

Reviews and Documentary Research Methods in a Scientific Article: Brief Reports.

Dr Wilfredo Molina Wills

DDS, MSc, MShr, PHD

Researcher at the University Latina of Panamá

Abstract

There are differences between a literature review and documentary research. The etymological concept of both has a different vision. Although the structure of both is well demarcated, review articles can have a generic narrative. Documentary research must always maintain a critical stance, which allows the results of original research to be accredited. The purpose of this brief report is to present relevant aspects of scientific positions, the review and the documentary research.

Key words

Documentary investigation, Literature review, research methodology

Introduction

The literature review article does not meet the conditions to be considered original. However, it does not lose its scientific status because it has an established elaboration structure through the parameters that a scientific manuscript must meet. In many cases this structure or elaboration instructions is suggested by the journals themselves according to their style of publication.

All review articles must specify the objectives of the study and this allows the author to guide the bibliographic search patterns to achieve these objectives. It offers the reader clear guidance on the purposes of the study, the guidelines that have been taken into account, the quality of the research, whether the objectives have been achieved, or whether on the contrary the author lost his way through the narrative.

Every scientific review article must compile excellent information regarding the object of study (1). The bibliographic search should be organized under the optics of descriptors and search criteria that facilitate organization and assembly of ideas by the authors of the study, and this process will benefit the quality of the research.

The specific purpose of a review article is to gather enough information about an object of study, from a questioning perspective on aspects that you want to clarify on a specific topic. That is, a well-crafted review article allows us to observe ¿what is there? And ¿what lack of information on relevant aspects of a same subject? The scientific review articles are a valuable tool that allows to elaborate a synthesis through a neutral vision and to contrast the results published in several investigations on the same subject. Moreover, it is possible to infer which of these studies are closest to reality or validity.

The big problem with review articles is that in many cases they are subjective and scientifically dubious (2). In addition, articles of this type have limitations when it comes to giving importance to the findings of other authors. Among the most important functions of the review articles are to synthesize, compare and transmit new knowledge on a topic of scientific importance (3).

Saracevik and Wood (1981) divide the review articles into critical, evaluative, interpretive, speculative, teaching, historical and popular. However, only those of evaluation and description are considered as true articles.

Methods

Identify, specify and delimit the object of study: when selecting the topic to be investigated we must answer the question of what interest does the subject have for the scientific community? In the same way, it is necessary to evaluate what uncertainties or gaps there are on the subject under study. In such a way, that the research allows to contribute new elements. Of course, the need for new input will depend on the amount of research that has been done. Much of the delimitation approach is going to depend on the objectives. In this way, having clear objectives, we proceed to establish the groups of criteria that help delimit the study.

Selection of descriptors and bibliography

The selection of keywords or descriptors is a fundamental basis in any type of scientific article including the review. They are the tools that allow researchers to focus the entire research process to achieve pre-established objectives. But, they provide ideas about what is the scientific line of the study and what are its limits.

Selection of bibliography

The keywords are the important conceptual elements for the selection of the bibliography to be reviewed in the database. The selected literature must have adequate scientific support. This is possible to achieve, when using journal articles that have a high impact factor. In these the requirements are more rigorous when accepting articles for publication. In the same way, it is possible to evaluate the indicators of the scientific production of the authors of the original studies selected in the compilation of the bibliography. Moreover, it is possible to review the quality of the original publications for the impact they have had on the scientific community and that it is possible to do so by the citations that each article has had.

Search criteria

The selection of the available information is based on a process of discrimination of which evidence obtained through the reports has greater scientific relevance. If academic pages, recent publications, the scientific background of the authors, the citations in the index, the relevance in scientific forums and congresses and the type of source selected are taken into account as search criteria, then the bibliographic search becomes a vital element to evaluate the importance of the research question and the selection of the type of study design (4). Ideally, in the process of searching the bibliography, the sources should be primary. In this way, knowledge is obtained only from original articles and high-impact journals. All popular writings are discarded. Due to the need to answer a research question, it is necessary to consider evaluative reviews as of greater importance than descriptive reviews.

The systematic order of the ideas that respond to the objectives of the research, must respond to a logical, clear and concise structure of concepts or postulates place the reader with the subject of study. This level of precision and significance, position the message in a central context and is, which allows the reader to be nourished by the new ideas that arise from the process and without any dispersion.

Limitations

Although the authors of review articles may take a critical stance, it is always a limitation whether or not to give relevance to the original findings of other authors. And even discussing the results and conclusions of other research can be subjective.

Documentary research

Reviewing means examining or analyzing concepts, theories, proposals, studies, or data on a topic. Documenting consists of accrediting the results obtained in previous studies through testifying, proving, or justifying those results through a report. Scientific documentation has a structure that starts from the identification of the scientific process, delimits the facts, identifies the veracity or falsity of what is expressed in the sources of information and issues a verdict that is the product of testimony.

Reviews are qualitative narratives or very simple quantifications of the results. Documentary research has as its fundamental objective to look for gaps in scientific knowledge and to interpret and direct approaches. You can test the validity of a hypothesis or you can describe an object of study in as much detail as possible. It poses a problem, establishes study objectives, develops a theoretical and methodological framework, performs the analysis and interpretation of the results, discusses the findings and establishes conclusions about the study. The documentary scientific article is a facilitating and intermediary document, characterized by producing a new vision or scientific conception product of the analysis, synthesis and interpretation of the original documents, with the contribution of a new scientific perspective.

Discussion

All the analyses carried out in a documentary investigation must be supported by a rigorous methodological process. Under the positivist approach this analysis is quantitative, and is based on the reliability of the sources, the logical evidence and rational. This type of analysis does not allow subjective assessments. That is, it only relates to what is possible to quantify (5). The next step is interpretation (6). This step allows you to understand the entire subjective context of the research and the third step (7) is the critical approach to evaluating documents. Although a good review should be critical (8), it does not always meet these parameters. This can be observed in narrative a description, whose format allow an easy understanding of the

subject but does not require a demanding methodological structure (9). There is a very fine line between review articles and documentary research. In many cases, authors create a hybrid that they call a documentary review.

Conclusion

Documentary research has been accepted as an important method of scientific research. To place you in this status, it needs to have a greater scope than a simple review. The scientific success of documentary research will depend in large part on the fulfillment of all the structural elements and on providing new ideas that give way to new questions or lines of research. A simplistic review of the literature has always had limitations due to its high subjectivity. Therefore, there are differences between examining concepts or accrediting results. That is, from the etymological concept, there are differences between reviewing and documenting.

References

- 1 Guirao J, Olmedo A, Ferrer E (2008) El artículo de revisión, revista Ibero-Americana de enfermería comunitaria, 1,1,6.
- 2 Brugerías M, Díaz G, Díaz A, Valdés M (2008) Review paper, rev Cubana de salud pública v34, n 4, La Habana.
- 3 Saracevic T, Wood JB (1981) Consolidation of information: Handbook on evaluation, restructuring and repackaging of scientific and technical information, pilot edition, PGI-81/ws/16. Unesco, 9-167.
- 4 Aguedas O (2009) La búsqueda bibliográfica, Acta méd, Costarric, vol 51, n 3.
- 5 McNally P(2013) Qualitative research in medical education. In: Walsh K, editor. *The Oxford textbook of medical education*. Oxford: Oxford University Press, pp,638–647. [[Google Scholar](#)]
- 6 Cohen L, Manion L, Morrison K. *Research methods in education*.(2011) 7th ed. New York: Routledge,. [[Google Scholar](#)]
- 7 Kincheloe JL, McLaren P(2002) Rethinking critical theory and qualitative research. In: Zou Y, Trueba ET, editors. *Ethnography and schools: qualitative approaches to the study of education*. Lanham, MD: Rowman & Littlefield Publishers, pp. 87–138. [[Google Scholar](#)]

8 Ömer Gülpınar and Adil Güçal Güçlü (2013) How to write a review article?, Turk J Urol. 2013 Sep; 39(Suppl 1): 44–48.

doi: [10.5152/tud.2013.054](https://doi.org/10.5152/tud.2013.054)

9 Collins JA, Fauser B. Balancing the strengths of systematicand narrative reviews (2005) *Hum Reprod Update*, 11:103–4. [[PubMed](#)] [[Google Scholar](#)]