### ■ Guest Editorial

# Writing an academic paper for publication

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## **Background**

This paper on writing for publication aims to help new authors getting started with the process. The paper starts by asking the basic question: "Why should one write an academic paper?" The paper then attempts to answer the questions: "What to write? and "When to start writing?" It also discusses authorship (i.e. with whom to collaborate in the writing process). The focal point of the paper is an advice on the writing process (i.e. how to write). This paper follows on from our earlier paper 'Submitting a paper to an academic peer-reviewed journal, where to start?' in an earlier edition of *the Health Renaissance*.<sup>1</sup>

### Reasons for writing

There are many reasons why academics may want to write a paper for a peer-reviewed journal. Perhaps researchers have interesting (a) research findings; (b) ideas or plans for new research; or (c) on-going research, all of which they may want people to know about. Table 1 suggests a variety of types of publication an academic may want to write. Specifically for health-care researchers, educators and practitioners the aim is to improve existing health care through sharing research results, innovations in teaching and disseminating evidence of good practice. Researchers may also be required by funding bodies or sponsors to publicise their work. Other obvious reasons for getting into print are raising

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the profile and status of: (a) oneself; (b) your department or institution; and (c) your academic discipline. Helping junior staff and postgraduate students to publish their research may act as a motivating factor for both, and finally, writing may be a way of making some money, as some non-academic journals pay authors on publication. Having a strong public profile is also important in terms of attracting funding through grant funding bodies and other institutions.

### **Table 1:** What to write

- Research findings
- Research plans
- Insight into research methods
- Insights into education & training
- Theoretical debate
- Overview of problem (lit. review)
- Review of book or film or software
- Report of a conference or event
- Opinion piece

### **Timing**

There are different points in time in a research project when one might want to submit a paper (Table 2). The first bullet point in Table 2 is the obvious one, i.e. publishing results at the end of a study, but also describing aspects of the research at the start of the study, e.g. the study protocol or throughout the research, e.g. methodological issues that arise. One example of the latter, is after completing the pilot study for a larger project,<sup>2</sup> while a second example describes the way Nepalese respondents write their answers on a questionnaire.<sup>3</sup> Publishers have also become interested in lessons learnt from studies that can be shared with the aim of improving future

research. Hundley and colleagues reported the challenges and lessons learnt from a cluster randomised controlled trial.<sup>4</sup>

**Table 2:** Points in the research process when one might try to get published

- When the study is finished
- When there is a big debate in your field
- When the Government wants your report
- When a journalist comes along
- When you have a research plan
- When you have comments on methods
- When you have pilot data
- When you have presented a conference paper
- When you have revised your curriculum
- When you have finish a literature review in preparation for a study
- When you considering cross-national or cross-cultural collaborations

## **Authorship**

Obviously you will be a key author, but who will be your co-authors? As health research is often conducted in multi-disciplinary teams, a paper can have several authors. Many universities expect a postgraduate students' supervisor to be a co-author in recognition of the time and effort spent in shaping the student's research project. This is, of course, justified where supervisors have contributed to the study design, its analysis and/or writing up of the student's paper. Guidance about co-authorship is generally based on the contributions of each author. The question is: Who has been involved in the study (the work), the analysis, the writing of the drafts, etc?

The International Committee of Medical Journal Editors produced guidance on authorship in the form of the 'Uniform Requirements for Manuscripts Submitted to Biomedical Journals' which is widely followed across the globe (see: http://www.icmje.org/). This specifies that authorship cannot be 'gifted' and that to be eligible an author needs to have made 'substantive intellectual contributions to a published study'. This is important not simply from the perspective of ensuring credit where it is due; gift authorship has in the past got some quite eminent

authors into trouble when the data were subsequently found to be fraudulent.<sup>5</sup>

A special sub-category of researchers who sometimes are forgotten in the authorship discussion are contract or short-term researchers who may have moved on to another job by the time the manuscript gets drafted. Furthermore short term contracts mean that such researchers may not get the chance to develop writing skills, and it is often perceived as quicker for more senior members of the team to write up the work.<sup>6</sup> This highlights the importance of discussing issues of authorship early in the writing process.

Once you have decided who fulfills the authorship requirement, the question is 'What will be the order of authors?' There exist different conventions in journals from different academic traditions. The Vancouver Protocol, the basis for the 'Uniform Requirements for Manuscripts Submitted to Biomedical Journals', is less than helpful in this respect. It simply states that "The order of authorship should be a joint decision of the coauthors. Because the order is assigned in different ways, its meaning cannot be inferred accurately unless it is stated by the authors." <sup>7</sup>

# How to write a manuscript

Follow author instructions! Most journals produce fairly detailed guidelines for authors. However, the first step is identifying which journal is appropriate for your paper. Considerations should include:

- Target audience who are you writing for? For example a study on alcohol use in nursing students in Nepal could be submitted to a nursing journal, an education journal, an alcohol research journal, a public health journal or a general health journal such as *Health Renaissance*. For each audience you would write your manuscript slightly differently.
- Will the journal be interested? consider writing a query letter. Your letter should be addressed to the editor (it is important to get these details correct), propose what you intend to write and explain briefly what the article is about, explain why it is important and why it is of interest to readers of that particular journal, and conclude with a 'call for action' (For example: I hope you

- will consider reviewing my paper, and if so I will be able to submit it by ...).
- Are similar types of paper published in the journal? Taking a look at previous papers can not only help identify if this is the right journal for your paper, but also help identify the manuscript style that the journal prefers.

# Initial manuscript development

Our advice is that you can't start writing early enough. You can start writing when you start your study. Remember that your study starts when you are doing the literature review in preparation for your research proposal. Write down some subheadings, such as literature review, methods, introduction, discussion and add text as your go along. Do not worry about getting it right first time; if the material does not quite fit move it around to another section later on. We like the following quote which highlights that writing is a process to help you think!

"I write because I want to find something out. I write in order to learn something that I didn't know before I wrote it ...not to write until I knew what I wanted to say, until my points were organized and outlined ...." 8

The second most important piece of advice is to raise one or two ideas in a single paper. A very common mistake is the author trying to cram too much information into one paper, making it hard to read and difficult to follow.

In our view the key skills needed to write an article are:

- Planning;
- Identifying a key message;
- Critical thinking (in relation to content);
- Written communication / language;
- Time management.

#### Writing style

If you are writing a findings paper after you have completed a PhD or MSc thesis or a long final report to the funders, try not to simply condense your thesis/report from 100,000 words into 3,000!

 Your 3,000 word academic paper is not a summary of your thesis / dissertation / research

- report! Therefore, drafting a paper needs to start from scratch.
- A good paper is based on one or two main ideas, if your research or thesis has four or five main findings, consider drafting two or three papers for different scientific journals. However, avoid salami publishing, where two papers are too similar and cover, to a large extent, the same material (population, methods, and question).
- Write sections for a paper, often journals specify the sections they expect you to use.
- Stick to the word limit!
- Write a coherent story!
- Stick to the point, be concise and precise.

### The writing process

Different people have different writing styles, but we suggest you write in small sections, you start without thinking too much about grammar, punctuation and style. Once you have some draft sections on paper you can come back to it at any time and edit the text. More importantly, when you have a draft you can both (a) make notes of ideas for later, e.g. things that don't fit your argument exactly; points for your discussion or recommendations; and perhaps more importantly, (b) let a colleague, friend or supervisor read and comment upon your draft.

# Table 3: Common sections is a research-based paper

- 1. Introduction or Background
- 2. Methods
- 3. Findings or Results
- 4. Discussion
- 5. Conclusion / Recommendations
- 6. References

Make use of the various checklists that exist to guide you in structuring certain types of paper. For example:

- CONSORT statement for the reporting of randomised controlled trials (http://www.consortstatement.org/);
- PRISMA statement for the reporting of systematic reviews and meta-analyses (http:// www.prisma-statement.org/);

Many who have written about the writing process advise that you approach colleagues with experience

in writing and publishing academic papers. 9-10 Having a mentor can be useful for a number of reasons:

- Feedback from simply being a sounding board (someone to bounce ideas off) to providing more structured feedback on your writing;
- Support and encouragement sharing experiences of what works and how to deal with challenges;
- Help meeting deadlines / target dates.

# Writing style

Read a number of articles in your target journal so as to see what style of writing is in the journal. The more biomedical journals commonly apply a very passive grammar, using phrases like: 'The study was conducted ...', 'the researchers found that ...' etc. More social and behavioural science journals accept an more active voice, e.g. the author may write 'I reflected on my findings and conclude that ...' The style may also depend on the kind of study you have conducted, as qualitative studies are more likely to be written in the active voice of the first person compared to more statistics-based papers.<sup>11</sup>

### Abstract or Summary, write this last!

Contrary to popular belief you should write the abstract last; write it when the paper is completed to ensure that the abstract actually covers the paper you are submitting. Remember apart from the title the abstract is the part that the reader sees first. Therefore, it needs to be informative and accurate but also interesting - enticing the audience to read the full paper. If you are drafting an abstract for a (large) conference there are a few other considerations as out lined in Table 4. First establish for which part or stream of the conference your presentation or poster is most suited. Then outline what kind contribution you propose to make to the conference, e.g. is it practice-based, research-based, policy-analysis. Next write down the key points, put this into short sentences and find an appropriate title, finally double check the submission criteria provided by the conference organisers.

### Table 4: Six steps to writing an abstract

- 1. Find stream where your topic best fits;
- 2. Is your topic empirical (research based), or an issue, programme or policy-driven?;

- 3. List main points in bullet form;
- 4. Convert bullet points into linking sentences;
- 5. Think of a descriptive title; and
- 6. Re-check your abstract using the conference checklist and submit.

Make sure that the abstract reads easily with each sentence following into the next; in the final draft, bullets or numbers should only be used for lists. Remember this is only an abstract; use a clear, direct writing style.

# Using quotes at the start of a paper?

When presenting sessions on writing for publication at colleges in Nepal we are often asked afterwards what we think of starting an academic article in the health or medical field with a quote. We are not keen; especially not a quote from a famous person or another author. We feel it is a little pretentious and the quote rarely add to the scientific quality of the paper.

## Title of paper

Start with a working title and check if your working title is still appropriate when you are finished. Your title should be descriptive & simple (but not too brief).

- "Children, barriers & facilitators: Time for change"- looks cute but doesn't tell us which children, which barriers/ facilitators, or which changes
- "Midwifery training centre"- too general
- "Birth in Nepal"- too brief
- "HIV/AIDS knowledge among female sex workers in Nepal"- clearer and more detailed clearer
- Your title needs to help reviewers categorise your presentation and may eventually help conference delegates find your session.
- For the title, don't worry about being bland. You need to describe the topic.

# Table 5: Checklist for final draft of the paper

- Can people from other disciplines understand your paper?
- Does it give a sense that someone will get more from the presentation than from just reading the research paper?
- Is it clear and concise?

- Have acronyms & abbreviations been explained?
- Too much introductory material / text that sets context?
- Has someone checked it over to ensure it is free of grammatical errors, spelling errors and awkward sentence structure, and that it is factually correct?

Have you adhered to required word limit and other author guidelines?

## Selecting appropriate keywords

Most journals ask you to provide a list of 5 to 10 keywords, that they can use to classify and organize their content. The list of keywords is especially important for indexing the article so that search engines and readers can easily find your article if it is related to what they are looking for. It is important that articles are found online, quickly and accurately, ideally within the top three hits. The use of keywords helps to increase the chances of the article being located, and therefore cited. The key to this is the appropriate use of keywords. Do not pick up the keywords those are already in your article title. Be careful when choosing and note that a keyword does not have to be made of only one word! This is a common misconception, for example, "sex workers" is a keyword by its self. If you are not sure which keywords are the most suited for your work, just take a look at your article and note the words that you are using a lot in the text. Authors should know the key phrases for their subject area. Key words may differ from the actual text used in the title and abstract, but should accurately reflect what the article is about.

## Final thoughts

There are a few rules (do's and don'ts) that can help the novice writer stay out of trouble. First do not submit the same article to more than one journal at the time. Once you are rejected by your first choice journal you can submit your paper to another one, but not at the same time! Although we advised above not too cram too much information into a single paper, it is also not acceptable to reuse large chunks of a paper more than once in attempt to get more papers out of a single study. This undesirable habit is referred to as 'salami slicing.' Above all report your work honestly; you don't want to have to retract it further down the line.

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