paper, the COVID-19 pandemic has placed disabled individuals into a particularly precarious position in which they are already at a heightened risk of experiencing medical

discrimination, domestic abuse, psychological distress, and economic turmoil and now must cope with the added possibility of death due to the COVID-19 virus.

Governmental responses to the impact COVID-19 has had on citizens must take into account the needs of disabled communities in order to address these exacerbated outcomes and lower risks of long-term effects such as depression and increasing poverty. Taking steps such as revamping guidelines for medical rationing, providing economic interventions specifically targeting individuals with disabilities, and encouraging positive stories of disability icons in the wake of similar medical catastrophes could be instrumental in ensuring that such an adversely impacted population is not left behind during times as scary and unsure as a global pandemic.

## References

- Ables, K. (2020, October 1). Covid 'long haulers' have nowhere else to turn — so they're finding each other online. *The Washington Post*. <https://www.washingtonpost.com/technology/2020/10/01/long-haulers-covid-facebook-support-group/>
- ADA Live. (n.d.). Judy Heumann: Disability Advocate. [https://www.adalive.org/heumann\\_j](https://www.adalive.org/heumann_j)
- Abrams, A. (2020, April 24). 'This Is really life or death.' For people with disabilities, coronavirus is making it harder than ever to receive care. *TIME*. <https://time.com/5826098/coronavirus-people-with-disabilities/>
- Albrecht, G. L., & Devlieger, P. J. (1999). The disability paradox: High quality of life against all odds. *Social Science & Medicine*, 48(8), 977–988. [https://doi.org/10.1016/s0277-9536\(98\)00411-0](https://doi.org/10.1016/s0277-9536(98)00411-0)

- Alexiou, G. (2020, June 23). Doctors issuing unlawful 'do not resuscitate' orders for disabled Covid patients 'outrageous.' *Forbes*. <https://www.forbes.com/sites/gusalexiou/2020/06/23/unlawful-do-not-resuscitate-orders-for-disabled-covid-patients-outrageous/>
- American Psychological Association. (2010). *Disability & socioeconomic status*. Retrieved April 25, 2020, from <https://www.apa.org/pi/ses/resources/publications/disability>
- Amundson, R. (2010). Quality of life, disability, and hedonic psychology. *Journal for the Theory of Social Behaviour*, 40(4), 374–392. <https://doi.org/10.1111/j.1468-5914.2010.00437.x>
- Anastasiou, D., & Kauffman, J. M. (2013). The social model of disability: Dichotomy between impairment and disability. *The Journal of Medicine and Philosophy*, 38(4), 441–459. <https://doi.org/10.1093/jmp/jht026>
- Andrews, E. E., Ayers, K. B., Brown, K. S., Dunn, D. S., & Pilarski, C. R. (2020). No body is expendable: Medical rationing and disability justice during the COVID-19 pandemic. *The American Psychologist*, Advance online publication. <https://doi.org/10.1037/amp0000709>
- Banks, L. M., Davey, C., Shakespeare, T., & Kuper, H. (2021). Disability-inclusive responses to COVID-19: Lessons learnt from research on social protection in low- and middle-income countries. *World Development*, 137. <https://doi.org/10.1016/j.worlddev.2020.105178>
- Banks, L. M., Kuper, H., & Polack, S. (2017). Poverty and disability in low- and middle-income countries: A systematic review. *PloS One*, 12(12). <https://doi.org/10.1371/journal.pone.0189996>
- Begley, S. (2020, March 3). Which groups are most at risk from the Coronavirus? *Scientific American*. <https://www.scientificamerican.com/article/which-groups-are-most-at-risk-from-the-coronavirus/>

- Benning, T. B. (2016). No such thing as mental illness? Critical reflections on the major ideas and legacy of Thomas Szasz. *BJPsych Bulletin*, 40(6), 292–295.  
<https://doi.org/10.1192/pb.bp.115.053249>
- Bradbury-Jones, C., & Isham, L. (2020). The pandemic paradox: The consequences of COVID- 19 on domestic violence. *Journal of Clinical Nursing*, 29(13-14), 2047–2049.  
<https://doi.org/10.1111/jocn.15296>
- Braithwaite, J., & Mont, D. (2009). Disability and poverty: A survey of World Bank poverty assessments and implications. *Alter*, 3(3), 219-232. <http://dx.doi.org/10.1016/j.alter.2008.10.002>
- Brisenden, S. (1986) Independent living and the medical model of disability. *Disability, Handicap & Society*, 1(2), 173-178.  
<https://doi.org/10.1080/02674648666780171>
- Bunbury, S. (2019). Unconscious bias and the medical model: How the social model may hold the key to transformative thinking about disability discrimination. *International Journal of Discrimination and the Law*, 19(1), 26–47.  
<https://doi.org/10.1177/1358229118820742>
- Burker, E. J., Evon, D. M., Loiselle, M. M., Finkel, J. B., & Mill, M. R. (2005). Coping predicts depression and disability in heart transplant candidates. *Journal of Psychosomatic Research*, 59(4), 215–222. <https://doi.org/10.1016/j.jpsychores.2005.06.055>
- Burns J. K. (2009). Mental health and inequity: A human rights approach to inequality, discrimination, and mental disability. *Health and Human Rights*, 11(2), 19–31.  
<https://pubmed.ncbi.nlm.nih.gov/20845839/>
- Bywaters, P., Bunting, L., Davidson, G., Hanratty, J., Mason, W., McCartan, C., & Steils, N. (2016). *The relationship between poverty, child abuse and neglect: An evidence review*. Joseph Rowntree Foundation. [https://www.researchgate.net/publication/295812966\\_The\\_relationship\\_between\\_poverty\\_child\\_abuse\\_and\\_neglect\\_an\\_evidence\\_review](https://www.researchgate.net/publication/295812966_The_relationship_between_poverty_child_abuse_and_neglect_an_evidence_review)

- Centers for Disease Control and Prevention. (n.d.-a). *Disability and health overview*. Retrieved April 25, 2020, from <https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html>
- Centers for Disease Control and Prevention. (n.d.-b). Many adults with disabilities report frequent mental distress. Retrieved April 25, 2020, from <https://www.cdc.gov/ncbddd/disabilityandhealth/features/adults-with-disabilities-mental-distress.html>
- Chappell, B. (2020, March 11). *Coronavirus: COVID-19 is now officially a pandemic, WHO says*. NPR. <https://www.npr.org/sections/goatsandsoda/2020/03/11/814474930/coronavirus-covid-19-is-now-officially-a-pandemic-who-says>
- Coaston, J. (2019, May 28). *The intersectionality wars*. Vox. <https://www.vox.com/the-highlight/2019/5/20/18542843/intersectionality-conservatism-law-race-gender-discrimination>
- Courtenay, K., & Perera, B. (2020). COVID-19 and people with intellectual disability: Impacts of a pandemic. *Irish Journal of Psychological Medicine*, 37(3), 231-236. <https://doi.org/https://dx.doi.org/10.1017%2Fipm.2020.45>
- D’Anna, J. (2020, April 15). *‘We are dead’: People with disabilities fear they will be on losing end of doctors’ life-or-death choices amid coronavirus crisis*. USA Today. <https://www.usatoday.com/story/news/nation/2020/04/14/coronavirus-people-disabilities-worry-covid-19-care/2994471001/>
- Dembo, R. S., Mitra, M., & McKee, M. (2018). The psychological consequences of violence against people with disabilities. *Disability and Health Journal*, 11(3), 390–397. <https://doi.org/10.1016/j.dhjo.2018.01.006>
- Drum, C. E., Horner-Johnson, W., & Krahn, G. L. (2008). Self-rated health and healthy days: Examining the “disability paradox.” *Disability and Health Journal*, 1(2), 71–78. <https://doi.org/10.1016/j.dhjo.2008.01.002>

- Edelstein, W. (2010). Ed Roberts, disability-rights leader and Cal alum, gets his own state day. *Berkeley News*. <https://news.berkeley.edu/2010/07/27/roberts/>
- Eisenberg, A., & Goldenberg, S. (2020, April 3). *Northwell memo calls for rationing ventilators to 'patients most likely to benefit.'* Politico. <https://www.politico.com/states/new-york/albany/story/2020/04/03/northwell-memo-calls-for-rationing-ventilators-to-patients-most-likely-to-benefit-1271711>
- Emerson, E. (2007). Poverty and people with intellectual disabilities. *Mental Retardation and Developmental Disabilities Research Reviews*, 13(2), 107–113. <https://doi.org/10.1002/mrdd.20144>
- Emerson, E., Fortune, N., Llewellyn, G., & Stancliffe, R. (2021). Loneliness, social support, social isolation and wellbeing among working age adults with and without disability: Cross-sectional study. *Disability and Health Journal*, 14(1), Article 100965. <https://doi.org/10.1016/j.dhjo.2020.100965>
- Ettman, C. K., Abdalla, S. M., Cohen, G. H., Sampson, L., Vivier, P. M., & Galea, S. (2020). Prevalence of depression symptoms in US adults before and during the COVID-19 pandemic. *JAMA Network Open*, 3(9), Article e2019686. <https://doi.org/10.1001/jamanetworkopen.2020.19686>
- Evans, G. W., & English, K. (2002). The environment of poverty: Multiple stressor exposure, psychophysiological stress, and socio-emotional adjustment. *Child Development*, 73(4), 1238–1248. <https://doi.org/10.1111/1467-8624.00469>
- Evans, G. W., & Schamberg, M. A. (2009). Childhood poverty, chronic stress, and adult working memory. *Proceedings of the National Academy of Sciences of the United States of America*, 106(16), 6545–6549. <https://doi.org/10.1073/pnas.0811910106>

- FAIR Health. (2020). *Risk factors for COVID-19 mortality among privately insured patients*. <https://s3.amazonaws.com/media2.fair-health.org/whitepaper/asset/Risk%20Factors%20for%20COVID-19%20Mortality%20among%20Privately%20Insured%20Patients%20-%20A%20Claims%20Data%20Analysis%20-%20A%20FAIR%20Health%20White%20Paper.pdf>
- Falk, G., Carter, J. A., Nicchitta, I. A., Nyhof, E. C., & Romero, P. D. (2021). *Unemployment rates during the COVID-19 pandemic: In brief* (Report No. R46554). Congressional Research Service.
- Goering, S. (2015). Rethinking disability: The social model of disability and chronic disease. *Current Reviews in Musculoskeletal Medicine*, 8(2), 134–138. <https://doi.org/10.1007/s12178-015-9273-z>
- Greenhalgh, T., Knight, M., A'Court, C., Buxton, M., & Husain, L. (2020). Management of post-acute covid-19 in primary care. *BMJ*, 370, Article m3026. <https://doi.org/10.1136/bmj.m3026>
- Haegele, J. A., & Hodge, S. (2016). Disability discourse: Overview and critiques of the medical and social models. *Quest*, 68(2), 193–206. <https://doi.org/10.1080/00336297.2016.1143849>
- Haushofer, J., & Fehr, E. (2014). On the psychology of poverty. *Science*, 344(6186), 862–867. <https://doi.org/10.1126/science.1232491>
- Health Resource and Service Administration. *Organ donation statistics* (n.d.). Retrieved April 25, 2021 from <https://www.organdonor.gov/statistics-stories/statistics.html>
- Heflin, C. M., & Iceland, J. (2009). Poverty, material hardship and depression. *Social Science Quarterly*, 90(5), 1051–1071. <https://doi.org/10.1111/j.1540-6237.2009.00645.x>
- Hogan, A. J. (2019). Social and medical models of disability and mental health: Evolution and renewal. *CMAJ*, 191(1), E16–E18. <https://doi.org/10.1503/cmaj.181008>

- Iezzoni, L. I., Rao, S. R., Ressalam, J., Bolcic-Jankovic, D., Agaronnik, N. D., Donelan, K., Lagu, T., & Campbell, E. G. (2021). Physicians' perceptions of people with disability and their health care. *Health Affairs*, *40*(2), 297–306.  
<https://doi.org/10.1377/hlthaff.2020.01452>
- Inclusion London. (2020). *Abandoned, forgotten and ignored: The impact of the coronavirus pandemic on disabled people*.  
<https://www.inclusionlondon.org.uk/wp-content/uploads/2020/06/Abandoned-Forgotten-and-Ignored-Final-1.pdf>
- Joshi, S., Mooney, S. J., Rundle, A. G., Quinn, J. W., Beard, J. R., & Cerdá, M. (2017).
- Pathways from neighborhood poverty to depression among older adults. *Health & Place*, *43*, 138–143.  
<https://doi.org/10.1016/j.healthplace.2016.12.003>
- Kittay, E. (2020, April 29). *People with disabilities are at a disadvantage when scarce medical resources are being allocated*. STAT.  
<https://www.statnews.com/2020/04/29/people-disabilities-disadvantage-covid-19-scarce-medical-resources/>
- Krahn, G. L., Walker, D. K., & Correa-De-Araujo, R. (2015). Persons with disabilities as an unrecognized health disparity population. *American Journal of Public Health*, *105*(S2), S198–S206.  
<https://doi.org/10.2105/AJPH.2014.302182>
- Kutner, J. S., Nowels, D. E., Kassner, C. T., Houser, J., Bryant, L. L., & Main, D. S. (2003).
- Confirmation of the “disability paradox” among hospice patients: Preservation of quality of life despite physical ailments and psychosocial concerns. *Palliative & Supportive Care*, *1*(3), 231–237.  
<https://doi.org/10.1017/s1478951503030281>

- Landes, S. D., Turk, M. A., Formica, M. K., McDonald, K. E., & Stevens, J. D. (2020). COVID- 19 outcomes among people with intellectual and developmental disability living in residential group homes in New York State. *Disability and Health Journal*, *13*(4), Article 100969. <https://doi.org/https://dx.doi.org/10.1016%2Fj.dhjo.2020.100969>
- Lebrasseur, A., Fortin-Bédard, N., Lettre, J., Bussièrès, E. L., Best, K., Boucher, N., Hotton, M., Beaulieu-Bonneau, S., Mercier, C., Lamontagne, M. E., & Routhier, F. (2021). Impact of COVID-19 on people with physical disabilities: A rapid review. *Disability and Health Journal*, *14*(1), Article 101014. <https://doi.org/10.1016/j.dhjo.2020.101014>
- Livingston, A. (2020, March 23). *Texas Lt. Gov. Dan Patrick says a failing economy is worse than coronavirus*. The Texas Tribune. <https://www.texastribune.org/2020/03/23/texas-lt-gov-dan-patrick-says-bad-economy-worse-coronavirus/>
- Logue, J. K., Franko, N. M., McCulloch, D. J., McDonald, D., Magedson, A., Wolf, C. R., & Chu, H. Y. (2021). Sequelae in adults at 6 months after COVID-19 infection. *JAMA Network*, *4*(2), Article e210830. <https://doi.org/10.1001/jamanetwork-open.2021.0830>
- Lund, E. M. (2020). Interpersonal violence against people with disabilities: Additional concerns and considerations in the COVID-19 pandemic. *Rehabilitation Psychology*, *65*(3), 199– 205. <https://doi.org/10.1037/rep0000347>
- Lustig, D. C., & Strauser, D. R. (2007). Causal relationships between poverty and disability. *Rehabilitation Counseling Bulletin*, *50*(4), 194-202. <http://dx.doi.org/10.1177/00343552070500040101>
- Mastroianni, J. (2020, March 3). *'Real people won't die': Rhetoric around who is at risk of coronavirus infection sparks debate over ageism, ableism*. The National Post. <https://nationalpost.com/news/world/real-people-wont-die-why-the-rhetoric-around-who-is-at-risk-for-coronavirus-is-so-harmful>

- Meisner, B. A. (2020). Are you OK, Boomer? Intensification of ageism and intergenerational tensions on social media amid COVID-19. *Leisure Sciences*, *43*(1-2), 56-61.  
<https://doi.org/10.1080/01490400.2020.1773983>
- Mitra, S., Posarac, A., & Vick, B. (2013). Disability and poverty in developing countries: A multidimensional study. *World Development*, *41*(C), 1-18.  
<https://doi.org/10.1016/j.worlddev.2012.05.024>
- Mojtabai, R., Olfson, M., Sampson, N. A., Jin, R., Druss, B., Wang, P. S., Wells, K. B., Pincus,
- H. A., & Kessler, R. C. (2011). Barriers to mental health treatment: Results from the National Comorbidity Survey Replication. *Psychological Medicine*, *41*(8), 1751-1761.  
<https://doi.org/10.1017/S0033291710002291>
- Nath, A. (2020). Long-haul COVID. *Neurology*, *95*(13), 559-560.  
<https://doi.org/10.1212/WNL.0000000000010640>
- National Council on Disability. (2019). Organ transplant discrimination against people with disabilities: Part of the Bioethics and Disability Series.  
[https://ncd.gov/sites/default/files/NCD\\_Organ\\_Transplant\\_508.pdf](https://ncd.gov/sites/default/files/NCD_Organ_Transplant_508.pdf)
- Nosek, M. A., Foley, C. C., Hughes, R. B., & Howland, C. A. (2001). Vulnerabilities for abuse among women with disabilities. *Sexuality and Disability*, *19*(3), 177-189.  
<https://doi.org/10.1023/A:1013152530758>
- Oliver, M. (1983). The causes of impairment and the creation of disability. In M. Oliver, B.
- Sapey, & P. Thomas (Eds.), *Social Work with Disabled People (Practical Social Work Series)* (pp. 50-63). Palgrave, London.
- Owens, J. (2015). Exploring the critiques of the social model of disability: The transformative possibility of Arendt's notion of power. *Sociology of Health & Illness*, *37*(3), 385-403.  
<https://doi.org/10.1111/1467-9566.12199>

- Park, C. L., Russell, B. S., Fendrich, M., Finkelstein-Fox, L., Hutchison, M., & Becker, J. (2020). Americans' COVID-19 stress, coping, and adherence to CDC guidelines. *Journal of General Internal Medicine*, 35(8), 2296–2303. <https://doi.org/10.1007/s11606-020-05898-9>
- Parker, K., Horowitz, J. M., & Minkin, R. (2020, December 9). *How the coronavirus outbreak has – and hasn't – changed the way Americans work*. Pew Research Center. <https://www.pewresearch.org/social-trends/2020/12/09/how-the-coronavirus-outbreak-has-and-hasnt-changed-the-way-americans-work/>
- Previtali, F., Allen, L. D., & Varlamova, M. (2020). Not only virus spread: The diffusion of ageism during the outbreak of COVID-19. *Journal of Aging & Social Policy*, 32(4-5), 506–514. <https://doi.org/10.1080/08959420.2020.1772002>
- Reddy, S. (2020, July 1). Three months in, these patients are still ravaged by Covid's fallout. *The Wall Street Journal*. <https://www.wsj.com/articles/three-months-in-these-patients-are-still-ravaged-by-covids-fallout-11593612004>
- Ridley, M., Rao, G., Schilbach, F., & Patel, V. (2020). Poverty, depression, and anxiety: Causal evidence and mechanisms. *Science*, 370(6522), Article eaay0214. <https://doi.org/10.1126/science.aay0214>
- Rubin, R. (2020). As their numbers grow, COVID-19 “Long Haulers” stump experts. *JAMA Network*. 324(14):1381–1383. <https://doi.org/10.1001/jama.2020.17709>
- Ryan, F. (2020, March 11). Coronavirus hits ill and disabled people hardest, so why is society writing us off? *The Guardian*. <https://www.theguardian.com/commentisfree/2020/mar/11/coronavirus-ill-disabled-people>
- Scheunemann, L. P., & White, D. B. (2011). The ethics and reality of rationing in medicine. *Chest*, 140(6), 1625–1632. <https://doi.org/10.1378/chest.11-0622>

- Schur, L. A., Ameri, M., & Kruse, D. (2020). Telework after COVID: A “silver lining” for workers with disabilities? *Journal of Occupational Rehabilitation*, 30(4), 521–536.  
<https://doi.org/10.1007/s10926-020-09936-5>
- Schwartz, C. E., Andresen, E. M., Nosek, M. A., Krahn, G. L., & RRTC Expert Panel on Health Status Measurement. (2007). Response shift theory: Important implications for measuring quality of life in people with disability. *Archives of Physical Medicine and Rehabilitation*, 88(4), 529–536.  
<https://doi.org/10.1016/j.apmr.2006.12.032>
- Shakespeare, T. (2010). The social model of disability. In L. J. Davis (Ed.), *The disability studies reader* (pp. 266-273). Routledge.
- Shapiro, J. P. (1994). *No pity: People with disabilities forging a new civil rights movement*. Broadway Books.
- Shapiro, J. (2020a, July 31). *One man’s COVID-19 death raises the worst fears of many people with disabilities*. NPR.  
<https://www.npr.org/2020/07/31/896882268/one-mans-covid-19-death-raises-the-worst-fears-of-many-people-with-disabilities>
- Shapiro, J. (2020b, December 21). *Oregon hospitals didn’t have shortages. So why were disabled people denied care?* NPR.  
<https://www.npr.org/2020/12/21/946292119/oregon-hospitals-didnt-have-shortages-so-why-were-disabled-people-denied-care>
- Slabbert, I. (2017). Domestic violence and poverty: Some women’s experiences. *Research on Social Work Practice*, 27(2), 223–230.  
<https://doi.org/10.1177/1049731516662321>
- Spong, C. Y., & Bianchi, D. W. (2018). Improving public health requires inclusion of underrepresented populations in research. *JAMA Network*, 319(4), 337–338.  
<https://doi.org/10.1001/jama.2017.19138>
- Terzi, L. (2004). The social model of disability: A philosophical critique. *The Journal of Applied Philosophy*, 21(2), 141-157.  
<https://doi.org/10.1111/j.0264-3758.2004.00269.x>

- Thomas, C. (2004). Rescuing a social relational understanding of disability. *Scandinavian Journal of Disability Research*, 6(1), 22–36. <http://doi.org/10.1080/15017410409512637>
- Thompson, D. (2020, September 7). What young, healthy people have to fear from COVID-19. *The Atlantic*. <https://www.theatlantic.com/ideas/archive/2020/09/what-young-healthy-people-have-fear-covid-19/616087/>
- U.S. Bureau of Labor Statistics. (2021, February 24). Persons with a disability: Labor force characteristics summary. Retrieved April 25, 2020, from <https://www.bls.gov/news.release/disabl.nr0.htm>
- Ubel, P. A., Loewenstein, G., Schwarz, N., & Smith, D. (2005). Mismagining the unimaginable: The disability paradox and health care decision making. *Health Psychology*, 24(4S), S57–S62. <https://doi.org/10.1037/0278-6133.24.4.S57>
- Umucu, E., & Lee, B. (2020). Examining the impact of COVID-19 on stress and coping strategies in individuals with disabilities and chronic conditions. *Rehabilitation Psychology*, 65(3), 193–198. <https://doi.org/10.1037/rep0000328>
- United Nations. (n.d.). Factsheet on persons with disabilities. <https://www.un.org/development/desa/disabilities/resources/factsheet-on-persons-with-disabilities.html>
- Warner, J. (2020, March 3). Does the Fed know something the rest of us do not with its panicked interest rate cut? *The Telegraph*. <https://www.telegraph.co.uk/business/2020/03/03/does-fed-know-something-rest-us-do-not-panicked-interest-rate/>
- Washington State Department of Health. (2020). *Scarce resource management & Crisis Standards of Care*. Northwest Healthcare Response Network. [https://www.doh.wa.gov/Portals/1/Documents/Pubs/Scarce\\_Resource\\_Management.pdf](https://www.doh.wa.gov/Portals/1/Documents/Pubs/Scarce_Resource_Management.pdf)
- Webster, L. (2020, September 17). *Coronavirus: Disabled people fear losing their job*. BBC. <https://www.bbc.com/news/uk-politics-54103010>

World Health Organization. (2020, December 1). *Disability and Health*.

<https://www.who.int/news-room/fact-sheets/detail/disability-and-health> Yaribeygi, H., Panahi, Y., Sahraei, H., Johnston, T. P., & Sahebkar, A. (2017). The impact of stress on body function: A review. *EXCLI Journal*, *16*, 1057–1072.  
<https://doi.org/10.17179/excli2017-480>