



Exploring Attitudinal Barriers Faced by Persons with Physical Disabilities in Twin Cities; Pakistan

¹**Fiza Rehman** -Email- fiza.rehman2019@gmail.com

²**Ms. Saira Javed** -Email- saira.javedbhati@gmail.com

¹*BS Graduate/Research Scholar, Department of Psychology, National University of Medical Sciences, Rawalpindi, Pakistan.*

²*Lecturer Clinical Psychology/PhD Scholar Psychology, Department of Psychology, National University of Medical Sciences, Rawalpindi, Pakistan.*

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Corresponding Author*:

Fiza Rehman

Abstract

Around 1.3 billion of the world's population experience disability among which physical disabilities are the most common. In Pakistan, the ratio of reported cases of physical disability was about 295,093 in 2021 (Pakistan Bureau of Statistics, 2021). Objectives: The main objective of the study was to explore the attitudinal barriers persons with physical disabilities face in Pakistan. Methods: The study is based on qualitative research design. In-depth interviews were conducted with individuals with physical disabilities in Rawalpindi/Islamabad. The sample consisted of 18 participants with permanent physical disabilities. Purposive sampling technique was used to collect data. An interview guide based on literature was used to conduct interviews with the participants. The data was analyzed through thematic analysis. Key Findings: The key points of the results reveal that persons with disabilities were majorly stigmatized and discriminated by society. Implications: The study implies the attitudinal barriers people with physical disabilities experience from society and what should be done that can help them lead more fulfilling lives and create an inclusive society that values diversity and promotes equality.

Keywords: *Attitudinal Barriers, Physical Disability, Society*



INTRODUCTION

Physical disability is characterized by the impairment of motor function or limitations in movement caused by deformation of limbs, body paralysis, or structural injury to the body leading to difficulties in performing social responsibilities and normal daily works (Rajati et al., 2018). Physical disabilities pose major challenge for persons with disabilities, as they limit mobility and access to resources. World Health Organization (World Health Organization, 2023) reported that physical barriers are the most common barriers faced by the disabled (Wang et al., 2021). These barriers include a lack of accessibility, negative attitudes, and discrimination. For example, people with mobility impairments may face difficulties in establishing connections with others due to discrimination and stereotypes.

Attitudinal barriers are the negative attitudes, stereotypes, stigmas and discriminatory beliefs of the people or society held towards people with disabilities. These barriers can seriously affect the lives of the persons with physical disabilities, hindering their full participation in various aspects of life (Wang et al., 2021). These attitudinal barriers lead to the marginalization and exclusion of people with impairments, restricting their participation and involvement in social activities (Załuska et al., 2020). Thus, without access to inclusive environments and supportive attitudes, individuals with disabilities may be excluded from the many benefits of healthy activities (Załuska et al., 2020).

Literature Review:

Disability

Disability is a term that covers impairments, activity limitations, and participation restrictions (Huang, 2020; Lebrasseur et al., 2021). Disability can be temporary or permanent and affects people of all ages and backgrounds. Currently, around 16% of the world's population, or 1.3 billion people, experience significant disability (World Health Organization, 2023). People with disabilities have long-term physical, mental, intellectual, or sensory impairments that, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis compared to others. People with disabilities often face challenges that lead to more anxiety and depression than those without disabilities (Puce et al., 2023).

The disability process encompasses the individual's personal and environmental traits in addition to any underlying medical conditions, birth defects, or accidents (Altman, 2019). A number of factors, including health conditions like cerebral palsy, Down syndrome, and depression, as well as personal and environmental factors like negative attitudes, inaccessible transportation and public buildings, and limited social support causes disability. Additional factors include stigma, discrimination, poverty, exclusion from school and work, and obstacles within the healthcare system as the root cause of health disparities among the disabled (World Health Organization, 2023).

Types of Disability

The term "Disability" refers to impairments, limitation in various activities, and possible exclusion from social activities (Huang, 2020; Lebrasseur et al., 2021). Impairments are the problems in body functions or structures i.e. loss of a limb, loss of vision, or memory loss. Examples of impairments are; Physical disabilities are impairments that affect mobility or



movement-related functions, such as difficulty walking or climbing stairs, and coordination, such as difficulty using hands or arms (World Health Organization, 2020; Lebrasseur et al., 2021). A study in USA reported that physical disability is the most prevalent form of all the disabilities.

Sensory disabilities involve impairments of sensory organs, such as blindness or low vision, and hearing, such as deafness or hearing loss (Brown et al., 2020). Intellectual disabilities are impairments that affect cognitive functioning, such as difficulty with memory, problem solving, or communication. Disabllement of adaptive behaviors and poor social skills are also evident in persons with intellectual disabilities (Patel et al., 2018). Mental health disabilities are impairments that affect mental functioning, such as depression, anxiety, or bipolar disorder. Physically disabled persons are at potential risk for mental health disabilities or problems (Steptoe & Di Gessa, 2021). Such disabilities make it impractical to engage in social activities and obtaining health care and preventive services.

Models of Disability

The way people perceive disability affects their emotional response to it. These perspectives are described as the models of disability. In moral model of disability, also known as traditional model of disability (Khupe et al., 2022), there is a belief that people with disabilities are morally responsible for their condition and are unfortunate. On the other hand, medical model of disability explains disability as an impairment in a body system or function that is inherently pathological. The social model of disability beliefs that it is the environment that makes the disability a barrier for people. From this perspective, the way to address disability is to change the environment and society, rather than people with disabilities. Negative stereotypes, discrimination and oppression serve as barriers to their full inclusion (Olkin, 2022).

Large patterns of exclusion and inclusion in the society may include various aspects of life, such as education, employment, and social activities. In addition, emphasis on power and inequality highlights the ways in which power dynamics and social hierarchies affect the experiences of disabled people. Inequalities include prejudice and stereotypes that stop physically disabled persons from having equal opportunities in society (Hashemi et al., 2020). Thus, the theory emphasizes the role of social barriers in creating disability and advocates for the removal of these barriers to promote social inclusion.

Physical Disability

According to a cross-sectional study conducted in the United States, physical disability is the most common type of disability, followed by cognitive or mental, independent living, hearing, and visual disabilities. Physical disability refers to the impairment of motor function or limitations in movement and activities due to deformed limbs, body paralysis, or structural damage to the body. Individuals with physical disabilities face challenges in performing regular social roles, and affected by societal barriers in their daily routines (Rajati et al., 2018).

A physical disability is a self-disclosed condition encompassing various impairments in the neuromusculoskeletal systems. This includes conditions like paraplegia, quadriplegia, muscular dystrophy, cerebral palsy, limb deformities, arthritis, and disorders



affecting bones. The definition also encompasses visual challenges like blindness and uncorrected vision impairment, as well as hearing-related issues such as deafness, hearing impairment, and speech loss. Additionally, acquired brain injuries leading to declines in cognitive, physical, emotional, or independent functioning are considered part of the present definition of physical disability (Tillewein, 2023).

Types of Physical Disabilities

Cerebral Palsy

Cerebral palsy is a type of physical disorder that affect movement, posture, and balance. It can occur in 2-3 out of 1,000 live births. The movement disorders associated with cerebral palsy are categorized as spasticity, dyskinesia, ataxia, or mixed/other. Cerebral palsy may result in secondary problems, including hip pain or dislocation, balance problems, hand dysfunction, and equinus deformity. Patients with cerebral palsy often also experience other problems in addition to movement that includes cognitive dysfunction, seizures, pressure ulcers, osteoporosis, behavioral or emotional problems, and speech and hearing impairment (Vitrikas, 2020).

Multiple Sclerosis (MS)

Multiple sclerosis (MS) is a chronic inflammatory demyelinating disease of the central nervous system (CNS) that affects young adults. It is characterized by the degeneration of the myelin sheath, scarring and/or plaque formation, and the eventual loss of axons in both the white and gray matter. Some of the risk factors that have been identified include genetics, Epstein-Barr virus (EBV), smoking, and vitamin D deficiency (Mirmosayyeb, 2023).

Muscular Dystrophy

Muscular dystrophy is a serious muscular disorder that results in muscle atrophy, making it difficult to walk and ultimately necessitating assisted ventilation and an early death. Genetic mutations inhibit muscles from producing dystrophin, making them more susceptible to injury, which leads to a progressive loss of muscle mass and function (Duan et al., 2021). Thus, muscular dystrophy limits life of people and reduces their quality of life as well as of their families (Mercuri et al., 2019).

Paraplegia

Paraplegia can be defined as the paralysis of lower limbs of body i.e. loss of motor functioning of legs (Li et al., 2021). It may result due to spinal cord injuries or other medical conditions such as tumor or infections. People with paraplegia and tetraplegia due to spinal cord injuries are expected to have low self-esteem due to interpersonal incompetence and loneliness, thus having poor sense of control and socializing skills (Mehrini, 2023).

Spinal Cord Injury (SCI)

Spinal cord injury (SCI) is a neurological condition that can cause physical dependency, morbidity, psychological stress, and financial burden. The global prevalence of SCI has increased from 236 to 1298 cases per million populations in the last 30 years (Anjum, 2020). The irreversible functional impairment of the injured spinal cord is caused by the



disruption of neuronal transduction across the injury lesion, which is brought about by demyelination, axonal degeneration, and loss of synapses (Katoh, 2019).

Quadriplegia

Quadriplegia, also known as tetraplegia is the paralysis of all four limbs of the body i.e. both arms and both legs due to neuromotor dysfunctioning (Pirrera et al., 2022). One of the causes of quadriplegia is spinal cord ischemia, which is the loss of blood supply to spinal cord causing damage to lower and upper motor neurons (Zedde et al., 2022). Thus, resulting in disability or mortality among these people.

Barriers Faced by the Disabled

People with physical disabilities often face more limitations in social activities, resulting in lower well-being and relatively poorer quality of life compared to those without disabilities (Rajati et al., 2018). They face many challenges such as transportation problems, communication problems, financial constraints, and trouble receiving inclusive care (Croft & Fraser, 2022). Some of the major societal barriers experienced by persons with physical disabilities are physical barriers, institutional barriers, policy barriers and attitudinal barriers, explained as follows:

Physical barriers

Inaccessibility of persons with physical disabilities to various public places along with transportation barriers hinder their access to services, social interaction and community mobility. Barriers in the built environment such as steps without ramps or lifts, narrow sidewalks, lack of accessible waiting areas or washrooms can lead to social exclusion of people with disabilities (Eisenberg et al., 2020). Such barriers in the built environment indicate discrimination towards the people with physical disabilities. In addition, the literature notifies the absence of viewpoints of the disabled persons in planning of the infrastructure (Terashima & Clark, 2021).

Furthermore, it is essential for the well-being of the people to have the capacity to travel safely and independently (Park & Chowdhury, 2022). However, barriers in the public transport systems hinders the safe and independent travel of people with disabilities in public transport. As a result, such people travel infrequently, have reduced exposure to different experiences, and may become isolated (Bezyak et al., 2020). Therefore, policies should be made in alignment with the requirements of individuals with disabilities.

Institutional barriers

Institutional barriers includes inaccessibility to education, jobs, healthcare and other services to the persons with physical disabilities. Everyone is entitled to have an equal access to education, but people with physical disabilities face many institutional and environmental barriers to access education (Tudzi et al., 2020). In addition to these barriers, discrimination and negative attitudes from other students may result in drop out of such students at early stages of education (Merchant et al., 2020).

In order to make a livelihood, it is essential to have a job even for persons with disabilities; however, job opportunities for these people are limited all over the world. They struggle a lot to secure a job and even then remain unrepresented and discriminated at



most workplaces (Halid et al., 2020). Khupe also reported that the disabled people generally have low chances of promotion and progression at workplace in Zimbabwe because they are marginalized. They face ignorance and biasness that prevent their effective inclusion (Khupe et al., 2022).

Individuals with disabilities have varying rates of risky behaviors that impact their health status as they face significant challenges in engaging in activities that promote health because of their physical and social settings. They are also more likely to experience co-morbidities related to their disability (Ibrahim et al., 2021). Also, due to factors, such as low income, poor education, inequality in accessing healthcare services etc. they experience poorer health status and have few opportunities to receive proper healthcare (Matin et al., 2021).

Policy barriers

The rights to employment, social support, health care, education and participation are specially guaranteed under the Convention on the Rights of Persons with Disabilities. According to the Convention, the availability of professional training, placement services, and technical and vocational mentoring programs were promoted for individuals with disabilities. Apart from the Convention, the Sustainable Development Goals (SDGs) also address the significance of ensuring those with disabilities have access to quality jobs for the first time. In fact, Goal 8.5 specifically includes those with disabilities in its pursuit of full and productive employment as well as dignified work.

Despite legislation promoting equal opportunities for people with disabilities in education and employment, evidence suggests that these environments are far from inclusive (Goodall, G. et al., 2022). Findings suggest that people with physical disabilities often need to work beyond their capacity to succeed in higher education and access meaningful employment. Overall, there is currently a lack of literature that summarizes knowledge on the policies not being followed for the inclusion of such people. Consequently, there is still much to be done in creating inclusive education and employment environments.

Attitudinal barriers

Attitudinal barriers remain a significant challenge for people with disabilities. These barriers create a social environment that discourage participation of such people in various aspects of life, including healthy activities. Stigma is one of the major obstacle to the acceptance and inclusion of people with physical as well as intellectual disabilities as society sees disability as something shameful and makes a person less worthy (Richard & Hennekam, 2021). Therefore, stigma has a leading role in social marginalization and discrimination of people with disabilities discrediting them in almost every phase of life.

Negative attitudes towards disabled had also been identified as a hindrance to their involvement in various activities, including physical activity, fitness, and educational settings (Wang et al., 2021). When people hold negative views towards disabilities, it can cause low expectations for people with disabilities. Believing they cannot achieve much, others might not offer them opportunities or support their goals. This can then lead to discrimination, where they are unfairly passed over for jobs, education, or social inclusion



(Shahif et al., 2019). Finally, this cycle of negativity can push people with disabilities to the margins of society, feeling isolated and excluded.

Theoretical Background:

The present research is supported by the theory of "Social Model of Disability". According to (Olkin, 2022), the social model of disability suggests that disability is not an inherent trait of an individual, but rather a result of the interaction between the individual and society. The SDM argues how disability is created as a social category through institutional structures, larger patterns of exclusion and inclusion, and emphasis on power and inequality. Institutional structures refer to the policies, laws, and regulations that either promote or hinder social inclusion for disabled people. For example, policies that mandate accessibility in public spaces can promote social inclusion by making it easier for disabled people to participate in various activities.

Rationale:

According to Ministry of Human Rights, about 10 to 15% of people in Pakistan are living with varying types of disabilities. In 2020, Pakistani parliament passed a new law for people with disability aiming to fight and eliminate discrimination against disability. However, persons with disability still face discriminatory prejudice and stigma in society. In addition, negative attitudes of people towards disability is prevalent thus, leading the disabled towards social isolation, low self-esteem and other psychological problems.

Therefore, the main objective of the study was to investigate what are the attitudinal barriers faced by persons with physical disabilities and what are their experiences in the face of attitudinal barriers from society.

Method:

Sample

The sample was taken from the twin cities in Pakistan. Purposive sampling technique was used for data collection. Sample size for in-depth interviews comprised of 18 participants. Interview conduction was terminated when data saturation raised.

Inclusion Criteria

- Only people with physical disabilities were involved in the research.
- Participants must be a citizen of twin cities (Rawalpindi and Islamabad) of Pakistan.
- Persons with physical disabilities who are willing to participate.

Exclusion Criteria

- People with any other type of disability were not included in the study.
- Participants with vision and hearing impairment along with physical disability were not included.

Scales Used to Measure/Instruments



Interview guide (for conducting interviews with people with physical disabilities in order to develop intervention according to their needs).

Study Design/Procedure

Qualitative study design was used in the research. Data was collected using purposive sampling technique. Telephonic interviews were conducted in order to collect data for the research. In the beginning of the interview, formal approval of participation through informed consent was taken and all participants were briefed about the aim of the study. The study involved in-depth interviews with persons with physical disabilities. Thematic analysis was used to analyze the interview data. An intervention was also developed, discussing the traits to be developed in order to boost self-acceptance in persons with physical disabilities, based on thematic analysis.

Analysis

Thematic analysis was done in order to find the attitudinal barriers faced by persons with physical disabilities, how these barriers impact their self-acceptance and to develop an intervention which will help them develop traits to enhance their self-acceptance.

Results:

Descriptive Statistics

Table 1

Frequencies and Percentages for Demographic Characteristics of Participants (N = 18)

	Groups	f	Percentage
Gender	Male	8	44.5
	Female	10	55.5
Ethnicity	Islamabad/Rawalpindi	18	100
Education	Matric	7	39
	Bachelors	7	39
	Masters/M.Phil.	4	22
Employment Status	Unemployed	5	28
	Employed	10	55.5
	Own Business	3	16.5
Marital Status	Single	10	55.5
	Married	8	44.5
Type of Physical Disability	Cerebral Palsy	2	11.5



	Genetic	3	16.5
	Muscular Dystrophy	3	16.5
	Polio	4	22
	Spinal Injury	4	22
Mobility Aid	Tumor in Spinal Cord	2	11.5
	User	16	88.5
	Non-user	2	11.5

Table 1 shows the demographic characteristics of the participants. About twenty interviews were conducted for the purpose of research study; however only eighteen interviews fulfilled the criteria of research. The age range of these participants was 18-40. Among the eighteen participants, eight were male and 10 were females. All of these participants were the residents of the twin cities. About 39% participants were Matric passed and Graduates, whereas only 22% had done Masters/M.Phil. About 28% participants were unemployed while 72% participants were bread earners. Ten of the participants were single while eight participants were married. Two participants had cerebral palsy, three had physical disability by birth, three participants suffered from muscular dystrophy, four participants were disabled because of polio, four other participants suffered spinal injury due to accidents and the last two participants had tumor in spinal cord, which led them to disability.

Thematic Analysis

Table 2

Derived Themes and Sub-Themes of Attitudinal Barriers faced by the Persons with Physical Disabilities

Sr No.	Themes	Sub-themes	Codes
1	Discrimination	Biasness	People with physical disabilities face biasness due to their appearance. They are not given equal opportunities and accessibility at public places as well as in institutions.
		Inferior than Others	Persons with physical disabilities are thought to be inferior than others in all fields of life i.e. not capable to be educated or appointed for jobs.
2	Negative Attitudes	Treated as Outsider	Persons with physical disabilities are usually treated, as they do not belong in society i.e. not being able to walk or do things normally.



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		Look with Pity Call names	Most people feel sympathy and shame for persons with disabilities. Persons with disabilities are called by different names, i.e. special persons, handicapped.
3	Stigma	Misconcept ions (Mostly religious)	The most common stigma faced by persons with physical disability is that their disability is some kind of punishment to them or a result of wrongdoings.
4	Ignorance	Administrative/Institutional Level	Persons with physical disabilities face travel and mobility limitations due to infrastructure of roads, public transportations and public places.
		Policy Level	Policies are made for persons with physical disabilities; however, there is no implementation on them. In addition, most of them do not have awareness about any of such policies that benefit them.

Table 2 enlists the themes and sub-themes derived from the interviews conducted with persons with physical disabilities. The first theme discloses discrimination faced by persons with physical disabilities followed by biasness and depreciation. The second theme is negative attitudes, which further explains humiliation experienced by persons with physical disabilities, being treated as an outsider and called different names by the society. The third theme explains stigmatization and misconceptions faced by persons with physical disabilities. The fourth theme interprets the ignorance at administrative and policy levels faced by persons with physical disabilities.

Discussion:

The main objective of the present study was to investigate the attitudinal barriers faced by people with physical disabilities. Individuals with physical disabilities face many challenges, including attitudinal, institutional, physical, and policy barriers (Collins et al., 2021; Croft & Fraser, 2022). These challenges can affect their self-esteem, leading to social isolation, and psychological pressures.

Attitudinal barriers faced by individuals with disabilities are deeply rooted in societal norms and perceptions. In fact, the social model of disability emphasizes that societal obstacles, rather than the disability itself, make people truly disabled. These barriers manifest in various forms, including discrimination, stigma, prejudice and negative stereotypes in persons with physical disabilities.

The study was based on qualitative approach involving in-depth interviews with participants. Table 1 in results section explains the demographic characteristics of participants. Interviews with eighteen participants were conducted during data collection



of research. All participants were young adults, living in twin cities of Pakistan. The participants had physical disabilities due to various reasons, that is cerebral palsy, genetic, muscular dystrophy, polio, and spinal cord injury. However, they experienced similar attitudes from the society.

Table 2 analyzes the common attitudes faced by people with physical disabilities from the society. The discrimination and stigma associated with persons with disabilities is a pervasive issue that affects them on multiple levels. Societal stigma and discrimination manifests people with disabilities as less capable, which may internalize the feelings of inadequacy and worthlessness. This stigma originates from misconceptions and cultural myths that causes lack of understanding and awareness about them. Thus, influencing their mental health, leading to anxiety, depression, and a diminished sense of self-worth.

Ignorance about persons with disabilities at individual as well as institutional and policy level is another significant barrier that contributes to the struggle for self-acceptance. When society lacks awareness and understanding of the challenges faced by people with disabilities, it can lead to assumptions and judgments that are both inaccurate and harmful. This ignorance can result in a lack of accommodations and support, further isolating individuals with disabilities from the society.

Limitations and Recommendations:

Qualitative researches based on interviews, as a data collection technique may involve interviewer biases while conduction as well as interpretation. In addition, this study is particularly focused on attitudinal barriers faced by persons with physical disabilities.

Recommendations include exploration of other barriers faced by the persons with physical disabilities and propose changes at institutional or policy level thus enabling them to live a better life in an inclusive society.

Implications

The implications of the study include,

- *SDG 4: Quality Education* ensures equal access to all levels of education and vocational training for the vulnerable, including people with disabilities in vulnerable situations.
- *SDG 8: Decent Work and Economic Growth* help achieve productive employment and decent work for all persons with disabilities, and equal pay for work of equal value.
- *SDG 16: Peace, Justice, and Strong Institutions* Target 16.3 aims to promote the rule of law at the national and international levels and ensure equal access to justice for all including persons with disabilities to have access to justice and are protected from exploitation, violence, and abuse.

Conclusion:

The study concludes that persons with physical disabilities are majorly stigmatized, discriminated and faced negative attitudes and ignorance by society. Such attitudinal



barriers cause lack of self-acceptance, which make them unable to face the society and live a good life.

References:

Altman, B. M. (2019). Definitions, concepts, and measures of disability. *Annals of epidemiology*, 24(1), 2-7.

Anjum, A., Yazid, M. D. I., Fauzi Daud, M., Idris, J., Ng, A. M. H., Selvi Naicker, A & Lokanathan, Y. (2020). Spinal cord injury: pathophysiology, multimolecular interactions, and underlying recovery mechanisms. *International journal of molecular sciences*, 21(20), 7533.

Bezyak, J. L., Sabella, S., Hammel, J., McDonald, K., Jones, R. A., & Barton, D. (2020). Community participation and public transportation barriers experienced by people with disabilities. *Disability and rehabilitation*, 42(23), 3275-3283.

Brown, H. K., Carty, A., Havercamp, S. M., Parish, S., & Lunsky, Y. (2020). Identifying reproductive-aged women with physical and sensory disabilities in administrative health data: a systematic review. *Disability and health journal*, 13(3), 100909.

Collins, A., Rentschler, R., Williams, K., & Azmat, F. (2022). Exploring barriers to social inclusion for disabled people: perspectives from the performing arts. *Journal of Management & Organization*, 28(2), 308-328.

Croft, S & Fraser, S. (2022). A Scoping Review of Barriers and Facilitators Affecting the Lives of People with Disabilities during COVID-19. *Frontiers in Rehabilitation Sciences*.

Disability Statistics. Pakistan Bureau of Statistics Government of Pakistan. <https://www.pbs.gov.pk/content/disability-statistics>.

Disability. World Health Organization. https://www.who.int/health-topics/disability#tab=tab_1.

Duan, D., Goemans, N., Takeda, S. I., Mercuri, E., & Aartsma-Rus, A. (2021). Duchenne muscular dystrophy. *Nature Reviews Disease Primers*, 7(1), 13.

Eisenberg, Y., Heider, A., Gould, R., & Jones, R. (2020). Are communities in the United States planning for pedestrians with disabilities? Findings from a systematic evaluation of local government barrier removal plans. *Cities*, 102, 102720.

Goodall, G., Mjøen, O. M., Witsø, A. E., Horghagen, S., & Kvam, L. (2022, April). Barriers and facilitators in the transition from higher education to employment for students with disabilities: A rapid systematic review. In *Frontiers in Education* (Vol. 7, p. 202). Frontiers.

Halid, H., Osman, S., & Abd Halim, S. N. J. (2020). Overcoming unemployment issues among person with disability (PWDs) through social entrepreneurship. *Albukhary Social Busniss Jornal*, 1(2), 57-70.



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Online ISSN

Print ISSN

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3006-4651

Hashemi, G., Wickenden, M., Bright, T., & Kuper, H. (2022). Barriers to accessing primary healthcare services for people with disabilities in low and middle-income countries, a Meta-synthesis of qualitative studies. *Disability and Rehabilitation*, 44(8), 1207-1220.

Huang, L. (January 2020). Disability Types. *Encyclopedia of Gerontology and Population Aging*, 1456-1461.

Ibrahim, A. M., Mohamed, M. A., & Farg, H. K. (2021). Environmental Barriers and Facilities at Health Care Settings as Perceived by Physically Disabled People.

Katoh, H., Yokota, K., & Fehlings, M. G. (2019). Regeneration of spinal cord connectivity through stem cell transplantation and biomaterial scaffolds. *Frontiers in cellular neuroscience*, 13, 248.

Khupu, W. A. T. S. O. N., Ndlovu, M. J., Shava, G. E. O. R. G. E., Zulu, E. L. D. O. N., & Shonhiwa, S. M. A. R. N. T. H. A. (2022). Challenges facing progression of disabled people towards senior managerial positions in the national association of societies for the care of the handicapped member organizations in Zimbabwe. *International Journal of Research in Education Humanities and Commerce*, 3(2).

Lebrasseur, A., Fortin-Bédard, N., Lettre, J., Bussières, E. L., Best, K., Boucher, N., & Routhier, F. (2021). Impact of COVID-19 on people with physical disabilities: a rapid review. *Disability and health journal*, 14(1), 101014.

Li, W., Liu, Z., Xiao, X., Xu, Z., Sun, Z., Zhang, Z., & Wang, X. (2021). Early surgical intervention for active thoracic spinal tuberculosis patients with paraparesis and paraplegia. *BMC Musculoskeletal Disorders*, 22, 1-9.

Matin, B. K., Williamson, H. J., Karyani, A. K., Rezaei, S., Soofi, M., & Soltani, S. (2021). Barriers in access to healthcare for women with disabilities: a systematic review in qualitative studies. *BMC women's health*, 21, 1-23.

Mehrin, M. (2023). Influence of self-efficacy and self-esteem of spinal cord injury patients at CRP- an icf based study (Doctoral dissertation, Bangladesh Health Professions Institute, Faculty of Medicine, the University of Dhaka, Bangladesh).

Mercuri, E., Bönnemann, C. G., & Muntoni, F. (2019). Muscular dystrophies. *The Lancet*, 394(10213), 2025-2038.

Mirmosayyeb, O., Ghaffary, E. M., Vaheb, S., Pourkazemi, R., & Shaygannejad, V. (2023). Multiple sclerosis (MS) and neuromyelitis optica spectrum disorder (NMOSD) following COVID-19 vaccines: a systematic review. *Revue Neurologique*.

Olkin, R. (2022). Conceptualizing disability: Three models of disability. *American Psychological Association*.

Park, J., & Chowdhury, S. (2022). Towards an enabled journey: barriers encountered by public transport riders with disabilities for the whole journey chain. *Transport Reviews*, 42(2), 181-203.



Patel, D. R., Apple, R., Kanungo, S., & Akkal, A. (2018). Narrative review of intellectual disability: definitions, evaluation and principles of treatment. *Pediatr Med*, 1, 11.

Pirrera, A., Meli, P., De Dominicis, A., Lepri, A., & Giansanti, D. (2022, December). Assistive Technologies and Quadriplegia: A Map Point on the Development and Spread of the Tongue Barbell Piercing. In *Healthcare* (Vol. 11, No. 1, p. 101). MDPI.

Puce, L., Okwen, P. M., Yuh, M. N., Akah Ndum Okwen, G., Pambe Miong, R. H., Kong, J. D., & Bragazzi, N. L. (2023). Well-being and quality of life in people with disabilities practicing sports, athletes with disabilities, and para-athletes: Insights from a critical review of the literature. *Frontiers in Psychology*, 14, 1071656.

Rajati, F., Ashtarian, H., Salari, N., Ghanbari, M., Naghibifar, Z., & Hosseini, S. Y. (2018). Quality of life predictors in physically disabled people. *Journal of education and health promotion*, 7.

Richard, S., & Hennekam, S. (2021). Constructing a positive identity as a disabled worker through social comparison: The role of stigma and disability characteristics. *Journal of Vocational Behavior*, 125, 103528.

Shahif, S., Idris, D. R., Lupat, A., & Rahman, H. A. (2019). Knowledge and attitude towards mental illness among primary healthcare nurses in Brunei: A cross sectional study. *Asian journal of psychiatry*, 45, 33-37.

Steptoe, A., & Di Gessa, G. (2021). Mental health and social interactions of older people with physical disabilities in England during the COVID-19 pandemic: a longitudinal cohort study. *The Lancet Public Health*, 6(6), e365-e373.

Terashima, M., & Clark, K. (2021). The precarious absence of disability perspectives in planning research. *Urban Planning*, 6(1), 120-132.

Tillewein, H., Franklyn, G., Frederick, V., Ghasseminia, R., Michels, C., & Stevens, E. (2023). Investigating the Intersection of Physical Disability and Sexuality.

Tudzi, E., Bugri, J., & Danso, A. (2020). Experiences of Students with Disabilities in Inaccessible Built Environments: A Case Study of a Student with Mobility Impairment in a University in Ghana. *Scandinavian Journal of Disability Research*, 22(1).

Vitrikas, K., Dalton, H., & Breish, D. (2020). Cerebral palsy: an overview. *American family physician*, 101(4), 213-220.

Wang, Z., Xu, X., Han, Q., Chen, Y., Jiang, J., & Ni, G. X. (2021). Factors associated with public attitudes towards persons with disabilities: A systematic review. *BMC Public Health*, 21(1), 1058.

World Health Organization. (2020). Disability and health. *Niepełnosprawność-zagadnienia, problemy, rozwiązania*, (3-4 (36-37)), 74-78.

Załuska, U., Grześkowiak, A., Kozyra, C., & Kwiatkowska-Ciotucha, D. (2020). Measurement of factors affecting the perception of people with disabilities in

Journal of Social Signs Review

Online ISSN

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3006-466X

3006-4651



the workplace. *International Health*, 17(12), 4455.

Journal of Environmental Research and Public

Zedde, M., Grisendi, I., Pezzella, F. R., Napoli, M., Moratti, C., Valzania, F., & Pascarella, R. (2022). Acute Onset Quadriplegia and Stroke: Look at the Brainstem, Look at the Midline. *Journal of Clinical Medicine*, 11(23), 7205.