IIUM MBBS SEMINAR SERIES



NOT DISABLED JUST DIFFERENTLY ABLED

MUHAMMAD LUKMAN OTHMAN
MUHAMMAD DANIAL ISKANDAR
NUR ALYA MYSARA HASNAWI
NADZATUL NABIHAH MOHD FAUZI
DURRATUL HANAN MUHAMMAD FADLI
NUR AINUL NADIA MOHAMAD SAFAR
DR HIDAYATUL RADZIAH ISMAWI

IIUM MBBS SEMINAR SERIES

NOT DISABLED JUST DIFFERENTLY ABLED

BY

MUHAMMAD LUKMAN OTHMAN
MUHAMMAD DANIAL ISKANDAR
NUR ALYA MYSARA HASNAWI
NADZATUL NABIHAH MOHD FAUZI
DURRATUL HANAN MUHAMMAD FADLI
NUR AINUL NADIA MOHAMAD SAFAR
DR HIDAYATUL RADZIAH ISMAWI

EDITOR: DR HIDAYATUL RADZIAH ISMAWI

e ISBN 978-629-96678-5-8



DISCLAIMER

THIS E-BOOK IS WRITTEN BY MUHAMMAD LUKMAN OTHMAN, MUHAMMAD DANIAL ISKANDAR, NUR ALYA MYSARA HASNAWI, NADZATUL NABIHAH MOHD FAUZI, DURRATUL HANAN MUHAMMAD FADLI, NUR AINUL NADIA MOHAMAD SAFAR, AND DR HIDAYATUL RADZIAH ISMAWI, KUANTAN, PAHANG AND PUBLISHED BY THE MALAYSIAN INTEGRATED MEDICAL PROFESSIONALS ASSOCIATION, KOTA KINABALU, SABAH. ALL RIGHTS RESERVED. REPRODUCTION OF ANY PART OF THIS WRITING IS NOT PERMITTED IN ANY FORM AND ANY MANNER WHETHER ELECTRONIC, PHOTOCOPYING, RECORDING, OR OTHER FORMS WITHOUT THE AUTHOR'S PERMISSION. RESELLING OR MODIFICATION OF THIS BOOK WITHOUT THE AUTHOR'S PERMISSION IS NOT ALLOWED. THE AUTHOR IS NOT RESPONSIBLE FOR THE SUITABILITY OF CONTENTS TO ALL READERS.

Copyright © 2023

Published by:

Malaysian Integrated Medical Professionals Association

(MIMPA)

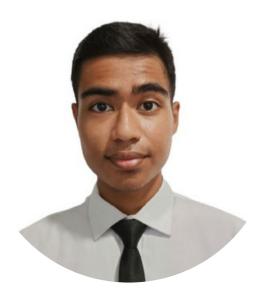
No15, 1st Floor, Block H, Ruang Singgahmata 4, Asia City, P.O. Box 16125,

88869 Kota Kinabalu, Sabah

PREFACE

The IIUM MBBS SEMINAR SERIES are e-books based on Phase 1 Kulliyyah of Medicine, IIUM, MBBS student seminar presentations. As part of the curriculum, all students are required to present one seminar. Topics covered are varied and not necessarily related to medicine.

This e-book is based on the topic of disability and accessibility for people with disabilities. It touches on three main types of impairments namely of mobility, hearing and vision. It also describes disability etiquettes and Islamic views on disabilities.



MUHAMMAD LUKMAN OTHMAN

YEAR 1 MEDICAL STUDENT 22/23 KULLIYYAH OF MEDICINE, IIUM

In my view, physical disability is actually an essential topic that most people overlooked. Through this seminar and e-book, we are able to acknowledge the struggles and hardships of those with disabilities, and learn how we can properly communicate and assist them. If everyone manages to get a grasp on how to offer mutual respect towards these people, we may create an inclusive society which overrides discrimination towards differences.



MUHAMMAD DANIAL ISKANDAR

YEAR 1 MEDICAL STUDENT 22/23 KULLIYYAH OF MEDICINE, IIUM

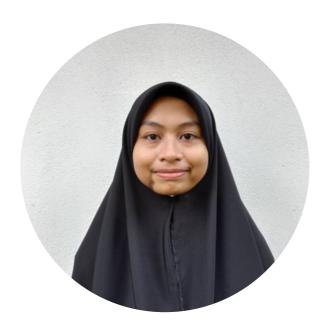
Understanding and learning about people with disabilities helps promote inclusivity and a more equitable society. It creates an inclusive environment where people of all abilities can participate fully. Moreover, learning about the challenges that people with disabilities face can lead to increased empathy and understanding. Last but not least, learning about people with disabilities can remove the physical, social, and attitudinal barriers to them and help foster respect and a sense of worth for every individual, regardless of their abilities.



NUR ALYA MYSARA HASNAWI

YEAR 1 MEDICAL STUDENT 22/23 KULLIYYAH OF MEDICINE, IIUM

Learning sign language can be a valuable life skill to develop for practically anyone. Due to that, I've always wanted to learn this language and by taking part in this seminar and writing this e-book, I finally get the chance to do so. Mastering this language has numerous beneficial practical, cognitive, social and cultural effects. It contributes to a more inclusive society where communication barriers are reduced, and diverse forms of expression are embraced.



NADZATUL NABIHAH MOHD FAUZI

YEAR 1 MEDICAL STUDENT 22/23 KULLIYYAH OF MEDICINE, IIUM

First of all, I am grateful for having Dr. Hidayah as a supportive supervisor and good teammates. When doing this seminar, we make a video with sign language in introducing ourselves. It's really fun, because I learnt a little bit about it. For me, learning sign language is really important for each of us, because we can understand and communicate with them.



DURRATUL HANAN MUHAMMAD FADLI

YEAR 1 MEDICAL STUDENT 22/23 KULLIYYAH OF MEDICINE, IIUM

The opportunity to conduct such a practical seminar holds great significance for me. Our facilitator, Dr. Hidayah, provided invaluable assistance in ensuring the success of this wonderful event. The seminar and this e-book serves to underscore the importance of demonstrating gratitude and respect, particularly towards individuals with disabilities.



NUR AINUL NADIA MOHAMAD SAFAR

YEAR 1 MEDICAL STUDENT 22/23 KULLIYYAH OF MEDICINE, IIUM

When I was preparing for this seminar and e-book, a lot of interesting things that I learned about people with disabilities. I also found that they are actually there are some ways that we have to take note about how to approach them and we have to be very careful with our actions because we don't want to make them feel like they do not belong to the society. I learned to understand their condition and be more sensitive about this stuff. This seminar help me to gain more knowledge about something that is something that is actually important for my career as a future doctor.



DR HIDAYATUL RADZIAH ISMAWI

LECTURER, KULLIYYAH OF MEDICINE, IIUM

I felt that this topic was an important one to be discussed by our future doctors. I wanted the team to share not only knowledge with their classmates but also allow them an opportunity to ask questions that may previously have not crossed their minds as well as experience a little bit of what differently abled individuals experience on a daily basis.

TABLE OF CONTENTS

| Introduction | 13 |
|----------------------------|----|
| Mobility Impairment | 16 |
| Auditory Impairment | 26 |
| Vision Impairment | 34 |
| Disability Etiquette | 43 |
| Islam's view on disability | 46 |
| Rights of persons with | 47 |
| disability in Islam | |
| Conclusion | 48 |





DISABILITY

Definition

A long term condition of the body or mind that makes it more difficult for a person to do certain activities and interact with the world around them.

Source: CDC Website

Types

- Hearing Disability
- Visual Disability
- Physical Disability
- Speech Disorder
- Learning Disorder
- Mental Disorder
- Multiple Disabilities

Source : Public Services Commission of Malaysia

INTRODUCTION

According to the Centres for Disease Control and Prevention (CDC), a disability is any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions).

Based on the World Health Organisation (WHO) disability encompasses three wide dimensions namely, IMPAIRMENT, ACTIVITY LIMITATION and PARTICIPATION RESTRICTIONS.

IMPAIRMENT refers to impairment of body structure or function and includes mental impairment. **ACTIVITY LIMITATION** includes difficulty in carrying out activities due to difficulty in walking, hearing, seeing or cognition. **PARTICIPATION RESTRICTIONS** refers to all aspects of the individual's life such as normal daily activities, work-related activities, social activities and even healthcare activities.

Disability can be divided into several major types:

- Physical disability
- Hearing disability
- Visual disability
- Speech disorder
- Learning disorder
- Mental disorder
- Multiple disabilities

According to the WHO, 16% of the wordl's population experience a significant disability. This number represents 1 in 6 of the population. Based on the National Health and Morbidity Survey (NHMS 2019), 1 in 4 Malaysians experience functional difficulties and 1.6% of these individuals are registered.

How to get OKU Card?

Persons with Disabilities Act 2008



- Go to Department of Social Welfare (JKM) website @ https://oku.jkm.gov.my/
- Fill in the online MyDaftarOKU form
- Get validation of disability from medical doctor/psychiatrist (for not obvious disability)
- Send the form together with a copy of your IC to the district JKM office

Persons with disabilities are entitled to be registered under the DisabilitiesAct 2008. Upon registering, they will receive an "OKU" Orang Kelainan Upaya card which entitles them to many benefitsspecial allowances, discounts, tax exemptions, educational aids and many more.

The steps to register are as above.



MOBILITY IMPAIRMENT

DEFINITION

A disability that affects movement ranging from gross motor skills, such as walking, to fine motor movement, involving manipulation of objects by hand.

Source : University of Washington

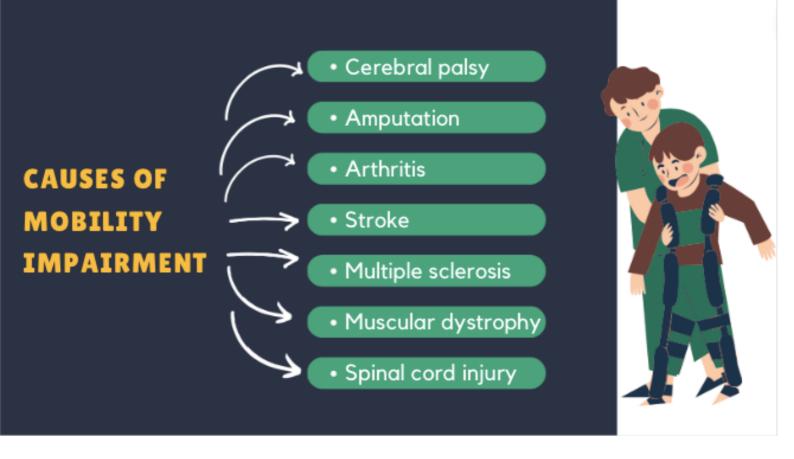
 Mobility impairments can be permanent or temporary.

- Lower body impairments canes, walkers, or wheelchairs
- Upper body impairments limited or no use of the upper extremities and hands.



Mobility disability is a disability that affects movement ranging from gross motor skills, such as walking, to fine motor movement, involving manipulation of objects by hand. Mobility impairments can be permanent or temporary.

Impairment of the lower body requiring aids such as canes, walkers or wheelchairs. Individuals with upper body impairments have limited or no use of the upper extremities and hands.



CEREBRAL PALSY - a group of disorders that affect a person's ability to move and maintain balance and posture. CP is the most common motor disability in childhood.

AMPUTATION - the loss or removal of a body part such as a finger, toe, hand, foot, arm or leg.

ARTHRITIS - joint inflammation.

STROKE - An ischaemic stroke is cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery. A haemorrhagic stroke is due to bleeding into the brain by the rupture of a blood vessel.

MULTIPLE SCLEROSIS - a condition that can affect the brain and spinal cord, causing a wide range of potential symptoms, including problems with vision, arm or leg movement, sensation or balance.

MUSCULAR DYSTROPHY - a hereditary condition marked by progressive weakening and wasting of the muscles.

SPINAL CORD INJURY - damage to any part of the spinal cord or nerves at the end of the spinal canal (cauda equina) — often causes permanent changes in strength, sensation and other body functions below the site of the injury.



In order to assist individuals with mobility impairment there are certain accommodations that are put in place. Grab bars are installed in washrooms to assist mobility. Wheelchair ramps are built in lieu of stairs to access a change in levels. Accessible parking spots are designated as these individuals require more space to ease getting into and out of their vehicles. A curb cut is also made available at the end of each curb to create access to the road for wheelchairs during crossing.



Individuals with mobility impairment also use mobility aids to improve accessibility. These may include wheelchairs, walkers, crutches and prosthetic devices. The choice of mobility aid depends on the the individual impairment as well as other factors which may include financial ability.

SKY IS THE LIMIT



There are numerous individuals with mobility impairment who have proven that the sky is indeed the limit for them.

Among these incredible human beings, here are a few examples:

- Mohamad Ridzuan Mohamad Puzi
- Dato' Ras Adiba Radzi
- Hari Budha Magar

MOHAMAD RIDZUAN MOHAMAD PUZI

- Diagnosed with cerebral palsy at the age of on 1
- Gold medalist of 100m event in 2016 Paralympic
 Games
- Achieved gold medal hat-trick in 100m, 200m and long jump Asian Para Games 2018.
- Broke the 100 metres world record of Russian athlete, Evgenii Shvetsov with 11.87s.
- Asia's Best Male Athlete Award 2018



Mohamad Ridzuan Mohamad Puzi was born on 27th December 1987. Mohamad Ridzuan had diagnosed with cerebral palsy at the age of one. He debut as a professional para-athlete during 2011 ASEAN Para Games at Surakarta, Central Java, Indonesia. He is a Paralympic athlete from Malaysia who competes in T36 classification sprint (running) Mohammad long jump events. Ridzuan Malaysia at represented the 2016 Summer Paralympics in Rio de Janeiro, where he won the gold medal in the 100 metres event.



DATO' RAS ADIBA RADZI

- Represented Malaysia in the Para Asean Games
 2015 & 2018 in air rifle
- Appointed as senator representing OKU (May 2020)
- First female chairman of the National News
 Organization of Malaysia (Bernama)
- Malaysia Book of Records first disabled female to ride wheelchair along 420 km in 13 days from Johor Bahru to Putrajaya.
- Receiver of the International Women of Courage (IWOC) Award on International Women's Day 2023

Dato' Ras Adiba Radzi was born on 27th July 1968. She is a Malaysian politician, community activist and veteran news presenter. She has served on TV3 and NTV7 as a broadcast journalist, television presenter and sports commentator. She is also one of Malaysia's paralympic shooters.

Dato' Ras Adiba served as Senator from May 2020 to May 2023 and represented persons with disabilities (OKUs). The former senator received the 2023 International Women of Courage Award, which was presented to her and other nominees by Jill Biden and Anthony J. Blinken.



HARI BUDHA MAGAR

- First double above-knee amputee to summit
 Mount Everest
- Former soldier of Gorkha who served the British army
- Lost both his legs above the knee to an explosive device in Afghanistan in 2010

"We all have our own weaknesses and disabilities, but instead of the weaknesses, we should be focusing on our strength, and only then we can all lead a better and meaningful life"

Hari Budha Magar was born in 1979 in Nepal. His beginnings are extremely humble where he grew up in poverty. Magar joined the British Army via the Royal Gurkha Rifles when he was 19 years old. He served across five continents, doing training and operations for the British Army, his roles included Combat Medic, Sniper, and Covert Surveillance. While he was serving with the British Army in Afghanistan in 2010, Magar stepped on an improvised explosive device (IED). He lost both his legs and had double above knee amputations due to his injuries. In May 2023, Hari Budha Magar achieved his goal as he became the first double above-knee amputee to summit Mount Everest.



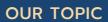
AUDITORY IMPAIRMENT











Auditory Impairment

DEFINITION

Defined by a decreased ability or total inability to hear (deafness).

TYPE AND CAUSES



PREVENTION

- Immunization
- The rational use of medicines to prevent ototoxic hearing loss.
- Early identification of hearing loss and ear diseases

ACCESSIBILITY

- Hearing aid
- Cochlear implants
- Sign language
- Hearing assistive technologies



INTRODUCTION

- According to Accessibility.com website, Hearing (or auditory) disabilities are usually defined by a decreased ability or total inability to hear (deafness).
- It may be mild, moderate, severe, or profound.
- 'Hard of hearing' people with hearing loss ranging from mild to severe.
- 'Deaf' people mostly have profound hearing loss, which implies very little or no hearing.

Source: Accesibility website

Hearing impairment, also known as hearing loss or deafness, refers to a partial or total inability to hear sounds. It can vary in severity, from mild to profound, and can affect one or both ears. Hearing impairment can be congenital or acquired.

Types of hearing impairment:

- Conductive Hearing Loss: Occurs when sounds cannot get through the outer and middle ear.
- Sensorineural Hearing Loss: Results from damage to the inner ear (cochlea) or the auditory nerve.

• **Mixed Hearing Loss:** A combination of conductive and sensorineural hearing loss and involves issues in both the middle and inner ear.

DEGREE OF HEARING LOSS



Degrees of hearing loss refer to the severity of the loss and are generally described as mild, moderate, severe, or profound.



DEAF PEOPLE ALSO MUTED!

- They never hear their own voices or others' voices.
- Difficult for them to learn how to form words and use proper pronunciation.

This is actually inaccurate, since deaf and hard of hearing people generally have functioning vocal chords. However, in order to successfully modulate your voice, you need to be able to hear your own voice. Therefore, this makes it more difficult for these individuals.

Because deaf and hard of hearing people use various methods of communication other than using their voices, they are not truly mute. True communication occurs when one's message is understood by others, and they can respond in kind.



HOW DO DEAF PEOPLE ENJOY CONCERTS?

Deaf people can use the vibrations caused by musical sounds to help them 'listen' to live music performance into a fully haptic experience.

Vibrating suit & The Sound Shirt

Sign Language interpreter



Many assume that deafness impedes the appreciation of music. This is untrue. They use the vibrations caused by musical sounds to help them 'listen' to music.

Since the Americans with Disabilities Act passed in 1990, concert venues or production companies have been required to provide interpreters upon request in the United States. Rather than merely signing the words, the interpreters embody musical textures with their face and movements, to show the density of sounds visually.

HOW DO DEAF PEOPLE ADJUST TO LIFE?





Sign language







Individuals with hearing impairment use several methods to adjust to daily life.

- **Hearing aid:** A hearing aid is a small electronic device that is worn in or behind the ear. It makes some sounds louder so that a person with hearing impairment can listen, communicate, and participate fully in daily activities.
- Cochlear implant: A cochlear implant is a small, complex electronic device that can help to provide a sense of sound to a person who is profoundly deaf or severely hard-of-hearing.

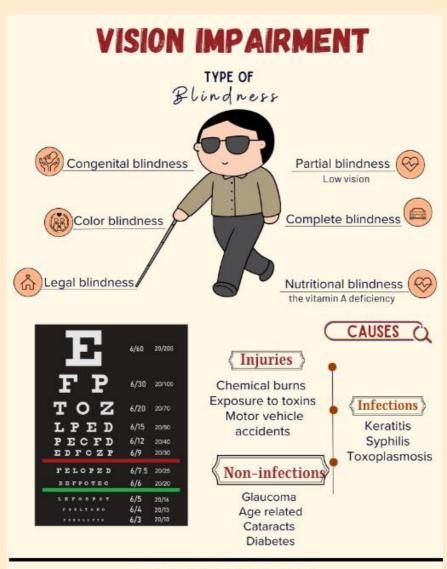
• Sign language: Instead of spoken word, sign lanhguage uses the visual-manual modality to convey meaning. Sign languages are expressed through manual articulation in combination with non-manual markers. They are full-fledged natural languages with their own grammar and lexicon. Contrary to popular belief, sign languages are not universal and are usually not mutually intelligible, although there may be similarities among different sign languages.



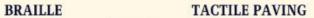


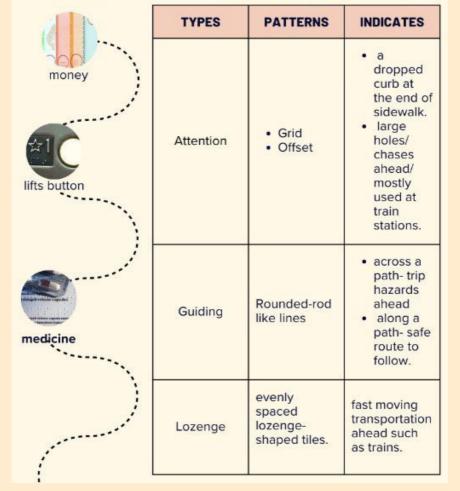
PHYSICAL DISABILITIES AND ACCESSIBLITIES

VISION IMPAIRMENT



ACCESSIBLITIES





Introduction

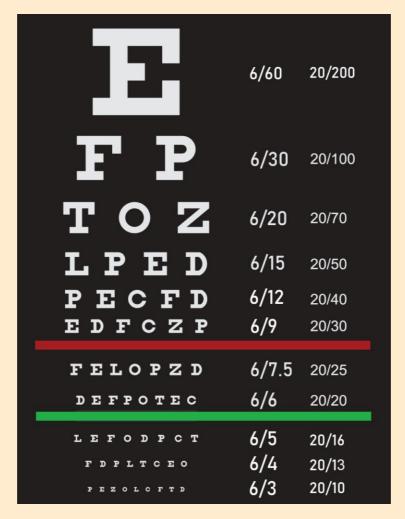
Based on Disable World website, Visual impairment is defined as a decreased ability to see to a degree that causes problems not fixable by usual means, such as glasses or medication. Visual impairment can be due to disease, trauma, or congenital or degenerative conditions.

The term, 'Low Vision,' sometimes also referred to as, 'Vision Loss,' means that even though a person may use eyeglasses, contact lenses, medication, or surgical techniques to improve their vision; they still have difficulty seeing.

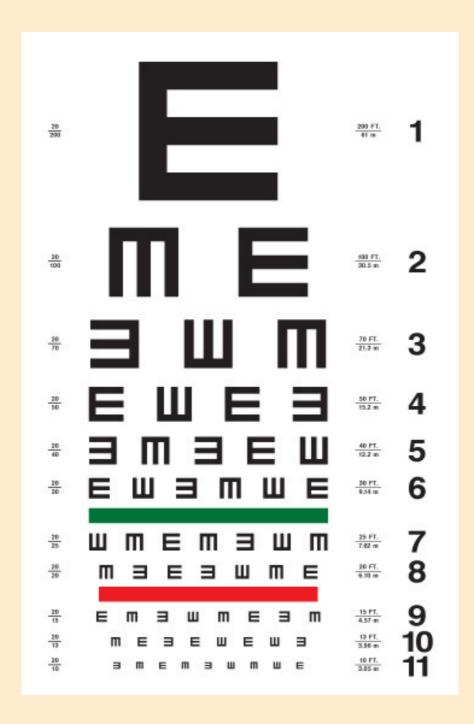
Most persons develop low vision due to eye disease or health conditions.



Snellen Eye Chart



A Snellen chart is an eye chart that can be used to measure visual acuity. A Snellen chart is placed at a standard distance: 6 metres (or 20 ft). At this distance, the symbols on the line representing "normal" acuity. This line, designated 6/6 (or 20/20), is the smallest line that a person with normal acuity can read at a distance of 6 metres.



The illiterate "E" also known as the "tumbling E" for testing visual acuity of people who are illiterate, disabled or where English is not their first language or for persons who cannot speak.

TYPE OF BLINDNESS

- Partial blindness: Also known as "low vision." Individuals have limited vision.
- Complete blindness: The individual are unable to see or detect light. This condition is very rare.
- Congenital blindness: Babies with congenital blindness, which means they are visually impaired at birth. The causes include inherited eye and retinal conditions and non-inherited birth defects.
- Legal blindness: This is when the central vision is 20/200 in the best-seeing eye even when corrected with glass or contact lenses. Having 20/200 vision means that the person has to be 10x closer or an object has to be 10x larger in order to see compared to a person with 20/20 vision.
- Nutritional blindness: This term describes vision loss from vitamin A deficiency. This type of blindness can also make it more difficult to see at night or in dim light due to decreased function of retinal cells.

CAUSES OF BLINDNESS

Injuries

- Chemical burns
- Exposure to toxins
- Motor vehicle accidents

Infections

- Keratitis
- Syphilis
- Toxoplasmosis

Non-infectious

- Glaucoma
- Age related macula degeneration
- Cataracts
- Diabetic retinopathy

Common causes of blindness include:

- Injuries: Chemical burns, exposure to toxins, motor vehicle accidents
- Infections: Keratitis, syphilis, toxoplasmosis
- Non-infectious: Glaucoma, age related macula degeneration, cataracts, diabetic retinopathy

TACTILE PAVING



Grid pattern



rounded like bars (across path)



rounded like pattern (along a path)



Lozenge pattern

Tactile paving is used to help improve safety and accessibility for people who are blind or visually impaired. Tactile paving, also known as tactile ground surface indicators (TGSIs) or tactile warning surfaces, is a system of textured ground surfaces that provide tactile and visual cues to assist individuals with visual impairments in navigating pedestrian pathways, public spaces, transportation facilities, and urban environments.

Types of tactile paving include:

- Detectable Warning Surfaces: Often found at the edges of train platforms, pedestrian crosswalks, and the tops of staircases. They have a distinctive truncated dome pattern and are meant to alert individuals of upcoming hazards or changes in elevation.
- **Directional Tactile Paving:** Provides guidance by featuring linear or directional patterns, such as rows of bars or raised lines, to indicate the direction of travel, pathways, or important landmarks.
- Informational Tactile Paving: Some tactile paving includes symbols, braille, or text to convey specific information, such as bus stop locations, restroom entrances, or pedestrian crossings.

DISABILITY ETIQUETTE

Disability etiquette, also known as disability awareness or disability etiquette guidelines, refers to a set of social and communication norms and practices that help create an inclusive and respectful environment for people with disabilities. These guidelines are essential for fostering understanding and promoting equality. Some key principles of disability etiquette include:

- Treat everyone with respect: Just as you would with anyone else, treat individuals with disabilities with respect, kindness, and dignity. Focus on their abilities rather than their disabilities.
- Use person-first language: When referring to someone with a disability, it is generally considered respectful to use person-first language. This means mentioning the person before their disability, such as "a person with a disability" instead of "a disabled person."
- Ask before offering assistance: If you believe someone with a disability may need help, ask them if they would like assistance before offering it. Not all disabilities require assistance, and some individuals prefer to do things independently.

- Don't make assumptions: Avoid making assumptions about a person's abilities or limitations based on their appearance or type of disability. Disabilities can be visible or invisible, and people have unique strengths and challenges.
- Speak directly to the individual: When communicating with a person with a disability, speak directly to them rather than talking to a companion or caregiver. Make eye contact, and use a normal tone of voice.
- **Be patient and listen:** If someone with a disability has difficulty communicating or understanding, be patient and give them extra time. Listen carefully and ask for clarification if needed.
- Respect personal space and equipment: Respect the personal space of individuals with disabilities, including their mobility devices, service animals, or assistive technology. Do not touch or handle these items without permission.
- Offer assistance appropriately: If someone does request assistance, follow their instructions on how to help. Don't assume you know what they need; instead, ask for guidance.

- Don't use derogatory language or stereotypes: Avoid using offensive language, stereotypes, or humor related to disabilities. Treat conversations about disabilities with sensitivity and respect.
- Be mindful of accessibility: In public places or events, be aware of and respect accessibility features such as ramps, elevators, and accessible restrooms. Keep pathways clear for individuals who use mobility aids.
- **Promote inclusivity:** Advocate for and support policies and practices that promote inclusivity and accessibility in your workplace, community, and society as a whole.
- Educate yourself: Take the time to educate yourself about various types of disabilities and their unique challenges. The more you understand, the better you can interact respectfully and inclusively with individuals with disabilities.

Islam's view on disability

Islam teaches us that humans are all created differently. It also teaches us that Allah SWT continuously tests us to develop Taqwa. However, tests are not Allah's SWT punishment as stated in the Quran, "Had Allah willed, He would have made you one nation [united in religion], but [He intended] to test you in what He has given you; so race to [all that is] good." (Surah Al-Ma'idah, verse 48).

Islam believes disability is a natural part of being a human; it's neither a blessing nor a punishment. People with disability "have strength and resources for their own empowerment" and emphasise these strengths.



Rights of persons with disability in Islam

According to Islam, integrating people with disabilities into the society is crucial in regards to their emotional and mental well-being.

We are encouraged to have empathy and a sense of care for each other and to treat people with disabilities as an important part of our society.

Therefore, Islam grants them rights while assisting them in their needs.

In Islam, people with disabilities have the right to be respected and enjoy social justice; they are to be provided with basic needs such as food and clothes and receive treatment and rehabilitation.

The Prophet Muhammad SAW also stood for human rights and abolished discrimination based on disability, which was prevalent during pre-Islamic times.



CONCLUSION

In conclusion, we should be grateful for our able and differently abled selves. Everyone should strive to make our society an inclusive one for all persons with different abilities. This can be achieved through awareness, an open heart and by extending a helping hand when needed.

The IIUM MBBS SEMINAR SERIES are e-books based on Phase 1 Kulliyyah of Medicine, IIUM, MBBS student seminar presentations. As part of the curriculum, all students are required to present one seminar. Topics covered are varied and not necessarily related to medicine.

This e-book is based on the topic of disability and accesibility for people with disabilities. It touches on three main types of impairments namely of mobility, hearing and vision. It also describes disability etiquettes and Islamic views on disabilities.

e ISBN 978-629-96678-5-8

