

How to Write an Article for the *SAMJ*

THE EDITOR

The first criterion which determines whether an article submitted for publication will be accepted or not, is obviously its scientific content and merit. Any prospective author must realise, however, that observance of the house style and rules of any particular journal where an article is to be presented will certainly improve its chances of acceptance and expedite publication. We regularly publish a concise list of instructions for authors, giving the salient points required in the preparation of the manuscript; in this article they are discussed in more detail. These guidelines will be republished periodically and reprints will be available on request. Careful attention to these stylistic requirements before typing the final manuscript will save considerable editorial time in the preparation for printing and will also ensure that errors, delays and unnecessary correspondence are kept to a minimum. Manuscripts in which these rules have not been sufficiently observed, may be returned to the author for rewriting, even after acceptance.

DRAFTING THE ARTICLE

After the initial research has been completed, it is necessary to draft a general layout of how the material will be presented. As a rule the final article will be divided into the following main sections: Introduction; Patients (or Materials) and Methods; Results; Discussion and Conclusions; and a Summary. It will usually be easier not to write these chapters in their correct final sequence. The Introduction is the most difficult part of the manuscript to compile and therefore it often receives the most attention, with the result that the first few paragraphs read so well that the editor may gain the impression that he has received an article of unusual journalistic merit. It often proves, however, that the rest of the article did not enjoy the same meticulous and protracted attention and the style and grammar soon deteriorate. It may be better, when compiling, to change the sequence as follows:—

Patients, Material and Methods

This is the easiest part of the article to write, for only straightforward concrete facts about subjects, technique, apparatus and similar details are presented. Little diversification is necessary and one must guard against a tendency to present irrelevant information. The reader must merely be concisely informed of the machinations which made the collection of data possible. In the case of clinical trials all ethical considerations as to consent and dangers of side-effects should be stated, so that the reader can satisfy himself that there was due consideration of these matters.

Results

This chapter is also a factual report and is therefore not difficult to compile. Only the actual findings of the particular research project should be presented, and any chance observations not pertinent to the subject under discussion should be kept for some future article. For instance, if a survey to ascertain the average height of schoolchildren also brings to light an unexpected and interesting disease pattern, this should merely be noted, and the details reserved for a future contribution. If the disease pattern had a significant effect on the recorded heights and the primary intention was research into an average height distribution, the data should be abandoned and a new geographical area sought.

The results may be presented in the form of tables, histograms or graphs, which will be discussed later. Many authors have a tendency to overtabulate, under the erroneous impression that such a presentation is more readily assimilable. Such lists are difficult to read and waste valuable space.

It is also important not to burden the reader with interminable lists of findings that have no actual bearing on the eventual conclusions to be drawn. There is no need, in a case report of some rare fracture, to present details of normal haematological findings and similar laboratory tests. Such additional data should be kept available by the author for researchers who request reprints or more information.

Introduction

At this stage this most difficult part of the article may be drafted. In the introductory paragraphs the author should give a short motivation for the research, setting out exactly what the intention of the study is. A common fault is to give too much prominence to historical data. Although it is necessary to indicate briefly what has been done and published in connection with the particular subject, a complete dissertation is out of place and the reader's interest thereby lost. From a journalistic point of view it is important that the first sentence of an article should be succinct and to the point, with sufficient impact to catch and hold the reader's attention. One example will suffice: 'A careful perusal of the literature and discussions with various interested persons have brought to light that, in spite of the importance of the subject, not very much is known about the dietary habits of certain inhabitants of South Africa, especially those living in the vicinity of the Lowveld in Natal.' This sentence should read: 'Little is known about the diet of the peoples living in the Lowveld.'

Discussion

In this chapter the author may permit himself a little more leeway. He should now take into account his own findings and correlate them with what is already known on the subject. But he still may not allow his discussion to wander from the true object of the study, and he should not grasp this opportunity to air various other personal beliefs and prejudices he may hold and which are not strictly germane to the issue under discussion.

Whether a separate chapter should be written in which the final conclusions are given, is a matter of individual taste. Usually it suffices to add a last paragraph which sums up the findings and the conclusions to which they led.

Summary

There is a difference between a summary and an abstract. The latter is intended to be published on its own as a brief rendering of the subject. It will be read in conjunction with other abstracts and the reader will then decide for himself whether he wishes to go to the trouble of seeking a copy of the full text. A summary, however, is intended to give the reader a very brief indication of what the article contains so that he can decide whether the subject is of interest to him and whether he wishes to read the full text. Although a summary should be brief (about 50 words), it must be more than a mere repetition of the title of the article. It should inform the reader what the article contains without, as in the case of an abstract, actually giving all the final findings.

ILLUSTRATIVE MATERIAL

Illustrative material includes all graphs, histograms, photographs and line drawings which cannot be set in type. It does not include tabular material which can be typeset. Diagrammatic presentation of chain reactions, etc. can be accommodated as text, provided that none of the arrows or linking lines run diagonally or are curved. It must be emphasised that even the smallest pictogram cannot be set and must be transformed into an illustration, as the typesetter can only cope with letters, numbers and straight lines that run either horizontally or vertically. The *Journal* printer can also set Greek letters, most mathematical symbols and signs, etc., but everything out of the ordinary, such as a schematic presentation of the benzene ring, must be rendered on a separate sheet of paper so that a block can be made.

Tables

Tables and figures must be cited and their approximate position in the text indicated. Where layout permits, these requests will be acceded to. Each table must be numbered in roman numerals, carry an explanatory caption, and must be intelligible without a complete repetition in the

text. The totals in tables should add up correctly and where there are discrepancies these should be explained in a footnote to the table. Photographic prints of tables are unacceptable.

Illustrations which require blocks for printing can be divided into 3 categories:

Line Blocks

These are drawings (graphs, etc.) which do not contain shading from black through grey to white, as is the case in a photograph. A line illustration has only absolute black on completely white areas, with no transition. Histograms may carry dots, lines or cross-hatching to separate the columns.

Half-Tone Blocks

These include all photographs and other illustrations that show shading from black through grey to white. In order to reproduce these a block must be made by means of a screening process which breaks the picture into thousands of dots, as can be seen when applying a magnifying glass to any such published illustration. These blocks are obviously more expensive to produce than line blocks. All photographs should be submitted as glossy prints, with good contrast. The fineness of the mesh screen used will determine the quality of reproduction but it also influences the price of the printing.

Colour Illustrations

Full-colour illustrations have to be separated into the 4 primary colours—black, red, blue and yellow, each colour requiring a separate block which is printed separately. Such precision printing is costly and time-consuming. Even just one additional colour, added to a histogram for instance, necessitates a second run through the printing press.

Costs

In view of the escalating costs of block production, illustrations should be kept to an absolute minimum and each one must serve a specific useful purpose. It is, for instance, unnecessary to submit a photograph of a new anaesthetic machine unless this illustration clarifies a point that cannot be concisely described in the text. The *Journal* pays the first R20 of the block costs per article, but any excess amount is charged to the author. Where possible, an estimate of the excess cost will be given, but as this figure can often only be assessed after printing, such pre-warning is not always possible. If more than 4 illustrations are submitted, order of preference should be indicated, should the editor decide to delete some.

It is important to note, as has been pointed out in recent editorials,^{1,2} that even when the cost of illustrations is sponsored, one must not lose sight of the fact that such sponsorship depletes funds which might otherwise have been available for research.

The Size of Figures

All figures will be adjusted in size to a width of 8,5; 11,5; or 17,5 cm and the vertical height will vary in accordance. It is therefore extremely important that a possible reduction in size be kept in mind when illustrations are prepared. It is not possible to reproduce an illustration which is submitted with a vertical height of, say, 50 cm and a width of 15 cm, for even with reduction to a width of 8,5 cm the vertical height will still be more than the maximum of 22 cm that can be accommodated on a *Journal* page. Otherwise the actual size, within reasonable limits, of the submitted illustration does not matter very much. However, very large illustrations that cannot be bent or folded do present filing difficulties at the *Journal* offices.

Careful attention should be paid to the effect of reduction in size, and in this regard it is particularly important to remember that spaces as well as actual markings are reduced. This may mean that a broken line, where the dashes are very much longer than the breaks, may after reduction appear as a solid line. Lettering on illustrations should also be done with this in mind. A map, for instance, drawn on a sheet of paper 100 × 100 cm can be reduced to *Journal* size, but if the place-names have been stencilled in a letter size such as a normal typewriter prints, they will be unreadable after reduction.

As it is impossible to change any detail on an illustration after a block has been made, it is important to ensure that the illustration be submitted in its final form.

Annotation of Illustrations

Every illustration should be accompanied by a legend, submitted on a separate sheet of paper and not written on the back of the illustration itself. The legend should never appear on the front of the illustration, not even in the case of graphs or histograms. The back of every illustration should be clearly marked with a number corresponding to the legend, and the 'top' indicated. This information is best written in the centre of the illustration, as it may otherwise be lost during trimming. Unless there is a very definite reason for indicating the top of a photomicrograph, this should not be done, as it is often possible to save space and costs by turning such a photograph on its side.

Photographs and illustrations submitted for the same article should be, as nearly as possible, of the same original size, as this also saves costs when making the blocks, because they can then be reduced *en bloc*.

REFERENCES

Unnecessarily citing numerous references is probably the most common failing of most authors. Long lists of references create an impression of erudition and may seemingly lend weight to statements in the text, but with few exceptions, careful analysis of such cited material proves unprofitable. It is certainly essential that sources be named where the information is pertinent, but in many cases the author merely renders a list of references as they were given to him by the librarian, without any sifting. It is our future intention to limit the number of references to 10 per article and we can only accept more under certain special circumstances, e.g. review articles.

As the control, editing, and proofreading of references are the most arduous and time-consuming tasks of the editorial staff, it is essential that they be afforded meticulous attention before the manuscript is mailed. Every library has copies of *World Medical Periodicals* which give standard abbreviations as well as lists of accredited journals, and authors should consult this book before compiling their reference lists. It is particularly important to ensure that the spelling of authors' names and their initials are correct, as it is difficult for us to check these. It often happens that an author's name is spelt differently in the text and in the list of references. Such lack of attention to detail causes untold waste of time and energy.

When referring to articles which appeared in scientific journals, the names and initials of all the authors must be supplied as well as the name of the journal, correctly abbreviated, the date, the volume number and the page number, in the correct order, thus:

1. Webster, T. J., Carlson, S. H., Berman, T. F. and Jackson, C. V. (1975): *S. Afr. Med. J.*, **49**, 1027.

It is not enough to give only the principal author's name and to add *et al.* or 'and co-workers'. These phrases should, however, be used in the text (but only when it is really necessary to refer to the actual authors by name) if there are more than 2 authors, thus: 'As early as 1927 Henderson *et al.* published an article in which . . .' If there are only 2 authors both names should be given in the text, thus: 'As early as 1927 Henderson and Peters published an article in which . . .'

When referring to books, the name of the author or editor must be given as well as the name of the book, the name of the publisher, the place and date of publication and the page number on which the passage referred to occurs, in the following order:

- Anderson, J. in White, G. ed. (1978): *The Neural Cause of Psychosomatic Pain*, p. 388. Bloemfontein: African Medical Press.

No references may be included that are not actually cited in the text, and unless they have very specific bearing on the content, references such as 'personal communication' and 'article in preparation' cannot be allowed. If the author has a considerable number of reference articles which may be useful to other researchers who wish to continue the work, he may append a footnote to the effect that such further material is available from him on request.

ACKNOWLEDGEMENTS

On the whole, acknowledgements are mostly unnecessary and should be included only if there is a specific reason why certain help or financial assistance should be mentioned. As a general rule only acknowledgement of actual work done or monies supplied will be included. Encouragement, advice, etc. are personal matters between the author and his colleagues, and need not be mentioned in the *Journal*. In future it will be assumed that the author had obtained the permission of the hospital authority concerned before submitting the article to the *Journal*, and therefore acknowledgements of permission to publish will no longer be printed.

NAMES AND TITLES

The names of all the authors of an article must be given on the title page of the MS and the degrees and affiliations must be set out according to the correct style. Unless otherwise indicated, the author who submitted the article will be regarded as the principal and all editorial correspondence will be addressed to him. In accordance with international practice, the principal author's name should appear first, followed by the names of the co-authors, with the head of the department appearing last. The capacity in which the particular research was done should be mentioned, rather than a list of all the appointments held by each author. For instance, if an article emanates from the vascular diseases clinic of a particular hospital, appointments held in this regard should be cited, but there is no need to list affiliation with other organisations, such as teaching posts or honorary appointments on boards.

Academic titles must be cited in accordance with the accepted abbreviations as listed in the Medical Register. In the case of registered medical practitioners it is to some extent possible to check the detail against the information given in the Medical Register, but as this register appears only once a year it is not always completely up to date. Medical authors not registered in South Africa and authors not on the Medical Register should be particularly careful that the information is complete and correct, as it is virtually impossible for the editorial staff to control such data.

It should be noted that a higher clinical degree supersedes a lower degree and the latter need therefore not be cited. In the case of non-clinical degrees, it must be borne in mind that in a clinical sense an M.D., for instance, cannot supersede M.B. Ch.B., as only the latter will allow the doctor to practise medicine.

TRADE NAMES, PROPER NAMES AND SPELLING

In accordance with a directive from the SA Medical and Dental Council, authors should ensure that names of preparations mentioned are the ones commonly known and used by the average reader, in order to avoid any

possible danger of confusion. Although it is therefore theoretically preferable to use only generic names when referring to pharmaceutical products, in practice the inclusion of the trade name may be unavoidable and even advantageous in many instances.

The names of instruments, techniques, etc. must be very carefully controlled by the author, as it is difficult for the *Journal* staff to check spelling and accuracy of technical and trade names. It often happens, unfortunately, that the names of equipment, trade names, etc. appear in the same manuscript spelt in different ways.

THE FINAL MANUSCRIPT

Before the final manuscript is typed, the draft should be read again with the utmost critical attention. It cannot be expected of every researcher that he or she be able to write journalistic copy of high standing, but careless mistakes are unforgivable and smack of a lack of attention to detail, which will not enhance its chances of acceptance. Not even the most inexperienced author can be excused for writing mEq/litre in 3 different ways in the same paragraph, and yet such mistakes abound. Articles should be kept as short as is reasonably possible and authors must expect severe editing in order to shorten the text if needless repetition or verbosity is indulged in.

Where there are alternative, recognised ways of spelling a word, authors must accept that for the sake of conformity the usual house style of the *Journal* will be followed.

Italics may be used and these are indicated on the typescript by underlining the words in question. All words in foreign languages should be written in italics, and sometimes specific points may be emphasised in this way, but it is important to remember that impact is lost if this is done too often.

The numbering of consecutive paragraphs or facts serves no purpose unless these numbers are referred to again later in the text. Patients should not be identified as 'Mrs J. v.d. M' or 'Mr R.S.' If specific cases need to be referred to, they can be numbered. In this respect it is important to ensure that the names of the patients are blotted out on illustrations, particularly on X-ray films. If, for a clinical reason, it is necessary to present a recognisable photograph of any patient, prior consent should be obtained and the editor be so informed. In all other instances the face or part of it should be blotted out before submitting the photograph.

Percentages and decimals should be rational, for instance '7 out of 9 (77,77%)' should read '7 out of 9 (78%)'. The following details should receive special attention:

Figures, Abbreviations and Symbols

Figures should be given as numerals except at the beginning of a sentence, thus: 'Four of the 5 patients completed the course.' Note that the custom of giving concentrations as mg% is incorrect, as this implies that

the concentration is x mg/100 *mg*, whereas in most instances in clinical medicine the author means x mg/100 *ml*.

The symbols for milligram, gram, millilitre, etc., being symbols, are written without a stop, thus: 25 mg/day. Note that these are not abbreviations, and a complete list of these symbols may be obtained from the Metrication Advisory Board of the SA Bureau of Standards, Private Bag X191, Pretoria.

For the sake of easy reading it is sometimes desirable that long and intricate names, e.g. serum glutamic oxaloacetic acid transaminase (SGOT), be abbreviated. Such abbreviations must be used sparingly and only if the name occurs frequently in the text, otherwise the space saved is not justifiable. Nothing is more exasperating to the reader than to be confronted by a text studded with obscure or arbitrary abbreviations, which may not always be familiar to him.

Headings and Subheadings

Most authors tend to over-classify but it is nevertheless necessary to break the text into various divisions by means of headings and subheadings. The *Journal* uses three different headings in an order of priority: the main chapters are divided by headings printed bold in the centre of the page, thus:

'PATIENTS AND METHODS'

The next subheading, which will further break down the particular chapter, begins at the left-hand margin and the text starts under the subheading as a paragraph. The subheading is printed bold, with initial capitals, thus:

'Selection of Patients

The survey included all . . .'

Finally, a subheading further dividing the above starts as a paragraph and is printed bold in smaller type. The text runs straight on, thus:

'Age of patients: The average age of the patients . . .'

Telegraphic Style

The telegraphic style of writing is never acceptable, not even when laboratory results are listed. Contrary to common assumption, a telegraphic style saves but few words and virtually no space and it is irritating. One example suffices: 'Abdomen distended. Liver enlarged 2 fingers. Cyanotic. Pulse not palpable.' When this is written in a normal, more readable way, 'The abdomen was distended and the liver 2 fingers enlarged. There was cyanosis and no palpable pulse', only 26 more letters and spaces are needed, representing exactly half a line in normal *Journal* print.

Typing the Manuscript

The final manuscript should be typed on good quality paper, with very wide margins (at least 3 cm) and triple spacing. Carbon copies or photocopies are not acceptable and thin paper makes editing and typesetting extremely difficult. A carbon copy of the manuscript should be submitted with the original, and duplicate copies of photographs will be welcome, as these can then be forwarded to the referees. Title page, summary, tables, legends to illustrations and references must be on separate sheets of paper, as these are set in different typefaces.

A limited number of corrections of typing errors are permissible for this obviates the retyping of the manuscript, especially where secretarial help may be at a premium. It is, however, of the utmost importance that the manuscript *be submitted in its final form*. Any changes made in the text after editing and setting may be charged to the author.

Before finally sealing and posting the manuscript, make sure that all material such as illustrations, separate sheets with legends, etc., are included. These are frequently missing when envelopes are opened at the *Journal* offices.

THE GALLEY PROOFS

The principal author is sent a galley proof together with the edited manuscript for checking. Experience has taught that this is the stage in production where manuscripts are most often delayed. Authors should ensure that the galley proofs are read and corrected with minimal delay. If an author expects to be unavailable when the galley proofs arrive, he should appoint someone to attend to them in his absence. When proofs are scrutinised, the following points should receive special attention:

Information Requested by the Editor

Sometimes certain items in the text are not quite clear and need further elucidation. Such requests for information will be clearly marked on the galley proof and on the manuscript and must be given careful attention. It frequently happens that proofs are returned without these queries having been answered. This results in delay in publication, as the author has to be contacted again.

Printing Errors

The galley proofs should be read, preferably by an experienced proofreader, in order to correct any printing errors that may have escaped the notice of the editorial staff. Authors should, however, make sure that they understand the markings on the galley proof, as it often happens that they laboriously correct mistakes that have already been noticed and so annotated by the *Journal* staff. Any changes made must be marked *in the margin* of the galley proof, so that they are clearly discernible. Minute alterations made in the body of the text may well be missed.

Corrections

If the author for some good reason disagrees with alterations made by the editor, he may ask that these be revised, always bearing in mind that our offices are well supplied with dictionaries and other reference books, and more often than not objections to the editing have to be overruled. In this regard the editor has the final say. If no agreement can be reached, the author may withdraw his article. Changes made in the text as late additions may be charged for, as this necessitates costly resetting. It is important to remember that the deletion of a mere comma from a line results in the resetting of the entire line, and because the setter has to search for the particular section in the article, several such changes can be time-consuming and very expensive, and may result in further coincidental typesetting errors.

CORRESPONDENCE COLUMN

Letters to the Editor, intended for publication, should be clearly marked as such. Such published letters also carry an *Index Medicus* and *Current Contents* listing, as well as having an entry in the index of the *Journal*. Letters should be typed in the same way as manuscripts of articles, i.e. in triple-spacing on good quality paper. As no galley proofs of letters are ordinarily sent to authors, it is especially important that the text should be free of errors, as these cannot be rechecked before printing.

Letters should not exceed 500 words unless additional space is arranged beforehand with the editor. Although pseudonyms are acceptable, it is preferred that letters in the *Journal* should carry the writer's name. The name and address of the author must be supplied to the editor, as anonymous letters will not receive attention.

GENERAL REMARKS

The date of receipt of a manuscript will be published in the *Journal* in order to establish research priority. Should an article be returned to the author for revision, the final date of acceptance will be published.

The titles of articles must not be too long, and if need be, a subtitle may be suggested. In accordance with journalistic practice, the editor has the right to change the title of a manuscript.

If material is submitted, such as illustrations which may require copyright release, the author should obtain this in writing and submit a photocopy of the permission with the manuscript.

CONCLUSION

The submitted article is the culmination of a research project and therefore deserves the same attention as was lavished on the work reported. This also holds for semi-philosophical articles, reviews and similar material. The readers of the *Journal* eventually read what is printed, not what was obscurely intended by the author, and although it is the task of the editorial department to render an article as lucid as possible, their burden can be considerably lightened if the author is prepared to spend a little extra time on the final draft. Untidy original copy will leave the impression with the editor and his referees that the research was undertaken in an equally slap-dash manner, and will not increase the chances of acceptance nor expedite publication.

REFERENCES

1. Editorial (1973): *S. Afr. Med. J.*, **47**, 2094.
2. Van die Redaksie (1973): *Ibid.*, **47**, 1621.