



When and how to write a “Case report” for a journal

Kada i kako napisati „Prikaz slučaja“ za časopis

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At a time when an enormous number of papers are being written, accepted, and published daily around the world, the scientific community is faced with the task of accepting and publishing papers under the “Case reports” or “Case series reports” categories. These types of manuscripts should describe, in a concise and focused style, important, previously undetected or underreported clinical observations and their integration into a scientific context. They may include one or two cases, although some journals allow case reports to present up to three patients; likewise, case series reports may consist of three to four patient cases or more ^{1–5}. The essential conditions for this type of work to reach publication in this category are, as Sun ⁶ puts it, that it shows “a rare or unusual clinical condition, a previously unreported or unrecognized disease, unusual side effects to therapy or response to treatment, and unique use of imaging modalities or diagnostic tests to assist diagnosis of a disease”.

Case reports may also become part of the literature when they bring to attention particularly bizarre cases. One such report is from 1991 ⁷, where *The New England Journal of Medicine* published the case of an 88-year-old man with Alzheimer's disease who had frequent cholesterol measurements ranging from 3.88 to 5.18 mmol/L *per* liter despite consuming 20 to 30 eggs a day. His metabolism was studied after at least 15 years of the above daily egg intake. The purpose of publishing this case report is clear, as it is unlikely that there will be many patients like this one in the world with similar feeding habits; such an extreme diet could shed

further light on cholesterol metabolism. In addition to being new or unusual, the report must, therefore, have a meaningful purpose.

The main components of this manuscript type are: introduction, case description, discussion, and conclusion ⁸. Although preparing a case report is usually considered far easier than conducting any other elaborate research with a more complex design ⁹, writing a good case report is harder than it seems; this is because of the stringent need to present a case which, albeit isolated or in very limited numbers, must appear so relevant to the scientific community that it deserves publication. To that effect, expert-devised, now widely used guidelines, such as CARE ^{10,11}, have been developed to help authors write high-quality case reports that may be worthy of publication.

Case reports also contain parts of patients' medical records, such as images from radiological diagnostics, pathohistological findings, images of patient body parts, and other clinical findings. It is, therefore, paramount to obtain the patient's, parent's, or guardian's written consent and approval for publication of the case, pictures, or other visual forms in an anonymized version; this is increasingly important when images can be easily uploaded onto websites and quickly reach a vast audience. Approval should also be sought from the hospital's Institutional Review Board/Ethics Committee ¹², particularly when slightly larger case series are presented (more than four cases).

Case reports aim to advance knowledge by highlighting significant and unusual variations in the presentation of a clinical condition and/or in its diagnostic and therapeutic strategies¹³. It follows that, for case reports to be sufficiently interesting to a journal's readership, they should possess both clinical and educational value¹⁴. With this in mind, a thorough literature search is essential to prevent unnecessary writing efforts; what seems unique to the authors may not be as unique to the rest of the medical community. Today, with frequent advancements in medical science and practice, it has become increasingly difficult to find novel enough cases that can make a meaningful impact on clinicians' knowledge and daily practice. The key question that authors, as well as the reviewers of case reports or case series, should ask themselves is whether, by reading the manuscript, clinicians could learn something completely new that could help them in their practice.

Case reports are often considered a weak level of evidence^{15, 16}. Additionally, their often low citation rate puts any journal at risk of seeing its impact factor decrease¹⁷, which has led many editors to remove the "Case report" section from their journals and be more likely to accept this type of paper as "Letters to the editor" or in the "Correspondence" section. On the other hand, some journals are publishing only case reports, such as *Anesthesia and Analgesia Practice*, *Pain Medicine Case Reports*, *British Medical Journal Case Reports*, etc. This fact highlights the role that high-quality case reports can

play in expanding current knowledge and enhancing learning¹⁸. It is also crucial to remember that case reports are often the first step for junior healthcare professionals on the publication ladder; therefore, they have an added educational value.

Undoubtedly, a case report rarely has the impact on clinical practice that double-blind randomized controlled trials, systematic literature reviews with meta-analysis, or clinical guidelines can have⁶. However, it can still be a valuable source of a different kind of meaningful knowledge for clinicians. This is because case reports provide a means for developing and discussing new hypotheses, such as those related to mechanisms of drug action, therapeutic avenues, or diagnostic tools, offering a springboard for the design of later studies and clinical trials¹⁹. However, the authors should avoid using case reports to prove that a certain therapeutic approach works.

While case reports may be considered second- or even third-tier publications, the fact that they may bring to the attention of the clinical community unusual and rare conditions or exceptional clinical events, sometimes repeating under certain circumstances, constitutes an opportunity for the scientific community to ponder these matters and refine existing knowledge. Whatever their 'ranking', any prospective publication should, of course, still satisfy certain requirements around value and quality, which would need to be reviewed, validated, and proofed with similar standards to other types of scientific publication.

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