

city of Curitiba, PR, the State of Paraná 2008 Knowledge Olympics. One of the many goals of this event was to make young people aware of health preventive practices. One of them, created by SESEI was the "Citizenship Square", where participants received information on the many different areas of health such as Speak Pathology. The adolescents were invited to answer the Brazilian version of the Youth Attitude to Noise Scale (YANS) questionnaire in order to study their attitude towards noise. Complementing the questionnaire other subjects were considered related to hearing, family history of hearing alterations, experience with buzzing, ear infections and/or pain and possible temporary buzzing after different activities. Teenagers' habits and the use of ear protective devices were also appraised together with demographic data. Descriptive statistics was used to characterize demographic data while Fisher's and Square Chi were used for the other analyses. Results: From a total of 316 questionnaires only 125 were used for having been fully answered without erasures. The 125 teenagers included in the study were of both genders (68% male and 30.4% female), with an average age of 16.6 years. They were from fundamental and medium level schools of several municipalities of Paraná. Regarding the youths' hearing history it was noticed that 34% of the adolescents present buzzing and they considered themselves sensitive to the noise. It is worth to stand out that 107 (85.6%) of the teens said that they don't worry before going to shows or even discos and that they had had precedent experiences of buzzing after resonant events. 75.2% said they never use any hearing protective equipment. At 0.05% (5%) significance level there were no significant differences between boys and girls. On resonant habits, 46.4% of the sample said that they hear music daily using ear phones; 34.4% hear music with house sound equipment in high volumes. Significant results ( $p < 0.05\%$ ) between genders were found in sporting and nautical activities as well as in shooting practices and musical groups. Related to attitudes, 40.2% agree that noises and high sounds are natural aspects of our society, 32% are prepared to make the school atmosphere less noisy and 41.6% of the adolescents consider important to make the atmosphere sound more comfortable. Conclusions: The findings of this paper reinforce previous studies from all over the Country in the sense that, once knowing the hearing habits and attitudes related to noise in the environment and in leisure activities, one can work more directly on the awareness, advice and prevention of damages resulting from this exposure.

**POSTER SESSION II - DATE: 31/3/2010 TIME: 8H00 - 18H00 - PANEL 7**

**PARENTS' AND PEDIATRICIANS' KNOWLEDGE REGARDING NEONATAL HEARING SCREENING: A STUDY IN SAPIRANGA, RS**

**Authors**

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**Abstract:** Neonatal Hearing Screening (NHS) is recommended for early detection of hearing impairment. This study's goal was to verify the knowledge of a group of parents and pediatricians of the city of Sapiiranga, Brazil, about this procedure. The city has a population of approximately 86.000 people. The study design developed two questionnaires for parents and pediatricians. Parents answered the questionnaires through interviews at the city's health centers. Due to their time availability, pediatricians received the questionnaires at the health centers and answered them at their spare time. The research group collected the questionnaires at a later date. Fifty parents, 39 (78%) females and 11 (22%) males, participated in the interview. Most parents, 38 (76%), did not have any knowledge about the NHS; 7 (14%) declared that they had "heard about it", but did not know exactly what it was; 4 (8%) knew that it was a test that should be performed after birth and only 1 (2%) affirmed that it was a procedure for the evaluation of hearing of new born children. In 49 births (98%) did not receive any request from the pediatrician for NHS. In the only exam requested, the exam was not made. After these answers, the parents who did not have any knowledge on NHS received a short explanation about the exam and answered about their recognition about the importance of the procedure. All those interviewed after the explanation affirmed that NHS is important for the newborn babies: to determine if the child is able to hear (74%), to initiate early treatment (24%), and as an important newborn screening test. Regarding the group of pediatricians, there was a low adherence to the study. Of the 12 questionnaires distributed only 4 (33.3%) returned. All professionals affirmed having knowledge of NHS through scientific literature and correspondence from the Brazilian Pediatrics Society. In spite of that, only 1 individual (25%) mentioned referring all his/her patients for NHS. The remaining pediatricians informed that they only referred their patients when there was a family history of hearing impairment, or when there were intercurrents during pregnancy and only when the patient did not have private medical insurance. Regarding the age of referred patients, two (50%) were referred during the neonatal period; one (25%) starting at age three and one (25%) did not answer the question. All pediatricians (4) considered the examination important: for prevention (50%) and to avoid developmental delay (25%) while one (25%) did not answer why he/she considered NHS important. This study verified the lack of information of interviewed parents. The pediatricians also need to be advised, for even though they expressed knowledge of the procedure, they did not request it in an effective form, and this certainly caused delays in diagnosis and treatment of children's hearing impairment.

**POSTER SESSION II - DATE: 31/3/2010 TIME: 8H00 - 18H00 - PANEL 8**

**NEONATAL SCREENING IN A PUBLIC MATERNITY AND PHONOAUDIOLOGIST PERFORMANCE IN THE PRIMARY HEALTH**

**Authors**

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**Abstract:** The integrity of the auditory pathways is mandatory for the development of one of the most noble and distinctive functions of the human being, which is language, the basic element for the effectiveness of communication. From the world population below the age of 15, it is estimated that 62 million people have irreversible hearing loss. The specific indicators of risks associated to hearing loss in newborn babies and children, according to the Joint Committee on Infant Hearing (2004), have been used as a parameter in delineating the high and low-risk groups, and according to the neonate rating measures are taken and different procedures are made, aiming always at the best outcome, and, in the detected cases of hearing loss, an early prosthetics is carried out. This is a quantitative retrospective study, characterized by a data collecting research related to the neonate hearing trial, weight and pregnancy age at delivery, and possible risk factors for the hearing loss. The analysis was made up of the organization of the existing data in the reports, such as pregnancy age (in weeks), weight, APGAR score from the first to the fifth minute, vital status, and if the risk factors for hearing loss were present. From the risk factors for hearing loss, the most frequent were: Ototoxicity (34.6%), Low birth weight (12.1%), Congenital Infections (9.4%); Neonate ICU (8.7%); Prematurity (7.7%); Respiratory anomalies (5.2%); Heredity (4.5%); Anoxia/Hypoxia (4.0%); Small baby for the pregnancy age (3.5%); Convulsion attacks (2.8%); Post-term deliveries (1.6%); Heart anomalies (1.1%); Preeclampsia (1.0%); Craniofacial anomaly (0.8%); Maternal anemia, Incompatible Rh factor and Low APGAR score (0.5%), each one; Advanced mother age, Abortion threat, and Meconial aspiration (0.3%). The issue about the lack of awareness, lack of information on the real and specific effects that hearing loss exerts upon the individual and his/her family is raised. This usually justifies the great number of absences in previously scheduled trials and interventions which are carried out cyclically - in the case of risk newborn babies who are followed for two years, every six months a reevaluation is made.

**POSTER SESSION II - DATE: 31/3/2010 TIME: 8H00 - 18H00 - PANEL 9**

**MIDDLE EAR PRESSURE VARIATION AND DISCOMFORT IN AIRCRAFT**

**Authors**

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**Abstract:** Introduction: With the progress associated with the aeronautic industry, and the fact that more and more people have been using the aircraft as a means of transport, a growing preoccupation with aspects related to comfort in aircraft is observed. During the processes of take-off, cruising and approach of a flight, the aircraft is submitted to atmospheric pressure variation, which leads to a need for pressure equalization in the aircraft cabin to minimize the discomfort of the passengers and crew who have difficulty equalizing the middle ear pressure with atmospheric pressure. Ear pain and a sensation of auricular plenitude are the most common manifestations related to this pressure variation. Aim: The purpose of this study is to investigate the middle ear pressure variation and discomfort in aircraft. Methodology: An electronic questionnaire was made available on the internet and was completed by 178 persons. Only the questionnaires of those who had traveled at least once by airplane were analyzed and used in this research, which corresponds to 146 persons (52% female and 48% male), 45% having traveled more than 20 times. The negative aspects most emphasized were the space between seats (85%), followed by chair inclination and size (77%). The pressure in the middle ear lay in third place, and was emphasized by 54% of respondents, followed by delays (52%), vibration (45%), noise (42%) and others. It is important to observe that 126 persons (86%) mentioned feeling discomfort related to the middle ear pressure during the flight. In addition to those who reported feeling discomfort, 61 (48%) felt it most during take-off and 44 (35%) during approach. The ear pressure variation symptoms disappear after landing for 52 (41%) persons. The practice of chewing gum or simulating the movement of chewing was reported by 71 volunteers (56%) as a strategy to minimize the discomfort during the flight, followed by yawning 66 (52%), and swallowing 59 (47%), Valsalva's maneuver 52 (41%) and others. Conclusion: One can conclude that passengers feel discomfort in aircraft when there is middle ear pressure variation. It is evident from the responses that middle ear pressure manifestations are known and shared by a large number of people who often look for alternatives to minimize this discomfort. The results of this study highlight the need for detailed research on this subject and reveal the importance of this theme.

**POSTER SESSION II - DATE: 31/3/2010 TIME: 8H00 - 18H00 - PANEL 10**

**THE IMPORTANCE OF ALERTS ABOUT THE HIGH INTENSITY AND THE RISKS FOR THE HEARING IN MANUALS OF MP3 PLAYERS**

**Authors**

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**Abstract:** Introduction: The normal human ear can distinguish around 400.000 different sounds and the music makes us remember important times in our lives, but if we hear it at high sound pressure levels SPL it can cause irreversible damage to our hearing. After studies testifying the damage caused to the ear through excessive exposition to elevated SPL, IBAMA/INMETRO has ruled by means of a Regulation the use a noise seal to be applied to household electric devices. Apart from this seal regulation there are other legal ordinances that must be observed by the makers of toys that are in the Brazilian market. Such as nº108, where levels of continual noise and of impact noise (85dB e 100dB in that order) are mentioned. With the technological advance, devices to play music such as MP3 players have been getting smaller, more powerful and more practical and possibly a risk to the hearing of those who use them in an inappropriate way. Aim: to check whether MP3 players come with the information, in their manual with instructions for use, regarding the maximum amplification, in dB, the duration of its battery, the alert about high intensity and time of exposure, the risks of offsetting a hearing loss chain and ultimately if this information is easily seen in the manual. Methodology: The instruction manuals of ten referred national and international brands of MP3 players which were found in five Brazilian websites for on-line sale. The instruction manuals for these selected brand MP3 players have been read and the following have been looked for: Maximum amplifying; Time that the battery lasts; The existence of an alert or warning with regards to the potential risks of hearing loss, versus the time of exposure and high intensity; Easy visualization of all this information. The data have been analysed in a descriptive way. Results: It has been observed that 30% of the MP3 brands mentions in their instruction manuals the maximum sound amplifying which is 90dB to 120 dB. With regards to the time that the battery lasts we noticed that 90% of the MP3 brands analysed indicate the maximum time of use of the battery, which varied between 8 hours and 24 hours. Only one brand analysed have a warning in its instruction manual alerting for the potential risk of hearing loss and this was easily visualized. Conclusion: The information in the instruction manuals of the brands analysed refer mostly to the characteristics of the device performance and only 10% of the brands analysed make a warning available to the buyer alerting for the risks of hearing loss caused by high SPL, with easy visualization of this information. Thus, it becomes essential the need for the hearing health to be promoted through the health information campaigns developed by the government, or by the phonoaudiologists, aiming at guiding the population in general. It is deemed necessary the fulfilment of the existing rules of law by the companies as well as a major inspection by the organizations responsible for such tasks.

**POSTER SESSION II - DATE: 31/3/2010 TIME: 8H00 - 18H00 - PANEL 11**

**COMPLIANCE WITH REGULATORY STANDARDS OF BRAZILIAN MINISTRY OF LABOR RELATED TO THE HEARING BY THE COMPANIES OF PLASTIC OF JABOATÃO DOS GUARARAPES AND RECIFE/PE**

**Authors**

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