55 - CLINICAL CHARACTERISTICS OF CHILDREN AND TEENAGERS WITH HEARING IMPAIRMENT ASSISTED AT A REFERENCE INSTITUTION OF THE NORTE FLUMINENSE, RIO DE JANEIRO

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INTRODUCTION

Deafness and hearing impairment are terms with different definitions, but most often referred to as synonyms for impossibility to hear or difficulty hearing. Deafness refers to the complete loss of hearing in one or both ears. Hearing impairment refers to both complete and partial loss of the ability to hear (WHO, 2010).

The Decree 5.626/2005 which regulates Law No. 10.436/2002, which provides for the Brazilian Sign Language - LIBRAS at its art.2, it is considered that the deaf person: "(...) to have hearing loss, understand and interact with the world through visual experiences and expressing their culture, especially the use of LIBRAS. Sole Paragraph. It is considered bilateral hearing loss, partial or total, forty-one decibels (dB) or more, measured by an audiogram on frequencies of 500Hz, 1000Hz, 2000Hz and 3000Hz."

Hearing loss since birth or established early in childhood can affect the process of human development if not detected and properly cared for by both the family and the state. This is because the hearing is one of the major channels of information of the human being, because it involves development of thought, memory and reasoning (Marazita et al., 1993).

According to the World Health Organization, in the year 2005 there were 278 million people in the world with disabling hearing impairment. Of these, the hearing loss was in 68 million children, and in 210 million adults (WHO, 2006).

In Brazil, the IBGE census in 2000 revealed a population of 5,7 Brazilians who were hearing impaired. In children aged zero to nine years, the IBGE, in 2005, revealed the occurrence of 205,366 cases.

In September 2004, the National Policy for Hearing Health, established by Ordinance GM No. 2073 of September 28, 2004, according to the social magnitude of hearing loss in the Brazilian population and its consequences and the possibility of successful intervention in natural history of hearing loss, through promotion and prevention at all levels of health care, established in his art. 2, paragraph I, the need to develop strategies to promote quality of life, education, protection and restoration of health and injury prevention, protecting and enhancing the autonomy and equality of individuals and communities, with multidisciplinary and interdisciplinary support (Brasil, 2004).

There are only few studies on health conducted with this specific group of people. In this perspective, this study aims to describe the clinical characteristics of hearing impaired children and adolescents treated in a reference institution of the Norte Fluminense.

SUBJECTS AND METHODS

This is a cross-sectional study with 26 children and adolescents with hearing impaired of Associação Macaense do Deficiente Auditivo (AMADA) in August 2010-212. This association is located in the city of Macaé, belonging to the Norte Fluminense, with a total area of 1,219.8 km2, corresponding to 12.5% of the area of Norte Fluminense. The population is approximately 200.000 inhabitants (169.513 fixed and 50.000 floating) and population density of 103.11 inhabitants/km2 (Prefeitura de Macaé, 2011).

The study is part of the research project developed at AMADA, aiming at evaluate the nutritional status of children and youth group with hearing impaired. Study participants were children and adolescents between 07 and 19 years 11 months and 29 days old who have accepted and agreed in writing by their parents, after reading the terms informed consent containing explanations about the objectives of study and the procedures to be performed. All standards were met and guidelines for studies involving human subjects contained in Resolution 196/96, the National Health Council/Ministry of Health. The project was approved by the Research Ethics Committee of the Faculdade de Medicina de Campos, under No. 065/11.

The variables analyzed were: sex, age, medical diagnosis at first consultation, age at first diagnosis doctor, and family history of deafness.

The data were consolidated and analyzed by means of absolute and relative frequencies, and measures of central tendency (mean and standard deviation) of selected variables, using the Microsoft Excel 2010.

RESULTS AND DISCUSSION

Information was obtained from 26 children and adolescents, 61.5% male and 38.5% female, mean (±SD) age of 11.8 ± 3.5 years.

In this study, we detected a predominance of children and adolescent males (61.5%), which brings us closer to the findings of Silva et al. (2007), which is 65%. These authors conducted a study aimed at describing the clinical and epidemiological characteristics of a population of students (n = 232) aged between 1 and 39 years with a mean age of 10.9 years, in a special education program national reference.

As for the age of diagnosis of hearing impairment, in this study we detected a mean (± SD) age of 2.9 ± 3.0 years.

As to the medical diagnosis presented in the query the first time, it was found that 42.3% of children and adolescents evaluated showed bilateral profound sensorineural hearing impairment, 15.4% bilateral severe to profound sensorineural hearing impairment, 15.4% bilateral severe sensorineural hearing impairment, 11.5% bilateral moderate to severe sensorineural hearing impairment (Figure 1).

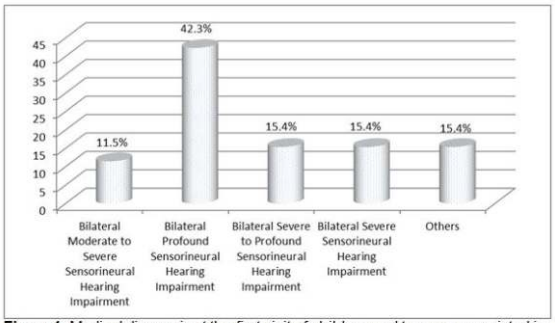

Figure 1. Medical diagnosis at the first visit of children and teenagers assisted in Reference Institution for the Hearing Impairment in the Norte Fluminense, Rio de Janeiro. August 2010-2012.

The hearing loss since birth or established in early childhood can adversely affect the process of human development if not detected and properly cared for by both the family and the state.

The types of hearing loss are: Conductive, Sensorineural, Mixed and Central (Gomes, 2010).

Conductive hearing loss is coming from the external ear disease and / or medium, will be subject to drug treatment and/or surgery. Examples: ear infections, otosclerosis, perforation and even ear wax. The sensorineural is set when the lesion is located in the inner ear hair cells may be within the cochlea or the auditory nerve dysfunction. This type of loss is usually permanent and irreversible, being the most common causes, meningitis and maternal rubella. Mixed hearing loss is characterized when changes occur in the outer ear and/or middle and inner ear. As changes may be cited cochlear otosclerosis and otitis associated with lesions of the inner ear. The hearing levels will probably not return to their normal limits. And the central auditory dysfunction is when the lesion can be located from the brainstem to the cerebral cortex and subcortical regions (Frizanco & Honora, sd).

According to de World Health Organization “hearing loss can be largely prevented through public health measures, such as immunization, improved maternal and child health and safe occupational health practices”. It is essential that efforts are expended by the systems of primary health care, with special attention to the ear and hearing care, to promote the reduction of the burden of this problem (WHO, 2010).

Regarding family history of hearing loss, it was found that 61.5% of the individuals had no family history of deafness, 23.1% had a family history of deafness (Figure 2).

Ignored (15.4%) correspond to adopted children that parents do not know how to answer (Figure 2).

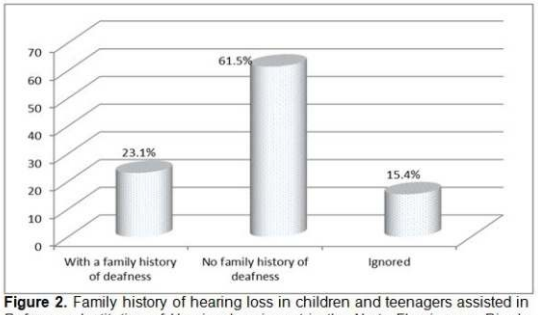

Figure 2. Family history of hearing loss in children and teenagers assisted in Reference Institution of Hearing Impairment in the Norte Fluminense, Rio de Janeiro. August 2010-2012.

The Federal Law 12,303 of 02/08/2010, became obligatory in all maternity hospitals and the realization of the free test called Otoacoustic Emissions (better known as Test OAE) in children born on the premises for the detection of cases of hearing loss. This test can be done from the second day of birth, is painless, quick, noninvasive and lasts an average of 5 to 10 minutes.

The effective implementation of this test on all newborns will allow the Newborn Hearing Screening and thus directing appropriate treatment, should be identified hearing problems. Early treatment will provide faster development of speech, language, thought, memory and reasoning, among other skills, essential for the child to feel included and integrated in the society in which they live.

CONCLUSION

We conclude that most children and adolescents tested showed profound bilateral neurosensorial hearing loss, medical diagnosis at first visit. The development of new studies is essential to think of strategies, geared to health, adequate and broad reach to the reality of the group attended.

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CLINICAL CHARACTERISTICS OF CHILDREN AND TEENAGERS WITH HEARING IMPAIRMENT ASSISTED AT A REFERENCE INSTITUTION OF THE NORTE FLUMINENSE, RIO DE JANEIRO

ABSTRACT

In Brazil, the IBGE census in 2000 revealed a population of about 6 million hearing impaired. In 2005, the IBGE showed that the occurrence in children up to nine years was about 205,366 cases. According to the Brazilian Society of Otology, it is estimated that 3-5 children per 1,000 are born deaf. Thus, this study describes the clinical characteristics of children and adolescents with hearing impaired treated in a Reference Institution of the Norte Fluminense. We conducted a cross-sectional study, descriptive primary basis, with the population of children and young with hearing impaired, from 7 to 19.9 years in August 2010-2012. Interviews were conducted with parents and/or legal guardian, in person or by telephone, using a previously tested form. Of the 26 children and adolescents evaluated, 61.5% were male, and had a mean(±SD) age of 11.8±3.5 years. As for the medical diagnosis made at the first consultation, we detected 42.3% of children and adolescents presenting with profound bilateral sensorineural hearing impairment. Of the participants, 61.5% had no family history of deafness, 23.1% had a family history of deafness. As for the age of diagnosis of deafness, we detected a mean(±SD) age of 2.9±3.0 years. It is concluded that most tested showed profound bilateral sensorineural hearing impairment, medical diagnosis at first visit. The development of new studies is essential to think of strategies for health and adequate nutrition and broad reach to the reality of the group attended.

KEYWORDS: Deafness, Hearing loss, Hearing impaired persons.

CARACTÉRISTIQUES CLINIQUES DES ENFANTS ET DES ADOLESCENTS AYANT UNE DÉFICIENCE AUDITIVE A ASSISTÉ À UNE INSTITUTION DE RÉFÉRENCE DU FLUMINENSE NORTE, RIO DE JANEIRO

RÉSUMÉ

Au Brésil, le recensement de l'IBGE en 2000 a révélé une population d'environ 6 millions malentendants. En 2005, l'IBGE a montré que l'apparition chez les enfants jusqu'à neuf ans était d'environ 205 366 cas. Selon la Société Brésilienne D'otologie, on estime que 3-5 enfants par 1000 naissent sourds. Ainsi, cette étude décrit les caractéristiques cliniques des enfants et des adolescents avec une déficience auditive traités dans un établissement de référence de l'Fluminense Norte. Nous avons mené une étude transversale, descriptive base primaire, avec la population des enfants et des jeunes ayant une déficience auditive, de 7 à 19,9 ans dans la période Août 2010-2012. Les entrevues ont été menées avec les parents et / ou du tuteur légal, en personne ou par téléphone, en utilisant un formulaire précédemment testé. Sur les 26 enfants et adolescents évalués, 61,59% étaient de sexe masculin et avaient un âge moyen (±SD) à l'âge de 11,8±3,0 ans. Comme pour le diagnostic médical effectué lors de la première consultation, nous avons détecté 42,3% des enfants et des adolescents présentant une déficience auditive profonde neurosensorielle bilatérale. Parmi les participants, 61,5% n'avaient pas d'antécédents familiaux de surdité, 23,1% avaient des antécédents familiaux de surdité. En ce qui concerne l'âge du diagnostic de la surdité, nous avons détecté une moyenne (±SD) à l'âge de 2,9±3,0 ans. Il est conclu que la plupart testés ont démontré une profonde déficience auditive neurosensorielle bilatérale, le diagnostic médical à la première visite. Le développement de nouvelles études est essentiel de penser à des stratégies de santé et nutrition adéquate et large portée à la réalité du groupe y ont participé.

MOTS-CLÉS: surdité, la perte auditive, les personnes malentendantes.

CLÍNICA DE NIÑOS Y ADOLESCENTES CON DEFICIÊNCIA AUDITIVA EN UNA INSTITUCIÓN DE REFERENCIA DEL NORTE FLUMINENSE, RIO DE JANEIRO

RESUMEN

En Brasil, el censo del IBGE en el año 2000 reveló una población de unos 6 millones de personas con discapacidad auditiva. En 2005, el IBGE mostró que la incidencia en niños de hasta nueve años fue alrededor de 205.366 casos. Según la Sociedad Brasileña de Otología, se estima que 3-5 niños por cada 1.000 que nacen sordos. Así,en este estudio se describen las características clínicas de los niños y adolescentes que son sordos y con problemas auditivos. Las personas fueron atendidas en una institución de referencia Norte Fluminense. Se realizó un estudio transversal, descriptivo, a título primario, con la

población de niños y jóvenes sordos y problemas de audición, de 7-19,9 años en el período Agosto 2010-2012. Se realizaron entrevistas con los padres y / o persona responsable o por teléfono, mediante un formulario previamente probado. De los 26 niños y adolescentes evaluados, el 61,5% eran varones y tenían una edad media (±DE) de edad de 11,8±3,0 años. Cuanto al diagnóstico médico hecho en la primera consulta, se detectó un 42,3% de los niños y adolescentes que presentan una profunda sordera neurosensorial bilateral. De los participantes, el 61,5% no tenían antecedentes familiares de sordera, el 23,1% tenía antecedentes familiares de sordera. La edad de diagnóstico de la sordera o la audición, se detectó un promedio (±DE) de edad de 2,9±3,0 años. Se concluye que la mayoría de los probados mostraron una profunda sordera neurosensorial bilateral, obtenida por diagnóstico médico en la primera visita. El desarrollo de nuevos estudios es esencial para pensar en estratagemas de salud y nutrición adecuada y un amplio alcance de la realidad del grupo asistido.

PALABRAS CLAVE: Sordera, Pérdida auditiva, Personas con deficiência auditiva.

CARACTERÍSTICAS CLÍNICAS DE CRIANÇAS E ADOLESCENTES DEFICIENTES AUDITIVOS ASSISTIDOS EM UMA INSTITUIÇÃO DE REFERÊNCIA DO NORTE FLUMINENSE, RIO DE JANEIRO

RESUMO

No Brasil, o censo do IBGE, em 2000, revelou uma população de cerca de 6 milhões de deficientes auditivos. Em 2005, o IBGE mostrou que a ocorrência em crianças de zero a nove anos era de cerca de 205.366 casos. Segundo a Sociedade Brasileira de Otologia, estima-se que 3 a 5 crianças, em 1.000, nascem surdas. Deste modo, este estudo objetivou descrever as características clínicas de crianças e adolescentes deficientes auditivos atendidas em uma Instituição de Referência do Norte Fluminense. Realizou-se um estudo seccional, descritivo, base primária, com a população de crianças e adolescentes deficientes auditivos, de 7 a 19,9 anos, em Agosto 2010-2012. Foram realizadas entrevistas com pais e/ou responsáveis, pessoalmente ou por telefone, utilizando-se um formulário testado previamente. Das 26 crianças e adolescentes avaliadas, 61,5% eram do sexo masculino e apresentaram média(±DP) de idade de 11,8±3,5 anos. Quanto ao diagnóstico médico apresentado na primeira consulta, detectou-se 42,3% das crianças e adolescentes apresentando perda auditiva neurossensorial profunda bilateral. Dos participantes, 61,5% não tinham história familiar de surdez, 23,1% tinham história familiar de surdez. Quanto a idade de diagnóstico da surdez ou deficiência auditiva, detectou-se uma média(±DP) de idade de 2,9±3,0 anos. Conclui-se que a maioria dos avaliados apresentou perda auditiva neurossensorial profunda bilateral, no diagnóstico médico na primeira consulta. O desenvolvimento de novos estudos é primordial para pensar em estratégias voltadas à saúde adequadas e de amplo alcance à realidade do grupo atendido.

PALAVRAS-CHAVE: Surdez, Perda auditiva, Pessoas com insuficiência auditiva.