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SPEECH-LANGUAGE PATHOLOGY

ase reports rose to popularity around the same time as the creation of periodical journals, and are the greatest source of evidence to support the majority of clinical practices in speech-language pathology. There has been an overwhelming increase in publications of case reports in the last decade at the international level. Even when their contributions to evidence-based practices are called into question, case reports continue to be an essential part of science and contribute in a significant way to the formulation of hypotheses that can lead to more complex studies.

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INTRODUCTION

The rise in case reports in speech-language pathology coincided with the creation of periodical journals. At the end of the 1930s, one of the most widely known associations in the world, the American Speech-Language-Hearing Association (ASHA1), had already published its first case report in the journal that was subsequently rena-

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¹ ASHA published its first journal in 1936.

med the Journal of Speech Disorders, known today as the Journal of Speech, Language and Hearing Research. This report dealt with the case of a subject who had benefitted from a treatment focused on improving a pronunciation problem caused by the use of a dental prosthesis (1).

From that moment the publication of case reports gradually increased, though the last decade has seen the most dramatic increase of all. The ASHA's four journals² published approximately 288 case reports in the last century (1937-1999), and have continued to publish 569 more in the first 14 years of the 21st century alone (2). Certainly, this increase in case reports (and more generally, of publications) is to be expected from developed countries where speech-language pathology research advances at a much greater pace. This phenomenon does not tend to occur in countries like Colombia for a variety of reasons—among others, the lack of a tradition in publishing the results of interventions by professionals as well as the limited existence of specialized journals in the field.

However, the low publication rate in Colombia is not directly proportional to the actual practice of case studies. Within the schools of speech-language pathology, case studies are a common and routine practice that are built into programs of study. Professionals in training are exposed to case studies in a variety of contexts, both in courses dedicated exclusively to those case studies, as well as in professional practice situations where they select their own patients. These practices are designed to structure the evaluative-diagnostic processes as well as the speech-language pathology treatment process itself. All of this encourages assertive decision-making

and fosters scientific thought as part of a systematic review of scientific literature.

THE CONTRIBUTIONS OF CASE REPORTS TO SPEECH-LANGUAGE PATHOLOGY

Discussing the contributions of case reports to speech-language pathology and the weight they hold in professional decision-making leads us directly to the topic of evidence-based practices (EBP). From the beginning, these EBP have tried to evaluate clinical interventions to prove their efficacy and demonstrate their effectiveness in clinical contexts (3). These are all part of research publications, with a clear preference for studies with randomized clinical trials and meta-analysis, which offer the possibility of testing the hypotheses behind treatment results (4). As such, case reports have been considered as a form of low-level research which often do not go beyond anecdotal reporting (5). This means that there is a lack of experimental control, and one is then unable to infer changes produced in subjects as a result of therapeutical interventions (6).

However, the results of clinical trials and meta-analysis should not be overestimated (7). EBPs are useful in different ways and use scientific evidence differently depending on the profession and the level of development they hold. In the case of speech-language pathology, which still lacks definitive scientific evidence and is relatively new in Colombia³, EBPs are on a basic level in the construction of knowledge, that is, in an initial phase of documenting the results of interventions (3).

² Journal of Speech, Language, and Hearing Research; Language, Speech, and Hearing Services in Schools; American Journal of Speech-Language Pathology and American Journal of Audiology.

In 2016, it will be 50 years since Speech-language therapy profession was established in Colombia.



Fig 1. Transition of case reports to the generation of scientific knowledge

Furthermore, many of the studies with a random group design are not appropriate nor sufficient in evaluating interventions as the people who use the services of speech-language pathology are all different and have complex difficulties that affect more than one aspect of communication (3), which is why it would be more sensible and informative to base clinical practice on case reports (8).

In this way, the evidence that supports the majority of speech-language clinical practices is based on studies that are in phases I and II. They are based on clinical or case reports that show the potential effects of treatments and those that have no secondary effect (9). Therefore, these case reports are becoming increasingly more relevant in the field of speech-language pathology, contrary to what has occurred in other health professions (10).

TRANSITION FROM CASE STUDIES TO THE GENERATION OF NEW KNOWLEDGE

Case reports are necessary to support EBPs; however, it is important to remember that they have a mainly informative value. They are an important source in formulating hypotheses about specific problems regarding human communication, so they should become the base to justify more complex study (11). In this way, case reports continue to be a fundamental piece in generating knowledge and helping show to the community of professionals and patients how these interventions work. Figure 1 shows the place case reports occupy in the EBP cycle and how the clinical practice of speech-language pathology feeds into research and how research feeds into clinical practice.

Evidently, to generate and apply the knowledge gained by EBP, speech-language pathologists need to develop certain basic skills, such

as an efficient approach to literature search and critical reasoning when analyzing published studies; the latter has the purpose of determining if the reported interventions are legitimate, or rather if they are, in the words of Lof (12), mere folk medicine.

The systematization of case studies and their reporting in scientific literature will help advance the development of complex studies that allow for the validation of hypotheses and a generalization of results, with the logical effect of providing peace of mind to the academic and professional comunity of the efficacy of treatments.

CONCLUSION

Case reports continue to be relevant in the generation of new knowledge today. In speech-language pathology, they are the greatest source of information that supports practices based on evidence; even if they are widely criticized, it is necessary to continue their publication for the benefits they bring to clinical practice. Furthermore, case studies are a routine practice in academia and in the training of speech-language pathologists, so it is essential to generate a larger number of publications in specialized journals. Nonetheless, it is also important to raise the level of case reports to begin to publish studies that are more complex to confirm the hypotheses of therapeutic interventions.

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