

Effective Medical Writing

Pointers to getting your article published

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Why Write?

INTRODUCTION

Writing is one of the distinctive features of human civilisation: like speaking, it is an advanced means of communication among humans. Similar to others who write, e.g. historians and poets, scientists and those involved in medical research need to write in order to leave behind a documented legacy of their accomplishments. While scientists and doctors do not need to be fantastic wordsmiths, it is a great advantage to be able to write clearly and effectively. A successful researcher is usually a good communicator who has the ability to maximise the transmission of research findings to his or her chosen audience.⁽¹⁾

While “doing” the research is important, “writing” about why and how it was done, what was found, and what it means is far more important as it serves as a permanent record of scientific work that has been completed and accepted by peers. In short, research, no matter how “good”, is incomplete, until it has been published. Publication also serves as a benchmark, indicative of having achieved a certain academic standard. Besides communication of a finalised piece of research, the published work also acts as a starting point for additional opinions, criticisms, refutations and discussion—all part and parcel of the scientific process—from fellow professionals and academics separated by time and distance.

Medical writing takes many forms, including theses, books, book chapters, grant applications, course syllabi, abstracts, and journal articles. For doctors, publications in journals that are indexed in a major database such as PubMed (a service of the US National Library of Medicine that includes over 17 million citations from MEDLINE and other life science journals), are probably the most highly regarded, as the published manuscripts are peer-reviewed and widely accessible by an international audience.⁽²⁾

ADVANTAGES OF MEDICAL WRITING

Writing can be a source of enjoyment. The altruistic doctor writes for the pleasure derived from the creative activity of writing and intellectual sharing, and the desire

to advance knowledge and benefit mankind. For these exceptional authors, writing may act as a channel for expressing the joy of scientific discovery, and may even be regarded as a leisurely pursuit.

For the rest of us, the advantages that can be gained from medical writing can be classified into:⁽²⁾

- Career
- Professional
- Institutional
- Practical

Career benefits

During the training period, the importance of written communication is recognised by its incorporation into the examination and accreditation system. Most medical specialty examinations include a written component where the candidate has to write quickly and succinctly within a short period of time. Many overseas professional specialty qualifications incorporate a mini-thesis, complete with the elements of basic research techniques and manuscript preparation. Some of the more progressive specialties in the Master of Medicine examination system, run by the Division of Graduate Medical Studies of the National University of Singapore, are currently in the process of planning the inclusion of a formal thesis component into their programmes.

One of the most compelling reasons for many doctors to start writing is to fulfill specific job requirements set by employers (e.g. hospitals or universities). These include initial appointment to an academic position, renewal or confirmation of that appointment, promotion to a higher-level appointment, and granting of tenure. In some public and private hospitals in Singapore, getting published in recognised journals is a requirement for appointment as a consultant. Having a first author journal publication is also a requirement for specialty accreditation set by some of the specialist training committees in Singapore. Other career benefits include continuing medical education (CME) accreditation, and application for membership of prestigious academic societies. The Singapore Medical Council recognises the value of publication, and awards CME points for successful publication of journal articles

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as part of its requirements for the renewal of a doctors' practising certificate.

Professional benefits

Publications can be regarded as a form of international currency that transcends geographical borders. For young doctors, having published articles in reputable international journals are a great help when applying for positions in foreign institutions, and when applying for competitive overseas fellowships. Publications are an important means for more established doctors to gain recognition as experts in a particular field at regional and international levels; this leads to benefits such as invitations to lecture at scientific meetings and refresher courses, and appointments as consultants to external agencies, expert panels and advisory boards, and to reviewer and editorial boards.

Having publications focused in a specific field or topic is also regarded as an attainment of a certain standard of scholarly endeavour by several prestigious invitation-only international academic societies. From the academic point of view, writing and getting published improves one's prospects of being successful in applications for research funding, extension of funding, and to obtain further funding. Grant-awarding bodies usually closely examine the publication track records of the investigators.

The discipline imposed by scientific study, research and writing increases the practising doctor's depth of knowledge in a particular subject. This knowledge complements and hones clinical skills, and enables better teaching of students, clinical trainees and postgraduates. Through continuous scientific writing and publication in a specific field or topic, the author will also gain acknowledgement as an expert by his or her peers.

Institutional benefits

Publication in peer-reviewed journals is arguably the most important means to achieve international recognition for an individual, department, hospital, and university. The author's country, and even the region, may also derive benefit from published work, particularly if it is on a topic of major importance. Many government bodies and academic institutions use publications as a measure of academic productivity. Published papers not only contribute to an institution's academic prestige and

standing, but may also have an influence on the budget allocation for individual academic cost centres and departments.

Practical benefits

The most important practical reason for why doctors should know how to write is probably the benefit derived from the inherent training gained during the process of manuscript preparation. Scientific writing entails the discipline of performing a thorough literature search, collating and analysing data, and drafting and repeatedly revising the manuscript. Authors who have had their own manuscripts accepted and published will be much better positioned to appreciate what is written in journals and other publications. Having the opportunity to serve as a journal manuscript reviewer is an invaluable learning process and CME activity, and is highly recommended for all practising doctors.

With the huge amount of information now available in many journals and in other forms, it is vital for doctors and academics to be able to judge the quality and reliability of published work. If one has published, and appreciates the writing, reviewing and editing process, then one will be better positioned to critically read and evaluate articles. Being able to provide a discriminatory assessment and judgment of what is written are skills that will make us better doctors. Medical practice is, after all, a knowledge-based profession. Patients always want to be managed by the most knowledgeable and up-to-date doctor; and we, as doctors, look up to and respect the expertise of our more learned peers.

SUMMARY

Research, writing and publication complement teaching/training and patient care. One of the most important reasons for medical writing stems from the inherent training that enables doctors to better appreciate and evaluate the published work of peers. Doctors-in-training should be encouraged to start research and writing early, with the senior members of the profession acting as role models and providing sufficient support.

REFERENCES

1. Peh WCG, Ng KH. Effective medical writing: the nuts and bolts (editorial). *Singapore Med J* 2008; 49:369.
2. Peh WCG. Scientific writing and publishing: its importance to radiologists. *Biomed Imaging Interv J* 2007; 3:e55.