

Research article

Open Access

Instructions to authors for case reporting are limited: A review of a core journal list

Olanrewaju Sorinola*¹, Olufemi Olufowobi², Aravinthan Coomarasamy² and Khalid S Khan²

Address: ¹Warwick Hospital. U.K and ²Birmingham Women's Hospital. U.K

Email: Olanrewaju Sorinola* - sorinola@talk21.com; Olufemi Olufowobi - femi.olufowobi@bwhct.nhs.uk; Aravinthan Coomarasamy - Arri.coomarasamy@bwhct.nhs.uk; Khalid S Khan - khalid.khan@bwhct.nhs.uk

* Corresponding author

Published: 25 March 2004

Received: 05 October 2003

BMC Medical Education 2004, **4**:4

Accepted: 25 March 2004

This article is available from: <http://www.biomedcentral.com/1472-6920/4/4>

© 2004 Sorinola et al; licensee BioMed Central Ltd. This is an Open Access article: verbatim copying and redistribution of this article are permitted in all media for any purpose, provided this notice is preserved along with the article's original URL.

Abstract

Background: Case reports are frequently published in the health care literature, however advice on preparing such reports using the "instructions to authors" pages of journals is alleged to be limited. However, to our knowledge, this has not been formally evaluated. As roles of case reports may vary according to the case and the clinical specialities, one might expect the advice to authors to vary according to journal clinical grouping.

Methods: We surveyed the current advice available to authors of case reports from 'instructions to authors' pages of a core collection of 249 journals ('Hague' list). These were examined and compared for advice or recommendation on writing case reports. Of these, 163 (65%) published case reports and provided instructions on this publication type. Data were extracted on items of style and content of case reports, using a piloted data extraction form.

Results: Journals that published case reports were grouped into medical (n = 81, 50%), surgical (n = 38, 23%) and generic or multidisciplinary (n = 44, 27%) categories. There was a difference among the medical, surgical and generic or multidisciplinary journals in the maximum number of words and pages allowed but no difference in the number of figures, tables, references, authors, abstract or synopsis, indexing or key words and consent. Additionally, there was no statistically significant difference among the three different categories of journals regarding the content of the case reports.

Conclusions: Of the journals reviewed, we found that 'instructions to authors' pages provided limited and varied information for preparing a case report. There is a need for consensus, and more consistent guidance for authors of case report.

Background

Case reports are frequently published in the health care literature – more than 240,000 case reports appeared in MEDLINE in the last 5 years (1997 to 2002). Advice about preparing such reports in the "instructions to authors" pages of journals that publish case reports is alleged to be limited [1]. However, to our knowledge, this has not been formally evaluated.

The roles of case reports are reported to be diverse. These include recognition and description of new diseases, detection of drug side effects (adverse or beneficial), study of the mechanism of disease, recognition of rare manifestation of disease, and medical education [2]. As some roles may be more suited to certain clinical specialities, one might expect "information for authors" to vary according to journals' clinical grouping. We surveyed and

compared advice on case reporting in different groups of healthcare journals included in the core journal list, 'Hague' list [3].

Methods

A total of 249 journals are included in the 'Hague' list and this served as our survey sample. This core collection of journals produced by the medical information working party of the British Medical Association (BMA) is used as a selection tool for journal subscription in the United Kingdom health care sector, and also as an accreditation standard for libraries serving postgraduate medical education. The journals' "instructions to authors" posted on their websites were surveyed from September 2002 to November 2002. These were examined for advice or recommendation on writing case reports, and data were extracted on items of style and content of case reports, using a piloted data extraction form. Two of us (OS and OO) extracted the data independently and compared our findings for any discrepancies on a pilot set of 20 journals initially. This allowed us to develop an explicit coding system for data extraction.

We obtained data on style of reporting including maximum number of words, pages, figures or illustrations, tables, references and authors as well as the need for abstract or synopsis, indexing or key words, and consent form. For advice on content of case reports, we sought information on nature of cases to be reported including, cases with instructive or teaching point, originality (novel or creative reports), innovative cases (new methods or ideas, including modifications of existing ones), unusual or rare cases, and cases leading to hypothesis generation.

The journals were independently categorised into medical (e.g. *Annals of Internal Medicine* and *Respiratory Medicine*), surgical (e.g. *Journal of Neurosurgery* and *Archives of Surgery*), and generic (e.g. *Lancet*, *British Medical Journal*, and *New England Journal of Medicine*). The agreement between the reviewers regarding classification of journals was 95% (weighted kappa value of 0.89). Differences in style of reporting or content of case reports between the three groups of journals were tested using chi-square for trend and Kruskal-Wallis analysis of variance.

Results

Of the 249 journals review, 163 (65%) published case reports. These included 81 (50%) medical, 38 (23%) surgical and 44 (27%) generic journals. (Table 1).

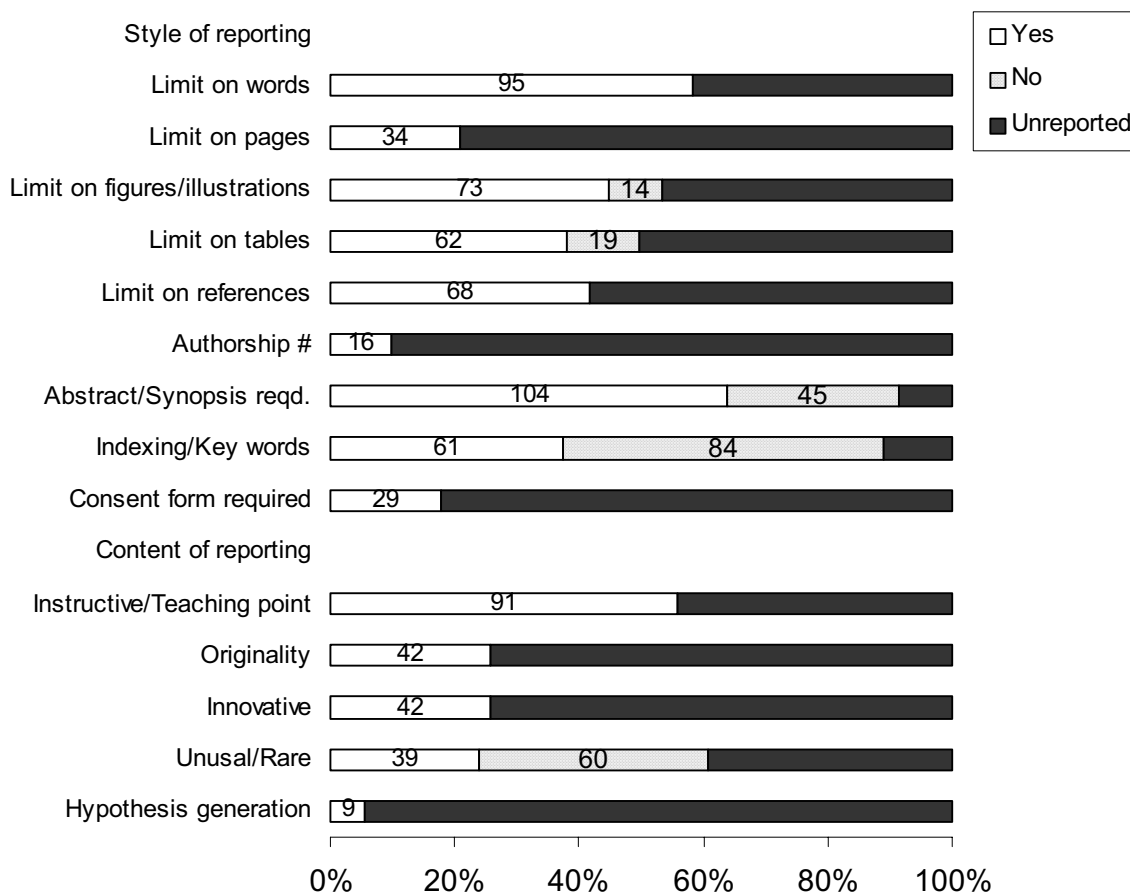
Style of reporting

There was more information on style (i.e. limitation on words, pages, figures or illustrations, tables, references, authors, need for abstract or synopsis, indexing or key words and consent form) than content. Most of the information provided was on the need for abstract or synopsis, required by 150 (92%) journals, closely followed by indexing or key words required by 145 (89%) journals. However information on number of authors allowed for case reporting and the need for consent was provided by only a small number of journals 16 (10%) and 29 (18%) respectively. Out of the 29 journals requesting consent only four (14%) actually provided a consent form. There were significant statistical differences between the medical, surgical and generic groups in the maximum number of words and pages allowed, but there was no statistical difference in the number of figures, tables, references, authors, abstract or synopsis, indexing or key words and consent (Table 1).

Table 1: Comparison of advice on style of reporting and content of case report presented as no (%) or median with interquartile ranges.

	All journals n = 163	Medicine n = 81	Surgery n = 38	Generic n = 44	p value
<i>Advice on style of reporting</i>					
*Limit on words	1000 (750,1000)	1000 (750,1500)	750 (500, 1000)	1000 (925,1000)	0.70
*Limits on pages	4 (2,5)	3 (2,6)	4 (2.75, 6)	1 (1,1)	0.0001
*Limit on figures	1 (1,1)	1 (1,2)	2 (1,2)	1 (1,1)	0.30
*Limit on tables	1 (1,1)	1 (1,1)	1 (1,2)	1 (1,1)	0.45
*Limit on references	8 (5,10)	8 (6,10)	5 (4,8)	9 (5,10)	0.74
*Limit on Authors	6 (4,6)	5 (3,6)	5.5 (3.5, 6)	6 (5.25,9)	0.31
Abstract/Synopsis	149 (91%)	72 (89%)	37 (97%)	40 (91%)	0.30
Indexing/Key word	145 (89%)	70 (86%)	36 (94%)	39 (89%)	0.40
Consent required	29 (18%)	14 (17%)	5 (13%)	10 (23%)	0.52
<i>Advice on content of case report</i>					
Instructive	91(55%)	50 (62%)	16 (42%)	25 (57%)	0.90
Originality	42 (26%)	19 (23%)	8 (22%)	15 (34%)	0.07
Innovative	42 (26%)	15 (19%)	10 (26%)	17 (39%)	0.25
Unusual/Rare	99 (61%)	53 (65%)	18 (47%)	28 (64%)	0.63
Hypothesis generation	9 (6%)	4 (6%)	2 (5%)	3 (7%)	0.55

Data are reported as median with interquartile ranges, the others as actual numbers with percentages in bracket.



Legend:
 Yes – If the criterion was required by the journal.
 No - If criterion was specifically not required by the journal.
 Unreported- If no information was provided by the journal.

Figure 1
 Summary of journals' instructions to authors on case reporting

Content of case reports

The majority of information provided was on whether the case has to be unusual or not, provided by 99 (60%) journals, or have an instructive or teaching point required by 91 (55%) journals. This was followed by original and innovative cases required by 42 (26%) journals each, while only 9 (6%) journals considered hypothesis generation a reason for reporting the case. There was no significant statistical difference between the three groups of journals. The results for style of reporting and content of case reports in the three groups are summarised in Table

1, while Figure 1. summarises the advice on style and content for all journals considered.

Discussion

There was a wide variation in the instructions given by the journals to authors on case reporting. The instructions to authors provided more information on style of reporting than on the content of the case report. Statistically, there was no difference between the three groups of journals with regards to the information provided on content. The recommended length of case reports varied from 500 to

Table 2: A suggested checklist for writing case reports (based on advice in existing literature)

Title:
<ul style="list-style-type: none"> • Should facilitate retrieval with electronic searching.
Introduction
<ul style="list-style-type: none"> • Describe whether the case is unique. If not, does the case have an unusual diagnosis, prognosis, therapy or harm? • Describe how the case contributes to scientific knowledge. • Describe the instructive or teaching points that add value to this case.
Methods and Results
<ul style="list-style-type: none"> • Describe the history, examination and investigations adequately. Is the cause of the patient's illness clear-cut? What are other plausible explanations? • Describe the treatments adequately. Have all available therapeutic options been considered? Are outcomes related to treatments?
Discussion
<ul style="list-style-type: none"> • Report a literature review of other similar cases. Describe how is this case different. • Explain the rationale for reporting the case. What is unusual about the case? Does it challenge prevailing wisdom? • In the future, could things be done differently in a similar case?

2000 words with a median of 1000 words. Tables, figures or illustrations are usually limited to one. One-quarter of the journals require the case to be original or innovative, while the others place a greater emphasis on succinctly illustrating a single educational point. Consent was specifically requested by only 29 journals (one-sixth), in spite of the fact that there may be information within these reports that may allow identification of the patients. However, opinion is divided on whose responsibility it is to provide the consent. Is it that of the journal or the institution? With the Health Insurance Portability and accountability (HIPAA) regulations in the United States, the responsibility somehow lies with the hospital and their legal department to develop an informed consent document for publication in medical journal [4].

Also the scientific importance of the key aspects of the structure of a case report were variably acknowledged and emphasised. Consequently, the quality and standard vary among the journals reviewed.

"In this era of outcome studies and evidence-based medicine, the value of case reports, physician intuition, and serendipity is often overlooked. All science is rooted in observations, and full-time clinicians are in ideal position to observe unusual cases, develop rational explanations for the findings, and follow progress to determine if their hypothesis appear to be valid" [5]. Thus, the collected findings from case reports may provide the bases for future researches that will lead to evidence-based treat-

ment. Therefore, it is imperative these cases are reported in the highest possible standard and with great enthusiasm.

We acknowledge that some roles and structure of case reporting might be more suited to certain clinical specialties, therefore, it is conceivable that 'instructions to authors' might vary according to journal categories. However, this does not negate the need for a minimum standard for reporting cases reports. Common sense standards provide a 'method in madness', which is likely to be better than no methods at all.

Our findings make explicit the limited amount of advice available to authors of case reports. The generalisation of these findings is limited to the extent to which, 'Hague' list is representative of the healthcare journals published worldwide. Our study highlights a need for consensus about a minimum standard for case reporting. Based on our review of the author's instructions in this paper and other published literature on case reporting [6-8] a suggested checklist for reporting cases in the medical literature is provided in Table 2.

Authors' contributions

OS downloaded half (50%) of the journals used in the survey from their website, extracted the data, and drafted the manuscript.

OO downloaded half of the journals from their website, extracted the data, and made critical revisions to the manuscript.

AC carried out the statistical analysis and made critical revisions to the manuscript.

KSK provided the original idea, gave guidance during data extraction, and made critical revisions to the manuscript.

References

1. Wright SM, Kouroukis C: **Capturing zebras: what to do with a reportable case.** *CMAJ* 2000, **163(4)**:429-431.
2. Vandenbroucke JP: **In defence of case reports and case series.** *Ann Int Med* 2001, **134**:330-332.
3. British Medical Association Medical Information Working Party: **Collection of Medical Books and Journals.** *Core* 42001.
4. [<http://www.biohealthmatics.com/healthinformatics/hippa>].
5. Brodell RT: **Do more than discuss that unusual case: Write it up.** *Postgrad Med* 2000, **108(2)**: [http://www.postgradmed.com/issues/2000/08_00/editorial.htm].
6. Bignall J, Horton R: **Learning from stories – The Lancet's case reports.** *Lancet* 1995, **346(8985)**:1246.
7. Huston P, Squires BP: **Case reports: Information for authors and peer reviewers.** *CMAJ* 1996, **154**:43-44.
8. Khan KS, Thompson PJ: **A proposal for writing and appraising case reports.** *BJOG* 2002, **109(8)**:849.

Pre-publication history

The pre-publication history for this paper can be accessed here:

<http://www.biomedcentral.com/1472-6920/4/4/prepub>

Publish with **BioMed Central** and every scientist can read your work free of charge

"BioMed Central will be the most significant development for disseminating the results of biomedical research in our lifetime."

Sir Paul Nurse, Cancer Research UK

Your research papers will be:

- available free of charge to the entire biomedical community
- peer reviewed and published immediately upon acceptance
- cited in PubMed and archived on PubMed Central
- yours — you keep the copyright

Submit your manuscript here:

http://www.biomedcentral.com/info/publishing_adv.asp

