

## Systematic Reviews in Health: The Importance of Developing Quality Evidence

Vanessa Souza Gigoski de Miranda<sup>1\*</sup>, Lisiane De Rosa Barbosa<sup>2</sup> and Gilberto Bueno Fischer<sup>3</sup>

<sup>1</sup>*Pediatrics Post-Graduatin Program, Universidade Federal de Ciências da Saúde de Porto Alegre, Brazil*

<sup>2</sup>*Department of Speech-Language Pathology and Audiology, Universidade Federal de Ciências da Saúde de Porto Alegre, Brazil*

<sup>3</sup>*Department of Pediatrics, Universidade Federal de Ciências da Saúde de Porto Alegre, Brazil*

**\*Corresponding Author:** Vanessa Souza Gigoski de Miranda, Universidade Federal de Ciências da Saúde de Porto Alegre, Address: Sarmiento Leite, 245. Porto Alegre, Rio Grande do Sul, Brazil.

**Received:** April 13, 2019; **Published:** April 20, 2019

### Abstract

With the growing number of scientific publications around the world, identifying relevant evidence and impact has become a challenge. In health, the search for scientific evidence that supports clinical practice becomes fundamental. Systematic reviews, when well delineated, may represent the highest level of scientific evidence. For this, the authors must carefully follow the steps of preparing good reviews.

**Keywords:** *Systematic Review [Publication Type]; Review [Publication Type]; Publication Formats [Publication Type]; Health; Evidence-Based Medicine; Evidence-Based Practice*

The search for scientific evidence of quality has been growing at the same pace as the growth of scientific work in health. Currently, the growing number of published content and manuscripts is in line with the elaboration of scientific evidence that identifies the best results for application in clinical practice. Systematic reviews and meta-analyses are at the top of the evidence pyramid, providing the highest level of evidence to verify the effectiveness of interventions [1].

The Cochrane Collaboration is an international organization that seeks to support decision making by preparing, maintaining and promoting accessibility to systematic reviews [2]. Given the importance of systematic reviews to present methodological rigor during its development, and this being the first volume of the Journal

of Otorhinolaryngology - Diseases of the Head and Neck, we will present a step-by-step on how to carry out a Systematic Review, aiming that accepted articles in the future, present reliable data for science and clinical practice. This step-by-step is based on the Cochrane Handbook [2] and our experience of producing quality systematic reviews [3]:

1. Elaboration of a protocol. In order to promote the transparency of the study and to outline the methodology to be followed by the reviewers, it is important to publish a protocol. For Cochrane reviews, this protocol should be published in the Cochrane Database of Systematic Reviews; In this protocol, one must present the methodology to be used in the research: type of study included (observational or interventional), delineate the search strategy, databases to be used, population under

**Citation:** Vanessa Souza Gigoski de Miranda, Lisiane De Rosa Barbosa and Gilberto Bueno Fischer. (2019). Systematic Reviews in Health: The Importance of Developing Quality Evidence. *Journal of Otolaryngology - Head and Neck Diseases* 1(1).

- study, type of intervention or exposure, if there will be a comparison group, and the outcomes to be sought, as well as how these outcomes are measured;
2. The search strategy should include as many databases as possible, including gray literature, as it maximizes data sources. Also, we suggest that there is no limitation of publication date, to cover all published literature on the subject. It is important that the strategy is adapted with the appropriate keywords for each database;
  3. Review of abstracts by title and abstract, minimally, two independent reviewers, seeking abstracts that fit the population, intervention or comparison, and outcome sought. For this step, you can use applications that help in the management of abstracts;
  4. Reading of the full text: The reviewers must make a complete reading of the articles, and select the ones that will compose the work, being within the inclusion criteria of the articles in the review. In the event of disagreement between reviewers, a third party should read and tie the tie;
  5. Data extraction: It is indicated that the authors make the extraction of the data of the articles individually, and that the comparison is made later. Such a measure increases reliability and decreases the probability that one reviewer leaves some important data out of the study.
  6. Studies Risk Bias Analysis: Cochrane Collaboration recommends the use of a specific tool to assess the risk of bias in each included study. The judgment should be performed by minimally, 2 independent assessors, who rate bias as "low risk," "high risk," or lack sufficient information in the study, "uncertain risk." This measure assesses the information entered into the study, and it becomes very important because as mentioned in step 2, we enter all the information published on the subject, without limitation magazine quality, or date of the article.

7. Meta-Analysis: Analysis of the effects of a given intervention or exposure more accurately than each study individually. Care should be taken in the preparation of the meta-analysis, since the methods of evaluating the results should be sufficiently similar so that we can group and compare them.

Given the information provided in this letter, we hope that the articles of systematic reviews published in this journal are of quality and of fundamental importance and help for decision making for clinical practice in health.

#### Conflict of interest

We declare that there is no conflict of interest.

#### References

1. Oh EG. (2016). Synthesizing quantitative evidence for evidence-based nursing: systematic review. *Asian Nurs. Res.* 10, 89–93. doi: 10.1016/j.anr.2016.05.001
2. Higgins JPT et al. (2011). *Cochrane Handbook for Systematic Reviews of Interventions*. Version 5.1.0 March [e-book online].
3. Miranda VSG et al. Evidence-based speech therapy: the role of systematic revisions. *CoDAS*, 31(2), e20180167. Epub March 18, 2019.

#### Benefits of Publishing with EScientific Publishers:

- ❖ Swift Peer Review
- ❖ Freely accessible online immediately upon publication
- ❖ Global archiving of articles
- ❖ Authors Retain Copyrights
- ❖ Visibility through different online platforms

#### Submit your Paper at:

<https://escientificpublishers.com/submission>