



Spot of seven errors in the scientific article submission process (Part 4): a review of studies - shortcut, but to where?

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## ABSTRACT

Several universities and research centers throughout the world have succeeded in establishing the paradigm to be followed by all parties in relation to decision making with regard to the best research designs. Excluding the internal validity of each study, since this lies beyond the scope of this editorial, one may perceive a degree of plurality with regard to these institutions as to the research proposals that represent the best study approach in order to support decision making. The Grading of Recommendations Assessment, Development and Evaluation (GRADE) initiative constitutes a significant collaborative effort in order to provide evidence rating and a measure of the strength of recommendations. As far as secondary studies are concerned in terms of the quality of evidence there arises the problem of its trivialization. This often causes it to be thought of as a shortcut when faced with problems such as an extremely short deadline, a lack of resources, a discipline associated with a postgraduate course that intends to optimize production, or else for a project that does not move learning forward.

Descriptors: Quality Publication; Access to Information; Evidence-Based Nursing.

Since the resurgence of the logic of Evidence-Based Practice (EBP), especially in the last decade of the Twentieth Century, numerous proposals with regard to evidence hierarchies have emerged.

Several universities and research centers throughout the world have succeeded in establishing the paradigm to be followed by all parties with regard to decision-making in terms of the best research designs.

In a doctoral thesis defended in 2009<sup>(1)</sup> 13 hierarchical models were listed. Currently, among the most commonly accepted by the international scientific community are included: McMaster University<sup>(a)</sup> (Canada); Healthcare and Quality Research Agency<sup>(b)</sup> (USA); University of Oxford<sup>(c)</sup>, University of York<sup>(d)</sup> and the Cochrane Collaboration<sup>(e)</sup> (United Kingdom); University of Auckland<sup>(f)</sup> (New Zeland) and; Joanna Briggs Institute<sup>(g)</sup> (Australia). Excluding the internal validity<sup>(2)</sup> of each of the studies, since it lies beyond the scope of this editorial, one may perceive a plurality with regard to these institutions as to the research proposals that represent the best study approach in order to support decision making. The Grading of Recommendations Assessment, Development and Evaluation<sup>(h)</sup> (GRA-DE) initiative constitutes a significant collaborative effort in order to provide evidence rating and a measure of the strength of recommendations.

It must be noted that, except for subtle nuances, all the proposals presented are based on the biomedical model, which is still a major influence in the health field. Thus, considering the plurality of professions that complement each other in this field, the difficulty of any proposal when it comes to contemplating such a diffuse and interconnected universe of knowledge is revealed. However, in analyzing only the highest level of evidence of the proposals presented, it can be seen that the valuation of meta-analysis studies and their analogue with regard to qualitative approaches, meta-synthesis, are particularly predominant.

Meta-analysis and meta-synthesis are referred to as secondary studies. However, they are no less important; rather, they are considered to be of key importance. The term 'secondary' is due to the fact that the researcher does not use an original source of data for the research but rather deals with the publications of other authors. Therefore, as a piece of research originating from other studies, a review study features certain aspects as a whole: the time needed to perform the study, the need for fewer staff, lower cost, no need for consideration of the project by a research ethics committee, among others. However, there are also difficulties: one cannot change the internal or external validity of the original data, the essential presence of primary critical mass of high guality, advanced statistical knowledge requirements for the of calculation of homogeneity in order to determine the summary effect in meta-analyzes, among others.

In this area, there is a global trend that large randomized control trials make use of major public databases. The idea is that if clinical trials control all the variables well, and these variables become available to other researchers, the need for further testing on the same population will be reduced, minimizing costs and reducing ethical problems. The United Kingdom is at the forefront of this new research model. During the VII Workshop on Scientific Publishing<sup>(3)</sup> organized by the Brazilian Association of Scientific Editors in November 2014, several publishers expressed their experiences with an alternative model, perhaps one in transition, entitled Open Data, which is a topic that will be addressed by this journal in the future.

As far as secondary studies are concerned in terms of the quality of evidence there arises the problem of its trivialization. This often causes it to be thought of as a shortcut when researchers are faced with problems such as an extremely short deadline, a lack of resources, a discipline associated with post-graduate courses that intend to optimize production or else, for a project that does not move learning forward.

There are other types of secondary research<sup>(4)</sup> that are not necessarily in the form of meta-analysis or meta-synthesis, namely integrative review/narrative, bibliographical research, systematic review and others, whose limit is the imagination of the applicant and of the performer.



As addressed in a previous editorial<sup>(5)</sup>, in Brazil the Higher Education Personnel Training Coordination (Capes) demands metrics that, while "stimulating" scientific production, it also fosters and intensifies the competition between programs and journals in the search for the the improvement and maintenance of course grades as well as publishing the Qualis magazine. However, the undesirable effects do not end there, because subsequently "sub-articles" are produced, resulting from subjects of the program, often deriving from four or five meetings. The result is poorly made revisions, with no reproducible methodology, limited to full texts available in repositories like SciELO<sup>(a)</sup> and/or from the mother tongue language, Portuguese. These will lead to resource expenditure on the part of the author with respect to time, money or self-esteem, since

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s/he will find severe difficulties in terms of the acceptance in journals, certainly in the case of the ones that are more in line with international quality standards.

Also in the field of secondary education, a rather peremptory definition of the term 'systematic review' is that it relates to an exhaustive search for all potentially relevant publications<sup>(6)</sup>. However, it does not mention excessive financial cost.

Such high costs reveal another flaw in the process of the internationalization of Brazilian authors and journals, which is who will pay the bill? But that is a subject for 2015.

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