10 - EVALUATION OF HEARING SCHOLARSHIPS LINKED TO AN EXTENSION PROJECT DEVELOPED AT HEARING ON HEALTH IN THE CITY OF MACAÉ, RIO DE JANEIRO.

VIVIAN DE OLIVEIRA SOUSA[1];
IZABELLA MENDES NOGUEIRA[1];
ARIADNE PIRES DE ARAUJO SOUZA[1];
CRISTIANE DA SILVA RANGEL DE MENESES[2];
ANGELICA NAKAMURA[1]
1 - UNIVERSIDADE FEDERAL DO RIO DE JANEIRO - CAMPUS UFRJ – MACAÉ, RJ, BRASIL.
2 - CENTRO MUNICIPAL DE REABILITAÇÃO/ SECRETARIA MUNICIPAL DE SAÚDE, MACAÉ.
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sousa.vo@gmail.com

INTRODUCTION

The ability to perceive sounds is paramount not only to the development of language and communication, but also for emotional development and maintenance of auditory skills. Hearing is a sensory function that allows us to perceive and react to sounds (RUSSIAN; SANTOS, 1993) and hearing loss can alter the intelligibility of speech sounds, worsening thus the quality of life of individuals.

The method that evaluates and measures the ability of human hearing sounds is known for audiometry, which is a subjective test of hearing, dependent on the answer the user gives the health service being done with headphones and within the acoustic enclosure (CFFa/CRFa, 2009).

Audiometry aims to measure the hearing threshold for pure tones. Auditory threshold can be defined as the minimum level of sound intensity required for the pure tone can be perceived 50% of the time it is submitted for each frequency. The values of the thresholds are recorded on a graph (the audiogram) (CFFa/CRFa, 2009).

For some young adults who have never performed the test and do not have information about your hearing health, audiometry examination shows a singular, being a difference in the lives of these individuals, because small hearing loss can be diagnosed improving the expected longevity of hearing (RUSSO; SANTOS, 1993).

The PET Health/Care Networks (2013-2015), approved to be developed at UFRJ Campus - Macaé Professor Aloisio Teixeira aims to analyze the organization of the hearing health care network in Macaé and has 12 scholarship holders and three volunteers from the health sector, namely: Nursing, Medicine and Nutrition, inserted into the primary health care, to the development of various activities. One of his proposals was to provide its scholar audiometry to know in practice, the method and its importance in Hearing Health.

This study aims to describe the hearing ability of scholars linked to an extension project on hearing impairment developed in the city of Macaé - Rio de Janeiro.

SUBJECTS AND METHODS

We conducted a descriptive, quantitative, cross-sectional and primary basis with scholars attached to the project "PET Redes Saudi", developed in the city of Macaé, RJ. Scholarship holders and volunteers aged between 18 and 25 years (n=15) did audiometry, speech therapist individually by the project "PET Redes Saudi", linked as a governess in the Laboratory of Audiology, Municipal Rehabilitation Center/Semusa-Macaé, between September and December 2013.

We used a structured questionnaire was developed for the study, including the following variables: Age (years), hearing complaints, prior Meatoscopy; Pure tone audiometry (PTA - ANSI-69); Speech Recognition Threshold (SRT) and Percentage Index Speech Recognition (SDT). Audiometer AC-40/340 AUIOTEST Brand Interacoustics, properly calibrated, and the Omni 3000 Xenon Otoscope and cabin acoustics: the equipment was used. Frequencies of 0.25, 0.5, 1, 2, 3, 4, 6 and 8 kHz were evaluated.

For detection of hearing thresholds by air, the descending technique at intervals of 10dB was used until the individual no longer responded to sound. From this intensity, the ascending technique was used with 5dB intervals until the subject returned to hear. The hearing threshold was established when the examinee was able to perceive the sound stimulus in 50% of presentations such intensity.

Data were entered, consolidated and analyzed by relative frequency, measures of central tendency, using Microsoft Excel 2010 software.

RESULTS AND DISCUSSION

A total of 12 schoolarship holders and three volunteers, with a mean age (±SD) 21.8±3.08 years were evaluated. In the interview, were detected 20% of participants reporting hearing complaints: one complaining of ear fullness in the left ear; the second, complaining of tinnitus and dizziness, were referred to the otorhinolaryngological evaluation (Figure 1). Therefore did not undergo audiometric testing.

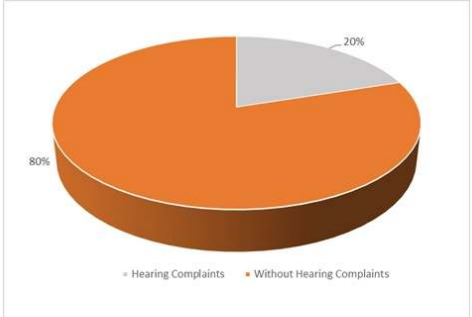


Figure 1. Percentage distribution of hearing complaints of scholarship holders *"PET Redes Saudi"* (n=13), in audiology laboratory in the Municipal Rehabilitation Center/Semusa – Macaé. Sep./Dec., 2013.

No changes were found in audiometry between fellows evaluated. It turned out that the auditory complaints were not valued by yet examined the anamnesis. Thus, it was found that a simple, noninvasive evaluation as audiometry, together with an

interview and meatoscopy, can in fact assist in the diagnosis of a hearing impairment. Meatoscopy is the inspection of the external auditory canal in which to observe if there is presence of foreign bodies or large amount of earwax that can result in a masking of responses to lowering the threshold, preventing the ideal exam This preview is indispensable for realization of tone threshold audiometry.

The result of otoscopy showed that 10% had alterations; being excluded from the trial and referred for otolaryngology evaluation (Figure 2).

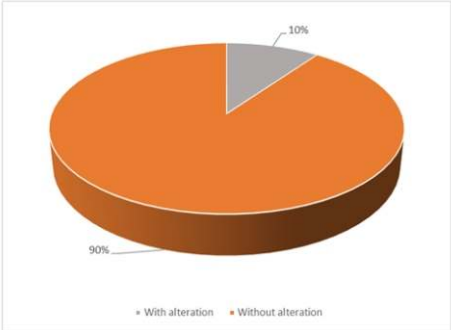


Figure 2. Percentage distribution of alterations of scholarship holders *"PET Redes Saudi"* (n=13), in meatoscopy. Audiology Laboratory in the Municipal Rehabilitation Center/Semusa – Macaé. Sep./Dec., 2013.

The results of pure tone audiometry, speech recognition threshold and percentage index speech recognition were within normal limits.

Audiological evaluation allows early identification hearing disorders. These hearing disorders can lead not only to a difficulty in the development of an individual as psychosocial difficulties. The hard of hearing can lead to a decline of sociability, which affects the quality of life (SANCHEZ et al., 2005; SAYEB et al., 2002).

For the realization of an audiological exam is important to previously perform an acoustic home fourteen hours on the exam, as well as verify the previously abnormal accumulation of cerumen, which causes a temporary loss of hearing, preventing audiometry. If the hearing is not conducted home, you can have a table of temporary threshold shift from audiometric triggered by auditory fatigue, which can mostly achieve high frequencies of 2kHz to 8kHz (FLEET; IÓRIO, 2002).

The degree of hearing loss can be checked in each ear in isolation and the loss may stem from the outer ear, middle ear or inner ear; as well as the auditory nerve and the neurosensory auditory pathways. Thus, the audiometric report takes into account three aspects: the type of hearing loss that can be conductive, sensorineural, or mixed; the degree of hearing loss (mild, moderate, moderately severe, severe and profound), and finally, the audiometric configuration (RUSSO et al., 2009; CFFa/CRFa, 2009).

This study, using audiometry to assess hearing, the scholarship holders, enabled the recognition that, for the evaluated and who will work with public health issues hearing, is of paramount importance to the individual and audiometric evaluation to quality their own hearing. Fellows are college kids often have a habit of being exposed to high sound levels.

The audiogram has great value for health and performance of these students as future health professionals. Furthermore, of those with hearing complaints, none of them had the previously valued, taking them into account only during the interview held before the audiometric evaluation.

It is understood, therefore, that the care with hearing health should be started as soon as possible and the participation of undergraduates in the health area was particularly relevant as they have a better understanding on the subject that are developing the project and the their future professional life.

CONCLUSION

All audiological evaluations performed on stock linked to the extension project on hearing health were within the normal thresholds, despite being observed hearing complaints. This experience has provided knowledge and awareness of the students about the need for this examination in the general population.

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Universidade Federal do Rio de Janeiro - Campus Macaé – Curso de Nutrição
Rua Aluísio da Silva Gomes, 50 - Granja dos Cavaleiros – Macaé – RJ – CEP: 27930-560

EVALUATION OF HEARING SCHOLARSHIPS LINKED TO AN EXTENSION PROJECT DEVELOPED AT HEARING ON HEALTH IN THE CITY OF MACAÉ, RIO DE JANEIRO.

ABSTRACT

Audiometry is a method that evaluates the ability of human hearing sounds. For some young adults who have never performed the test and do not have information about your hearing health, audiometry shows a single examination, with a

difference in the lives of these individuals. This study aimed to describe the hearing ability of scholars linked to an extension project on hearing loss developed in the city of Macae - Rio de Janeiro. We conducted a descriptive, quantitative and primary basis with scholars attached to the project “PET Redes Saudi”, developed in the city of Macaé, RJ. Scholarships holders were individually evaluated by the governess project in outpatient speech therapy Municipal Rehabilitation Center/Semusa - Macaé, for audiometric evaluation. The variables collected were: Age (years), hearing complaints, prior meatoscopy; pure tone audiometry; speech recognition threshold and percentage index speech recognition. Data were entered, consolidated and analyzed by relative frequency, measures of central tendency, using Microsoft Excel 2010 software. A total of 12 scholarship holders and three volunteers (n=15) were evaluated, with a mean age (±SD) 21.8±3.08 years. Was detected in 20% of participants reporting hearing complaints (the first complaining of ear fullness in the left ear, the second complaining of tinnitus and dizziness, and was referred to the otorhinolaringologist). As the result of otoscopy, 10% had alterations. We conclude that all audiometric met the threshold of normality, despite being observed hearing complaints by some scholarship holders evaluated. This experience has provided knowledge and awareness of the students about the need for this examination in the general population.

KEYWORDS: Hearing, Deafness, Hearing Loss.

ÉVALUATION DE L'AUDITION DES BOURSES LIÉE À UN PROJET D'EXTENSION DÉVELOPPÉ À LA SANTÉ AUDITIVE DANS LA VILLE DE MACAÉ, RIO DE JANEIRO.

RÉSUMÉ

L'audiométrie est une méthode qui permet d'évaluer la capacité des sons de l'ouïe humaine. Pour certains jeunes adultes qui n'ont jamais effectué le test et ne pas avoir d'informations sur la santé de votre audience, audiométrie montre un seul examen, avec une différence dans la vie de ces personnes. Cette étude visait à décrire la capacité auditive de chercheurs liés à un projet d'extension sur la perte développé dans la ville de Macae entendre – Rio de Janeiro. Nous avons mené une base descriptive, quantitative et primaire avec des chercheurs rattachés au projet "PET Redes Saudi", développé dans la ville de Macaé, RJ. Des bourses ont été évalués individuellement par le projet de gouvernante en orthophonie ambulatoire Municipal Centre de réadaptation/Semusa – Macaé, pour l'évaluation audiométrique. Age (en années), les plaintes auditives et meatoscopy: Les variables suivantes ont été recueillies. Les données ont été saisies, consolidées et analysées par fréquence relative, des mesures de tendance centrale, en utilisant le logiciel Microsoft 2010. Um total de 12 boursiers et trois volontaires (n = 15) ont été évalués, avec un âge moyen (± écart-type) de 21,8±3,08 ans. A été détecté dans 20% des participants qui ont déclaré troubles auditifs (le premier de se plaindre de plénitude de l'oreille à l'oreille gauche, le second se plaindre des acouphènes et des vertiges, et a été renvoyé au otorhinolaringologist). A la suite de otoscopies, 10% avaient des altérations. Nous concluons que tout audiométrique a atteint le seuil de normalité, en dépit d'être observé troubles auditifs par certains boursiers évalués. Cette expérience a fourni la connaissance et conscience des les étudiants sur la nécessité d'un tel examen dans la population générale.

MOTS-CLÉS: Audition, La Surdité, La Perte Auditive.

EVALUACIÓN DE AUDIENCIA DE LOS BECARIOS DEL PROYECTO ENTENSIÓN EN SALUD DESARROLLADO EN LA CIUDAD DE MACAÉ, RIO DE JANEIRO.

RESUMEN

La audiometría es un método que evalúa la capacidad de audición de sonidos humanos. Para algunos adultos jóvenes que nunca han realizado la prueba y no tienen información sobre su salud auditiva, audiometría muestra un único examen, con una diferencia en las vidas de estas personas. Este estudio tuvo como objetivo describir la capacidad auditiva de los académicos vinculados a un proyecto de extensión de la pérdida auditiva desarrollado en la ciudad de Macae – Río de Janeiro. Hemos llevado a cabo de forma descriptiva, cuantitativa y primaria con estudiosos vinculados al proyecto "PET Redes Saudi", desarrollado en la ciudad de Macaé, RJ. Las becas fueron evaluados individualmente por el proyecto de institutriz en la terapia del habla para pacientes ambulatorios Municipal Centro de Rehabilitación/Semusa – Macaé, para la evaluación audiométrica. Edad (años), las afecciones auditivas y meatoscopy: Las siguientes variables se recogieron. Se introdujeron los datos, consolidados y analizados por frecuencia relativa, medidas de tendencia central, utilizando el software de Microsoft 2010. Um total de 12 becarios y tres voluntarios (n=15) fueron evaluados, con una edad media (±DE) de 21,8±3,08 años. Se detectó en el 20% de los participantes que informaron recibir las quejas (la primera queja de la plenitud del oído en el oído izquierdo, el segundo se queja de tinnitus y mareos, y fue remitido a la otorhinolaringologist). Como resultado de la otoscopia, 10% tenían alteraciones. Llegamos a la conclusión de que todo audiométrica alcanza el umbral de normalidad, a pesar de haber observado las quejas de audición por algunos compañeros evaluados. Esta experiencia ha proporcionado el conocimiento y la conciencia de los estudiantes sobre la necesidad de este examen en la población general.

PALABRAS CLAVE: Audición, Sordera, Pérdida de la Audición.

AVALIAÇÃO AUDITIVA DE BOLSISTAS VINCULADOS A UM PROJETO EXTENSIONISTA SOBRE SAÚDE AUDITIVA DESENVOLVIDO NA CIDADE DE MACAÉ, RIO DE JANEIRO.

RESUMO

A audiometria é um método que avalia a capacidade do ser humano em ouvir sons. Para alguns jovens adultos que nunca realizaram o teste e não possuem informações sobre sua saúde auditiva, a audiometria se mostra um exame singular, sendo um diferencial na vida desses indivíduos. Objetivou-se descrever a capacidade auditiva de bolsistas vinculados a um projeto de extensão sobre perda auditiva desenvolvido na cidade de Macaé – Rio de Janeiro. Realizou-se um estudo descritivo, quantitativo e base primária com bolsistas vinculados ao projeto “PET Redes Saudi”, desenvolvido na cidade de Macaé, RJ. Os bolsistas foram avaliados individualmente pela preceptora do projeto, no ambulatório de fonoaudiologia do Centro Municipal de Reabilitação/Semusa – Macaé, para avaliação audiométrica. Foram coletadas as seguintes variáveis: Idade (anos), queixas auditivas e meatoscopia. Os dados foram digitados, consolidados e analisados através da frequência relativa, medidas de tendência central, utilizando-se o software Microsoft 2010. Foram avaliados 12 bolsistas e três voluntários (n=15), com média de idade (±dp) 21,8±3,08 anos. Detectaram-se 20% dos participantes relatando queixas auditivas (o primeiro queixando-se de sensação de plenitude auricular em orelha esquerda; o segundo, queixando-se de zumbido e tontura, sendo encaminhado ao otorrinolaringologista). Quanto ao resultado da meatoscopia, 10% apresentaram alteração. Conclui-se que todas as audiometrias encontraram-se no limiar de normalidade, apesar de serem observadas queixas auditivas por parte de alguns bolsistas avaliados. Essa experiência proporcionou conhecimentos e sensibilização dos estudantes sobre a necessidade da realização desse exame na população em geral.

PALAVRAS-CHAVE: Audição, Surdez, Perda Auditiva.