



Systematic reviews, basic concepts.

Raúl Alberto Aguilera-Eguía.¹

Systematic Reviews (SR) are clear and structured summaries of the information that is available, whether on therapy, diagnosis or prognosis. They emerge principally in order to address to a specific clinical research question (*Letelier et al., 2005*).

SR can be classified as secondary research, in other words, their unit of analysis is focused on the different studies available in the different databases (*Sackett et al., 2000*). Therefore, SR are the type of review aimed at summarizing and analyzing the existing evidence regarding a specific, structured, explicit and systematic research question (*Letelier et al., 2005*).

These forms of designs explicitly state the method used by the researchers for finding, selecting, analyzing and synthesizing the evidence available in that moment.

There are two types of SR: A) Qualitative and b) Quantitative or meta-analysis. In Qualitative SR, the evidence is presented in a descriptive manner, without the use of a statistical analysis.

On the other hand, in Quantitative SR or meta-analysis, it is necessary to use statistical techniques in order to combine the results into only one-point estimator (*Letelier et al., 2005*).

Among the advantages that we can appreciate in SR, we highlight the following: they contain an explicit, systematic and reproducible methodology (*thus reducing the probability of bias*); they offer a more precise and trustworthy assessment of the question or intervention to be studied; they provide a more efficient use of time; the results from different studies can be compared; and in quantitative SR or meta-analysis, the accuracy of the results is increased.

Among the disadvantages that we can appreciate in SR, we highlight the following: the elaboration process of a SR uses a great amount of resources (*essentially time and dedication of the research team*); a SR will always be limited by the quantity and quality of the studies included; and, just as with any other investigation, a SR might be poorly developed, which may result in the appearance of bias.

As a conclusion, SR are a secondary research design that enables us to synthesize and analyze all the available scientific information regarding a specific clinical research question (*in accordance with the acronym P.I.C.O.T.; where P stands for Patient or Population; I for Intervention; C for Comparison; O for Outcome; and T for Type of study*). SR present a comprehensive process of elaboration. Therefore, a well-developed SR corresponds to the highest level of evidence for making a clinical decision (*on condition that the SR is developed in a rigorous manner*).

SR should not be confused with Narrative Reviews (NR). NR are focused on developing a review about a topic in a somewhat thorough manner and are generally written by an expert on the field. This type of design will essentially provide information concerning epidemiological, etiological, physiopathological, diagnostic, prognostic and therapeutic aspects from a fairly general perspective.

Affiliation:

¹Departamento de Salud Pública. Facultad de Medicina. Kinesiología. Universidad Católica de la Santísima Concepción. Concepción. Chile.

Corresponding:

Raúl Alberto Aguilera-Eguía. Av. Alonso de Ribera 2850, Concepción, Región del Bío Bío. Phone: +56982098990. E-mail: kine.rae@gmail.com.

Conflict of interests: None.

Acknowledgements: None.

doi: 10.32457/ijmss.2019.003.

As a consequence, unlike SR, NR will not present a structured clinical question; the search for scientific information will not be detailed (*thus the search will not be reproducible*); and the information of the studies included will not be methodologically assessed.

REFERENCES

Letelier L, Manriquez J, Rada G. Revisiones sistemáticas y metaanálisis: ¿son la mejor evidencia?. Rev Méd Chile 2005; 133(2)246-249.

Sackett DL, Strauss SE, Richardson WS, Rosenberg W, Haynes RB. Evidence-based medicine: How to practice and teach EBM. 2nd ed. London: Churchill-Livingstone; 2000.