# International Conference and Expo on Audiology and Hearing Devices

### August 17-18, 2015 Birmingham, UK



## Luciana Macedo de Resende

Federal University of Minas Gerais, Brazil

#### Auditory training program and hearing amplification outcomes

rearing amplification outcomes improve significantly when associated with auditory training. In the pediatric population, Lhearing aid prescription comes with a mandatory follow-up with speech-language therapists throughout the whole fitting and adaptation process. A directed program of auditory stimulation helps to accomplish successful results. Despite the technology used and how refined hearing adjustments are nowadays, a great number of patients are still unsatisfied with their hearing aids, especially presbycusis patients. It's known that auditory neuropathy accounts for a great percentage of failure in hearing aid acceptance and satisfaction. Another important factor, considering hearing amplification for the elderly are the cognitive issues accompanying hearing loss. A precise audiological diagnosis, combined with the best amplification resource and auditory training are imperative to improve amplification outcomes and prognosis. A group of elderly patients underwent auditory processing assessment and were invited to engage in an auditory training program. The study consisted of two groups of patients, one group with normal hearing patients and the other group with mild to moderate hearing loss. The proposed program consisted of 8 sessions of 50 minutes of formal training. Activities included auditory closure, dichotic listening and temporal processing tasks. The hearing loss group was also engaged in group counseling sessions that provided information regarding hearing aid use and care and was also a moment to share doubts and facts regarding amplification use with their peers. Hearing handicap inventory for the elderly was used pre and post auditory training. Central auditory assessment after training sessions showed significant difference with improvement in all auditory abilities. All patients, from both groups reported better communication outcomes, specially related to attention and memory. Physiological changes of the central auditory system due to its stimulation helped hearing aid acceptance and patient satisfaction. Indirect benefits related to cognition were also noted, such as better memory and attention. A follow-up study is under way to establish long term outcomes of the proposed training program.

#### **Biography**

Luciana Macedo de Resende is a Speech-Therapist and Audiologist. She completed her Graduation and Post-graduation and is a Professor at Federal University of Minas Gerais (UFMG), Brasil, and a Doctor in Human Communication Disorders. She develops research with biomedical engineering research group at UFMG as well as part of the research group CTBG/UFMG (Congenital Toxoplasmosis Brazilian Group).

Imacedo.luciana@gmail.com

Notes: