Structure of talk

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- How do editors make decisions
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- Publishing updates to SRs
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Overview of the publication process
The life cycle of a research article

Research → Submission → Peer review → Publication

PLoS Medicine process
Papers handled by in-house editor
Additional advice from academic editor
90% papers rejected before review
Typically 2-3 subject reviewers
1 statistical reviewer
50% papers rejected after peer review
Is it rigorous?
Is it novel?
Is it timely?
Right audience?
Can take months/years
Role of editor

- Should select appropriate papers for the journal
- Should carefully consider context: literature, policy, practice
- Should not review the paper in depth
- Should identify non-conflicted appropriate expert reviewers
- Should shepherd the paper through review
- Should be responsive to authors and reviewers
- Should be neutral and objective

Where to publish your systematic review

- Choose the best journal for your paper: topic, audience, speed to first decision, speed of production process
- Think about the difference between general and specialist journals
- Think about your audience – who will read your SR
- Think about accessibility
Where to publish your systematic review
There are many different types of journals – and many different peer review processes

Writing your paper
- Follow journal guidelines!
- Beware of slicing up work into too many small packets if you want to publish in prestigious journals
- Structured abstract
- Cover letter
- Main text
- Using guidelines
Writing your paper: Structured abstract

Abstract

Background

Tobacco smoking, indoor or outdoor, and indoor air pollution from biomass fuels have been implicated as risk factors for noncommunicable diseases, injury, and deaths. Pollution conditions and indoor air pollution are prevalent or growing exposure in regions where they pose a major health risk. We undertook a systematic review and meta-analysis to quantitatively assess the association between these exposures and the risk of hospitalization, death, and birth outcomes.

Methods and Findings

We conducted a systematic review and meta-analysis of observational studies reporting effect estimates and 95% confidence intervals. We included studies on male, female, and male-female exposure, and death or hospitalization risks. We found substantial evidence that tobacco smoking is associated with increased risks of hospitalization and death, regardless of the specific outcome. Compared with people who do not smoke, smokers have an increased risk of hospitalization. Risks of hospitalization and death due to smoking, and indoor air pollution show trends in the same directions, these associations are less strongly supported by the available evidence.

Conclusions

There is consistent evidence that tobacco smoking is associated with an increased risk of death and hospitalization. The findings on passive smoking and biomass use are not as consistent, but more studies are needed. Further studies on interventions aimed at reducing tobacco and indoor air pollution exposures, especially among those at high risk for exposure to both.

Writing your paper: PLoS journals – standards for reporting systematic reviews

- Authors must adhere to PRISMA
- Authors can provide a protocol if available
- Editors and peer reviewers check PRISMA flowchart and checklist, protocol.
Why are journals important in moving towards better reporting?

- Once, journals were the only mechanism for publishing results of trials and other studies.
- Journals still provide the main method of disseminating full details of systematic reviews.
- Investigators want peer-reviewed journal publication as credit for what has been done.
- Peer review and editorial process provides an important opportunity for achieving good quality reporting.

Writing your paper: The new PRISMA statement
http://www.prisma-statement.org/index.htm
Writing your paper: The new PRISMA statement

Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement

Click to edit Master text styles

Second level

Third level

Fourth level

Fifth level

What is new in updated PRISMA / Quorom?

Why we think guidelines for reporting are really important @plos medicine

Adhering to the spirit of the guidelines – not just using it as a tickbox mentality

www.plos.org
Writing your paper: Using PRISMA – advantages and opportunities?

For authors:

- Adhering to PRISMA upfront means your paper will go straight through to the editor’s desk
- Clearly reported papers go through peer review faster and with fewer revisions. Quicker, easier trip through copyediting
- We can’t guarantee the decision will be different

Specific examples – applying PRISMA guidance to real papers

- Many researchers think that once they have ticked the boxes in the checklist and filled out the numbers in the flowchart they are “PRISMA compliant”
- For editors (and readers) the devil is in the details
What are the barriers?

- Lack of awareness of appropriate standards for reporting
- Language?
- Lack of time – for authors, editors, reviewers
- Authors need to get the paper published as quickly as possible

Submiting your paper: What do PLoS Medicine editors look for in systematic reviews/meta-analyses?

- Does the systematic review/meta-analysis ask an important and novel question?
- Are the findings relevant to practice or policy?
- Is the SR well done – time frame, scope of search, databases, languages (English non English), inclusions and exclusions (types of studies, published, unpublished, conference abstracts), has there been an attempt to track down original data, assessment of bias
- Are reporting related biases dealt with
- If YES, YES, YES, YES – consider further
- Even if the outcomes are ‘better research is needed’ or ‘negative’
Submitting your paper: Dealing with conflicts of interest

- Conflicts of interest – authors
- **PLoS Medicine don’t consider just company COI**
- Conflicts of interest – reviewers
- Conflicts of interest – editors
- Most important – be upfront!
Submitting your paper: suggesting reviewers

- Suggest appropriate reviewers
- Editors will check for conflicts of interest
- Editors may want to pick their own reviewers
- Only exclude with good reason

Making decisions: journals can introduce bias

- Journals want to publish new and interesting papers
- Editors / reviewers may suggest emphasis on the “positive” parts of a study, shifting focus away from disappointing outcomes
- Lack of time may mean editors can’t always help authors use PRISMA
- Editors should balance reviews objectively considering positive / negative comments, in the context of literature
- Methodological review prime importance in SR/meta-analysis
Submitting your paper: Dealing with rejection

- Ask for specific reasons for rejection
- Be realistic
- If it’s ‘journal scope’, ‘lacking general appeal’ only appeal if you have good reasons
- Don’t be afraid to appeal decisions, but do have solid reasons WHY decision is wrong

Submitting your paper: How can you publish updates of SRs

- Ensure it’s the right time for an update – should be new evidence or a new research question
- Ensure the update advances in an important way on the original study and make it clear why
- You will publish more quickly if you target a specialist audience
Why publish an SR in an open access journal?

OPEN ACCESS

Free, immediate access online
Unrestricted distribution and re-use
Author retains rights to attribution
Papers are immediately deposited in a public online archive such as PubMed Central

Bethesda Principles, April 2003
Articles have broken free of journals: each can now be assessed for itself

- Citations in Google Scholar, Scopus, Web of Science, etc
- Usage (and re-usage)
- Press, blog coverage
Who cares about measuring research impact?

The worth of a paper tends to be judged on the basis of the impact factor of the journal in which it was published.

Recommended reading:
How can we measure ‘impact’?

At the **article level**, we can track:

- Citations
- Web usage
- Social bookmarking
- Community rating
- Media/blog coverage
- Commenting activity
- Expert ratings
- and more...

Current technology, and an evolving ecosystem of third parties, now makes it possible with...

[www.plos.org](http://www.plos.org)

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**Article-level metrics at PLoS**

- Article-level metrics at PLoS are **not just about citations and usage**. A whole range of additional measures can provide insight into ‘impact’

- We are providing metrics at the **article level**, for every article, in every one of our titles, from the first issue of our first journal, *PLoS Biology* in 2003, onwards

- We are the first publisher to provide this range of data, but we hope that others will follow

[www.plos.org](http://www.plos.org)
If you want to know more about PLoS, download our progress report at www.plos.org.