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Disability as a result of health and social disorders – role of prejudice and discrimination

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Abstract

Introduction and Objective. Discrimination against persons with disabilities – ableism – affects most disabled people, regardless of the cause of their disability. These may be single or long-term actions resulting in negative health and social consequences. The aim of the study is to identify the types of health and social consequences of functional disorders in disabled persons exposed to ableism, in relation to the causes and types of disability and the associated types of prejudice and discrimination.

Review Methods. A review of scientific literature in English and Polish from 1978 – 2025 was conducted on forms of prejudice and discrimination against persons with disabilities, in relation to the causes of disability and types of bodily dysfunction and health and social functioning disorders. The search was conducted in the PubMed, PubMed Central and Google Scholar databases. The following key words were used: 'disabled persons', 'prejudice', 'discrimination'.

Brief description of the state of knowledge. Persons with disabilities are among the most excluded social groups. Many of them face behaviour that can be described as discriminatory, a term that has many pejorative meanings defining the types of behaviour, presented taking into account the causes of disability in relation to the types of health and social consequences. The importance of comprehensive rehabilitation in order that people with disabilities could achieve the greatest possible social integration is also defined.

Summary. Persons with disabilities require significant support in developing their independence. In order to increase their participation in social life and prevent discrimination by able-bodied members of the society, comprehensive rehabilitation of disabled persons and public education should be conducted simultaneously.

Key words

disabled persons, health and social functioning disorders, prejudice, discrimination, ableism

INTRODUCTION

The percentage of people with disabilities in different societies varies greatly due to varying definitions of a disabled person, and the various research methods and tools used to classify people as disabled. Most authors specializing in disability issues agree that the reported data on the extent of disability are underestimated. Estimates published by the WHO experts indicate that people with various disabilities constitute approximately 16% of the global population [1]. Disability is often associated with or coexists with other problems and difficulties in life, mainly of a social nature, such as poverty, social exclusion, prejudice, lack of or difficulty in finding employment, and lack of strengthening interpersonal bonds. Incomplete data on the number of persons with disabilities, types of physical dysfunction and degrees of disability, as well as a low level of diagnosis of needs, are the reasons for the lack of full provision of medical treatment, social support and rehabilitation for most of these persons. This situation leads to low levels of social participation and an increase in the number of people with a low quality of life. These are factors that expose persons with disabilities to unequal treatment by able-bodied persons. The most commonly used term to describe negative behaviour is 'discrimination', which is used not only by researchers but also by disabled people themselves. This term encompasses many definitions used in scientific research by health professionals, sociologists, psychologists, lawyers and educators, as well as in everyday language by various social groups. Undoubtedly, discrimination is a public health issue. Research, mainly psychological, shows that experiencing discrimination can trigger many emotional, physical and behavioural changes generated by stress [2, 3]. Long-term stress is a consequence of negative emotional reactions, including anxiety, a sense of threat, low self-esteem, self-harm, sadness, and anger. These can often lead to unhealthy behaviours such as alcohol abuse, smoking, stimulant use, drug addiction, and various forms of aggression [4]. People with disabilities are twice as likely to develop conditions such as depression, asthma, diabetes, stroke, obesity, and poor oral health. It is also worth

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noting that many people with disabilities die up to 20 years earlier than those without disabilities [5]. People experiencing discrimination due to their disability are less likely to use health services, take preventive measures, they do not buy prescribed medications or buy them selectively, and they delay or avoid treatment [6, 7]. These behaviours contribute to the development of long-term undiagnosed comorbidities and related health problems. Numerous available sources of knowledge show that there are many disabled persons in various subpopulations who, depending on the cause, type and degree of disability and its duration, feel that they are victims of discrimination and prejudice. There is ample empirical evidence of discriminatory practices against persons with disabilities in many areas of life and functioning. Among the most frequently mentioned are barriers to access to education, healthcare, cultural goods, employment, good housing conditions and rehabilitation activities. Recently, there has been a trend towards building a social model of disability, indicating increasing opportunities to improve the lives of disabled persons [8, 9]. The main author, is Professor M. Oliver, who is disabled due to quadriplegia. He said that 'many of the inconveniences and difficulties associated with living with a disability do not stem from the disability itself, but from the society's inability to adapt to the needs of people with disabilities' [10, 11].

OBJECTIVE

The aim of the study is to present and analyse cases of prejudice and discrimination against persons with disabilities depending on the causes, type and severity of disability. For preventive purposes, the characteristics of the most important educational and institutional needs aimed at reducing or eliminating ableist behaviour of the members of society towards persons with disabilities, depending on the types and consequences of disability, are presented. The scope of research needs aimed at increasing the accessibility and effectiveness of social rehabilitation is also presented, with particular emphasis on the care and cooperation of a personal assistant for disabled persons to enable improvement in the quality of life in their living environment. The educational needs related to the removal of barriers, no matter if they are environmental, organisational or resulting from human attitudes, are also emphasised.

MATERIALS AND METHOD

A critical review of the scientific literature published between 1980 – 2025 in Polish and English was conducted using the PubMed, PubMed Central, Cochrane Library, and Google Scholar databases. The following key words were used: causes of disability, health and social functioning disorders in the environment, discrimination, as well as many related words concerning the phenomenon of discrimination, such as 'prejudice', 'persecution', inter-sectionality', 'ableism' and 'disablism'. The literature included medical, psychological, sociological, and legal works related to forms of prejudice and discrimination against people with disabilities, taking into account the types and severity of disability. The selected literature was analysed for their scientific validity and compliance with the principles of evidence-based

medicine. In order to achieve the highest possible level of recommendation, the review considered current scientific evidence based on reviewed scientific publications, systematic reviews, meta-analyses, and randomized controlled studies.

A list was compiled of potentially relevant articles and a comprehensive selection of works was made concerning cases of discrimination against persons with disabilities, its types and consequences, as well as methods and ways of preventing such actions. Attention was also drawn to the need to educate many social groups, including children and young people, in order to recognise the needs of disabled persons. Of particular significance here were the studies on the effectiveness of rehabilitation measures, especially in social and professional terms, on the functioning of persons with disabilities experiencing various forms of discrimination.

The team of authors also drew on their own many years of research experience in the multi-faceted issue of disability, including prejudice and discrimination.

BRIEF DESCRIPTION OF THE STATE OF KNOWLEDGE

Disability is an ambiguous and difficult-to-define concept, much like the definitions of 'health' and 'illness'. This is evidenced by years of research conducted by many specialists worldwide, not only in the medical field. Not so long ago, many specialists viewed disability as a congenital or acquired health condition. It is now agreed that disability is largely a social construct, rooted in social attitudes, with greater emphasis is being placed not on the illness itself, but on its consequences [12].

Defining disability in different health categories. Despite years of research programmes devoted to the assessment of health levels through definitions and terms, there are still no arbitrarily adopted definitions of health, disability, and illness. Many health problems result in varying degrees of bodily dysfunction due to illness, genetic defects, congenital defects, or various injuries. For many people, these consequences lead to short-term, long-term, or permanent disabilities. Each of these, to varying degrees, requires not only medical interventions but also social support, as well as support from specialists in psychology, sociology, law, and pedagogy. These are areas of support, the implementation of which primarily concern the living environment. They encompass tasks with varying levels of involvement and various forms of implementation, depending on the nature and consequences of the bodily dysfunction. These complex problems require systematic actions encompassed by the definition of a person with a disability. The multitude of definitions of a disabled person available in the international literature demonstrates the difficulties in developing a single, arbitrarily adopted definition of 'disable person' and a definition of the concept of 'disability'. The main reasons for this problem are: difficulties in defining a clear boundary between health and illness, between illness and disability, and many intermediate states that do not fit into these concepts [13, 14].

Defining the concept of a disabled person remains an open issue in many countries worldwide, most of which have developed their own definitions. Nevertheless, the most commonly cited definition is that formulated by experts from the World Health Organisation (WHO): 'A

disabled person is a person whose significant impairments and functional limitations prevent, hinder or restrict their effective functioning in society, taking into account factors such as gender, age and external factors' [15]. The issues covered by the definition concern human functioning in many areas of life, which prompts researchers from many scientific disciplines, from medicine to law, to introduce their own definitions or modify existing ones for their own scientific purposes. This is because it is impossible to include in a single definition all types of disabilities, which vary greatly in nature and consequences,. According to WHO experts, there is no single definition of disability, and defining it remains complicated because it is complex, dynamic, multidimensional and controversial [16]. The professional vocabulary does not use terms such as 'invalid', 'disabled', and 'cripple', as they have pejorative connotations. Therefore, these terms have been replaced by the broader concept of 'disabled person' or 'person with a disability'. This almost fully encompasses various states of dysfunction, both somatic, psychological, and social, regardless of gender, age, place of residence, or profession.

Qualifying a person as a disabled person is an extremely difficult task. Two groups of persons with disabilities are distinguished: those with a personal disability certificate and those without such a document, conventionally referred to as persons with biological disabilities. For various reasons, these people lack legal justification for their health status, and therefore lack the right to access various financial benefits, concessions, social assistance, labour market support, and rehabilitation programmes. For these and many other reasons, these people face a more difficult situation than those with disabilities with a legal disability certificate, both in the social and healthcare spheres, both basic and specialized. They are subject to various types of discrimination, just as often as persons with legal disabilities. This demonstrates the need for further, ongoing, and new research on persons with disabilities in many countries around the world, which can serve as a criterion for vulnerability in the Sustainable Development Goals. International organizations and nongovernmental organizations operating in the international development sector emphasize the need to collect health, social, and environmental data on disabled persons [17, 18]. They are essential for further work on defining disability, but not only that. It is crucial to develop new standard methods for assessing the qualification of individuals as disabled, as well as assessing the level (degree) of bodily dysfunction. This knowledge, in turn, is linked to the study of health needs and broadly understood social needs. This knowledge is essential for developing the most accurate methods and means of meeting these needs, primarily in the living environment of people with disabilities. There is no doubt that classifying a person as disabled is an extremely difficult task. A significant achievement is that defining this condition takes into account not only the health aspect but also the social aspect. Many researchers emphasize the importance of self-assessment, i.e., the subjective decision to classify oneself as disabled. In their work, Baart J. et al. [17] used subjective and functional disability assessment tools to verify whether they identify the same individuals as persons with disabilities. In a study of disabled persons in Cambodia, it was found that although all respondents self-identified as having a disability, not all would be considered as having a disability according to the Washington Group's short set of questions [17, 19]. This is a 6-question tool designed to identify individuals with functional limitations, using the International Classification of Functioning, Disability and Health (WHO) as a conceptual framework [20].

Causes of disability. Disabled persons are one of the most marginalised and diverse groups in almost every society, both in terms of the causes and consequences of disability. These factors, in turn, differentiate the medical and social needs of each person, and, if we take population studies into account, also the needs of large groups. Numerous scientific and statistical data, as well as materials from the WHO and the UN Special Rapporteur on the Rights of Persons with Disabilities, show that the number of people with various disabilities is increasing every year [21]. Changes in the frequency of causes of bodily dysfunction are also significant, as they require changes in the organisation of healthcare. The main causes of various types of bodily dysfunction include chronic non-communicable diseases, injuries, population ageing, and genetic/congenital defects. Social and environmental causes are also increasingly mentioned. Wars, various forms of violence, natural disasters, poor healthcare, low quality of life, unhealthy behaviours and other phenomena, contribute to the increase in the number of disabled persons.

Scopes of discrimination depending on the types and causes of disability. The word 'discrimination' comes from the Latin word 'discriminare', which means 'to distinguish' or 'to separate'. Initially, it was a neutral term, meaning to make distinctions, often seen as a positive trait, such as 'discernment'. The modern, negative meaning, referring to unfair or harmful treatment - based on characteristics such as gender, age, race, sexual orientation or disability emerged later, mainly in American-English after the Civil War [22, 23]. According to the Convention on the Rights of Persons with Disabilities, discrimination on the basis of disability means any form of differentiation, exclusion or restriction on the basis of disability, the purpose or effect of which is to hinder or negate the recognition, enjoyment or exercise of all human rights and fundamental freedoms on an equal basis with other citizens, in the political, economic and social spheres [24].

Discrimination against people with disabilities is called ableism. Ableizm (Eng. -able in disable - disabled and -ism in racism, sexism), in handicapizm (Eng. handicap disability, obstacle) - discrimination, reluctance, hostility towards disabled people. Ableism defines disabled persons by their disability, characterizing them as inferior and subordinate to able-bodied people. Direct discrimination occurs when someone is treated differently from a person without disabilities, based on their level of ability. Ableism leads to exclusion and discrimination against people with disabilities in all areas of life - education, employment, healthcare, participation in public and social life. According to various sources, most people with disabilities, regardless of the cause, type, degree, or duration of their disability, feel that they are victims of discrimination. There is ample empirical evidence of discriminatory practices in almost every area of life and functioning. The most frequently cited practices like that include access to education, employment, healthcare, and cultural goods. Various physical, social, and legal barriers are extremely important. The prohibition

of discrimination is legally grounded in international, community, and national law. Although this has certainly contributed to equal opportunities, but many people with disabilities are still not guaranteed equal opportunities and equal treatment in society, and experience exclusion or even self-exclusion. Discrimination can take many forms, such as denial of employment or education, harmful jokes, unjustified unequal treatment, rejection, and aggression. These can be single or long-term actions with varying degrees of consequences for the discriminated individual [25, 26].

Other behaviours directed at persons with disabilities include prejudice. This is a deeply ingrained negative perception of people, categories, and social groups based on superficial observations and logically unjustified generalizations of the characteristics of the subject matter, and persist despite new experiences because it involves significant emotional involvement [27]. In recent years, there has been an increase in cases of cyberbullying which mainly affects youth and children, involving violence via the electronic media, primarily the internet and cell phones.

When discussing the issue of discrimination, we cannot overlook a very important document that was created in 1976, the Union of the Physically Impaired Against Segregation (UPIAS) [28]. This British activist organisation was established to fight for the rights of people with physical disabilities, with the primary aim of opposing segregation and discrimination against people with disabilities. In the same year, the Fundamental Principles of Disability manifesto was published, which emphasised that it is society, not individual disabilities, that handicaps people. UPIAS played a key role in shaping the social model of disability, with a clear emphasis that it is social and systemic barriers that lead to disability, not the limitations of the individuals themselves. Disabled persons should have control over their own lives, supported by UPIAS professionals who promote self-determination. The foundations and principles of the UPIAS were also used by Mike Oliver, a British activist and researcher with quadriplegia. In 1983, he introduced a new model of disability which he called 'the social model of disability'. He was the first to develop disability studies and the first to explore the broadly understood issue of disability, and the author of the phrase 'words and ideas can change the world' [12]. This social model of disability was fundamental in the creation of the United Natuions Convention on the Rights of Persons with Disabilities, which is recognised worldwide by the disability community as a kind of constitution for their rights.

In the 1960s, the situation began to change when people with disabilities began to loudly demand their rights. In the United Kingdom, the Union of the Physically Impaired Against Segregation (UPIAS) was formed, which in 1976 published a manifesto entitled *Fundamental Principles of Disability* which redefined the concept of disability, and pointed out that it was not only a personal problem, but also a social one. In the view of UPIAS, disability is 'an inconvenience or limitation of activity caused by the contemporary organisation of society, which does not take into account, or takes into account only to a small extent, people with physical impairments or defects and therefore excludes them from participating in mainstream society' [10, 12].

Social campaigns that raise awareness of disability issues and contribute to equal opportunities are very important. These include, for example, 5 May – European Day Against Discrimination of Persons with Disabilities. This holiday, initiated by the French in the early 1990s, is a protest against discrimination against disabled persons in everyday life, at work and in public offices [29].

The research conducted by Szustak shows that people with disabilities identified the types of discrimination against them as: Limiting rights – the inability to participate in something or do something just because of their level of ability; Verbal abuse - indicating weaknesses, ridicule, humiliation, causing distress; - Not understanding the consequences of disability, e.g., too high or too low expectations; Undermining values not giving opportunities, considering them inferior; Lack of trust, partnership – lack of confidence in competences, excessive control over the performed tasks, e.g., by superiors or family; Alienation – pushing people with disabilities out of social life, not inviting them to meetings, isolation at home; Questioning disability - not recognizing illnesses (e.g., depression), saying that someone is too young to be disabled [8]. Similar results were obtained in the group of persons with disabilities due to visual impairments. Nearly a quarter of blind and visually impaired persons had repeatedly been told they were pretending not to see, and among them were their disabled peers for the same reason. Nearly a fifth of the study group stated that in various situations and places they had received comments that they should not use a white cane. This type of disability is associated with difficulties in cognitive functioning, acquiring information, spatial orientation, and independent mobility, yet people with disabilities themselves, to some extent, stigmatized people in their environment.

A large group of people with disabilities due to musculoskeletal dysfunctions constitute a very diverse population in terms of the causes of their disability. These include injuries, chronic somatic diseases, and genetic defects. Their consequences include mild to severe locomotor impairments, and even prolonged lying down. Among many, these include traumatic and non-traumatic spinal cord injuries, demyelinating diseases, cerebral palsy, spinal muscular atrophy, myopathies, rheumatoid diseases, and amputations. This group of people with visible bodily changes often leads to discrimination against them. Most of them require care at home or in care institutions.

Perhaps the largest group of disabled persons in this group consists of people who have undergone lower limb amputations. The types and number of amputation sequelae depend on many factors and characteristics, including gender, age, the level of amputation, the cause, and the level of advancement of medical care. Analyses made by Yuan et al. regarding the global burden of post-traumatic amputations in 204 countries shows that they increased from 11.37 million to 370.25 million in 1990 and from 13.23 million to 552.45 million in 2019, which represents an increase of 16.4% and 49.2%, respectively [30]. In 2019, the total estimated number of people living with limb loss in the USA, was 2,309,000. By 2060, the number of people living with limb loss in the U.S. is expected to increase by 145% [31, 32].

Post-traumatic amputation requires a long period of rehabilitation, which seriously impacts patients' quality of life. Initially, they may experience despair and disbelief, followed by frustration, anger, and rage (towards others and themselves), and over time, these feelings transform

into sadness, resignation, and anxiety about the future. This emotionally challenging situation can lead to depression, anxiety disorders, or acts of self-harm. Therefore, patients should receive assistance as early as possible, as part of a comprehensive rehabilitation programme to prevent discrimination. Moreover, such individuals require a personal assistant and, above all, family support. People within this disability category are perhaps most likely to experience discrimination, especially while using wheelchairs or crutches.

Research conducted at the Institute of Rural Medicine in Lublin, eastern Poland, has demonstrated differences in the frequency of barriers to daily functioning between urban and rural residents after amputation. People living in the rural areas more often complained about difficulties in getting around their homes, poor road quality, lack of rehabilitation options in their place of residence, and difficulties in dealing with official matters. They could not always count on help from people during chance encounters [33, 34]. In turn, in Canada, the experiences of persons who underwent amputations show that despite their efforts to overcome serious physical, psychological and emotional struggles, they often encounter aggressive behaviour on the streets and are marginalised because of their easily visible disability On the other hand, people with lower limb amputations from Sierra Leone complained about extremely difficult living conditions, discrimination and persecution, and a lack of opportunities for help and social support. They also have no access to rehabilitation, and many, often due to lack of family support, are reduced to begging and living on the streets [35].

Although almost a decade ago, Poland and other countries ratified the UN Convention on the Rights of Persons with Disabilities in practice, the process of its implementation, unfortunately, cannot be considered complete. Subsequent studies, reports and inspections, as well as the everyday experiences of people with disabilities, show that much has been achieved, but much still remains to be done. Too often, persons with disabilities are perceived as objects of care, without respect for their subjectivity, dignity and rights; as a result, the care model dominates over the inclusive model, focusing attention on dysfunctions and limitations [24].

Epidemiological studies show that people with Autism Spectrum Disorder (ASD) constitute an increasingly large group among persons with disabilities. In order to support them and their caregivers, there is a need to develop architecture for these individuals, as well as for people with hearing impairments and hypersensitivity to sound, with a view to an inclusive design. This should meet the requirements for independent living as well as providing adequate support for families and persons providing care for them [36]. Hull emphasizes that social skills training (SST) is an intervention designed to support the development of social communication and interaction in people with autism, often through group activities, role-playing, and peer mediation. The current provision in the UK does not always meet the needs of adults suffering from autism, and some even reject it. Facilities offering SST should rethink the personalization of their support options and ensure the involvement of adults with autism in the design and implementation of SST [37].

A significant and disappointing problem for most disabled persons is access to healthcare. People with disabilities face this type of difficulty worldwide, especially in low-income countries. Research by Ali A. et al. [38] found that half of

the participants believed that disabled patients were treated unfairly or discriminated against by healthcare professionals. They experience barriers in all aspects of healthcare, from interacting with a healthcare provider in a clinic to navigating a large facility and its complex environment [39]. However, persons with disabilities most often experience the greatest discrimination and stigmatization from healthcare professionals, precisely because of their disability. These attitudes are primarily due to a lack of knowledge about the needs of people with disabilities [40]. Lagu et al. proved that physicians showed hostility toward people with disabilities primarily due to insufficient reimbursement for accommodations. Greek medical and social work students demonstrated negative attitudes toward people with physical and intellectual disabilities. Bacherini et al. [41] demonstrated inappropriate attitudes among physicians, particularly regarding emotional and behavioural aspects, especially toward people with intellectual disabilities.

Problems with access to healthcare are associated with numerous types of discrimination, most of which constitute barriers. Their type and number depend on the consequences of the cause of the disability or, if they are interrelated, the causes. Chronic illnesses should also be considered, which further contribute to reduced mobility and bodily function. The most common obstacles include physical barriers, such as lack of a lift in a building, absence or incorrect signage in medical offices, inadequately adapted medical offices, and shortages of medical equipment. Other burdensome problems include limited access to specialists. Mental barriers, which are particularly harmful, include: 1) stereotypes and prejudices – medical personnel treating people with disabilities as less capable and constantly in need of assistance; 2) excessive compassion and patronization – treating patients from a position of inferiority? superiority, addressing them using just a name, disregarding their needs and requests for explanations; 3) infantilization undermining a person's independence and self-reliance, and treating them like a child [40].

Other causes of disability. A rather drastic cause of developing or worsening disabilities is time served in prison. Imprisonment is penal servitude for offences against the Penal Code. It is imposed on offenders with both legal and biological disabilities, regardless of the cause of their physical impairment. Despite numerous legal Acts of varying severity, they experience numerous forms of neglect, abuse, and discrimination. In almost every country, prisons are places with insufficient access to healthcare, mobility aids (wheelchairs and crutches), and communication services, leading to worsening health conditions and deepening isolation, and often loneliness. Lack of or insufficient staff training in disability awareness, the inflexibility of the prison system, the physical inaccessibility of facilities, overcrowding, and psychological stress, are factors that harm people with disabilities and potentially create new types of disabilities. [42]. A report published in the USA shows that people with disabilities are often over-represented in prison populations. Most of them are those who have committed minor offences or are experiencing homelessness. These individuals represent almost all causes of disability. Prisoners include persons with disabilities resulting from autism, Down syndrome, deafness, cognitive and intellectual disorders, dementia, and mobility impairments [43]. Most of them have already been

in other institutions in the past, such as juvenile detention centres or psychiatric hospitals [4]. Many prisons do not have facilities for disabled persons who use wheelchairs, walking sticks or crutches, or who are deaf or blind. This makes it extremely difficult for them to access basic facilities, such as toilets, gyms, showers, or cells adapted to their needs. Prisoners with disabilities are often dependent on the help of other inmates, which is not always safe. They sometimes become victims of violence, exclusion, abuse and suicide attempts. The issue of imprisoning persons with disabilities in penal institutions certainly requires rapid change, including legislative changes. It is essential to modernise prisons, improve medical care (medicines, availability of orthopaedic and rehabilitation equipment, better access to rehabilitation and social education, as well as training for prison staff in understanding disability issues) [44].

Another highly dangerous environment for persons with disabilities in terms of discrimination risks is armed conflict. These individuals are exposed to a disproportionately high risk of increased violence, discrimination, barriers to escape, and limited access to shelters, humanitarian aid and services. They are often overlooked and marginalised in the provision of medical care, mobility assistance, food and clothing. This is despite the existence of international regulations and resolutions, such as UN Security Council Resolution 2475 which aims to improve their protection and integration by ensuring access to humanitarian aid, access to justice and meaningful participation [45]. Persons with disabilities are more vulnerable in conflict situations to isolation, lack of up-to-date information, confusion, lack of transport and attacks by aggressors (CRPD statement on the integration of persons with disabilities at the World Humanitarian Summit, 2015) [46]. The same requirements for military service apply to persons with disabilities as to persons without disabilities, which is also a form of discrimination. Nevertheless, in recent years, the situation has been changing in favour of disabled persons. They have opportunities for employment in the military services, provided that they meet the requirements for specific positions in such sectors as cyber security, logic and administration, modern technologies, and military medicine. Countries that offer such opportunities include the USA, where persons with disabilities are offered positions in cybersecurity, data analysis or military administration, and the UK, where special programmes have been developed to enable persons with mobility impairments to work as military analysts, cybersecurity specialists or strategic advisers. In both cases, it is intellect and technical skills that matter, not just physical agility [47].

Personal assistance – promoting autonomy and independence of persons with disabilities. Persons with disabilities constitute a vast and diverse group, most of whom require assistance and support in their daily lives. This also applies to their caregivers. Support categories depend primarily on the type and severity of disability, as well as the types of discrimination they face. Personal assistants provide significant support for these individuals. Personal assistance for disabled persons emerged from the disability and independent living movements of the 1970s and 1980s in UK. Personal assistance services provide individual support for people with disabilities in performing their daily activities that they cannot perform on an equal basis with others. The goal of this support is the active inclusion and

full participation of persons with disabilities in social and professional life, thus increasing independence and active participation [48, 49]. This service provides personalized support, tailored to the individual needs of the user, essential for leading as full and independent a life as possible. Personal assistants perform a wide range of tasks, including personal care (e.g., hygiene, dressing/undressing), home assistance (cleaning, cooking, shopping), social support (participation in social events, education, employment), health assistance (medication administration, pressure sore prevention), and meeting educational needs. The assistant is not a caregiver or therapist, but a partner in everyday life. The needs of the person receiving assistance are crucial. Personal assistants are employed directly by disabled persons or their families and support people with disabilities in leading their lives in their chosen way: at home, in the community, or at work.

Research indicates that the role of personal assistants is poorly recognized in society and has a low professional status, likely related to discriminatory attitudes towards persons with disabilities and a poor understanding of the role of personal assistants in society. The personal assistant model varies depending on the country. For example, in the UK, personal assistants are distinguished by the fact that they are not employed by any organization. Instead, they are employed directly by the individual requiring support through direct payment or a personal budget or alternatively, they work on a self-employed basis [50]. In Poland, the Personal Assistance Act is scheduled to come into force on 1 January 2027. Services will be financed from the State budget [50, 51].

The importance of rehabilitation in preventing discrimination. All persons, regardless of the type and consequences of their disability, in order to fully participate in society require participation in multidimensional rehabilitation activities leading to the highest possible level of social inclusion using the International Classification of Functioning, Disability and Health (ICF, adopted by WHO in 2001) [52]. According to experts from the World Health Organisation (WHO), rehabilitation is the comprehensive and coordinated use of medical, social and occupational measures in order to improve the condition of people with impaired physical abilities, and help them achieve the best possible functional status. To attain this, it is necessary to take into account four stages of rehabilitation - medical, psychological, social and professional, in order that it can be effective; some researchers, however, rightly limit them to only two - medical-psychological and social-professional stages. Of course, this division is only of methodological significance, because only practical, multidimensional actions, taking into account the individual needs of the disabled person, lead to full social inclusion, using the ICF [53]. Rehabilitation, understood as a process, provides unique and irreplaceable support for persons with disabilities. Unfortunately, this form of support is often underestimated, even by medical institutions (Fig. 1).

Rehabilitation effectively prevents ableism through multidisciplinary activities that fall within its definition. In general terms, rehabilitation increases independence in everyday functioning, including through physical and psychological therapy, reducing health deficits and maximising fitness, enables active social and professional life through professional and social rehabilitation

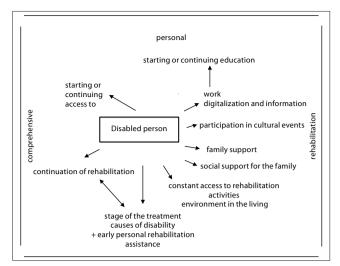


Figure 1. The importance of comprehensive rehabilitation to improve greater participation in society. *Source*: own studies

activities, which help disabled people return to work or take up employment, continue their education, and actively participate in social life, which is a strong justification for breaking stereotypes, improves the quality of life by improving health through various methods of treating the cause of disability, achieving a higher level of self-esteem and self-confidence, which reduces susceptibility to discriminatory treatment, supports physical fitness through regular physical activity as part of rehabilitation, which reduces the risk of health deterioration, and thus helps to maintain greater autonomy and independence [54]. All these achievements are aimed at attaining the goal of fighting against disability discrimination, and the achievement of these goals is most effective when maintaining the principles of comprehensive rehabilitation [55, 56].

One of the world's best rehabilitation programmes, recognised in 1970 by WHO experts, is the concept of the Polish School of Rehabilitation, which consists of the following attributes: 1) early initiation, 2) universality, 3) comprehensive approach, and 4) continuity [57].

SUMMARY

In recent years, in many countries worldwide, the number of social groups targeted by prejudice has been increasing together with the intensity of discriminatory actions, which have resulted in numerous social conflicts. One of the largest social groups experiencing the effects of prejudice and discrimination from the so-called 'healthy part of society' are people with various types of disabilities, of all ages. According to the WHO data, this figure represents 16% of the world's population, but for various reasons, this figure is an underestimate. This large number of people indicates that this is a significant problem for public health. Discrimination is defined fairly uniformly in the literature, although some terms used to describe such behaviours vary. Discrimination against persons with disabilities stems from both systemic conditions and individual social attitudes. There is still insufficient research on the negative causes of behaviours described as discrimination or prejudice. Identifying the causes of these forms of exclusion provides opportunities to effectively counteract their occurrence.

Furthermore, it is necessary to plan research that considers the long-term consequences of discriminatory actions, which manifest themselves in health, psychological, and social dysfunctions. Generally, these include: deterioration of health, reduced quality of life, low self-esteem, and limited social opportunities, including professional opportunities. Despite important and substantive legal provisions, various research methods and tools, as well as available scientific works by various specialists, including psychologists, nurses, sociologists, doctors, lawyers, economists and educators, unfortunately, changes for people with disabilities in many countries are happening extremely slowly. This is evidence of ineffective educational programmes and, therefore, low awareness and knowledge of the physical and psychological barriers in the living environment and the types of discrimination experienced. The functioning of the disabled can be effectively improved by examining those with different causes of disability in order to diagnose their health and social needs, and thus regulate the methods of solving these problems, using maps of needs in the country or region. Much greater emphasis should be placed on supporting the family members of a disabled person, who are often helpless in the face of the situation resulting from the disability [54].

The various types and degrees of discrimination, varying levels of severity, and intentional or unintentional mistreatment of persons with disabilities, allow us to identify the most important needs in the search for solutions to improve the quality of life of this population group. These include:

- 1) gaps in equality in healthcare; better preparation of medical, nursing, physiotherapy and other healthcare students to provide services to this population;
- 2) prevention of social isolation and loneliness among elderly people, mainly those with hearing loss, blindness and severe mobility problems;
- psychological support for families with a disabled person in order to better cope with burnout, depression and helplessness;
- 4) removal of physical barriers;
- 5) greater employment opportunities.

Discrimination also affects persons with disabilities in other areas of life, often depending on the type and consequences of physical dysfunction and various sociodemographic characteristics.

Undoubtedly, rehabilitation measures are one of the most effective ways to help people with disabilities overcome social isolation, loneliness, anxiety and depression, which is closely linked with improving the quality of life and social reintegration [58]. Restoring the ability to work and enabling disabled persons to take up employment is extremely important, not only from an economic point of view but also from the psychological perspective. For many people, this is the most important achievement in their lives, made possible by comprehensive rehabilitation, but unfortunately not available to all persons with disabilities. Many specialists underestimate the abilities of these people, sometimes outstanding abilities, which give them the opportunity to support themselves, but they need to be given a chance. Many famous people with various types of disabilities have proven that determination, passion and hard work can overcome any limitations. It is worth quoting a few persons with disabilities who have overcome these limitations. Stella Young, journalist

(congenital bone fragility) – 'My disability exists not because I use a wheelchair, but because the world is not adapted'; Robert M. Hensel, writer, poet (spina bifida) – 'Get to know me through my abilities, not my disability'; Helen Keller, writer (deaf and blind) – 'Disability is not a tragedy. It is just a different way of life'. The maxim of Mahatma Gandhi is extremely fitting – 'The greatness of a nation can be judged by the way its citizens treat its most vulnerable members'.

REFERENCES

- Disabled People in the World: Facts and Figures, https://www.inclusivecitymaker.com/disabled-people-in-the-world-in-2021-facts-and-figures/
- Ontario Human Rights Commission. Forms of discrimination. https:// www3.ohrc.on.ca/en/policy-ableism-and-discrimination-baseddisability/6-forms-discrimination (access: 16 October 2025)
- 3. Temple JB, Kelaher M, Williams R. Discrimination and avoidance due to disability in Australia: evidence from a National Cross Sectional Survey. BMC Public Health. 2018 Dec 5;18(1):1347. doi:10.1186/s12889-018-6234-7. PMID: 30518354; PMCID: PMC6282294.
- Bixby L, Bevan S, Boen C. The Links Between Disability, Incarceration, And Social Exclusion. Health Aff (Millwood). 2022 Oct;41(10):1460– 1469. doi:10.1377/hlthaff.2022.00495. PMID: 36190886; PMCID: PMC10335036
- 5. Disability Inclusion Strategies, CDC, Disability and Health, April 3, 2025.
- Pasin T, Dogruoz Karatekin B. Determinants of social participation in people with disability. PLoS One. 2024 May 20;19(5):e0303911. doi:10.1371/journal.pone.0303911. PMID: 38768173; PMCID: PMC11104585.
- 7. Knott C. 5 Barriers That Impact People with Disabilities Mon, 05/08/2023. https://lifespan.ku.edu/news/article/2023/05/08/be-aware-5-barriers-impact-people-disabilities
- Szustak K. Trojanowska M. Dyskryminacja osób z niepełnosprawnością. Cześć II. Fundacja Avalon – raport 2023.
- Burek W, Klaus W. Definiowanie dyskryminacji w prawie polskim w świetle prawa unii europejskiej oraz prawa międzynarodowego. Problemy Współczesnego Prawa Międzynarodowego, Europejskiego i Porównawczego. 2013;11:72–90.
- Disability Advocate who introduced the Social Model of Disability, Mike Oliver. level Playing Field 2019. https://www.levelplayingfield.org. uk/news-item/disability-advocate-who-introduced-the-social-modelof-disability-mike-oliver/
- Breaking Barriers: The Impact of Persons with Disabilities on Inclusive Research and Scholarship April 4, 2024.
- Oliver M, Sapey B. The Causes of Impairment and the Creation of Disability. Social Work with Disability People. 2020:56–76.
- 13. Kołłątaj B, Kołłątaj WP, Cipora E, et al. Determination of the medical and social levels of disability as a basis for successful comprehensive rehabilitation. Ann Agric Environ Med. 2025;32(2):198–205. doi:https://doi.org/10.26444/aaem/207621
- 14. Global Disability Inclusion Report. Accelerating Disability Inclusionin a Changing and Diverse World. A Multistakeholder Report for the Global Disability Summit 2025.
- Gutterman AS. Definitions and Models of Disability. Ageism and Disability, Sustainable Impact Entrepreneurship Project. 2023:1–14.
- Schramme T. Health as Complete Well-Being: The WHO Definition and Beyond. Public Health Ethics 2023 Jul 27;16(3):210–218. doi:10.1093/ phe/phad017
- 17. Baart J, Elbers W, Schippers A. Who is disabled? On whether the functional definition of disability targets the same individuals as the subjective definitione. Front Sustain. 2023;4. https://doi.org/10.3389/frsus.2023.1163128
- Disability Inclusion Strategies, CDC, Disability and Health, April 3, 2025. https://www.cdc.gov/disability-inclusion/strategies/index.html
- Handi-Diag: a self-assessment tool for disability inclusion. EP. Created by Emeline PETIT, An official website of the European Union. Digital Skills Jobs Platform. Updated 13 May 2024.
- Ivanova GE, Bulatova MA, Polyaev BB, et al. Application of the International Classification of Functioning, Disabilities and Health in the Rehabilitation Process. Bull Rehabil Med. 2021;20(6):4–33. https:// doi.org/10.38025/2078-1962-2021-20-6-4-33

- Special Procedures of the Human Rights Council. United Nations Rights. https://www.ohchr.org/en/special-procedures-human-rightscouncil
- 22. Stucki G, Pollock A, Engkasan JP. How to use the International Classification of Functioning, Disability and Health as a reference system for comparative evaluation and standardized reporting of rehabilitation interventions. Eur J Phys Rehabil Med. 2019;55:384–94. doi:10.23736/S1973-9087.19.05808-8
- 23. Discrimination in employment vs. CJEU ruling of 7 December 2023 in case ref. no. C-518/22. https://www.kpr.pl/en/discrimination-in-employment-vs-cjeu-ruling-of-7-december-2023-in-case-ref-no-c-518-22/
- 24. Convention on the Rights of Persons with Disabilities (CRPD). United Nations. Departament of Economic and Social Affairs. https://social. desa.un.org/issues/disability/crpd/convention-on-the-rights-of-persons-with-disabilities-crpd
- 25. Timmons S. McGinnity F, Carroll E. Degree of "ableism" depends on disability, gender and the social context. ESRI Research Bulletin 2024;01.
- 26. Eisenmenger A. What it is, what it looks like, and what we can do to fix it. Ableism 101. 2021;7:1–3.
- 27. Encyclopedia pedagogiczna XXI wieku. T. Pilch, editor. vol V R-St. Warszawa; 2006. p. 990.
- Bergsh M, Chatton C, Thomas C. Do disabled people need a stronger social model: a social model of human rights? Disability Society. 2019;34:7–8,1034–1039.
- 29. European Day of Persons with Disabilities 2024. Employment, Social Affairs and Inclusion. European Commission
- Yuan B, Hu D, Gu S. et al. The global burden of traumatic amputation in 204 countries and territories. Front Public Health. 2023 Oct 20:11:1258853. doi:10.3389/fpubh.2023.1258853. eCollection 2023
- 31. Rivera JA, Churovich K, Ashley B, et al. Estimating Recent US Limb Loss Prevalence and Updating Future Projections. Arch Rehabil Res Clin Transl. 2024 Oct 19;6(4):100376. doi:10.1016/j.arrct.2024.100376. eCollection 2024 Dec.
- 32. Bozzay AB, Potter KP, Forsberg JA. The Transfemoral and Transhumeral OPRA (Osseoanchored Prostheses for the Rehabilitation of Amputees) Osseointegration Technique. JBJS Essent Surg Tech. 2025 Nov 19;15(4):e22.00072. doi:10.2106/JBJS.ST.22.00072. eCollection 2025 Oct-Dec.
- 33. Keeves J, Hutchison A, D'Cruz K. Social and community participation following traumatic lower limb amputation: an exploratory qualitative study. Disabil Rehabil. 2023 Dec;45(26):4404–4412. doi:10.1080/09638 288.2022.2152114. Epub 2022 Nov 30. PMID: 36448299.
- 34. Sprawozdanie końcowe z realizacji zadania badawczego DS 444 /13 – Niepełnosprawność, jako problemy medyczne i społeczne w województwie lubelskim – znaczenie w organizacji ochrony zdrowia i w polityce zdrowotnej regionu (kierownik zadania badawczego: prof. I.D. Karwat). Uniwersytet Medyczny w Lublinie. Lublin 2017.
- 35. Amputees in Sierra Leone turn to farming to combat discrimination. December 28, 2024. https://www.voanews.com/a/amputees-in-sierra-leone-turn-to-farming-to-combat-discrimination/7916767.html
- Bettarello F, Caniato M, Scavuzzo G. indoor Acoustic Requirements for Autism-Friendly Spaces. Applied Sciences. 2021; 11(9):3942. https:// doi.org/10.3390/app11093942
- 37. Hull L, Rane S, Lee SH. "Just Ask What Support We Need": Autistic Adults' Feedback on Social Skills Training. Autism Adulthood. 2025 May 28;7(3):283–292. doi:10.1089/aut.2023.0136. PMID: 40539210; PMCID: PMC12174831.
- 38. Ali A, Scior K, Ratti V, et al. Discrimination and other barriers to accessing health care: perspectives of patients with mild and moderate intellectual disability and their carers. PLoS One 2013 Aug 12;8(8):e70855. doi:10.1371/journal.pone.0070855.
- Rotoli J, Poffenberger C, Backster A, et al. From inequity to access: Evidence-based institutional practices to enhance care for individuals with disabilities. A EM Educ Train. 2023 Jun 27;7(Suppl 1):S5-S14. doi:10.1002/aet2.10871
- Munthali AC, Swartz L, Mannan H, et al. This one will delay us": barriers to accessing health care services among persons with disabilities in Malawi. Disabil Rehabil. 2019 Mar; 41(6):683–69041. doi.org/10.108 0/09638288.2017.1404148
- 41. Bacherini A, Havercamp SM, Balboni G. Physicians' Attitudes about Individuals with Intellectual Disability and Health Care Practices Toward Them: A Systematic Review. Psychiatr Danub. 2021 Dec;33(Suppl 11):79–90. PMID: 34862898.
- Guyatt GH, Oxman AD, Vist GE, et al. GRADE: an emerging consensus on rating quality of evidence and strength of recommendation. BMJ 2008;336(7650):924–6. doi:10.1136/bmj.39489.470347.AD

- 43. Gormley C. The Hidden Harms of Prison Life for People with Learning Disabilities The British J Criminol. 2022;62(2):261–278, https://doi.org/10.1093/bjc/azab061
- 44. Sakowicz-Boboryko A, Otapowicz D, Wyrzykowska-Koda D. Osoby z niepełnosprawnością w izolacji penitencjarnej pozór a/i rzeczywistość. Resocjalizacja Pol. 2018;16:93–111. Polish Journal of Social Rehabilitation. doi:10.22432/pjsr 2018.16.08
- 45. Security Council Unanimously Adopts Resolution 2475 (2019), Ground-Breaking Text on Protection of Persons with Disabilities in Conflict. Meetinge Coverage and Press Releases. United Nations, S.C./13851, 20 June 2019.
- 46. Kun-Buczko M. People with Disabilities in Armed Conflict. EEJTR 2019;3(2):43–55. doi:10.15290/eeitr.2019.03.02.03
- 47. Niepełnosprawni w służbie wojskowej szansa czy bariera? Supervisor 06.01.2025. https://ipon.org.pl/aktualnosci/niepelnosprawni-w-sluzbie-wojskowej-szansa-czy-bariera
- 48. Besowski S, Cwojdzińska J, Orylski L, et al. Standard usługi asystencja osobista osoby z niepełnosprawnością. Warszawa: Ministerstwo Rodziny i Polityki Społecznej, PFRON; 2022.
- Sierpińska LE. Assessment of the degree of illness acceptance in patients diagnosed with hepatitis C. Ann Agric Environ Med. 2022;29(2):224– 231.
- 50. Woolham, JG, Norrie, CM, Samsi K, et al. Roles, responsibilities, and relationships: hearing the voices of Personal Assistants and Directly Employed Care Workers. NIHR Policy Research Unit in Health and Social Care Workforce, The Policy Institute, King's College London 2019. https://doi.org/10.18742/pub01-005

- 51. Projekt ustawy o asystencji osobistej osób z niepełnosprawnościami. Kancelaria Prezesa Rady Ministrów. https://www.gov.pl/web/premier/ projekt-ustawy-o-asystencji-osobistej-osob-z-niepelnosprawnosciami2
- 52. Stucki G, Pollock A, Engkasan JP, et al. How to use the International Classification of Functioning, Disability and Health as a reference system for comparative evaluation and standardized reporting of rehabilitations. Eur J Phys Rehabil Med. 2019;55:384–94. doi:10.23736/ S1973-9087.19.05808-8
- Mills JA, Marks E, Reynolds T, et al. Rehabilitation: Essential along the Continuum of Care. NIH: 2025. https://www.ncbi.nlm.nih.gov/ books/NBK525298/
- Stucki G. Advancing the Rehabilitation Sciences. FIELD GRAND CHALLENGE. Front Rehabil Sci. 2021;(1). https://doi.org/10.3389/ fresc.2020.617749
- 55. Tederko P, Górnicz M, Babij K, et al. Rehabilitation definition for research purposes. Ann Agric Environ Med. 2024;31(4):609–615.
- 56. Mazur A, Saran T, Łukasiewicz J, et al. Interpersonal correlates of the tendency to seek help in the situation of indebtedness in healthy people and in patients with impaired mobility, related to chronic disorders of the locomotor system – Pilot study. Ann Agric Environ Med. 2019;26(4):630–635. doi:10.26444/aaem/102493
- 57. Kołłątaj B, Kołłątaj WP, Cipora E. et al. Determination of the medical and social levels of disability as a basis for successful comprehensive rehabilitation. Agric Environ Med. 2025;32(2):198–205. doi:10.26444/ aaem/207621
- 58. Ekhammer A, Melin L, Thorn J, et al. A sense of increased living space after participating in multimodal rehabilitation. Disab Rehabil. 2016;38: 2445–2454. https://doi.org/10.3109/09638288.2015.1137978