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**FACULTY OF NURSING**

# HEARING IMPAIRMENT



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## **HEARING**

Hearing refers to the reception of sound by the ear, its analysis, and its transmission to the brain.

## **IMPAIRMENT**

An impairment is any loss or abnormality of psychological, physiological or anatomical structure or function.

# TYPES OF HEARING IMPAIRMENT

- Conductive
- Sensorineural hearing loss
- Mixed hearing loss

## ❖ ***CONDUCTIVE HEARING IMPAIRMENT:***

- A conductive loss refers to a decrease in sound caused by a problem in the outer or middle ear.

## ❖ ***SENSORINEURAL HEARING IMPAIRMENT***

- A Sensorineural loss refers to a problem located in the inner ear or along the nerve pathway between the inner ear and the brain.

## ❖ ***MIXED HEARING IMPAIRMENT***

- A mixed loss refers to a conductive loss and a Sensorineural loss occurring at the same time.

# Causes

Hearing impairment includes:

- A gradual buildup of earwax.
- Ear infection and abnormal bone growths or tumors.
- Ruptured eardrum.
- Damage to the inner ear.

# SYMPTOMS

- Muffling of speech and other sounds.
- Difficulty understanding words, especially against background noise or in a crowd of people.
- Frequently asking others to speak more slowly, clearly and loudly.
- Needing to turn up the volume of the television or radio.
- Withdrawal from conversations.
- Avoidance of some social settings.



## RISK FACTORS:

- Aging
- Heredity
- Occupational noises
- Some medications
- Some illness



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## PREVENTION FOR HEARING IMPAIRMENT

### ❖ *Protect your ears in the workplace:*

Specially designed earmuffs that resemble earphones can protect your ears by bringing most loud sounds down to an acceptable level. Foam, pre-formed, or custom-molded earplugs made of plastic or rubber also can effectively protect your ears from damaging noise.

## ❖ *Avoid recreational risks:*

- Some activities, hunting and listening to extremely loud music for long periods of time, can damage your hearing.
- Wearing hearing protectors or taking breaks from the noise during loud recreational activities can protect your ears.
- Turning down the volume when listening to music can help you avoid damage to your hearing.

## TEST AND DIAGNOSIS

### ***GENERAL SCREENING TEST:***

- Doctor may ask to cover one ear at a time to see how well hear words spoken at various volumes and you respond to other sounds.

## ***TUNING FORK :***

- Tuning forks are two-pronged, metal instruments that produce sounds when struck.
- A tuning fork evaluation may reveal whether hearing loss caused by damage to the vibrating part of middle ear, damage to sensors or nerve of inner ear or both.

## ***AUDIOMETRY TEST***

- Test conducted by an audiologist, you wear earphones and hear sounds directed to one ear at a time. The audiologist presents a range of sounds of various tones and asks you to indicate each time you hear the sound.
- The audiologist will also present various words to determine your hearing ability,

## **TREATMENTS:**

Treatment depends on the cause and severity of your hearing loss. Options include:

- Removing wax blockage.
- Hearing aids.
- Cochlear implants.



# MANAGEMENT

- Clear signs
- Visual alert
- Equal accessibility to all programs and services.
- Paper and pencil
- Assistive listening devices
- Amplification system
- Headsets and neck loops
- Compatible hearing aids.

# INSTRUCTIONAL STRATEGIES

- Circular seating
- Desk arrange in rows
- Repeat the questions of students
- Teamwork for assignments
- Assist the students
- Transcripts of audio information
- Avoid interruption
- Visual information
- Be Flexible

## **Teaching strategies:**

- Get the attention before signing.
- Keep your hand and face toward the deaf while speaking.
- Make sure your signs and finger spelling are clearly visible.
- Adjust your signs according to the level of the deaf.
- Use of flash cards
- Charts
- Dioramas & models

**THANK YOU**