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Writing scientific papers for publication in international peer-reviewed journals

Practical guides for non-English speaking health researchers

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(DRAFT FOR COMMENTS)

WRITING SCIENTIFIC PAPERS FOR PUBLICATION IN INTERNATIONAL PEER-REVIEWED JOURNALS

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Number of scientific papers published in international peer-reviewed journals (as of May 2018): 123

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Number of scientific papers published in international peer-reviewed journals(as of May 2018): 127

"Writing scientific papers for publication in international peer-reviewed journals is NOT AN EASY TASK but it is DEFINITELY ACHEIVABLE"

FOREWORD

Writing scientific papers for publication in international peer-reviewed journals is becoming an important professional objective of many scientists. Nowadays, more and more scientists are considering scientific publications as an essential part of enhancing their academic reputations. Many academic institutions now view the number of scientific publications as a key measure of research productivity of their faculty members. Furthermore, doctoral students from many universities are required to have their research work published before they can defend their dissertations.

However, many researchers, especially those working in the health system, consider the tasks of writing scientific papers and having them published in international peer-reviewed journals, very challenging. We do agree that the task is not easy. However, we also strongly believe that the task is definitely achievable.

This book, is written based on our reviews and synthesis of the current scholarly literature as well as our own experiences, and is designed to provide readers with key concepts relevant to scientific writing and practical approaches and tips for successful preparation of scientific manuscripts that can be submitted to international peer-reviewed journals.

We do think that the book can be further improved and I look forward to receiving comments from readers for improving the book.

We hope the readers will find this book useful.

Good luck with your writing!

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Basic concepts

Scientific paper

A SCIENTIFIC PAPER (or article)[1] refers to a piece of academic writing which aims to provide readers with scientific evidence based on a theoretical construct, a field-based research project or a review of scientific literature. A scientific paper is considered as an effective way of sharing research results with the world.

Types of scientific papers

Although there are a number of types of articles published, most articles published are one of the following types: 1) Original research; 2) Review; 3) Short report or Letter; 4) Case Study; and 5) Design or methods paper.

ORIGINAL RESEARCH[2] is the most common type of journal paper used to publish full reports of data from a research project. Depending on the journal, it can also be called an original article or just original research. Original research articles are primary sources of scientific literature and present findings from an original study. Authors conduct research on a particular topic through experiments, surveys, observations, etc. and report the findings from their research in the form of original research papers.

Criteria of a good scientific paper

A good scientific paper must come from GOOD RESEARCH. A good research needs to satisfy the following criteria: 1) Relevance (Addressing important, serious, urgent health problems); 2) Timeliness; 3) Clear objective(s); 4) Being designed and conducted based on scientific conceptualization and theoretical frameworks; 5) Following currently accepted research methodology; and 6) Consistent with generally accepted ethical principles.

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[1] *Also known as an academic or a scholarly paper (or article),*
[2] *In this book, we focus on the guide for writing Original Research paper*

A GOOD SCIENTIFIC PAPER needs to satisfy the following criteria: 1) Clear; 2) Logical in structure; 3) Providing sufficient details on the rationale, objectives and methods of the research; 4) Presenting and clearly explaining findings from the research; and 5) Properly formatted and no grammatical errors and typos.

Peer-reviewing process

Before a scientific paper is accepted for publication and then is published, it has to be reviewed by other scientists (peers) with experience within the relevant fields (referees). The PEER-REVIEWING PROCESS aims to guarantee the academic standards of scientific papers and provide credibility of all scholarly works. Peer reviews also help to increase networking possibilities within research communities.

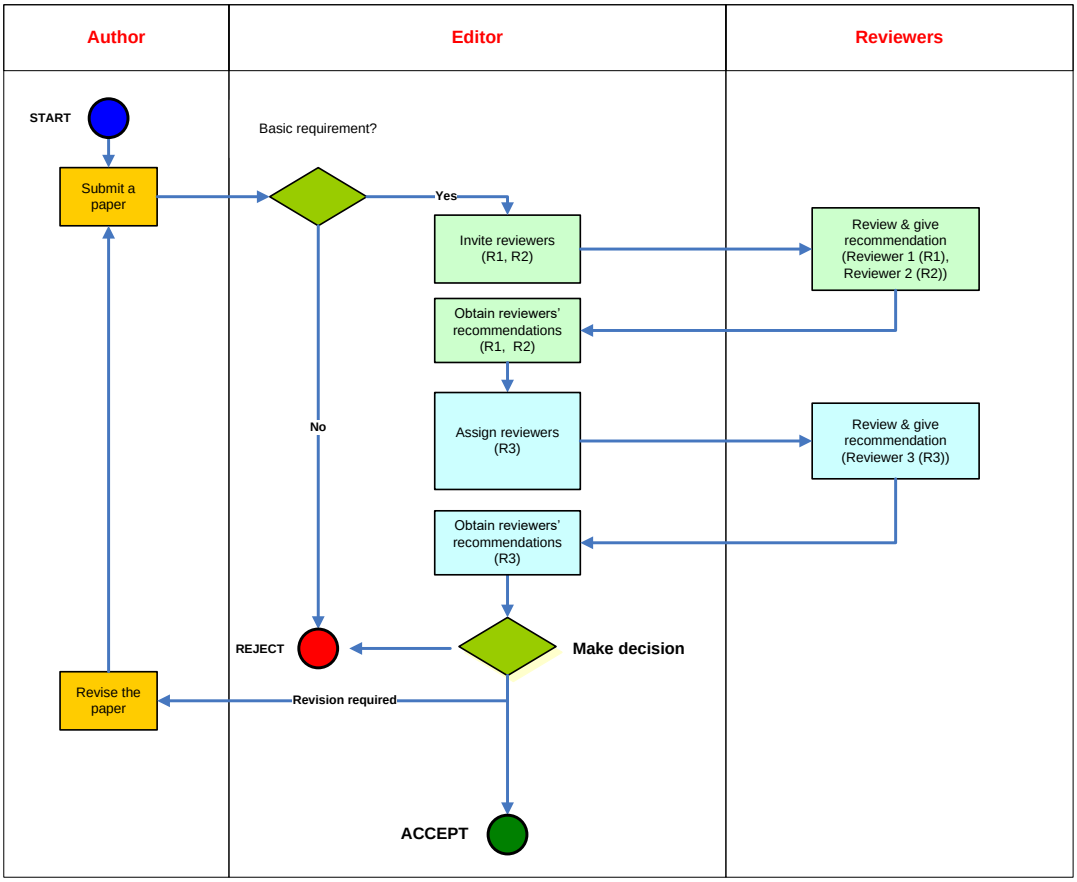


Figure 1: Example of peer-reviewing process

Peer-reviewed journals

PEER-REVIEWED (OR REFEREED) JOURNALS are scholarly (or academic) journals that only publish articles that are accepted based on a peer-reviewing process. Academic journals also serve as scientific forums for the presentation, scrutiny and discussion of research.

Bibliographic databases

Peer-reviewed journals are usually indexed by one or more bibliographic database(s) such as INSTITUTE FOR SCIENTIFIC INFORMATION (ISI), SCOPUS and MEDLINE:

- The ISI, belongs to Clarivate Analytics in the USA (previously Thomson Reuters), has a famous online subscription-based scientific citation indexing service Web of Science (previously known as Web of Knowledge). The ISI also publishes the annual Journal Citation Reports (JCR), an annual publication which lists an Impact Factor for each of the journals that it tracks.
- Scopus is a large interdisciplinary database from Elsevier, with particular strengths in science and technology. Scopus gives four types of quality measure for each title; those are h-Index, CiteScore, SJR (SCImago Journal Rank) and SNIP (Source Normalized Impact per Paper).
- Medline (Medical Literature Analysis and Retrieval System Online, or MEDLARS Online) is a bibliographic database of life sciences and biomedical information which belongs to the United States National Library of Medicine (NLM). It includes bibliographic information for articles from academic journals covering medicine, nursing, pharmacy, dentistry, veterinary medicine, and health care. MEDLINE also covers much of the literature in biology and biochemistry, as well as fields such as molecular evolution. Medline is freely available on the Internet and searchable via PubMed and NLM's National Center for Biotechnology Information's Entrez system.

Open access journals

OPEN ACCESS JOURNALS refer to web-based journals that provide readers with free access to their articles (e.g. certain copyright and license restrictions)[3]. The open access movement is motivated by the problems of social inequality caused by restricting access to academic research, which favour large and wealthy institutions with the financial means to purchase access to many journals, as well as the economic challenges and perceived unsustainability of academic publishing. Authors (or their funders) usually pay for publication fees but waivers can be given to authors from less developed countries.

Journal's impact factor

Nowadays, the relative importance of a journal within its field is measured by an impact factor (IF). Journals with higher impact factors are often considered to be more important than those with lower ones. The impact factor was devised by Eugene Garfield, the founder of the Institute for Scientific Information. Impact factors are calculated yearly starting from 1975 for journals listed in the JOURNAL CITATION REPORTS (JCR) (https://clarivate.com/products/journal-citation-reports/).

The IMPACT FACTOR (IF) or journal impact factor (JIF) of an academic journal is a measure reflecting the yearly average number of citations to recent articles published in that journal. In any given year, the impact factor of a journal is the number of citations, received in that year, of articles published in that journal during the two preceding years, divided by the total number of articles published in that journal during the two preceding years.

$$\mathrm{IF}(y) = \frac{\mathrm{Citation}(y-1) + \mathrm{Citation}(y-2)}{\mathrm{Publication}(y-1) + \mathrm{Publication}(y-2)}$$

[3] *ROBERTS, R. G. & ALFRED, J. 2013. Collection overview: ten years of wonderful open access science. PLoS Biol, 11, e1001688.*

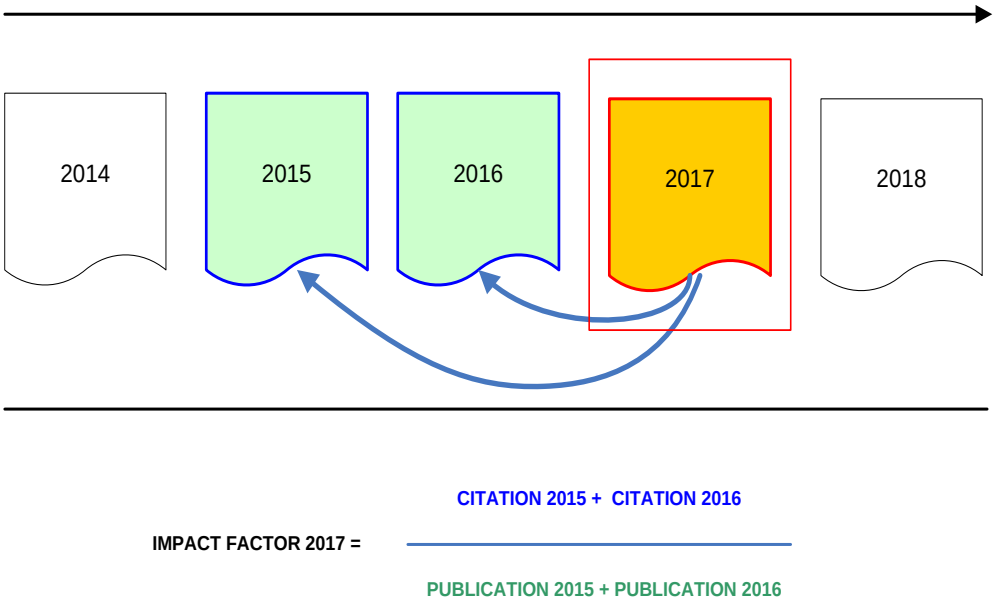


Figure 2: Calculation of impact factor

For example, calculation of 2017 IF of journal X:

- The total number of papers published in 2016 and 2017 were 100 and 150, respectively.
- The number of times papers published in 2016 and 2007 were cited by indexed journals during 2017 were 200 and 300, respectively.

$$\text{IF (2017)} = \frac{200+300}{100+150} = 2$$

The Journal Citation Reports (JCR) also includes a five-year impact factor, which is calculated by dividing the number of citations to the journal in a given year by the number of articles published in that journal in the previous five years.

Author(s) of a paper

The International Committee of Medical Journal Editors (ICMJE) recommends that AUTHORSHIP be based on the following 4 criteria[4]:

[4] *http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html*

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

H-index

The H-INDEX (Hirsch index) is an author-level metric that attempts to measure both the productivity and citation impact of the publications of a scientist or scholar. The h-index reflects both the number of publications and the number of citations per publication. The index works properly only for comparing scientists working in the same field; citation conventions differ widely among different fields. A scholar with an index of h has published h papers each of which has been cited in other papers at least h times. The h-index grows as citations accumulate and thus it depends on the "academic age" of a researcher.

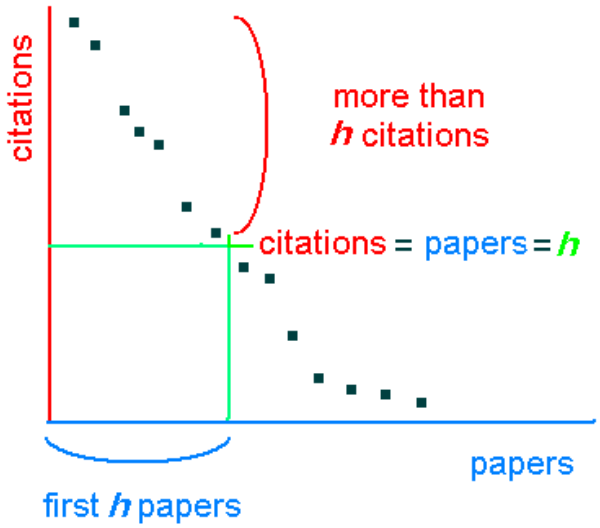


Figure 3: H-Index

Qualification and skills required for writing a scientific paper

Writing scientific papers for publication in international peer-reviewed journals is a job of QUALIFIED RESEARCHERS. To be able to produce publishable scientific papers, a qualified researcher (in the health field) needs to have the following qualifications:

1) Good understanding of health system and relevant policies and practical contexts;
2) Good knowledge and experience of the specific topic(s) addressed by the paper;
3) A systematic and analytical mind;
4) Confidence;
5) Commitment; and
6) Patience.

The REQUIRED SKILLS for qualified researchers include:

1) Research related skills, especially regarding searching and synthesizing literature,
2) Methodologic skills including knowledge of appropriate statistical analyses, etc.;
3) English skills (i.e. can read and write reasonably good English);
4) Computer skills (being able to use Word, Excel as well as some research support computer programs like EndNote, Stata, SPSS, etc.).

All these skills need to be developed gradually over time. The more practices you do, the faster you obtain these skills. .

Key steps in writing a scientific paper

Please be aware that writing scientific papers for publication in international peer-reviewed journals is NOT AN EASY TASK but it is DEFINITELY ACHEIVABLE. So please be OPTIMISTIC! However, the writing process takes times, requires acute attention to details and thus can be tedious at times, so please be WELL PREPARED (mentally, physically and time) to ensure that you will not give up.

GOOD PLANNING always helps to increase the chance to be successful with an academic writing process. Please specify steps of the writing process and assign a due date for each step.

10 KEY STEPS in writing a scientific paper are:

1) **Determining the main topic and the objective(s) of the paper**
2) **Selecting an appropriate target peer-reviewed journal**
3) **Searching and summarizing relevant literature**
4) **Creating an EndNote library and determining a right referencing style (Refer to the journals specific instructions to authors)**
5) **Creating an outline for the paper**
6) **Writing the first draft manuscript**
7) **Rewriting the manuscript**
8) **Revising the manuscript**
9) **Seeking for comments on the manuscript from supervisors, colleagues**
10) **Getting the manuscript edited by a native English professional**

We will discuss some steps in more details in the next sections.

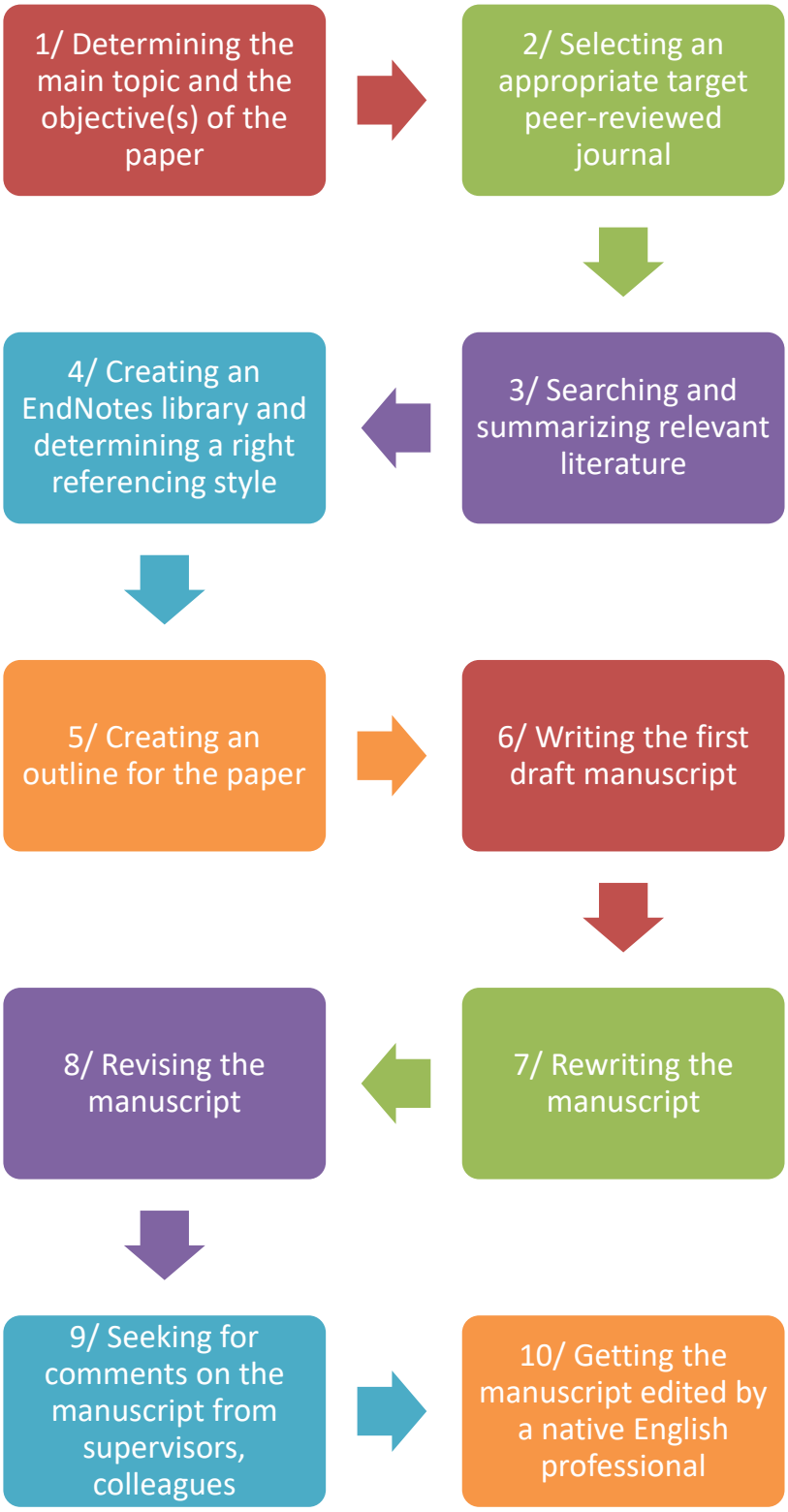


Figure 4: 10 key steps in writing a scientific paper

Determining the main topic and the objective(s) of the paper

Please determine THE MAIN TOPIC of the paper as soon as possible as this will guide you through the next steps.

The topic of the paper can be classified by health area:

- Clinical medicine
- Nursing research
- Basic, laboratory research
- Public health, community health, health promotion research
- Health system, health management, health service and health economic research
- Climate change and health

The topic of the paper can be grouped by type of disease:

- General health, self-reported, self-rated health, health-related quality of life
- Chronic non-communicable diseases (NCDs)
    - Cancer
    - Diabetes
    - Hypertension
    - Trauma and injury
    - Mental health
    - Risk factors for NCDs such as tobacco use, alcohol abuse
- Communicable diseases
    - HIV/AIDS
    - Malaria
    - Tuberculosis (TB)

    - Dengue
    - Risk factors for communicable diseases
- Other types of diseases such as eye disease, vision health and blindness, neurological and mental disorders and diseases, oral and dental health

The topic of the paper can be categorized by study participant:

- Child health
- Adolescent health
- Women health
- Adult health
- Elderly health
- Other topic could be social medicine, mobile health (mHealth), personalized medicine, evidence-based medicine, etc.

A good scientific paper needs clear objective(s). You should HAVE ONLY ONE OR TWO SPECIFIC OBJECTIVE(S) for a paper. If a project allows you to explore several distinct research questions, write several papers (Perneger and Hudelson, 2004).

- For the research based on primary data collection approach, the objective(s) of the paper is (are) obviously the same as those of the original research.
- For a paper which is based on secondary data analysis approach, author(s) should define the main research question a posteriori and develop the paper around it. The objectives of the paper can be revised based on the key findings of the research.

Selecting an appropriate target peer-reviewed journal

Selecting an appropriate journal for your manuscript is vitally important, while selecting the wrong journal can lead to unnecessary automatic rejection of your article and a loss of valuable time and effort. It is important to examine the types of articles usually published in the particular journal to see if the nature of your research fits the goals and objectives of the journal. For example, it might not make sense to submit an article based on population-based research to a journal that publishes clinical articles almost exclusively. Authors also want to publish their work in a journal with a high –impact factor. Although this is highly desirable, the author has to be honest in evaluating the actual impact the article is likely to have on the potential audience. High impact journals have limited publishing space and will clearly give precedence to articles that fit the goals of the editorial board and are likely to present ground breaking results.

Based on the main topic and objective(s) of the paper, you can find several target peer-reviewed journals. Please try to FIND REPUTABLE PEER-REVIEWED JOURNALS which are normally published by famous publishers such as:

- Elsevier: https://www.elsevier.com/
- Springer https://www.springer.com/
- Wiley-Blackwell https://www.wiley.com/
- Taylor & Francis http://taylorandfrancis.com/
- Sage http://www.sage.com/
- Etc.

Almost all reputable and popular peer-reviewed journals are indexed by one or more BIBLIOGRAPHIC DATABASES such as:

- Institute for Scientific Information-ISI: http://mjl.clarivate.com/,

- Scopus: https://www.elsevier.com/solutions/scopus/content
- Medline: https://www.ncbi.nlm.nih.gov/nlmcatalog?term=all[sb]%20AND%20currentlyindexed[All]&cmd=DetailsSearch

You can find journals that could be best suited for publishing your scientific paper using online tools, such as:

- Elsevier Journal Finder: https://journalfinder.elsevier.com/
- Springer Journal Suggester: https://journalsuggester.springer.com/
- Journal/Author Name Estimator (JANE): http://jane.biosemantics.org/ : :
- Think. Check. Submit: https://thinkchecksubmit.org/
- Edantz Journal Selector: https://www.edanzediting.com/journal-selector

WARNING: AVOID PREDATORY JOURNALS AND FAKE PUBLISHERS who charge publication fees to authors without providing the editorial and publishing services associated with legitimate journals (open access or not). New scholars from developing countries are said to be especially at risk of being misled by predatory practices. Please Check Bealls Blacklist of journals using the website https://beallslist.weebly.com/.

Once you have found the list of reputable and popular peer-reviewed journals, please carry out an initial search by broadly reviewing the titles of journals – this usually gives an idea of the areas of topics/themes/specialists covered by the journal. After selecting a number of journals that are broadly within your research topics, you need to read through in detail about the journal content and article style as well as the target themes sought by the Editors of the journals.

Please SEEK FOR ADVICE FROM YOUR MENTOR(S) AND EXPERIENCED COLLEAGUE(S) who may have a good idea of what will or will not be accepted in a particular journal.

Please SELECT THE MOST APPROPRIATE TARGET JOURNAL based on its aims and scope as well as the “scale” and “novelty” (in terms of topic or methods) of your research. If your research is a small scale one (e.g. based on a small sample size) and use simple study design (e.g. case-series or cross section study…) please select a journal with reasonable impact factor. If your paper is based on a national study or uses advance research method (such as longitudinal design or intervention design or multilevel modelling or other advanced statistical models, etc.) then you can think about higher impact factor journals.

Once the target journal has been selected, please read THE INSTRUCTIONS TO AUTHORS of the target journal carefully, especially about format and styles. Please find a few “MODEL” PAPERS for your reference. Download and review all RELEVANT TEMPLATES (paper or referencing style templates, etc.) if available.

Searching and summarizing relevant literature

In order to understand the current knowledge of the study topic(s) (available evidence and methods) as well as to facilitate the process of writing a good introduction and discussion sections, you will need to conduct a thorough search and to be able to summarize the relevant literature. You can do both hand search and online search but an online search could be the most efficient approach to adopt.

ONLINE SEARCH can be done from different sources such as: 1) Website of the target journal; 2) Google scholar[5] (https://scholar.google.com/); 3) Websites of well-kwon Organisation such as World Health Organization-WHO (http://www.who.int/), Centers for Disease Control and Prevention- CDC (https://www.cdc.gov/), and 4) PubMed (https://www.ncbi.nlm.nih.gov/pubmed/).

PUBMED SEARCH is the first choice of health researcher. PubMed is a free resource that is developed and maintained by the National Center for Biotechnology Information (NCBI), at the U.S. National Library of Medicine (NLM), located at the National Institutes of Health (NIH). PubMed comprises over 28 million citations for biomedical literature from MEDLINE, life science journals, and online books. PubMed citations and abstracts include the fields of biomedicine and health, covering portions of the life sciences, behavioral sciences, chemical sciences, and bio-engineering. PubMed also provides access to additional relevant web sites and links to the other NCBI molecular biology resources[6].

PubMed search can be simply done as following[7]:

- Constructing search terms: This can be done based on PECO or PICO formula. The PECO is the formula for observational research, including:

[5] *Google Scholar is a freely accessible web search engine that indexes the full text or metadata of scholarly literature across an array of publishing formats and disciplines*

[6] *https://www.ncbi.nlm.nih.gov/books/NBK3827/#pubmedhelp.PubMed_Quick_Start*

[7] *ECKER, E. D. & SKELLY, A. C. 2010. Conducting a winning literature search. Evidence-Based Spine-Care Journal, 1, 9-14.*

Problem/Patient/Population (P), Exposure (E), Comparison (C), Outcome (O). The PICO is the formula for observational research, including: Problem/Patient/Population (P), Intervention (I), Comparison (C), Outcome (O).

- Go to the PubMed homepage https://www.ncbi.nlm.nih.gov/pubmed/.
- Enter the terms in the search box. The search terms can be combined by connector words: AND, OR, or NOT using upper case letters (called Boolean logic)
    - AND between terms returns only records that contain all of the search terms
    - OR between terms returns all records that contain any of the search terms
    - NOT between search terms returns only records that contain the first term and not the second
- Click "Search" to run the search in PubMed
- Use the "advanced search" option to look up a term as it is indexed in PubMed
- Click on a desired paper to get its abstract

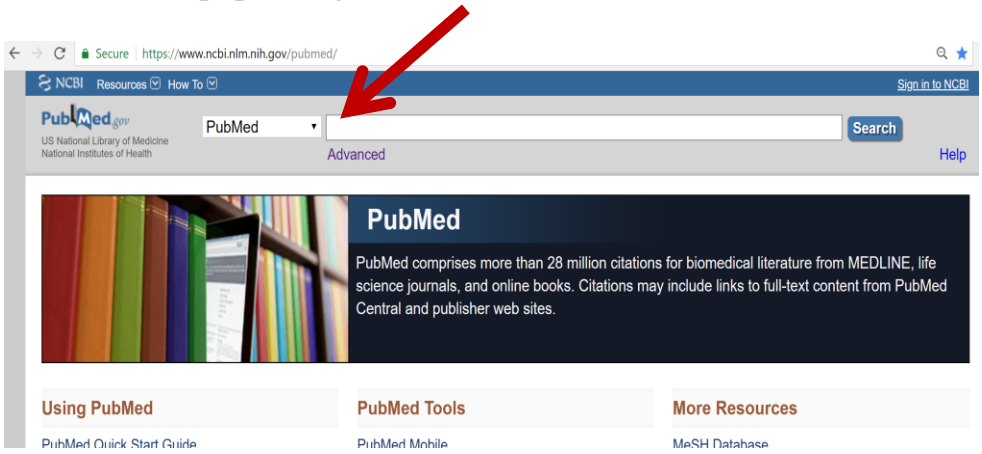


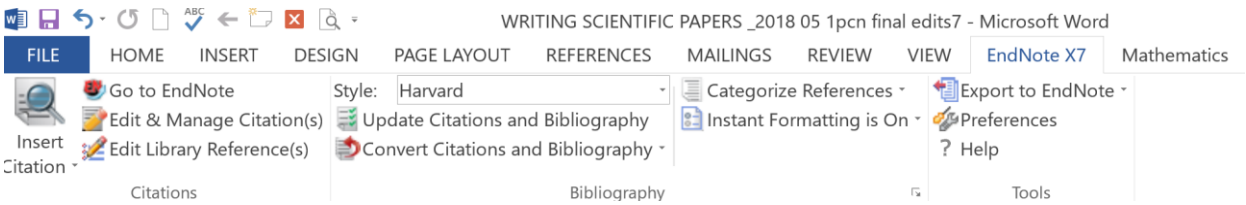
Figure 5: PubMed search

Summarizing relevant papers can be simply done by COPYING AND PASTING THE PAPERS' ABSTRACTS into a Word file. You can organize the abstracts by topic and order of time.

Creating an endnote library and determining a right referencing style

During the writing process, you will need to cite the relevant papers so that you definitely need to learn how to use a referencing software package. The most common software is ENDNOTE. EndNote is a commercial reference management software package, used to manage bibliographies and references when writing essays and articles. It is produced by Clarivate Analytics (previously by Thomson Reuters) (http://EndNote.com/).

Please study the EndNote "Getting Started Guide", which is available at: http://EndNote.com/training/guide/windows. EndNote installs a tab in the Word toolbar[8]. The ribbon has three sections: Citations, Bibliography, and Tools:

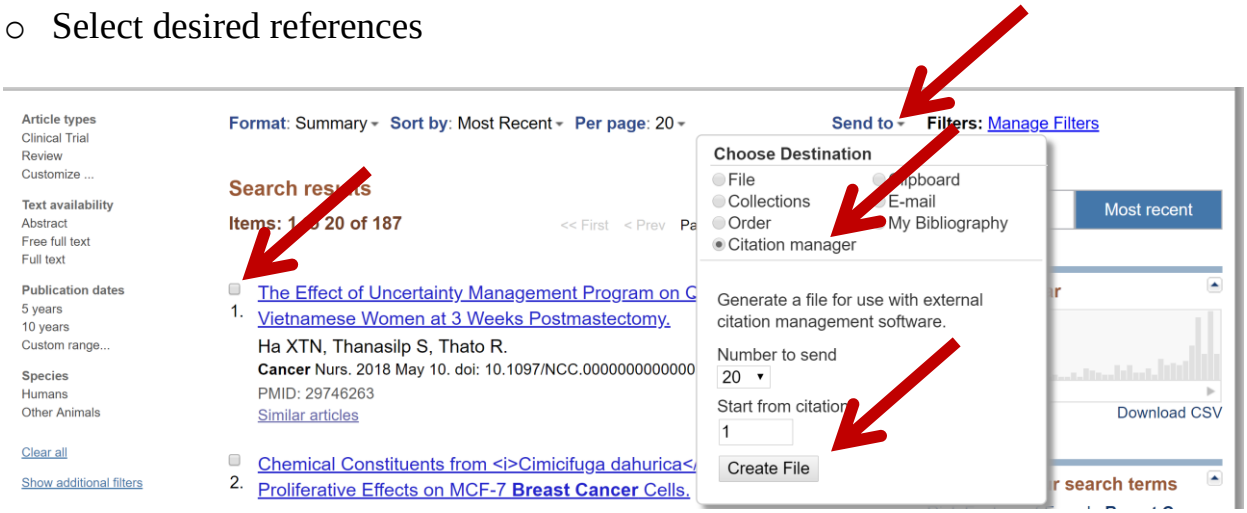


You need to have an ENDNOTE LIBRARY for your writing. You can learn how to create an EndNote library from the EndNote "Getting Started Guide". The simplest way to create an empty EndNote library with citations of relevant papers is to do importation of references from PubMed by the following steps:

- To create an empty EndNote library:
    - Launch the EndNote program
    - Click "File" and then "New". An EndNote library "Untitled" should be now created
    - Change the name of the EndNote library as you wish and located it as a desired folder.
- To do importation of references from PubMed:

[8] *http://libguides.utoledo.edu/endnote/word*

- Go the PubMed homepage https://www.ncbi.nlm.nih.gov/pubmed/.
- Conducting PubMed search (see above)
- Select desired references



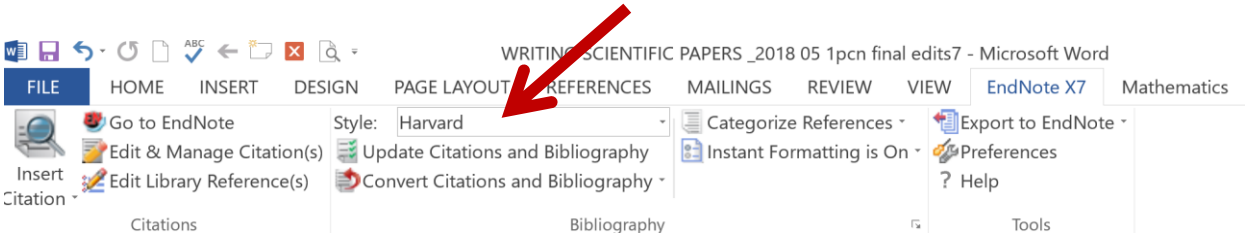
- Click the Send to link and choose the following options:
- Choose Destination: Citation manager
- Click Create File
- An EndNote file should be downloaded automatically
- Click the EndNote file. The references should now be imported

There are a few ways to PLACE CITATIONS INTO A WORD DOCUMENT. The simplest way is:

- In the Word document, place the cursor where the citation is to be inserted
- Open the EndNote toolbar and select Go to EndNote
- Select the citation(s) to be inserted [Hold down the CTRL key to select individual citations; hold down the Shift key to select a block of citations. CTRL + A selects all library entries]
- Select Insert Citation (Alt + 2) from the EndNote toolbar

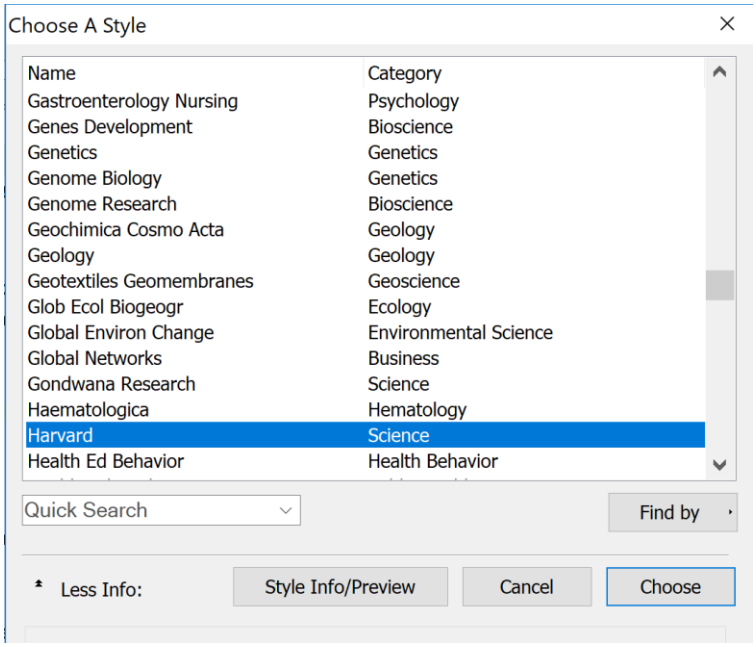
You will need to DETERMINE A CORRECT REFERENCING STYLE as each journal requires that citations and references are presented using their preferred style. The two most common referencing styles are Vancouver and Harvard.

EndNote makes it very easy to do this - either at the time of writing, or at some stage post publication. To select the style you want in EndNote



- Look at the top of the screen and locate the EndNote toolbar
- The style that is presently selected is identified in the menu bar on this toolbar
- In the case illustrated below, APA 6th is the selected Style
- If you want to change this style, click the drop-down box and select another style from the list
- To browse all styles available, choose Select another Style...
- Click the column headings to sort by Name or Category, or click the Find-by button to see lists of styles by discipline area.
- Click the Choose button to select a style from the list
- Go to Word document and change the output style accordingly
- Click “Update Citation and Bibliography”

Some journals require special referencing style and the template for that style is usually available for download from the websites of the journal. You can also find and download many EndNote referencing temples at: http://EndNote.com/downloads/templates.



You can install a new referencing style by:

- Downloading the style you want to install.
- Double-click on the style file. It should open in EndNote
- On the open style, go to “File Menu” and choose “Save As”. Replace the word “copy” with your style’s name and click “Save”.
- Click on “File Menu” and choose “Close Style”
- Then Go back to your EndNote Library and go to "select another style". Choose it from the list.

Creating an outline for the paper

Why an outline is so important?

Creating an outline for your paper is the first thing you should do. A PAPER OUTLINE can be considered as a "blueprint" or "plan" for your witting process. It helps you to think about and organise the items that are being written. A good outline can make the writing process much more efficient.

Basic outline of a scientific paper

The standard outline of a scientific paper is IMRAD formula, which stands for Introduction, Methods, Results, And Discussion. The IMRAD structure has proved successful because it facilitates literature review, allowing readers to navigate articles more quickly to locate materials relevant to their purpose[9]. Many academic journals develop specific outline templates. We hereby present the paper outline template that we have been using in our writing, including TEN MAIN HEADINGS:

1) **Title**
2) **Abstract and Keywords**
3) **Introduction**
    - *What was(were) the study topic(s)*
    - *Why the problem you address is important (Including what we currently know about the topic(s), what are the research gaps)*
    - *Why we need this study (Rationale of the study)*
    - *Objective(s) of the paper*
4) **Methods**
    - *Study design*
    - *Study participants*

[9] *Burrough-Boenisch, J (1999). "International Reading Strategies for IMRD Articles". Written Communication. 16 (3): 296–316. doi:10.1177/0741088399016003002. Retrieved 2011-06-17.*

- *Study setting*
- *Sample size and sampling*
- *Measurements*
  - *The dependent variable*
  - *The independent variables*
- *Data collection*
  - *Data collection tools*
  - *Data collectors*
  - *Data collection procedures*
  - *Data quality assurance*
- *Data analysis and statistical methods*
- *Ethical considerations*

5) **Results**
   - *Study response rate*
   - *Characteristics of study participants (e.g., demographic, clinical, social)*
   - *Key findings*
6) **Discussion and conclusion**
   - *Describing the strength(s)s of this study*
   - *Summarizing the key findings of the paper*
   - *Comparing with relevant findings from other published studies;*
   - *Providing possible explanations*
   - *Stating limitations of the study*
   - *Drawing conclusions*
   - *Providing policy and further research recommendations*
7) **Funding and conflict of interest**
8) **Acknowledgments**
9) **References**
10) **Tables and figures (belong to result section)**

Again, it is important for authors, who are working on a scientific paper, to go to the website of their target journal to study the "INSTRUCTIONS TO AUTHORS". Please check whether your target journal has a specific paper template, including standard formats for tables and figures. You can also develop a paper outline based on similar papers (model papers) from the same target journal.

Important reporting guidelines

Based on the IMRAD structure, the scientific communities have developed a number of reporting guidelines, including reporting templates and checklists, etc. aiming at facilitating the writing process. For example, the ICMJE (International Committee of Medical Journal Editors) released the Uniform Requirements for Manuscripts Submitted to Biomedical Journals (Uniform Requirements or URM)[10] in 1970. Recently, the EQUATOR (Enhancing the Quality and Transparency Of health Research) (http://www.equator-network.org/)[11]was established with the goals of raising awareness on the importance of good reporting of research, assisting in the development, dissemination and implementation of reporting guidelines for different types of study designs, monitoring the status of the quality of reporting of research studies in the health sciences literature, and conducting research relating to issues that impact the quality of reporting of health research studies.

The reporting guidelines that have been widely used by health researchers include:

- STROBE (STrengthening the Reporting of OBservational studies in Epidemiology) (https://www.strobe-statement.org/index.php?id=strobe-home) which aims to establish a checklist of items that should be included in articles reporting observational researches.

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[10] *"Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication - IV.A.1.a. General Principles" (PDF). International Committee of Medical Journal Editors. Archived from the original (PDF) on July 6, 2010. Retrieved 2010-03-08.*

[11] *Simera, I; Moher, D; Hirst, A; Hoey, J; Schulz, KF; Altman, DG (2010). "Transparent and accurate reporting increases reliability, utility, and impact of your research: reporting guidelines and the EQUATOR Network". BMC Medicine. 8: 24. doi:10.1186/1741-7015-8-24. PMC 2874506 Freely accessible. PMID 20420659. open access publication – free to read*

- CONSORT (Consolidated Standards of Reporting Trials) (http://www.consort-statement.org/) which provides an evidence-based, minimum set of recommendations for reporting randomized trials.
- SAMPL (Statistical Analyses and Methods in the Published Literature) (http://www.equator-network.org/2013/02/11/sampl-guidelines-for-statistical-reporting/) which aims to provide Guiding Principles for Reporting Statistical Methods and Results.

Writing the first draft manuscript

General principles

Please remember that "Poor writing can mask brilliant experimentation". The following PRINCIPLES should be considered:

1) WRITE THE MANUSCRIPT BASED ON THE OUTLINE YOU HAVE DEVELOPED and develop upon it over time. Refer to the annex "Paper template" and "Instructions to Authors" of the target journal.
2) WRITE SENTENCES USING CORRECT VERB TENSES. Refer to annex the "Verb tenses used".
3) WRITE COMPLETE SENTENCES. Refer to the annex "Useful phrases".
4) WRITE SHORT AND SIMPLE SENTENCES. Avoid long sentences that use too many "and". Don't try to convey multiple ideas in one overly long sentence. Refer to the annex "Useful phrases" and "Making sentences simple".
5) AVOID ABBREVIATIONS. If you have to use an abbreviation, make sure that it is defined on the page when it first appears.
6) AVOID REPETITION OF WORDS. Use "Thesaurus" function of Word program to see and select alternatives.
7) AVOID SPELLING ERRORS. Use "Spelling and Grammar" function of Word program to check and fix spelling errors of the manuscript.

We strongly recommend go to the EQUATOR (Enhancing the Quality and Transparency Of health Research) network (http://www.equator-network.org/)[12] to find an appropriate REPORTING GUIDELINE to follow.

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[12] *Simera, I; Moher, D; Hirst, A; Hoey, J; Schulz, KF; Altman, DG (2010). "Transparent and accurate reporting increases reliability, utility, and impact of your research: reporting guidelines and the EQUATOR Network". BMC Medicine. 8: 24. doi:10.1186/1741-7015-8-24. PMC 2874506 Freely accessible. PMID 20420659. open access publication – free to read*

Writing the Title

- Use the PRESENT TENSE
- The title should reflect the key findings of the study. It should contain the keywords that reflect the contents of the paper. STROBE[13] and CONSORT[14] suggest that the tile should include the information on the study's design.
- The title never contains abbreviations, chemical formulas, proprietary names or jargon. Waste words such as "studies on", "investigations on", the "etc." should not be used.
- *Example: "Leukemia incidence among workers in the shoe and boot manufacturing industry: a case-control study"*[15].

Writing the Abstract

- Pay attention to the NUMBER OF KEY WORDS allowed (depending on the journal).
- Use the PAST TENSE.
- Write the abstract after you have completed other sections of the paper.
- The abstract is the shop window of your article. It is critical to have the most important information about your article in the abstract.
- STROBE suggests that "Provide in the abstract an informative and balanced summary of what was done and what was found". CONSORT recommends that "Clear, transparent, and sufficiently detailed abstracts are important because readers often base their assessment of a trial on such information".

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[13] *VANDENBROUCKE, J. P., VON ELM, E., ALTMAN, D. G., GØTZSCHE, P. C., MULROW, C. D., POCOCK, S. J., POOLE, C., SCHLESSELMAN, J. J., EGGER, M. & INITIATIVE, F. T. S. 2007. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): Explanation and Elaboration. Epidemiology, 18, 805-835.*

[14] *MOHER, D., HOPEWELL, S., SCHULZ, K. F., MONTORI, V., GOTZSCHE, P. C., DEVEREAUX, P. J., ELBOURNE, D., EGGER, M. & ALTMAN, D. G. 2010. CONSORT 2010 explanation and elaboration: updated guidelines for reporting parallel group randomised trials. BMJ, 340, c869.*

[15] *FORAND, S. P. 2004. Leukaemia incidence among workers in the shoe and boot manufacturing industry: a case-control study. Environ Health, 3, 7.*

- STROBE and CONSORT suggest the use of STRUCTURED ABSTRACTS, which contain a series of headings pertaining to the introduction, methods, results, and conclusions which may help readers acquire the essential information rapidly.
- Avoid abbreviations, diagrams, and reference to the text.

Writing the Introduction

- The introduction should be less than ONE PAGE.
- Use the PRESENT TENSE (You can also use the PAST TENSE to report findings from previous researches)
- The introduction needs to include background information which is generally accepted as fact in a discipline. STROBE and CONSORT suggest reporting scientific background and rationale for the investigation being reported.
- A competent introduction should include at least the following components:

a) What was (were) the study topic(s)?

- Use definition(s) by well-known organizations such as WHO, UN, CDC, and other reputable professional agencies, etc.

  Example: "According to the Joint National Committee 7 (JNC 7), hypertension is defined as physician office systolic BP level of ≥140mmHg and diastolic BP of ≥90mmHg"

b) Why the problem you address is important?

- ⇨ Provide information on burden of diseases, mortality, morbidity, costs of illness, etc. at both the global and national levels.
- ⇨ At the global level, use the estimates by well-known organizations such as WHO, UN, CDC, and other reputable professional agencies, etc.

  Example: "XXX is a global public health problem, which affects mainly women. The World Health Organization (WHO) estimated the prevalence of XXX to be 15–71%..."
- ⇨ At the national level, provide selected recent data.

Example: "In Vietnam, the most recent data available showed that…"

c) Why we need this study (Rationale of the study):

⇨ Lack of evidence for health planning, management and policy making process is the most common reason for conducting this study.

Example: "Scientific evidence on prevalence of autism among the children aged 18-30 months is essential for planning of prevention and treatment services against the problems. However, such kind of evidence is still largely lacking in Vietnam"

d) Objective(s) of the paper:

⇨ This is the concluding part of the introduction section. Avoid using the sentence "This paper aims…", "This study aims…"

Example: "Therefore, the objective of this study was to estimate the prevalence of…" or "Therefore, we aimed to describe…"

Writing the Methods

- The methods section should be less than THREE PAGES.
- Use the simple PAST TENSE to describe what you did in your study. However, if you use figures or diagrams to help explain what you did, refer to the figure or diagram using the PRESENT TENSE.
- The Methods section should provide the readers with sufficient details about the study methods to be able to reproduce the study if so desired. Thus, this section should be specific, concrete, technical, and fairly detailed.

a) Study design

⇨ Give a short sentence

Example: "This was a cross-sectional study"

b) Study participant

⇨ Give the eligibility criteria, and the sources and methods of selection of participants. Avoid refer to people whom you study as "subjects." Use "participants" or "Informants".

Example: "In this study, we included women aged 22 and older"

c) Study setting

⇨ International readers do not know about the study setting so that detailed descriptions are needed.

Example: "The study was conducted in XXX, a rural site located in the north of Viet Nam, 20 km West of Ha Noi capital. XXX covers an area of 147 km2, including lowland and mountain, spread over 20 communes and a town. The number of populations in XXX in 2014 was 46,455. Per capita income of XXX in 2014 was VND 26,000,000 (US$ 1100)"

d) Sample size and sampling

⇨ Explain how the study size was arrived at.

Example: "A survey of postnatal depression in the region had documented a prevalence of 19.8%. Assuming depression in mothers with normal weight children to be 20% and an odds ratio of 3 for depression in mothers with a malnourished child we needed 72 case-control sets (one case to one control) with an 80% power and 5% significance" (Anoop et al., 2004).

Example: "The data used for this paper was obtained from a community health survey conducted in XXX in 2016. The sample size for the original study was estimated based on the WHO formula for estimating the proportion of…Stratified and cluster sampling techniques were employed. The district was divided into 2 strata (lowland and mountain). We randomly selected 30 clusters (villages) from the 2 strata (21 low land clusters and 9 mountainous clusters). In each cluster, 80 households were chosen by simple random sampling technique (total of 2,400 households)"

e) Measurements

⇨ The dependent variable

Example: "The dependent variable is health care service utilization (including inpatient, outpatient services) among people with chronic non-communicable diseases. The health care providers include national,

provincial, district and communal health care facilities (both public and private providers)"

- ⇨ The independent variables. STROBE suggests avoiding the term "explanatory variables"

  Example: "The independent variables include both household attributes such as household size, distance to health care facilities, household economic conditions, etc. and individual characteristics such as age, sex, marital status, education, occupation, health insurance status, health knowledge, etc. The economic condition of households was classified by the local authorities as: (a) poor, (b) near-poor, and (c) non-poor."

f) Data collection

- ⇨ Data collection tools

  Example: "In this study, Glasgow Coma Scale (GCS) was adapted and used"

- ⇨ Data collectors and data collection procedure

  Example: "Data was collected through personal household interviews conducted by twelve field workers. The field workers were trained during five days in both class room and field setting."

- ⇨ Data quality assurance

  Example: "Data quality was controlled in the field by supervisors as well as by the investigators of this study".

g) Data analysis and statistical method

- ⇨ Refer to the SAMPL Guideline (Statistical Analyses and Methods in the Published Literature) for writing this section.
- ⇨ Explain how quantitative variables were handled in the analyses.

  Example: "Patients with a Glasgow Coma Scale (GCS) less than 8 are considered to be seriously injured. A GCS of 9 or more indicates less serious brain injury. We examined the association of GCS in these two

categories with the occurrence of death within 12 months from injury." (Linn et al., 2007)

- ⇨ Describe all statistical methods, including those used to control for confounding.

  Example: "Both descriptive and analytical statistics were carried out using Stata 14 software (Stata Corporation). Proportions of variables of interest, together with corresponding 95% Confidence Interval (CI), were calculated. Multivariate logistic regression modelling was performed to examine the probability of using different types of health providers in relation socio-demographic status of the study respondents. A significance level of p<0.05 was used."

- ⇨ If applicable, describe analytical methods taking into account sampling strategy

  Example: "To take care of the sampling design, cluster analysis was applied"

h) Ethical considerations

- ⇨ State the ethical principles and provide reference of ethical approval

  Example: "All human subjects in the study were asked for their consent before collecting data, and all had complete rights to withdraw from the study at any time without any threats or disadvantages".

  Example: "The protocol of this study was approved by the Scientific and Ethical Committee in Biomedical Research, Hanoi University of Public Health, decision 012345 dated 20/10/2018"

Writing the Results

- Should be less than THREE PAGES (excluding tables, figures)
- Use the PAST TENSE to detail the results you obtained. Use the PRESENT TENSE to refer to figures, tables and graphs.

- The results section is the core or heart of the paper. It is typically fairly straightforward and factual. The purpose of this section is to SUMMARIZE AND ILLUSTRATE THE FINDINGS in an orderly and logical sequence (meet research objectives), WITHOUT INTERPRETATION.
- The findings are usually presented in tables and/or figures. TABLES are appropriate for large or complicated data sets that would be difficult to explain clearly in text. FIGURES are appropriate for data sets that exhibit trends, patterns, or relationships that are best conveyed visually.
- Any table or figure must be sufficiently described by its title and caption or legend, to be understandable without reading the main text of the results section.
- All figures and tables must be accompanied by a textual presentation of the key findings
- Do not include both a table and a figure showing the same information
- Never have a table or figure that is not mentioned in the text
- The following items should be reported in the result section:
    - ⇨ Report numbers potentially eligible, examined for eligibility, confirmed eligibility, included in the study, completed follow-up, and analyzed. Consider using a flow diagram.

      Example: "Of the...participants selected for this study, responded to the survey, response rate of...%"

    - ⇨ Describe characteristics of study participants (e.g., demographic, clinical, social)

      Example: "Table 1 shows the general characteristics of the study sample (or Demographics and descriptive variables concerning the women are shown in Table 1 or the characteristics of the sample population are displayed in Table 1). A total of XXX mothers participated in the study. The mean age of women was YYY years. Two thirds lived in an urban setting and ZZZ% was employed…."

(Table 1 about here)

⇨ Present key findings with respect to the central research question. Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence intervals).

Example of descriptive and bivariate analyses: "Table 2 presents the....AAA% of the adults reported having… The prevalence/ proportion of XXX (the proportion of people with YYY) was more common (was higher) among women than among men. Statistically significant differences in depression treatment patterns were found for race/ethnicity, age, marital status, metro area, education, health insurance, mental health, and current smoker. The relationships between depression treatment patterns and employment status, poverty status, usual source of care, presence of chronic conditions, physical activity and body mass index categories were not significant".

(Table 2 about here)

Example of multivariate analyses: "Table 3 reports odds ratios (ORs) and 95%CI from the multiple logistic regression analysis of relationships between health care service utilization among the women with non-communicable diseases during the last 12 months and their socio-economic status. After adjusting for other factors in the model, the statistically significant correlates of health care service utilization among people with non-communicable diseases were: 1) Ethnicity: Ethnic minority was significantly associated with a lower odds of health care service utilization (OR=0.4, 95%CI: 0.2-0.8); and 2) Health insurance: No health insurance was significantly associated with a lower odds of health care service utilization (OR=0.4, 95%CI: 0.3-0.7)".

(Table 3 about here)

Writing the Discussion and Conclusion

- The discussion section should be LESS THAN FOUR PAGES
- Use the PAST TENSE to summarise findings and the PRESENT TENSE to interpret results.
- The discussion section addresses the central issues of validity and meaning of the study[16]. We recommend that authors present the following items:

  ⇨ Describing the strength(s)s of this study

  Example:

  "This study is the first to analyze..."

  "The current study adds to evidence that...."

  "Our study contributes to the existing knowledge of… "

  ⇨ Summarizing the key findings of the paper

  Example:

  "We found that…"

  "We revealed that…"

  "We demonstrated that…

  "Of particular interest in this article is.... We found that…"

  ⇨ Comparing with relevant findings from other published studies;

  Example:

  "This is in line with the findings from a previous research conducted in…."

  "Similar findings were reported by...."

  "This is different from the findings from the study by..."

  "Previous studies in Vietnam reported similar findings"

  "There are both similarities and differences between the findings from this study and international research evidence"

  ⇨ Providing possible explanations

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[16] *HESS, D. R. 2004. How to write an effective discussion. Respir Care, 49, 1238-41.*

Example:

"This may indicate that lack of social support in widowed women may be a reason for not getting depression treatment"

"This may be due to the lack of..."

"This could be explained by the facts that…"

"This could be explained by the differences in..."

"In Vietnam women traditionally are the ones to take care of the domestic chores and child-rearing but they are also expected to earn money and help with the upkeep of the household"

⇨ Stating limitations of the study. Address the potential for selection bias

Example:

"Some of the limitations include that the information is self-reported; therefore, recall bias could have occurred during the interview process. To minimize this bias, more intervals of interviews should have been performed. We reported only a cross-sectional snap shot of the available data. In addition, we did not control for the severity of chronic illnesses or depression."

"In addition, it was not indicated within the data if women in the study met the criteria for minor or major depression"

⇨ Drawing conclusion

Example:

"In summary, we have demonstrated that…"

⇨ Providing policy and research recommendation

Example:

"The health sector needs to track these factors and associated policies in order to promote actions on the social determinants of health"

"Further research is needed to examine the non-treatment of depression in women with hypertension"

Writing Acknowledgments

⇨ Include all funders and people who provide supports to the study:

Example:

"This research was funded by a grant from the…"

"This paper was written as part of collaborative project on... in Vietnam which is being implemented by.... The authors are grateful to.... for their..."

"We thank XXX from YYY for editing language contents of this paper"

Preparing tables

- Be self-explanatory;
- Present values with the same number of decimal places in all its cells (standardization);
- Include a title informing what is being described and where, as well as the number of observations (N) and when data were collected;
- Have a structure formed by three horizontal lines, defining table heading and the end of the table at its lower border;
- Not have vertical lines at its lateral borders;
- Provide additional information in table footer, when needed;
- Be inserted into a document only after being mentioned in the text;

Preparing figures

- Include, below the figure, a title providing all relevant information;
- Be referred to as figures in the text;
- Identify figure axes by the variables under analysis;
- Quote the source which provided the data, if required;
- Demonstrate the scale being used; and
- Be self-explanatory.

Other writing tips

Writing a cover letter

***Cover letter for submission of the first version**

Hoang Van Minh

Hanoi University of Public Health

1A Duc Thang Road, North Tu Liem, Hanoi, Vietnam

Dr. Nawi Ng

Editor-in-Chief

Global Heath Action

August 20, 2018

Dear Dr. Nawi Ng:

I is my great pleasure, on behalf of a research team from Hanoi University of Public Health, Hanoi, Vietnam, to submit an original research article entitled "XXXX" for consideration for publication in Global Health Action.

In this manuscript, we showed that the prevalence of increased sharply in Vietnam and higher prevalence of XXX was significantly associated with older age and

We believe that this manuscript, once published in the Global Health Action, will add to scientific knowledge of XXX in Vietnam and in low-and middle income countries.

We declare that the manuscript is not currently under consideration for publication elsewhere, as well as any potential conflict of interest.

The manuscript has been proof-read and edited by a professional English speaker.

We are am looking forward to hearing from you soon,

Yours sincerely,

Assoc. Prof. Hoang Van Minh, MD, PhD

Vice Rector, Hanoi University of Public Health

Senior Lecturer of Research Methods and Health Economics

1A Duc Thang Road, North Tu Liem, Hanoi, Vietnam

E-mail: hvm@huph.edu.vn

***Cover letter for submission of a revision**

Hoang Van Minh

Hanoi University of Public Health

1A Duc Thang Road, North Tu Liem, Hanoi, Vietnam

Dr. Nawi Ng

Editor-in-Chief

Global Heath Action

Dear Dr. Nawi Ng:

Many thanks for your decision letter on our manuscript "**XXX".**

Our team has reviewed all the suggestions critically and revised the paper accordingly. We are grateful for the detailed comments we received, which we used to improve the paper.

Please find below our responses to the reviewers' comments.

We have re-submitted the revised paper for your consideration.

We are looking forward to hearing from you soon.

Yours sincerely,

Assoc. Prof. Hoang Van Minh, MD, PhD

Hanoi University of Public Health

1A Duc Thang Road, Bac Tu Liem District, Hanoi, Vietnam

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***Responses to comments/Suggestion from reviewers**

No	Comments/Suggestion from reviewers	Responses by the authors
1	Reviewer 1: The description of the explanatory variables should be complete (all the variable used).	We thank for the comment. We have added the descriptions of the explanatory variables as suggested (Table 2, Page 9)

No	Comments/Suggestion from reviewers	Responses by the authors
2	Reviewer 1: There should be some efforts to differentiate/discuss about "utilize health service for any conditions" and "utilize service for/because of NCDs".	We thank for the comment. However, in this study, we cannot differentiate “health service utilization for any conditions" and " health service utilization for NCDs". We have noted this as a limitation of this paper.
3	Reviewer 2: Looking at the regression results by communicable disease type, or inpatient vs. outpatient for the regression results.	We thank for the comment. We already did the regression results separate for inpatient vs. outpatient services. However, because the number of subjects included in the analysis was small (only those with NCD were included), the findings of regression analyses (from separate models for inpatient and outpatient services) on the difference in the rate of health service utilization by some important factors (and have strong policy implication in Vietnam at the moment) such as ETHNICITY AND HEALTH INSURANCE STATUS were not statistically significant (See table below). We decided to report only the overall utilization. We have noted this limitation in the discussion section.

Avoiding writing mistakes

The list of common writing mistakes you should avoid are:

- The manuscript does not conform with the journal's instructions for authors
- The paper's length is over the maximum number of words allowed
- The title, objective (s) and key findings are not matched
- The research objective(s) is (are) not well specified
- The introduction section includes too much literature or too much out-of-date references
- Methods, interventions and instruments are not described in sufficient detail
- Results are reported selectively (e.g. percentages without frequencies, p-values without measures of effect)
- The same results appear both in a table and in the text
- Detailed tables are provided for results that do not relate to the main research question
- Interpretation included in the results section
- Discussion are not backed up by appropriate references
- The discussion does not provide an answer to the research question
- The discussion overstates the implications of the results and does not acknowledge the limitations of the study
- The paper is written in poor English

Avoiding plagiarism

In an academic context, plagiarism implies a deliberate act on the part of the writer or researcher to use the work, ideas or expressions of others as if they were his or her own[17]. Plagiarism committed through misunderstanding or even carelessness is very common.

[17] *https://www2.le.ac.uk/offices/ld/resources/study/avoiding-plagiarism*

Guidance on how to avoid plagiarism and at the same time produce work of better quality:

- Fully reference and acknowledge the work of others
- Use your own words and develop your own writing style
- Organise and structure your work in your own way
- Use plagiarism-detection software to check your manuscript. You can use a free plagiarism-detection software such as https://plagiarismdetector.net/.

Using English language editing services

Because English is not your native language, you need to have your manuscript edited by a native speaker or use a professional language editing service to improve the quality of your paper and ensure that your meaning is clear.

You should consider using the language editing services offered by reputable organisations, such as SAGE Language Services (http://languageservices.sagepub.com/en/), Elsevier's English Language Editing Service (https://webshop.elsevier.com/languageservices/languageediting/), (http://authorservices.springernature.com/language-editing/)

Annexes

Paper template

1) **Title**
2) **Abstract and Keywords**
3) **Introduction**
    - *What was(were) the study topic(s)*
    - *Why the problem you address is important (Including what we currently know about the topic(s), what are the research gaps)*
    - *Why we need this study (Rationale of the study)*
    - *Objective(s) of the paper*
4) **Methods**
    - *Study design*
    - *Study participant*
    - *Study setting*
    - *Sample size and sampling*
    - *Measurements*
        - *The dependent variable*
        - *The independent variables*
    - *Data collection*
        - *Data collection tools*
        - *Data collectors*
        - *Data collection procedure*
        - *Data quality assurance*
    - *Data analysis and statistical method*
    - *Ethical considerations*
5) **Results**
    - *Study response rate*
    - *Characteristics of study participants (e.g., demographic, clinical, social)*
    - *Key findings*
6) **Discussion and conclusion**
    - *Describing the strength(s) of this study*
    - *Summarizing the key findings of the paper*
    - *Comparing with relevant findings from other published studies;*
    - *Providing possible explanations*
    - *Stating limitations of the study*
    - *Drawing conclusion*
    - *Providing policy and research recommendation*
7) **Funding and conflicts of interest**
8) **Acknowledgments**
9) **References**
10) **Tables and figures (belong to result section)**

Verb tense used

No	Section	Verb tense used
1	***Title***	PRESENT TENSE
2	***Abstract***	PAST TENSE
3	***Introduction***	Usually presented in the PRESENT TENSE. You can also use the PAST TENSE to report findings from previous researches.
4	***Methods***	PAST TENSE
5	***Results***	Use the PAST TENSE to detail the results you obtained. Use the PRESENT TENSE to refer to figures, tables and graphs
6	***Discussion and Conclusion***	Use the PAST TENSE to summarise findings and the PRESENT TENSE to interpret results

Useful phrases

(Adapted from Adrian Wallwork: English for Writing Research Papers, Springer International Publishing, 2016. Available at: https://www.springer.com/gp/book/9783319260921)

Introduction

- ***What was (were) the study topic(s)***
  - XXX is defined as…
  - The World Health Organization defines XXX as…
- ***Why the problem you address is important:***
  - XXX is a global public health problem, which affects many women…
  - XXX is an important issue for...
  - XXX is extensively/widely used in…
  - XXX is a very effective method for...
  - In the last few years, there has been growing interests in...
  - Quite recently, considerable attention has been paid to...
- ***Literature review***

+ Referring to the general literature

  - Previous studies indicate that...
  - XXX has/have been widely researched/investigated.
  - In recent years, research on/into... has become very popular.
  - Previous research has documented/shown/demonstrated that...
  - In the literature, several theories have been proposed to explain...

+Referring to authors

  - XXX et al. [1] indicated that...
  - The results obtained/offered by XXX in [5] suggest that...
  - Recently, several authors [4], [5], [7] have demonstrated that...
  - XXX [6] has also found that....
  - As reported by XXX [2],
  - In a recent paper by XXX [9],

+ Why we need this study (Rationale of the study):

  - However, to our best knowledge, very few publications can be found/are available in the literature that discuss/address the issue of....
  - To our knowledge... has/have been scarcely investigated from the point of view of.../from the theoretical point of view.
  - A key limitation of this research is that (it does not address the problem of...)
  - The major drawback of this approach is...
  - However, most of the previous studies do not take into account...
  - However, studies on... are still lacking.

- Although several studies have indicated that..., little attention has been paid/given to...

**** Objective(s) of the paper:***

- To answer all these questions, we present an original approach which....
- With this goal, this work (explores, seeks to...).
- The objective/aim of this paper/study is to propose...
- The paper presents/proposes a new approach to...
- This article introduces a new type of...
- In this paper, we/the authors offer...
- In this paper, we explore the possibility of...

**** Framework of the paper***

- The remainder of the paper is organized as follows/into... sections: Section II describes/outlines..., Section III discusses/analyses.... (Experimental results) are presented in Section IV; Section V concludes the paper.
- In Section II we explain.... In Section III we introduce our.... The measurements are presented in Section IV. Section V summarizes the results of this work and draws conclusions.

Methods

- This was a cross-sectional study
- The study employed cross-sectional design
- The study was conducted in XXX,
- We will make the following assumptions:
- Figure 2 shows/presents/depicts/outlines/illustrates/represents...
- Table 1 gives an example of...
- As can be seen from Figure 2,
- As shown in Figure 2,
- From this figure it can be seen that...
- Table 3 summarizes...
- The graph/diagram suggests/indicates that...

Results

- The results show that...
- The overall measurement results are summarized in Table II.
- The only disadvantage/drawback of such... is...
- There is no evident relationship between... and...
- The differences in (temperature) result in significant differences in...

Discussion

- In our paper, the focus of attention was/is on...
- This study shows/has shown that...
- This experiment/technique/demonstrates that...

- Our paper presents an innovative/a novel view of...
- To our knowledge, this is the first study to deal with/examine/investigate...
- This paper presents a pilot study to find the answer to...
- The data obtained is/are broadly consistent with the major trends...
- These results agree/concur/are consistent/are in good agreement with other studies which have shown that...
- In contrast to some reports in the literature, there were...
- An important implication of these findings is that...
- The finding was quite unexpected/surprising and suggests that...
- The most likely explanation of the negative result is...
- The findings have a number of possible limitations, namely...
- So far, the significance of this finding is not clear.
- The main limitation of the experimental result is...
- One question still unanswered is whether...
- The analysis does not enable us to determine...

Conclusion(s)

- Summing up the results, it can be concluded that...
- In conclusion, it is evident that this study has shown...
- This paper has clearly shown that...
- It has been demonstrated/shown/found that...
- The results/data obtained indicate/have indicated/suggest/show that...
- The existence of (these effects) implies that...
- The proposed method can be readily used in practice.
- The technique/approach/result is applicable to...
- The findings suggest that this approach could also be useful for...
- In our future research we intend to concentrate on...
- Future work will involve...
- The next stage of our research will be (experimental confirmation of our theory).
- Clearly, further research will be needed/required to prove/validate...
- Several other questions remain to be addressed/resolved.
- More research into... is still necessary before obtaining a definitive answer to...
- Further study of the issue is still required.
- Further research on/into... is desirable/necessary (to extend our knowledge of)…..

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  - their valuable insights and recommendations
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        - their contribution in conducting some of the experiments for the research
    - The authors would like to acknowledge the valuable comments and suggestions of the reviewers, which have improved the quality of this paper.
    - The authors wish to acknowledge the assistance and support of...
    - The authors appreciate the efforts and assistance of... regarding....
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    - This research/work was supported by the XXX under Project No....
    -

Making sentences simple

**Use the active voice*

(Source: the Writing Center, The University of Wisconsin-Madison: https://writing.wisc.edu/Handbook/CCS_activevoice.html)

- Active: Researchers earlier showed that high stress can cause heart attacks.
- Passive: It was earlier demonstrated that heart attacks can be caused by high stress.

**Avoiding wordy phrases*

(Source: the Writing Center, The University of Wisconsin-Madison: https://writing.wisc.edu/Handbook/CCS_wordyphrases.html)

Wordy form	Simple form
the reason for for the reason that due to the fact that owing to the fact that in light of the fact that considering the fact that on the grounds that	because, since, why

Wordy form	Simple form
this is why	
despite the fact that regardless of the fact that notwithstanding the fact that	although, even, though
in the event that if it should transpire/happen that under circumstances in which	if
on the occasion of in a situation in which under circumstances in which	when
as regards in reference to with regard to concerning the matter of where . . . is concerned	about
it is crucial that it is necessary that there is a need/necessity for it is important that it is incumbent upon cannot be avoided	must, should
is able to has the opportunity to is in a position to has the capacity for has the ability to	can
it is possible that there is a chance that it could happen that the possibility exists for	may, might, can, could
prior to in anticipation of subsequent to following on	before, after, as

Wordy form	Simple form
at the same time as simultaneously with	
All of, both of	All, both
At the present time, at this point in time	At present, now
By means of	By
During the course of, in the course of	During, in
In order to	To
Prior to, previous to	Before, preceding, or ahead of

** Avoiding wordy verbs*

(Source: the Writing Center, The University of Wisconsin-Madison: https://writing.wisc.edu/Handbook/CCS_wordyverbs.html)

Wordy form	Simple form
is aware of has knowledge of	knows
is taking	takes
are indications of	indicates
are suggestive of	suggest

STROBE Guidelines

This checklist is available from STROBE (STrengthening the Reporting of OBservational studies in Epidemiology) website (https://www.strobe-statement.org/index.php?id=strobe-home), which describes the items that should be included in reports of observational studies.

	Item No	Recommendation
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract

		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found
Introduction		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported
Objectives	3	State specific objectives, including any prespecified hypotheses
Methods		
Study design	4	Present key elements of study design early in the paper
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection
Participants	6	(*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up *Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls *Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants
		(*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed *Case-control study*—For matched studies, give matching criteria and the number of controls per case

Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group
Bias	9	Describe any efforts to address potential sources of bias
Study size	10	Explain how the study size was arrived at
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding
		(*b*) Describe any methods used to examine subgroups and interactions
		(*c*) Explain how missing data were addressed
		(*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed *Case-control study*—If applicable, explain how matching of cases and controls was addressed *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy
		(*e*) Describe any sensitivity analyses
Results		
Participants	13*	(a) Report numbers of individuals at each stage of study—e.g. numbers potentially eligible, examined for

		eligibility, confirmed eligible, included in the study, completing follow-up, and analyzed
		(b) Give reasons for non-participation at each stage
		(c) Consider use of a flow diagram
Descriptive data	14*	(a) Give characteristics of study participants (e.g. demographic, clinical, social) and information on exposures and potential confounders
		(b) Indicate number of participants with missing data for each variable of interest
		(c) *Cohort study*—Summaries follow-up time (e.g., average and total amount)
Outcome data	15*	*Cohort study*—Report numbers of outcome events or summary measures over time
		Case-control study—Report numbers in each exposure category, or summary measures of exposure
		Cross-sectional study—Report numbers of outcome events or summary measures
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted for and why they were included
		(*b*) Report category boundaries when continuous variables were categorized
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period
Other analyses	17	Report other analyses done—e.g. analyses of subgroups and interactions, and sensitivity analyses
Discussion		
Key results	18	Summaries key results with reference to study objectives

Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence
Generalisability	21	Discuss the generalisability (external validity) of the study results
Other information		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based

CONSORT Guidelines

This checklist is available from the CONSORT (Consolidated Standards of Reporting Trials) website (http://www.consort-statement.org/), which describes the of information to include when reporting a randomised trial.

Section/Topic	Item No	Checklist item
Title and abstract		
	1a	Identification as a randomised trial in the title
	1b	Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts)
Introduction		
Background and objectives	2a	Scientific background and explanation of rationale
	2b	Specific objectives or hypotheses
Methods		

Trial design	3a	Description of trial design (such as parallel, factorial) including allocation ratio
	3b	Important changes to methods after trial commencement (such as eligibility criteria), with reasons
Participants	4a	Eligibility criteria for participants
	4b	Settings and locations where the data were collected
Interventions	5	The interventions for each group with sufficient details to allow replication, including how and when they were actually administered
Outcomes	6a	Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed
	6b	Any changes to trial outcomes after the trial commenced, with reasons
Sample size	7a	How sample size was determined
	7b	When applicable, explanation of any interim analyses and stopping guidelines
Randomisation:		
Sequence generation	8a	Method used to generate the random allocation sequence
	8b	Type of randomisation; details of any restriction (such as blocking and block size)
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned
Implementation	10	Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions

Blinding	11a	If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how
	11b	If relevant, description of the similarity of interventions
Statistical methods	12a	Statistical methods used to compare groups for primary and secondary outcomes
	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses
Results		
Participant flow (a diagram is strongly recommended)	13a	For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analysed for the primary outcome
	13b	For each group, losses and exclusions after randomisation, together with reasons
Recruitment	14a	Dates defining the periods of recruitment and follow-up
	14b	Why the trial ended or was stopped
Baseline data	15	A table showing baseline demographic and clinical characteristics for each group
Numbers analysed	16	For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups
Outcomes and estimation	17a	For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval)
	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended

Ancillary analyses	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory
Harms	19	All important harms or unintended effects in each group (for specific guidance see CONSORT for harms)
Discussion		
Limitations	20	Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses
Generalisability	21	Generalisability (external validity, applicability) of the trial findings
Interpretation	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence
Other information		
Registration	23	Registration number and name of trial registry
Protocol	24	Where the full trial protocol can be accessed, if available
Funding	25	Sources of funding and other support (such as supply of drugs), role of funders

SAMPL Guidelines

The notes below are from "Lang T, Altman D. Basic statistical reporting for articles published in clinical medical journals: the SAMPL Guidelines. In: Smart P, Maisonneuve H, Polderman A (eds). Science Editors' Handbook, European Association of Science Editors, 2013" (Available from http://www.equator-network.org/2013/02/11/sampl-guidelines-for-statistical-reporting/).

Preliminary analyses

Identify any statistical procedures used to modify raw data before analysis. Examples include mathematically transforming continuous measurements to make distributions closer to the normal distribution, creating ratios or other derived

variables, and collapsing continuous data into categorical data or combining categories.

Primary analyses

- Describe the purpose of the analysis.
- Identify the variables used in the analysis and summarize each with descriptive statistics.
- When possible, identify the smallest difference considered to be clinically important.
- Describe fully the main methods for analyzing the primary objectives of the study.
- Make clear which method was used for each analysis, rather than just listing in one place all the statistical methods used.
- Verify that that data conformed to the assumptions of the test used to analyze them. In particular, specify that 1) skewed data were analyzed with non-parametric tests, 2) paired data were analyzed with paired tests, and 3) the underlying relationship analyzed with linear regression models was linear.
- Indicate whether and how any allowance or adjustments were made for multiple comparisons (performing multiple hypothesis tests on the same data).
- If relevant, report how any outlying data were treated in the analysis.
- Say whether tests were one- or two-tailed and justify the use of one-tailed tests.
- Report the alpha level (e.g., 0.05) that defines statistical significance.
- Name the statistical package or program used in the analysis.

Supplementary analyses

- Describe methods used for any ancillary analyses, such as sensitivity analyses, imputation of missing values, or testing of assumptions underlying methods of analysis.
- Identify post-hoc analyses, including unplanned subgroup analyses, as exploratory.