

Speech therapy based on the best evidences: From relevance to challenges

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Recently, evidence-based medicine has advanced and spread across health and other areas of knowledge that require decision-making with a greater possibility of success, gaining worldwide strength^{1,2} and becoming known as evidence-based practice (EBP), which considers the systematic use of the best evidence from high-quality studies capable of answering clinical questions^{3,4}. It involves three important inseparable pillars: conscious decision-making, preferences of the individual assisted, and clinician's experience with the therapeutic techniques used⁴.

In speech therapy, this movement has grown exponentially and its implementation has enabled scientific advances and the consolidation of a profession that has been continuously developing. Speech therapy based on the best evidence (STBE) available for a certain outcome, enables a harmonious dialogue between research and the clinician by suggesting paths and strategies for discussion and conscious decision-making.

To achieve this, the clinical question must be structured, so that the patient/client's outcomes and characteristics gain prominence. The first step depends on a straightforward question containing the patient's characteristics to be treated and outcomes studied, such as "what is the best treatment for the outcome of a specific patient?." By exchanging the outcome for the desired output and characterizing the patient, the guiding question is prepared to search for articles in the databases.

At this stage, an additional challenge that surpasses the abundance of studies currently published is the methodological quality and number of studies with research designs capable of answering the guiding question, considering that for the analysis of the best intervention, the types of studies that should be read are randomized controlled trials and their systematic reviews. Presently, it is essential to adopt a critical approach and read the selected articles, as an article is not necessarily of good quality just because it is indexed on a platform⁵.

It is paramount to understand that, in order to discuss about EBP, an explicit outcome is fundamental. Questioning the methodological quality of the scientific works consulted and peculiarities of the population/sample studied increases the awareness of the intervention that predicts a greater therapeutic success for each

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context. Moreover, it is easy to understand that no isolated intervention can solve all the problems of all subjects.

The use of EBP in decision-making of speech therapy clinics is essential and has significant implications in several aspects, including benefits, risks, costs, patient expectations, professional values, and experience. It provides new possibilities in care, whether with innovative technologies or lower cost possibilities, thus, contributing to the identification of the most effective intervention and approach in the treatment of communication disorders and improving clinical results and patient prognosis and increasing the probability of recovery and improvement in health conditions⁶.

However, the interpretation or appropriate application of evidence can result in ineffective or harmful treatments for patients. Therefore, in the curriculum of undergraduate courses in speech therapy, students should be immersed in the scientific field with access to robust and consolidated research mechanisms in the scientific world, so that they learn to study and critically interpret an article⁵. This is so, because for the analysis and identification of essential points in evaluating and interpreting a study from its design to the research question, and its objective, methods used, results, and conclusion, basic knowledge of epidemiological methods, and statistics, is necessary².

Another frequent challenge in implementing EBP is the clinician's experience. Suppose that the critically analyzed literature indicates that the clinician has not mastered the best technique that obtains the best costs and benefits. The clinical question is answered in this case, however, this method cannot be applied. The ethics of know-how must be imperative, as the order follows "*Primum Non Nocere*." Ethical precepts must always be considered if professionals decide based on principles, such as beneficence (doing good), non-maleficence (doing no harm), and patient autonomy (respecting patients' will). If the clinician's practices are permeated by studies and expand the possibilities of intervention, such as time, cost, and technology, the patients' autonomy is preserved as they are consulted about what they need, at that very moment⁷.

STBE can only be performed with a critical analysis of evidence synthesis. Currently, universities are important in the training of speech-language pathologists. Which established pillars should be demolished, so that the uncertain certainty that "the intervention works very well

in my clinic" can be tested? Confirmation bias, which is extremely organic, should yield, so that we know for whom and when a certain strategy can be chosen. This is not a battle between scientists and clinicians, but a harmonious coexistence that generates more precise and efficient speech therapy.

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