

chapter 23

Disability Studies in Inclusive Education

The nature of physical impairment and its impact on learning

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Chapter learning outcomes

After completing this chapter, you will be able to:

- ✓ Describe physical conditions that may lead to impairment and how they present.
- ✓ Have working knowledge of the International Classification of Functioning, Disability and Health.
- ✓ Identify causes of physical impairment.
- ✓ Demonstrate a deeper level of insight into cerebral palsy.
- ✓ Explain the importance of human rights and legal issues for learners with physical impairments.

Preparatory activities



READ: International classification of functioning, disability and health: An overview

Author: World Health Organization

Year: 2007

Estimated reading time: 90 minutes

File size: 131 KB

This reading will help you get a basic overview of the aims and underlying structure of the International Classification of Functioning, Disability and Health (ICF). Later in the chapter, we will discuss how to apply this conceptualisation in the context of academic barriers encountered by children with physical impairments.



READ: Getting to know cerebral palsy

Author: London School of Hygiene & Tropical Medicine

Year: 2021

Estimated reading time: 30 minutes

File size: 5.1 MB

Read the overview (page 4) of this parent and caregiver manual. It will serve to explain more in depth the need for a transgressive approach to education for learners with cerebral palsy.

Introduction

In this chapter, we continue to discuss the impact of different types of impairment, with a focus on physical impairment. We will also look at the experiences of students with physical impairments and how their disabilities impact on their learning. We shall begin with a definition of physical impairment and an overview of the ICF, after which we will discuss cerebral palsy (CP) as well as the importance of human rights and legal frameworks for learners with physical impairments.

What is physical impairment?

The World Health Organization (WHO) and World Bank (2011) define “physical impairment” as a disability that limits a person’s physical capacity to move, coordinate actions or perform physical activities. It is also accompanied by difficulties in one or more of the following areas: physical and motor tasks, independent movement, and performing daily living functions. In the same vein, the UK Equality Act 2010 defines physical impairment as a “limitation on a person’s physical functioning, mobility, dexterity or stamina” that has a “substantial” and “long-term” negative impact on that person’s ability to perform normal daily activities (S6(1)).

In both of these definitions, **impairment** is seen as a problem in body function or structure; an **activity limitation** is a difficulty encountered by an individual in executing a task or action; and a **participation restriction** relates to a problem experienced by an individual in life situations. Thus, disability is a complex phenomenon, reflecting an interaction between features of a person’s body and features of the society in which they live. As such, physical impairment is a condition that substantially limits one or more of an individual’s major life activities – including self-care, receptive and expressive language, learning, mobility and self-direction (WHO & World Bank, 2011)



GLOSSARY: Disability

“Disability” is an umbrella term, covering impairments, activity limitations and participation restrictions. A person has a disability if they have **“a physical or mental impairment which has a substantial and long-term adverse effect on her or his ability to carry out normal day-to-day activities”** (WHO & World Bank, 2011, p. 7).

The effects of a physical impairment vary from person to person, depending on the nature of their condition. Some are serious on their own. Others may be mild but are made worse by other diagnoses. Physical impairment presents itself in various ways. Conditions like arthritis may make daily tasks difficult without any obvious external signs. Meanwhile, an amputee has clear signs of their disability. Both conditions impact the person’s ability to perform normal daily living activities. When people think of physical disability, visible conditions are often what come to mind. Wheelchairs, walking sticks and injuries all tend to signal that someone has an impairment of some kind. Some visible disabilities are less obvious than others, but they are generally hard to miss. These factors demonstrate how complex and potentially problematic the definition of disability is; we therefore need a standard framework to describe and organise information on functioning and disability.

The International Classification of Functioning, Disability and Health

The ICF is a framework that describes and organises information on functioning and disability. It provides a standard language and a conceptual basis for the definition and measurement of health and disability. The ICF aims to provide scientific basis for understanding and studying health and health-related states, outcomes, determinants and changes in health status and functioning. It also aims to establish a common language for describing health and health-related states to improve communication between different users, such as health-care workers, researchers, teachers, education officials, policy-makers, and the public, including people with disabilities.

The ICF permits comparison of data across countries, health care disciplines, services, and time as well as providing a systematic coding scheme for health information systems (WHO, 2001). The ICF conceptualises a person’s level of functioning as a dynamic interaction between their health conditions, environmental factors and personal factors. All components of the ICF framework of disability are important and any one of them may interact with another.



With regards to the nature and impact of physical impairments on learning, environmental factors must be taken into consideration, as they have a deep, wide-ranging effects, and may need to be altered. Figure 1 shows interactions between the components of the ICF.

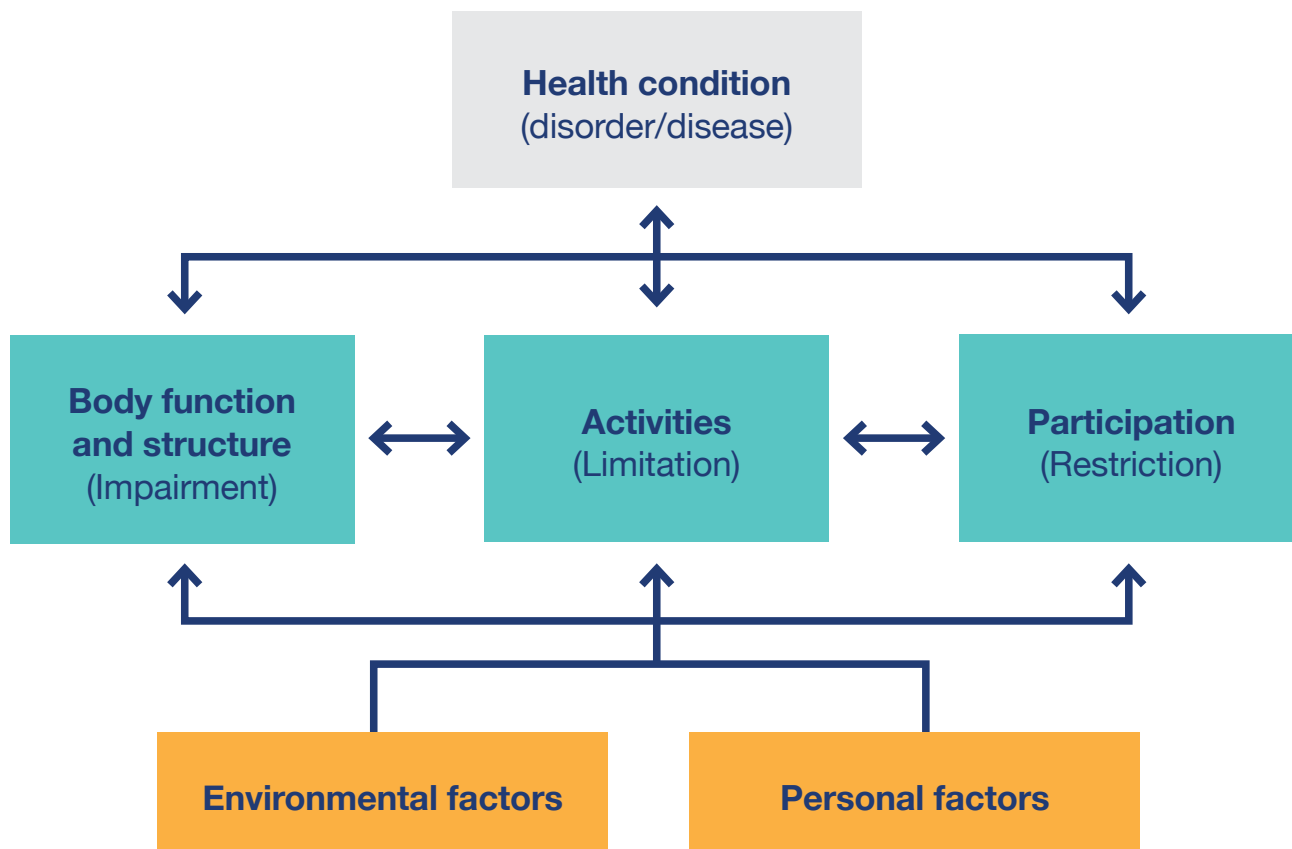


Figure 1: Interactions between the components of the ICF (Adapted from: **WHO, 2001**)



GLOSSARY: Definition of components of the ICF

Body functions: The physiological functions of body systems (including psychological functions).

Body structures: Anatomical parts of the body such as organs, limbs and their components.

Impairments: Problems in body function and structure such as significant deviation or loss.



Activity: The execution of a task or action by an individual.

Participation: Involvement in a life situation.

Activity limitations: Difficulties an individual may have in executing activities.

Participation restrictions: Problems an individual may experience in involvement in life situations.

Environmental factors: The physical, social, and attitudinal environment in which people live and conduct their lives. These are either barriers to or facilitators of the person's functioning.

Functioning: This is an umbrella term for body function, body structures, activities, and participation. It denotes the positive or neutral aspects of the interaction between a person's health condition(s) and that individual's contextual factors (environmental and personal factors).

Causes of physical impairment

The causes of physical impairment are varied and are usually grouped into two categories: hereditary/congenital and acquired.

Hereditary/congenital impairments refer to a person who was born with a physical disability or developed one due to inherited genetic problems, suffered an injury at birth, or has issues with their muscular development growing up. Genetic causes of physical impairment can include mutation of genes or be based on genetic incompatibilities between parents. The birthing process, also known as perinatal ethiology (which encompasses the entire time period of the birth), may, for instance, lead to prolonged lack of oxygen due to obstruction of the respiratory tract or injury to the brain during birth.

Acquired physical impairments could be due to an accident, infection or disease, or as a side-effect of a medical condition.

Causes of physical impairments can also be grouped into **communicable diseases** and **non-communicable diseases (NCDs)**.



Communicable diseases (i.e. infectious diseases) such as lymphatic filariasis, tuberculosis, HIV/AIDS and other sexually transmitted diseases, neurological consequences of some diseases (such as encephalitis and meningitis), and childhood cluster diseases (such as measles, mumps and poliomyelitis) can have side-effects which cause to physical impairment.

NCDs (or chronic diseases) such as diabetes, cardiovascular disease, arthritis and cancer, cause the majority of long-term impairments. The increase in NCDs, which is currently observed in all parts of the world, will have a profound effect on disability. Lifestyle choices and personal behaviour factors, such as obesity, physical inactivity, tobacco use, alcohol consumption and illicit drugs, that lead to NCDs are also becoming major contributing factors. Environmental factors, such as air pollution, occupational disease, poor water supply, poor sanitation and hygiene, as well as malnutrition also contribute to physical impairment.

Some conditions that may lead to physical impairment include acquired brain injuries, epilepsy (a neurological condition), cystic fibrosis (a genetic condition), multiple sclerosis (an autoimmune condition), spina bifida (a developmental birth defect) and cerebral palsy (CP).

Getting to know cerebral palsy

CP is the most common motor disability in childhood. “Cerebral” means related to the brain, while “palsy” pertains to weakness or problems with using one’s muscles. CP is caused by abnormal brain development or damage to the developing brain that affects a person’s ability to control his or her muscles.

Let us consider the following features of CP:

- CP is a group of disorders that affect a person’s ability to move and maintain balance and posture.
- CP affects movement and muscle tone or posture. It is caused by damage that occurs to the immature, developing brain, most often before birth.
- CP is a condition marked by impaired muscle coordination (spastic paralysis) and/or other disabilities, typically caused by damage to the brain before or at birth.

How to identify a child with cerebral palsy

Identifying CP in the early stages of it is difficult, as it often manifests over time. The observation of slow motor development, abnormal muscle tone and unusual posture are common initial clues to the diagnosis. Some early warning signs include:



- Delay in meeting motor-skill milestones (e.g. head control, sitting, crawling).
- Recurrent seizures.
- Stiffness or floppiness of the body.
- Poor sucking/feeding ability.
- Persistently fistled hand or not using one hand well (asymmetry).
- Decreased rate of head growth.
- Difficulty in seeing and hearing.

The risk is highest if the child's mother has a history of a difficult birth or pregnancy and if the child needed resuscitation/help to breathe at delivery, was born too early, or had a serious illness as a newborn baby. It is often a child's caregiver who first notices that the child is not developing in the same way as other children of the same age. Any concerns raised should be actively listened to.

Human rights and legal frameworks for learners with physical impairments

Education for all children is a right. Most children with physical impairments do, however, not enjoy this right to education fully, particularly in Sub-Saharan Africa. The Universal Declaration of Human Rights stipulates that everyone has the right to a quality education, while the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) makes reference to this right for disabled children and adults, including those with physical impairments. For example, Article 24 of the UNCRPD requires that the right to education of disabled people must be realised without discrimination and based on equal opportunity between persons with and without disabilities.

Importantly, "education" here refers not only to schooling, but also to tertiary education, vocational training, adult education and lifelong learning. The worldwide call to action, aiming to end poverty, protect the planet and ensure peace and prosperity for all was enshrined in the United Nations (UN) Sustainable Development Goals (SDGs). Unlike the UN's Millennium Development Goals, the SDGs make specific reference to disability, with specific reference to guaranteeing inclusive and equitable education for all through providing necessary assistance for disabled children and adults.

All three of these UN frameworks carry implications for improving the life-chances of disabled people, including clear directives to governments on how this can be achieved. In the case of learners with physical impairments, the negative social attitudes that disabled people face result in the systematic oppression, exclusion and discrimination (Lang, 2007; Nseibo, 2021). Learners with physical impairments are often restricted by the school and community



environments at large, as they are not universally accessible. Legal frameworks should be enforced to make schools inclusive for all learners.

When talking about inclusive education for learners with physical impairments, the extent to which inclusive schools can physically and pedagogically include children with impairments and special educational needs also depends largely on the physical environment (Ackah-Jnr & Danso, 2019; Nseibo, 2021).



CASE STUDY 1: The story of Mama Peace

Mama Peace (P) is a 51-year-old woman who grew up in rural Mfuleni near Cape Town in South Africa. Her son, Kojo, is 21 years old and presents with bilateral lower limb deformities. His diagnosis did not show whether his impairment was hereditary or acquired. He is cognitively intact and moves with the aid of bilateral elbow crutches. Crutches have been the type of mobility aid that he has used since he was a child and he has never used a wheelchair.

Mama P recalls her biggest challenge in life as having a husband from her teenage years and losing him because she gave birth to a disabled child. She stated that: “My husband ran away from me because of my disabled child.” She did not receive comfort from her family and the community. This is because she was nicknamed “the mother of the cripple” in the community. Mama P sent Kojo to three different full-service (mainstream) schools and was denied admission. The reason was that the schools were not environmentally friendly for Kojo. Another reason was that teachers were not trained to teach children with disabilities. Mama P was referred to a special school as the best space for her son. Unfortunately, there was no special school around Mfuleni. The nearest special school was about 100km away.

Kojo finally gained admission to grade one at Katanka Primary School (a full-service school) at Badale, near Mfuleni. Unfortunately, Kojo dropped out of school at Grade 4. It was believed that the school was not supportive amidst various environmental barriers. Apart from the barriers in the school, Mama P also had financial difficulties.

The story of Mama P shows that her son was denied educational rights despite the numerous legal frameworks that are there to protect all learners of school-going age. Kojo was completely oppressed, discriminated against and the community was not giving the necessary support to the family.



Conclusion

Disability is not just a health issue; it is the interaction between individuals with a health condition and a range of personal and environmental factors. Environmental factors (such as negative attitudes and inaccessible transportation and public buildings) as well as limited social support all impact on the learning of the child.

While literature shows that there has been some progress over the past half-century towards equity and inclusion of disabled people across the world, there is still much to do. In fact, many scholars regard the achievements of the global disability movement thus far as disappointing. Exclusion from education is only one aspect of the social oppression of learners with physical impairment; but it is a crucial one and remains endemic, particularly across a host of societies in the Global South. To holistically push the agenda of the inclusion of learners with physical impairments, human rights frameworks are but one important strategy for driving change, which requires community mobilisation, the empowerment of disabled people through inclusive development, and cultural shifts towards the inclusion of disabled lifestyles.

Overcoming the difficulties faced by learners with physical impairments requires interventions to remove environmental and social barriers. In the **next chapter**, we shall discuss the impact of physical disabilities on learning and how to support learners with physical impairment in the classroom.



ACTIVITY

Estimated time: 20 minutes

Identify a learner with physical impairment at your school, describe the nature of the disability and discuss how you think the disability impacts on the learning of the child.

References

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