

# IAO

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**Objective:** To assess the knowledge of information related to voice self-care from the perspective of teachers, who completed the online course "Promoting Teacher's Vocal Well-Being" conducted by the Municipal School of Health of São Paulo.

**Method:** An observational and cross-sectional study that investigated the responses of 162 participants to a questionnaire presented at the beginning and at the end of a course that included eight modules and three face-to-face meetings (total of 40 hours). The level of knowledge of information and self-care practices with the voice were compared using statistical analysis.

**Results:** A statistically significant difference was found at the end of the course, with reports of greater knowledge about care to maintain a healthy voice; how the voice is produced; use of verbal and non-verbal expressiveness resources; observation of the interference of emotions in the voice and thinking about strategies to improve the work environment. The vocal warm-up and cool-down exercises and the resonance exercises were performed by a smaller number of subjects than expected.

**Conclusion:** Most teachers who participated in the course "Promoting Teacher's Vocal Well-Being" were made aware of the topic, obtaining greater knowledge about voice production and self-care. Some adjustments must be made in the design of this course for the next groups, regarding the conduct and incorporation of different exercises presented in daily life.

**Keywords:** voice, voice disorders, faculty, health education.

#### 11007 Evaluation of central hearing processing in individuals with attention deficit disorder and hyperactivity

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**Introduction:** Attention deficit hyperactivity disorder (ADHD) is defined as a neurodevelopmental disorder characterized by frequent levels of inattention, hyperactivity and impulsivity. There is a close relationship between ADHD and Central Auditory Processing Disorder (CAPD) due to the difficulty faced in performing the differential diagnosis. Thus, studies with hearing tests and questionnaires are essential to assist in early identification and accurate diagnosis.

**Objectives:** To characterize and correlate auditory behavior and assessment of central auditory processing in individuals with ADHD.

**Methods:** Analytical cross-sectional study approved by the ethics committee (nº 5.268.520). 29 individuals with ADHD between 7 and 55 years old enrolled in the study. The Scale of Auditory Behaviors (SAB) and SNAP - IV questionnaires were applied and the minimum battery of behavioral tests. Spearman's correlation test was used for data analysis.

**Results:** The median SAB score was 24 points. In the SNAP, 13 children presented ADHD of the combined type, eight with predominance of inattention and two with predominance of hyperactivity/impulsivity. The median value of the amount of altered skills was five, the most frequent were: figure-ground, ordering and temporal resolution. There was no significant correlation between SAB ( $p = 0.723$ ) and SNAP with the amount of altered auditory skills ( $p = 0.196$  for inattention and  $p = 0.372$  for hyperactivity/impulsivity).

**Conclusion:** Most of the individuals presented important alteration in the auditory behavior measured by the questionnaires. Temporal aspects and the recognition of verbal sounds in dichotic listening should be emphasized in the rehabilitation of these individuals.

**Keywords:** auditory perception, hearing, surveys and questionnaires.

#### 11011 Audiometric findings in the correlation between the type of molecular defect found in patients followed up at a reference center for osteogenesis imperfecta

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**Introduction:** Hearing loss is a common extra-osseous manifestation in osteogenesis imperfecta, however, its correlation with the genotype is still uncertain.

**Objectives:** To verify the prevalence of hearing loss in cases according to alterations in the COL1A1 and COL1A2 genes in the different clinical types of osteogenesis imperfecta.

**Methods:** All participants underwent pure tone audiometry. Molecular analysis was performed using a Next Generation Sequencing Panel (NGS). The project was approved (CAAE: 3233018500005327).

**Results:** The sample consisted of 58 cases (N: 116 ears), 36 females and 22 males with a minimum age of 5 and a maximum of 66 years (median of 17.5). There was a higher prevalence of qualitative defect (60.34%). Among the types of osteogenesis imperfecta, 46 ears of individuals with Type I, 12 with Type III and 58 with Type IV were evaluated. Regarding the auditory findings, normality was observed in 43.97% of the ears. The qualitative defect presented a higher frequency of affected ears (55.38%), but with a lower degree of impairment, while in the quantitative defect, mixed hearing loss was evidenced in 48.28% of the ears.

**Conclusion:** The difference observed between genotype and phenotype serves as a clinical warning guide, however, a greater number of studies on the subject is necessary to better understand hearing loss in this population.

**Keywords:** osteogenesis imperfecta, hearing loss, genotype, phenotype.

#### 11012 Listening effort in challenging situations in adults with cochlear implants

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**Introduction:** Speech understanding in situations of noise increases the cognitive demands of listening, impacting individuals with cochlear implants (CI). Listening effort refers to the cognitive and attentional resources required for understanding a message.

**Objective:** To identify the listening effort in adults with CI in situations of noise and reverberation.

**Method:** Prospective study approved by the ethics committee under number 3.011.999. Seventeen adults participated in the study: 10 with normal hearing thresholds (control group - CG) and 7 CI users (study group - SG). The listening effort was measured by the dual task paradigm. The primary task consisted of sentence recognition (65dB) in the presence of noise (SNR= +5dB). The secondary task referred to visual memory for color recognition, available in the Dual-Task Assistive Platform - PALETA. The listening effort was calculated by the decline in performance of the secondary task in the dual-task condition.

**Results:** The mean execution time for the secondary task was respectively 4.24s for the CG and 7.7s for the SG. Higher number of correct answers was observed in both groups when the memory task was performed alone. The decline in performance during the dual task condition was on average 2 presentations for the CG and 4 presentations for the SG.

**Conclusion:** The group of CI users had longer execution time and a higher decline in the performance of the memory task, characterizing a higher listening effort.