A0003: Audiological Effects of Occupational Noise Exposure in High-Risk Staff in a Tertiary Care Hospital in South India
Anjali Lepcha,1 Manju Deena Mammen,1
Ann Mary Augustine,1 Ajay Philip1
1Department of ENT, Christian Medical College, Vellore, Tamil Nadu, India

Aims To determine the audiological effects of long-term noise exposure in high risk groups of staff working in a tertiary care hospital in South India.

Materials and Methods This study was done as part of the newly established occupational health program in the hospital. Boiler section, Artificial Limb Center (ALC), Laundry department, Central Sterile Supply Department (CSSD), and Dietary department were selected for the study based on questionnaires from employees about perception about noise hazards in their areas of work. The questionnaire that rated the noise levels on a scale from 0 to 5, where 0 was no noise to 5 was intolerable, extreme noise. Based on this, sound levels were assessed in these areas during different times of the day. The result of this questionnaire and sound measurement prompted the hospital administration to take several measures. Awareness programs were held in these areas, audiological examination was done, and ear protection devices were given to all employees working in these areas.

This study data have been retrieved from chart reviews of staff working in the five high-noise level areas and screened for hearing loss between March 2015 and October 2017.

Results The noisiest area in the hospital rated grade 5 was the boiler room with an average of 95 dB noise, followed by the CSSD, laundry, and dietary sections. One hundred and seventeen staff, 80 males and 37 females underwent evaluation by an ENT surgeon. Duration of noise exposure in these workers ranged from < 5 to > 20 years. Out of the 116 staff, who underwent pure tone audiometry, 66 had sensorineural hearing loss in either or both ears. Otoacoustic emissions were done on 73 staff, 23 had absent OAE bilaterally. There was significant association between CSSD workers and noise induced hearing loss as compared with other departments (Chi-square test with p-value of 0.044).

Conclusion The proportion of staff from high noise areas having documented sensorineural hearing loss was 64%. CSSD workers had a significant higher association of noise-induced hearing loss when compared with other departments. This data emphasize the importance of ongoing hearing conservation programs among health workers.

A0004: Vertigo Clinic Patients: A 2-Year Clinical Audit
Anoop Chandran

Introduction Clinical audit “quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change.”

Aims and Objectives:
1. Database of patient demographics serves as referral base.
2. Diagnoses to better focus on investigative tools.