## The Importance of Speech Mapping for Successful Hearing Aid Adaptation

Luciana Garolla PhD., Reg Caslpo Doctor of Audiology

## SPEECH AUDIBILITY COMES FIRST

Success in the process of adapting hearing aids depends on numerous factors, such as comfort, style and technology level of the model purchased. However, none of that is more important than providing audibility for speech sounds. Without speech audibility, all those factors lose their value as the main function of hearing aids has not been achieved. This may seem obvious, but unfortunately it is not.

Recent research shows that many of the hearing care professionals do not verify whether the devices amplify speech properly in the patient's ear canal, by not performing Speech Mapping. And why does that happen?

One of the most common reasons is that the hearing care professional simply assumes that hearing aids are making speech audible and fails to objectively evaluate. However, assumptions are always very dangerous, especially when it comes to restoring hearing. Some other reasons why professionals do not perform real ear measurements (REM) can also be:

- lack of time to perform the test;
- financial difficulties to purchase the REM equipment;
- lack of knowledge on how to carry out the evaluation and/or its importance in hearing aid adaptation

Unfortunately the result of not performing REM often leads to frustration and dissatisfaction with hearing aids.

## THERE IS NO SUBSTITUTE FOR SPEECH MAPPING

We already know that the hearing aid programming software does not show what is happening in the user's ear. The software graphics may even point out that the speech amplification is adequate, studies that have confirmed that the initial hearing aid programming frequently does not provide enough speech amplification. That discrepancy in the programming graphics is partly due to the fact that anatomical ear canal differences of many individuals is averaged by the manufacturers to calculate the gain provided. In fact, the information shown on the programming screen cannot be trusted and used as a parameter for adjustments unless the professional evaluates the amplification delivered directly to the individual patient's ear canal; there is no other way of knowing whether the necessary audibility for speech sounds has been achieved.

When speech mapping is performed, there is a proven increase in satisfaction with hearing aids, improvement in speech perception, reduction of complaints and a considerable decrease in the number of visits for new adjustments.

If the main purpose of getting hearing aids is to make speech audible, then we should always measure to know for sure. Subjective patient comments, clinical experience or random graphic representations on the software are not acceptable tools for making adjustments, and should never replace the objective verification of speech amplification.

## Remember: THERE IS NO SUBSTITUTE FOR SPEECH MAPPING!