ABSTRACT

THE PREVALENCE AND NATURE OF VOICE PROBLEMS IN CALL CENTER OPERATORS

Aim: Investigate the Prevalence & Nature of Voice Problems in call center operators (CCO) in Indian set up.

Objectives: Determine the prevalence of voice problems in CCOs using self-reported questionnaire, Identify the variables associated with increased risk of voice problems in the CCOs, determine functional impact of voice problems in CCOs and perform a comparative acoustic and auditory perceptual analysis of voice of CCOs.

Study design: Cross-sectional survey study.

Data collection: Study conducted using self- reported questionnaire. From 11 call centers 1093 samples obtained. 104 voice samples recorded to compare and identify the differences if any among the CCOs who are reporting frequent voice problems and who are not reporting voice problems.

Results: Higher prevalence rate observed in CCOs with 59% of career prevalence and 27% of point prevalence. Working in other jobs, raising voice due to noise, experiencing stressful calls, hearing difficulty, acid reflux, coaching, throat clearing, water intake and rate of speech were the variables found to have significant influence on experiencing the vocal symptoms. Impacts of the vocal symptoms were significantly higher in female than male CCOs. Acoustic analysis did not reveal any significant difference between the two groups barring NHR in female CCOs. Significant difference in few acoustic parameters found when compared with
existing norms. Auditory perceptual scores overlapped considerably between those reporting vocal symptoms and those not reporting symptoms.

**Conclusion:** Higher prevalence of vocal symptoms experienced by CCOs in the present study indicates CCOs are greater risk of developing voice problems. These problems affect productivity and are associated with modifiable risk factors. This warrants the need for vocal education in CCOs for optimal productivity and vocal health.

**Key words:** CCOs, Prevalence, Voice problems, Risk factors, Impact, Acoustic and Perceptual analysis