

On this day, International Day of Disabled Persons

Introduction

What does it mean to live with a disability? Since 1992, the United Nations has marked December 3rd as the [International Day of Disabled Persons](#) thus, giving a platform for the disabled in the world at large, and their advocates to make their voices heard. It's been met with varying degrees of success, and with the ever-changing world today, it's more important than ever to understand and give voice to those who need it most.

With the looming presence of poverty and hunger being assisted by the disparities of gender, climate change, violence, varied socio-economic issues, and natural resource depletion at an alarming rate, there is a beacon of hope. Advancements in medical and communication technology leading to better health and global interconnectedness has increased access to education for boys and girls globally and has also opened doors filled with unlimited potential in understanding all of those who hail from different walks of life.

As a human race, we can improve, respect, and honor the rights and dignity of the disabled through education, equitable human experiences, and especially now and beyond the COVID-19 era, equal and fair access to medical care.

H2: Perspective on Disabilities

The [World Health Organization \(WHO\)](#) defines a disability as, “anyone who has a problem in a body function or structure, an activity limitation, has a difficulty in executing a task or action; with a participation restriction.”

This broad definition can apply to the many conditions and types of disabilities that can impact a person's life from vision, hearing, mental, or motor conditions, and a person can be impacted by more than one. Also, invisible disabilities – or a disability that is not readily apparent – which without proper awareness and education, can hold negative impacts that last throughout life. Examples of an invisible disability are:

- Deafness
- Dyslexia
- Schizophrenia

According to the WHO, it is estimated that **15% of the global population currently lives with or identifies as someone with a disability**—that's approximately 1.1 billion people. As the population grows more, this figure is set to increase. Further breaking down this statistic, an estimated 1/5 of the global total, 110–190 million with a disability that significantly impacts their lives.

What's even more powerful to know is that the disabled are the world's largest minority with **80% of people with disabilities living in developing countries**, according to the United Nations. In many of the

countries that are a part of the [Organization for Economic Co-operation and Development](#), women report higher incidents of disabilities than men, and in many other countries, women are doubly disadvantaged due to their sex and disability on top of that.

The World Bank estimates that 20% of the world’s most poor have some form of a disability, and face social challenges because of that, and don’t have much or no access to education. In developing countries, as reported by UNESCO, a whopping 90% of children in developing countries aren’t being educated at all.

As many economic studies have shown, there is a direct correlation between education, health, and poverty. In the United States, [based on a survey](#) conducted between 2008 and 2019 involving people between the ages of 18–64, the estimated poverty rate for people living with a disability was 25.9%. To provide contrast, the estimated poverty rate for those without a disability was 11.4% that same year. The difference is astounding. In India, people living with disabilities constitutes 5–6% of the country’s population. However, despite legal regulations in place, employment needs are still unmet. The [“People with Disabilities” Act](#), which allots 3% of their government’s jobs, approximately only 100,000 out of the 70 million people with disabilities have succeeded in gaining employment.

Disabilities don’t discriminate. It doesn’t matter where you live, how much income a family gains, or how educated you are. For your reference, see below a table outlining the current count of the disabled population in some of the world’s developed areas for 2021:

Location	Population
Mexico	130 262 000
European Union	450 million
Canada	38 068 000

H3: Vision Disabilities

Average human beings take in 80% visual information, but there are people who identify as “low-vision, blind, or partially blind.” How do they navigate a world that is built on taking in visual information? It’s important to understand more than just the medical jargon—the human experience matters just as much! A visual disability is defined as, “a decreased ability to see to a degree that causes problems that cannot be repaired by typical medical care like glasses or medicines.” The causes of a visual disability can range between disease, genetics, trauma, or degenerative conditions.

On the worldwide scale, the main cause of moderate to severe visual impairments, uncorrected refractive errors, and cataracts remains the leading cause of blindness in low- and middle-income countries. The [Lancet Global Commission on Global Eye Health](#) stated that over 90% of vision loss could be avoided, and that poor eye health has impacts spanning economics, education, gender, and age. The WHO estimates that **82% of people globally living with blindness are aged 50 and above, and that 90% of the world’s population with a vision disability live in low- to middle- income countries.** The LGCGEH also states that unaddressed eye conditions result in a **global economic productivity loss of \$411 billion per year, and 1.1 billion people around the world experience vision loss due to lack of access to appropriate services.** It is also worthy of note that by 2050, projections estimate that half of the global

population, or 4.8 billion will need regular eye health services due mainly to aging. Furthermore, by 2050, the number of people globally with vision loss will increase from 1.1 billion to 1.7 billion.

In the United States alone, one person loses their sight permanently, and it is estimated that there are 15 million blind or low-sighted people. It is also good to note that the leading causes for new cases of blindness are in this specific order, age-related macular degeneration, glaucoma, diabetic retinopathy, cataracts, and optic nerve atrophy, according to [Prevent Blindness America](#).

What does vision loss really look like? Like those with hearing loss, vision loss is a spectrum with only 10–15% who live in total darkness. Many retain residual vision like color perception, or perception in light or form. A term that is heard in a professional or medical capacity is legally blind. This means that one has a visual acuity of 20/200 with corrective lenses. It is also generally assumed that everyone with vision loss knows Braille, the system of using raised dots to communicate the written word. It may not always be the case, therefore it is recommended to never make assumptions about ability. In the United States, only 10% of blind children know how to – and were taught to – read Braille!

In terms of employment, the Blind face many challenges, including disputes of whether or not a culture even exists. According to [a survey conducted by Cornell University](#), in 2015, **only 28% of working Americans who have a visual disability had gainful full-time employment**. Another fact from the [National Industries for the Blind](#), a non-profit employment agency, discovered – after surveying hundreds of employment managers across the U.S. – that **54% of the respondents believed there were few jobs available in their companies that a low-vision or blind person could perform**. For the following year – 2016 – the unemployment rate for the blind was an alarming 62.3%!

H3: Hearing disabilities

Considered an invisible disability, this is defined as someone who is not able to hear as well, and that hearing thresholds of 20 dB or better in both ears provide a benchmark of someone with hearing loss. Hearing loss is a very wide spectrum, can impact one or both ears, and it leads to difficulty speaking and hearing sounds, especially loud ones. Those with hearing loss have become a community with a language, culture, names, and customs that have a long history that give insight into this world. For this group of individuals, it is crucial to be aware of [these terms](#):

- **Deaf:** refers to the culture of Deaf people in respect to their customs, traditions and all items thereof, and usually refers to people who grew up culturally Deaf.
- **deaf:** refers to anyone with a severe hearing problem, and can also be used to refer to people who are severely hard-of-hearing.
- **Hard-of-Hearing:** refers to someone with mild to severe hearing loss. Many of the Hard-of-Hearing have some residual hearing, and can sometimes communicate verbally, or use a sign language.

Hearing loss of any kind requires the attentive services of a qualified healthcare practitioner. This applies to worldwide, as hearing care at this point is not prepared to accommodate the needs of world's population (It is estimated an investment of less than \$1.40 USD per person is needed to scale hearing care services.). **By 2050, the projections for people who will have some amount of hearing loss will reach 2.5 billion people**, with 700 million of those people will require rehabilitation services. **Over the**

course of ten years, the return on investment is projected to be \$16 USD for every U.S. dollar invested. A great deal of hearing loss can also be eliminated through education of safe listening practices and an active investment in providing quality protection equipment for workers who work in spaces with loud, constant noise on a regular basis.

Education on safe listening practices is only scratching the surface...and is more focused on preventative care. There is also the Deaf and Hard-of-Hearing who are very unique and have different communication styles and needs. Due to the ableist biases that persist in the medical field ([see this story here](#)), and in society as whole, it has resulted in **75% of parents throughout the world not using any kind of manual communication to interact with the Deaf or Hard-of-hearing children.** This is unfortunate because, despite 300 active languages being used around the world, deprivation of language can result in issues in the community, employment, learning development, and leading a fulfilling life. There are many Deaf and Hard-of-Hearing who have learned to use their voices through many hours of speech therapy and the use of assistive devices. However, not every Deaf or Hard-of-Hearing person has the same access to these resources, and assistive devices only provide a fraction of what a Hearing person has. Cochlear implants have an average of an 80% success rate. Hearing aids generally serve to amplify volume and ambient noise, and can run up to the thousands of dollars for just one, and that doesn't factor in the long-term costs.

In the United States, two to four of every 1,000 people are “functionally deaf.” Though more than half of this number became this way later in life, approximately one out of every 1,000 in the United States became deaf at an early age (before 18). The numbers become altered with the addition of those with severe hearing loss—it increases to four to ten times higher. That looks like 9 to 22 out of every 1,000 people, and with that, half of this number had hearing loss before the age of 64.

Employment of a Deaf/Hard-Of-Hearing person also has some disturbing statistics. According to the [Accessibility for Ontarians With Disabilities Act](#), **one in four Deaf workers have left jobs because the workplace environment was not Deaf friendly.** This contributes to the higher representation of Deaf unemployment and the unemployment rate as a whole. Accessibility regulations also legally require employers, when asked by a prospective hire, to provide an interpreter.

The dark reality as reported by AODA, is that:

- The prospective hire ends up paying for one out of pocket
- The employer views them as a “burden” and passes over them even if they're the best person for the job
- The interviewee struggles through the interview because they're embarrassed that they can't understand others.

H3: Intellectual disabilities

Another group of disabilities to consider are intellectual disabilities. These disabilities fall under a group of disorders defined by diminished cognitive and adaptive development. **Diagnosed in between 1–3% of the world's population, it's seen affecting more males than females.** In medical terms, a cognitive disability can be applied to groups of medical conditions that affect cognitive ability—this encompasses many intellectual or cognitive deficits. Sometimes, these are too mild to be properly qualified as an

intellectual disability, and there are disabilities that can happen later on in life such as dementia, ALS, Alzheimer's, and complications from a brain injury.

Many disabilities that affect brain and cognitive function have a foundation in physiological processes, like an injury or genetic disorder, and the results are unique to the individual affected. They can be minor where someone can function normally or they can be profound and a person will require assistance with daily living tasks.

In order to help assess the severity level one of the things that is done is testing adaptive functioning. It's assessed through standardized measures with the individual and those closest to them, family, teachers/friends, and caregivers.

There are three key areas to consider through adaptive functioning:

1. **Conceptual:** Language (reading and writing included), memory, knowledge, reasoning, math.
2. **Social:** Communication skills, building relationships and keeping them, social judgement, empathy, ability to follow rules.
3. **Practical:** Independence in personal care, jobs, money management, recreation, organization.

Out of all of the cognitive or intellectual disabilities, dyslexia is the most common language-based learning disability with around 15–20% of the population living with some kind of language-based learning disability. **200 million people globally have some kind of intellectual based learning disability.** In the United States alone, recent estimates show that about 17% of children from 3–17 years of age have co-morbid developmental disabilities.

Some of the most common causes of an intellectual disability include:

- Fetal alcohol syndrome disorder
- Genetic and chromosomal condition (like Down's syndrome or Fragile X syndrome)
- Certain infections that occur during pregnancy
- Low birthweight, premature birth, multiple births

With Fragile X being the most commonly known cause of genetic intellectual disabilities, it has been found that boys are seeing higher incidents than females—the average age of diagnosis for boys is 35–37 months, in contrast to a 42-month average for girls. These diagnoses usually are predicated by multiple (sometimes 10!) visits to a health professional before diagnosis. In Australia, a [national survey](#) found that Fragile X had been diagnosed and treated with co-occurring conditions, and half of the families that responded to this survey reported that there was a financial burden. The burden included for about two-third of the therapies, medicines, and testing required had to be out-of-pocket.

An additional condition that sees a global impact is [Fetal Alcohol Syndrome Disorder](#), and the most severe form is [Fetal Alcohol Spectrum Disorder \(FASD\)](#). Fetal Alcohol Syndrome Disorder refers to a number of conditions that can be caused when an unborn fetus is exposed to alcohol. Worldwide, around 119,00 children with Fetal Alcohol Syndrome are born each year as reported by the Centre for Addiction and Mental Health. Within that 119,000, nearly 15 per 10,000 of those children are estimated to have FASD. Unfortunately, many of these cases are misdiagnosed as autism or ADHD due to the symptom presentation similarities.

While the symptoms can vary, there are some distinct ones that can be found. Examples are:

- Distinctive facial features
- Joint deformities
- Organ damage
- Slow or delayed physical growth
- Learning difficulties
- Behavioral issues

The five countries in the world with the *highest prevalence* of cases are:

- Belarus
- Italy
- Ireland
- Croatia
- South Africa

Alternately, the five countries with the *lowest prevalence* are:

- Oman
- United Arab Emirates
- Saudi Arabia
- Qatar
- Kuwait

H3: Motor Disabilities

As it's known, disabilities can affect motor function. A motor disability is defined as *partial or total loss of function of a body part, usually a limb or multiple limbs*. Results can include muscle weakness, poor stamina, lack of muscle control, or total paralysis. It applies to any condition that limits sensation, movement, or coordination of one's body. There are several possible causes including:

- Congenital conditions
- Illness
- Physical trauma

To help assess physical functioning, some of the measures used include:

- Can a person walk a quarter mile without struggle
- Handling and grasping of small objects
- Pushing and pulling large objects

Globally, 75 million people need a wheelchair on a daily basis. For comparison, that is *half of the population of Canada*, the second largest country in the world! According to a national health survey conducted by the Center for Disease Control, for adults aged 18 or older, 32.4% of the population have at least one difficulty performing basic motor actions or a complex activity limitation. On the other end of the spectrum, 17.1 million people are unable or struggle with walking a quarter mile.

Spinal cord injuries are very dangerous because they can result in paraplegia or quadriplegia. The leading causes of these are as follows:

- Motor vehicle accidents: 44%
- Violence: 24%
- Falls: 22%
- Athletic injuries: 8%
- Others: 2%

Every year, as recorded by the World Health Organization, between 250,000 to 500,000 people suffer a spinal cord injury—majority of these are preventable. It is also estimated that per million, there are 40–80 cases of injuries globally. Injuries can vary depending where on the spinal cord that is hurt, and because of that, effects can occur all over the body. The conditions that occur afterwards play a part in the premature deaths, which are approximately 2–5 times more likely in developed countries versus worse rates in low- to middle- income countries.

On a financial level, the direct costs related to the first year after a spinal cord injury are the most expensive, and can decrease over time. However, the indirect costs, like lost income, end up exceeding the direct costs of care. Life after a spinal injury also requires adjustment depending on the location and severity of the injury. The World Health Organization also reports that there are increased instances of depression which has a proven impact on functioning and overall good health. Fortunately, with medical advancements, preventable secondary conditions such as infections are no longer the leading causes of death for people being treated for these kinds of injuries.

H5: How can a more accessible world be created, especially in a post-pandemic world?

The most important thing in creating an equitable and accessible world is education about disabilities, the cultures that have been created over time, and learning about their experiences interacting with the world. Education will lead to the removal of inherent biases that build up over time through lack of knowledge and exposure. It will also clear up any assumptions that are made in popular culture and media.

In medical care, the most important things that can be done begins with the basics: listening with kindness and empathy to those who need it to accurately address needs and following through on them. Also, directing additional finances and resources to the disabled communities will ensure that they get the care and dignity that every human being is entitled to. All too often, those who need it the most don't have access to adequate healthcare, which in turn results in lower quality of life through isolation and additional conditions impacting physical health.

It is a common occurrence, especially for the Deaf and Hard-of-Hearing, to be dismissed, or even worse, pressured by their care providers into assistive devices that may not be effective or right for the individual. (Deafness and hearing loss are treated by the medical community as a patho-physical condition that needs to be cured.)

By listening and making an active effort to create disabled-friendly spaces, we can further support the disabled by adapting the world to meet them instead of the other way around. We can support accessibility and education through:

- Educating yourself, and others about disabilities, and investing in education on cultural competency.
- Evaluating and reevaluating inherent biases.
- Making our digital content compatible with screen readers.
- Ensuring that the websites built can be navigated in multiple ways including, keyboard, mouse, and voice.
- Ensuring that video content has accurate, quality closed captioning, transcripts, and additionally a sign language interpreter translating.
- Using plug-ins like accessiB to ensure that your web content meets legal accessibility compliance easily.
- Creating multiple versions of printed material using large print, paper stock with a matte finish, supplementing whenever possible with digital versions, and using colors with a minimum of 70% contrast ratio across all kinds of color vision.
- Considering different mobility needs like wheelchairs, canes, and providing the appropriate wayfinding and signage systems.
- The different ergonomics of those in wheelchairs, walkers, and more play a significant role in the creation of spaces.
- Reaching out to your local communities and familiarizing yourself with your federal and regional accessibility regulations.
- Supporting organizations that help the disabled with employment, living, and more.
- **Be kind. Be patient. Be respectful. Never assume what someone can and cannot do.**

International Day of Disabled Persons serves as a yearly reminder to us all around the world that every human being deserves equal dignity, support, care, and respect from the grassroots to the planet.