CASE REPORT AND CASE SERIES: IS THERE ROOM FOR THEM?
Relato de caso e série de casos: há espaço para eles?

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ABSTRACT

This article is part of a special series developed to assist authors in the process of scientific writing and communication. The purpose of the study was to underscore the importance of publishing case reports and case series in the medical and health sciences and to provide insights to guide the authors who wish to submit these types of study. A non-systematic review was conducted to present a brief historical overview on reports published in the literature and to provide data on the main difficulties faced by authors trying to publish in the current scenario and on the contributions of case reports and case series to scientific progress. Finally, we address the current paradox of the simultaneous depreciation of this type of publication and reinforcement of the importance of publishing emblematic cases with major impact on the progress of medical science.

KEYWORDS: case reports, case studies, health communication, Journal Article.

RESUMO

Este artigo é parte de uma série especial que foi desenvolvida para auxiliar autores no processo da redação científica e comunicação. O presente artigo visa ratificar a importância das publicações científicas de relatos e série de casos nas ciências médicas e da saúde. O estudo teve o objetivo de fornecer insights para orientar os autores que pretendem submeter esse tipo de estudo. Realizou-se uma pesquisa não sistemática, trazendo uma breve abordagem histórica sobre os relatos da literatura científica, um levantamento de dados sobre as principais dificuldades para publicações no cenário atual e, as contribuições dos relatos e série de casos para a ciência. Por fim, aborda-se o atual paradoxo entre a subvalorização deste tipo de publicação e a importância dos casos emblemáticos publicados com grande impacto na evolução da ciência.

PALAVRAS-CHAVE: Relatos de Casos; estudos de casos; Comunicação em Saúde; artigo de revista.

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INTRODUCTION

Case reports and case series are descriptive studies based on single or multiple observations made during patient assessment. Case reports usually consist of a report on a single patient or up to four patients. Studies describing more than four patients are considered case series, as proposed by Abu-Zidan et al.1 Both types of studies are commonly used for knowledge dissemination and teaching in the field of health sciences, and their history is somehow intertwined with the history of medicine itself, stretching back to Hippocrates and ancient Egyptian medicine (1600 B.C.).

Currently, the case study format continues to be valuable for scientific progress and occupies an important place in the literature. A significant number of nosological conditions were initially described as case reports.3 In addition, case reports and case series provide an important field for research on treatments with little commercial investment. Case studies may be regarded as decisive scientific evidence if they are developed and presented with high scientific and methodological accuracy.

In recent years, however, there has been a moderate trend toward declining case reports in scientific journals, especially in more prestigious journals. The reasons for rejection are multifactorial and generally include the following aspects: insufficient interest to merit publication (little or nothing to add to scientific knowledge); case reports and case series are the most common forms of medical writing received by journals, which always have limited print space; the level of evidence associated with case reports is lower than that of other study designs (e.g., randomized controlled trial and meta-analysis); and case reports are rarely cited, which may lower a journal’s impact factor.

Therefore, considering both the important role that case reports and case series have in the field of medical and health sciences and the difficulties experienced by researchers in publishing these reports, the purpose of the present study was to provide insights and guidelines for authors who wish to submit these forms of medical writing.

CONTEXTUALIZATION

Initially, it is worth mentioning the great importance of reflecting on practice in any field of knowledge, particularly on daily experiences in clinical settings. Both successes and failures are essential to re-signify practices, reformulate hypotheses, and establish new paradigms for health care.

As far as applicability is concerned, examining the historicity of case reports and case series is essential to understand the prominent contributions of these publications. There are numerous reports of decisive and striking cases for science and humanity. Among the many reports published in the literature, attention is drawn to the first report on Parkinson’s disease published in 1817,9 the report on Paget’s disease published in the Medico-Chirurgical Transactions in 1877,10 the first reports on acquired immunodeficiency syndrome (AIDS) published in The New England Journal of Medicine in 1981,11 the earliest evidence of adverse effects of fenfluramine on pulmonary hypertension published in the British Medical Journal in 1981,12 and, more recently, the report of probably the first case of vertical transmission of Zika virus with consequent fetal microcephaly published in The New England Journal of Medicine in 2016.

CONSIDERATIONS OF WRITING A MANUSCRIPT

The publication of high-quality, significant case reports not only helps researchers to acquire knowledge and skills but also enhances the prestige of the institution, securing funding for future research and leveraging professional intellect to higher levels. The combination of these parameters has led editors of scientific journals to guide the structural preparation of case reports and case series. One of the first steps in the manuscript drafting process is selecting the journal in which to publish and following the instructions for authors for specific guidelines on formatting and submission of a manuscript as a case report or case series.

In general, a case report should include the following structural elements:

1. title;
2. abstract;
3. keywords;
4. introduction;
5. case report (or case series);
6. discussion;
7. conclusion;
8. acknowledgments;
9. references.

Other criteria to be considered are an accurate title and clear and objective writing (about 1,500 to 2,500 words) with an adequate number of references (about 20 to 30 references). However, there is a trend in journals to reduce the number of words and references allowed. For example, the Geriatrics, Gerontology and Aging encourages authors to write brief reports of no more than 1,600 words, supported by no more than 20 references.
Another requirement is that all authors must obtain prior consent from patients for publication of their data. This can be obtained directly on the patient’s medical record or provided as a separate document (informed consent form). In both cases, patient consent should be clearly indicated. Because some journals have their own criteria, the authors should carefully read the instructions before submitting their articles for publication. From the ethical point of view and considering that case reports and case series in the field of health sciences are studies involving human subjects, securing approval of an ethics committee is mandatory to ensure that the patient, the researchers, and the institution are protected.

**SCENARIO FOR PUBLICATION**

Despite the seemingly unfavorable scenario for the publication of case reports or case series, authors with a good critical eye for quality work should not renounce the purpose of publishing. In recent years, there has been an increase in the number of online journals that publish case reports and case series. However, authors need to identify the appropriate journal when choosing to publish online, considering factors such as the target audience, relative rapid publication with transparent publication policies, and the topics the journal covers.

A journal’s impact factor has been a recurring theme of studies on scientific publishing of case reports and case series, especially when analyzing the reasons that may lead to rejection. In this respect, Vandenbroucke is assertive when he states that “before an idea can be confirmed or quantified, it first has to be discovered,” indicating that there is space in the literature for dissemination of information from both case reports and randomized trials, with no need to express a preference for one type of study (e.g., randomized controlled trial and meta-analysis) over another (e.g., case reports and case series). Also encouraging the publication of case reports, Rosenfeldt et al. state that half of the reports that are initially rejected have potential and are eventually published.

**INSIGHTS AND PERSPECTIVES**

The importance of publishing case reports and case series to the progress of science, especially medical and health sciences, is therefore an indisputable fact. For this purpose, reports need to move toward a broader perspective, being more consistent with current medical practices, i.e., the patient should not be considered a mere accessory in the reported case. In line with this, Smith proposes that the doctor and the patient should simultaneously write the story of the case. The author also states that the doctor will certainly be surprised by an abundance of details that may emerge out of the patient’s report, and which might have gone unnoticed by the doctor and the team.

Barroso supports the proposal that case reports need to evolve to be consistent with current concepts of comprehensiveness, reciprocity, listening, and widening of perspective, perceiving the human being beyond the illness. This proposal is to be encouraged in the hope that certain areas of health sciences, whose practices are yet incipient and poorly developed, can also benefit from recent advances.

In view of the foregoing and considering that there is an emerging awareness of interdisciplinarity as a relatively new form of knowledge production, setting the trends to be followed by the scientific community, case reports cannot go unnoticed in the process of scientific progress and must adapt to new realities to remain useful.

**CONCLUSION**

Although high-impact journals have reduced the number of case reports and case series published per issue, these types of study continue to have a unique importance in the field of medical and health sciences, indicating that there is still room for them in the scientific literature. This confirms the assumption that these forms of medical writing need to evolve, becoming applicable to real-life circumstances of the patients, study subjects, and teams involved in the cases.

The main challenge is to disrupt the logic of the classical model of case report focused solely on the morphological and functional characteristics of the disease, diagnosis, and treatment by broadening the perspective of the circumstances in which events occur and their impact on the patient’s life, in all its different dimensions. This will certainly result in more attractive articles with a greater chance of success when submitted. Finally, the present study is not intended to exhaust the subject, but rather to promote critical reflection in order to encourage and qualify the preparation of case reports and case series as important strategies for knowledge dissemination in the field of medical and health sciences.

**CONFLICT OF INTERESTS**

The authors declare no conflict of interests.
REFERENCES


