Screening Camp at WHO-SEARO Regional Office

Introduction

As part of the global initiative to promote early detection and prevention of hearing loss, a screening camp was successfully conducted on 6th May 2025 in WHO-SEARO Regional Office in Delhi under the WHO Sound Hearing 2030 program.

Spearheaded by renowned doctors **Prof. Arun Agarwal**, Chairperson, Sound Hearing 2030; **Prof. Suneela Garg**, General Secretary, Sound Hearing 2030 and Chair, Programme Advisory Committee NIHFW; **Prof. Ravi Meher**, Director Professor & HoD, Department of ENT, MAMC and Associated Hospitals and **Prof. M.M. Singh**, Director Professor & HoD, Department of Community Medicine, MAMC and Associated Hospitals and Chairperson, Centre for Occupational and Environmental Health, the camp was held in close collaboration with Regional Medical Services, the World Health Organization, and the Departments of ENT and Community Medicine, Maulana Azad Medical College (MAMC).

Support Staff:

Following doctors and staff was included in the screening program:

1. Dr. Arun Agarwal
2. Dr. Suneela Garg
3. Dr. Ravi Meher
4. Dr. Abhinav Gupta, Senior Resident
5. Dr. Nandini Shruti, Junior Resident

6. Dr. Kinshuk Gupta, Junior Resident
7. Ms. Janki Mehta, Administrative Officer, Sound Hearing 2030
8. Mr. Ashutosh Kumar, Audiologist
9. Mr. Deepak Verma, Audiologist

Screening Procedure:

The day commenced with the systematic setup of the screening camp, ensuring clean and private spaces for conducting medical check-ups, along with a designated soundproof area for audiometric assessments to be conducted with minimal disturbance. The appointment slots had been pre-booked by the World Health Organization (WHO), allowing for smooth crowd management. Participants began arriving as per schedule, and upon arrival, each individual was registered and directed through the clinical stations in a sequential manner.

The screening process commenced with a detailed clinical assessment by experienced doctors, focusing on the patient's auditory history which included lifestyle factors, occupational exposure to noise, and any symptoms suggestive of hearing impairment. Each participant underwent a thorough otoscopic examination to check for wax impaction, infections, perforation, or any structural abnormalities in the ear canal and tympanic membrane.

Following the initial evaluation, Pure Tone Audiometry (PTA) was performed in the cases where either the patient complained of, or the doctor suspected, any abnormality in hearing. This standard hearing test measures the hearing threshold levels across various frequencies, helping to detect the type and degree of hearing loss. The test was conducted in a sound-treated environment by trained audiologists using calibrated equipment, ensuring accuracy and reliability.

In selected cases where further evaluation was deemed necessary—particularly in the presence of middle ear pathology or inconclusive PTA results—Impedance Audiometry (Tympanometry) was conducted.

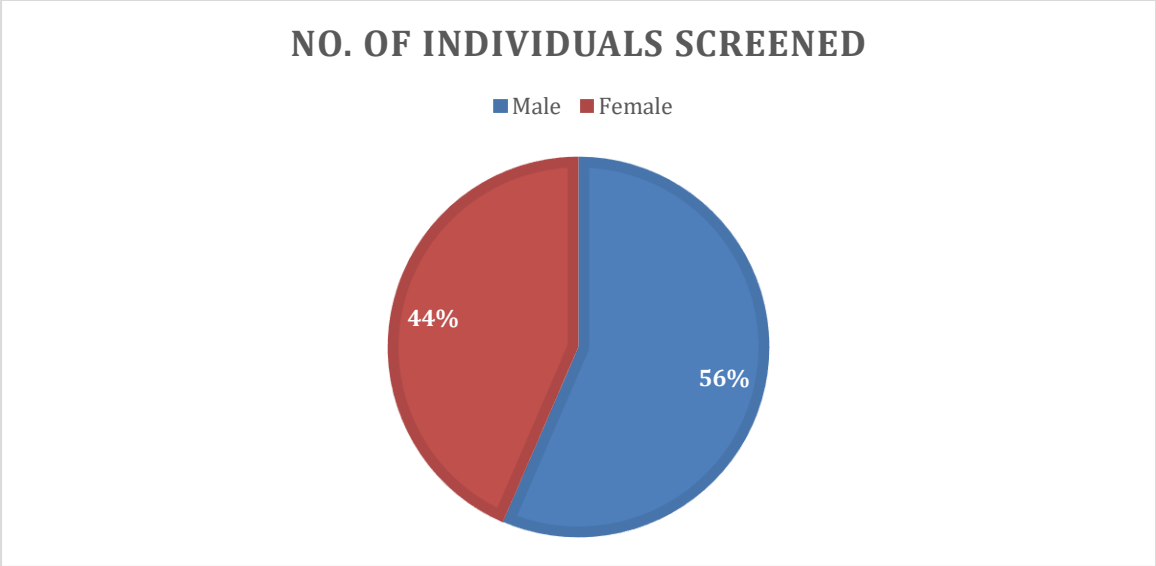
All findings were documented meticulously, and participants were counseled on the results. Safe practices to maintain ear hygiene were told. Those identified with hearing deficits were guided

regarding further management, referral to specialist care, or provision of hearing aids, wherever indicated.

Findings:

A total of 108 individuals were screened which included 61 males and 47 females. The gender-based distribution is as follows:

Fig1: Gender-wise distribution of the people



Their age-based distribution is as follows:

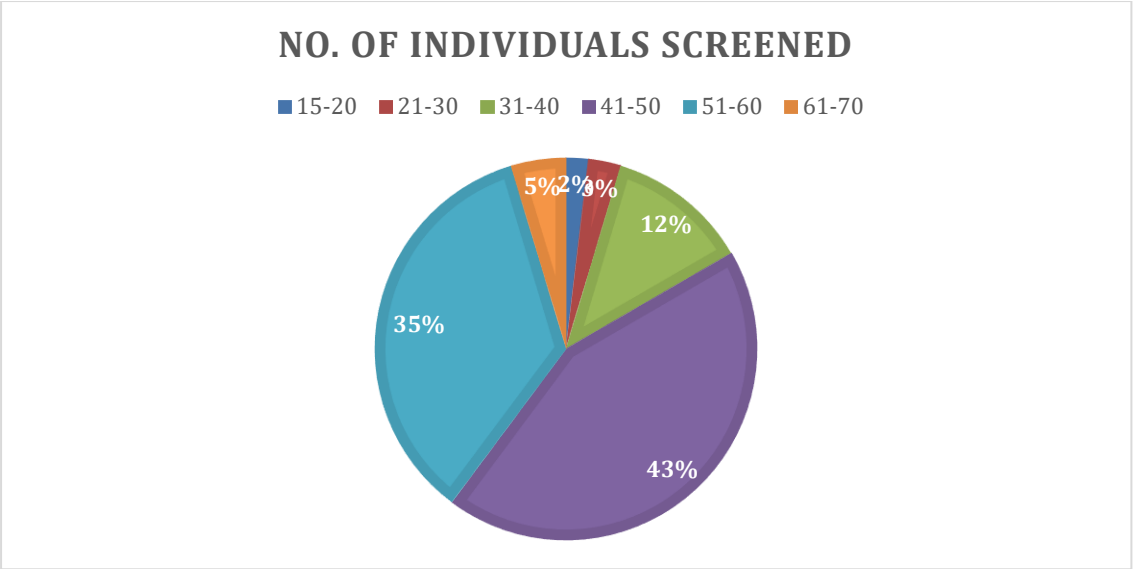


Fig2: Age-wise distribution of individuals

Summary of Findings:

Diagnosis Category	Number of Individuals	Percentage (%)
Normal	62	57.4%
Earwax (Wax in both ears)	21	19.4%
Hearing Loss (mild/moderate/severe)	21	19.4%
Retracted Tympanic Membrane (TM)	2	1.8%
Other Conditions	4	3.7%

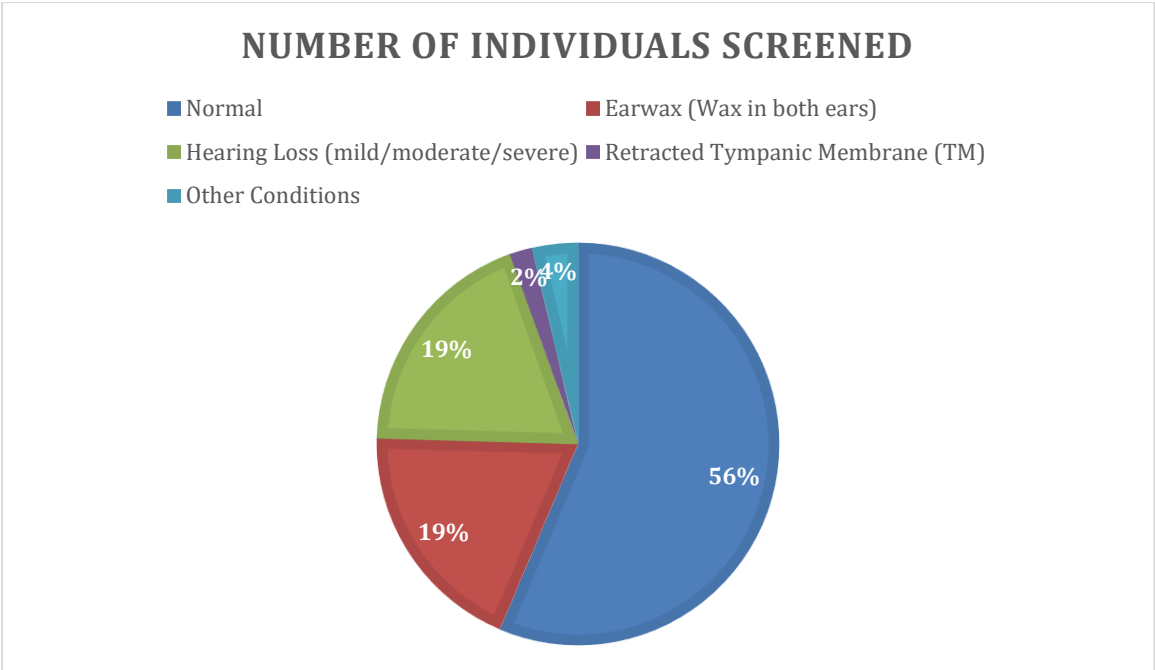


Fig3: Proportion of diseases in the individuals screened

Specific Conditions Identified

- **Hearing Loss 21 (19.4%) Cases:** 15 (13.8%) cases report mild hearing loss in high frequencies. Moderate hearing loss in one ear or both ears was reported in 5 (4.6%) cases, while profound hearing loss was reported in 1 (0.9%) case. Considering the nature of hearing loss in high frequency as well as normal architecture of tympanic membrane in these cases, one can deduce that the probable cause of this could either be age-related (presbycusis) or exposure to noisy surroundings.

- **Wax in Ears: 21 (19.4%) Cases**
- **Retracted TM: 2 (1.8%) Cases**

Other Notable Findings:

- **CSOM: Atticoantral Type,** commonly called as unsafe ear, was reported in one patient. Appropriate management was prescribed o the patients, which often requires surgery. An appointment at the ENT department of LNH was fixed.
- **Noise Induced Hearing Loss**
- **Allergic Fungal Sinusitis**
- **Chronic Rhinosinusitis**
- **Small Perforation in the Tympanic Membrane**
- **SHNL (Sensorineural Hearing Loss)**

Observations:

- A large majority (nearly 57.4%) of individuals showed no ear-related abnormalities.
- Common minor issues include **earwax buildup** which are treatable with early medical attention.
- **Hearing loss** was present in about 19.4% of participants, with one severe case requiring further audiological evaluation.

Recommendations

- Individuals with hearing loss or TM retraction should undergo further **audiometric and ENT evaluations**.
- Encourage routine ear hygiene education to prevent **wax buildup**.
- **CSOM-Atticoantral Type**, commonly called as unsafe ear, requires a surgical intervention at the earliest to prevent further damage to the ear and hearing loss.

Report compiled by: Dr. Kinshuk Gupta