PROMOTING PATIENT SAFETY THROUGH PHARMACY PRACTICE, TECHNOLOGY AND RESEARCH

Writing for Publication Workshop
Aim
• To consider writing for publication and reflect on own circumstances to enable them to be more effective in research dissemination

Objectives
• To describe the general steps involved in writing for publication
• To consider factors in the choice of journal for publication
• To identify the steps in the process for writing for publication
• To understand the process of submission and post-submission feedback and responses
• To understand the importance of ‘social network’ for research
General Steps

• Review aim / objectives of study
• Complete analysis

• Consider strategy for publication – 1 + papers
• Review journal areas of interest, authors instructions, informal approach to editor

• Choose journal(s) – aim high, be realistic
• Write paper and submit

• Get outcome and feedback
• ✔️ Respond OR ✗ move on!

• Published - manage ‘social networks’ and other (eg internal) databases
Steps in selecting a journal ....

• Be cautious of solicitations through email
• Journal **quality and reputation** ... view Journal Website
• Examine the journal metrics, e.g. **Impact Factor**, SCIMago
• What **ethical commitments** has the journal made?
• Talk to your **colleagues**

**Other Journal Characteristics ... to consider**
• Subject area(s) of the journal
• General interest Or specialist research
• Significance of reported findings
• Type of published articles (original research, review, case study)
Impact Factors (IF)

The journal IF is a measure of the frequency with which the "average article" in a journal has been cited in a particular year.

- For example, the 2003 impact factor for a journal would be \( (2003 \text{ IF} = \frac{A}{B}) \) calculated as follows:
  - \( A \) = the number of times articles published in 2001 and 2002 were cited in indexed journals during 2003.
  - \( B \) = the number of "citable items" (usually articles, reviews, proceedings or notes; not editorials and letters-to-the-Editor) published in 2001 and 2002.

- e.g. \( 600 \text{ citations} = 2 \frac{150 + 150 \text{ articles}}{} \)

This looks simple. Is it too simple?
Impact Factors (IF)

Tells us **NOTHING** concrete about any **specific paper** or **specific author**

- “Assessors" (e.g. granting agencies, promotion committees) may use the impact factor of journals in which you publish as an indicator of the quality of your work
- Does it happen? **Routinely!**
- Is this fair? **No**

- Example, 20% of articles published in Nature (IF: 41.4) are never cited

Other “Citation Count” Metrics

**Immediacy Index** measures the average number of times that an article, published in a specific year within a specific journal, is cited over the course of the same year.

**Cited Half-Life** measures the number of years, going back from the current year, that account for half the total citations received by the cited journal in the current year.

**Citing Half-Life** identifies the number of years from the current year that account for 50% of the cited references from articles published by a journal in the current year.

Eigenfactor Score (ES)

The ES calculation is based on the number of times articles from the journal published in the past five years have been cited in the particular year

• But it also considers which journals have contributed these citations so that highly cited journals will influence the network more than lesser cited journals

• ES are not influenced by journal self-citation

• ES versus IF?
Journal Citation Reports® (JCR)

A systematic, objective tool to critically evaluate the world's leading journals, with quantifiable, statistical information based on citation data, by Institute of Scientific Information (ISI)

- Discover highest-impact journals
- Identify impact factor trend
- Compare a custom selection of journals
- Analyze self-citations
- Develop and manage journal collections

Available directly at library websites, or via other sites such as ISI’s Web of Science
SCIImago Journal Rank (SJR)

SCIImago Journal Rank (SJR) is a prestige metric based on the idea that 'all citations are not created equal'

SJR is a measure of scientific influence of scholarly journals that accounts for both the number of citations received by a journal and the importance or prestige of the journals where such citations come from

• Based on Scopus database
• Journal and country ranking: http://www.scimagojr.com/
H Factor or H Index

Index that attempts to measure both the productivity and impact of the published work of a scientist or scholar

• A scholar with an index of $h$ has published $h$ papers each of which has been cited by others at least $h$ times

• Serves as an alternative to more traditional journal impact factor metrics in the evaluation of the impact of the work of a particular researcher

• Source of data
  • Scopus vs. Web of Science vs. Google Scholar
Open Access (OA) Journals

OA literature is digital, online, free of charge, and free of most copyright and licensing restrictions

- Two primary vehicles for delivering OA: OA journals ("gold OA") and OA repositories ("green OA").

- Advantage:
  - Free for all
  - Increased readership and citation
  - Access for researchers in low-income countries

- Disadvantage:
  - Publication fees
  - Lack of quality control

Open Access (OA) Journals

[Image of DOAJ website]

All links open in a new page.

**What is Open Access?**
- Open Access Overview by Peter Suber
- The Budapest Open Access Initiative
- Bethesda Statement on Open Access Publishing
- Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities
- The Open Access Bibliography
- The Open Access Directory - a compendium of OA lists
- How Open Is It? A guide by OAIPA

For other Open Access resources, please visit the Open Access Directory.

**Resources for identifying Quality Open Access journals**
- Evaluating Open Access Journals
- Open Access publishing for journal owners
  - Open Access Scholarly Publishers Association
  - Flipping a journal to open access, by Peter Suber
  - Open-access Journal Publishing Resource Index
- Disrupting the subscription journals’ business model for the necessary large-scale transformation to open access

For copyright matters and CC licenses, we recommend that you visit Creative Commons

**Publishing systems**
- E-Journal by Duraspace
- HyperJournal
- Open Journal Systems (OJS)
- Ambra Project from the Public Library of Science.
- SOPHiS from SIGOX
- Ubiquity Press

Check out a similar list on the Open Access Directory: [http://oad.simmons.edu/oadwiki/Free_and_open-source_journal_management_software](http://oad.simmons.edu/oadwiki/Free_and_open-source_journal_management_software)

**Open Access publishing for authors**
- SHERPA/RoMEO - Publisher copyright policies and self archiving

[Links to DOAJ website and other resources]
Reporting Guidelines: equator network

• **Enhancing the QUALity and Transparency Of health Research**

• ‘.. an international initiative .... improve the reliability and value of published health research .... promoting transparent and accurate reporting and ... use of robust reporting guidelines.’

Equator Network Objectives

- Maintain and further develop ... online resources .... related to health research reporting
- Promote the use of reporting guidelines .... through an education and training ...
- Assist in the development, dissemination and implementation of robust reporting guidelines
- Support journals, universities and other organisations
- Undertake research projects
- Set up a global network of local EQUATOR centres
International clinical reporting guidelines

- **PRISMA**: Systematic reviews & Meta-analyses
- **CONSORT**: Randomized controlled clinical trials
- **STROBE**: Observational studies
- **CARE**: Case reports
- **ARRIVE**: Animal studies

http://www.equator-network.org/
# Example – STROBE checklist

<table>
<thead>
<tr>
<th>Item No</th>
<th>Recommendation</th>
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| **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** | 2 | Explain the scientific background and rationale for the investigation being reported |
| **Objectives** | 3 | State specific objectives, including any prespecified hypotheses |
| **Methods** | 4 | Present key elements of study design early in the paper |
| **Study design** | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection |
| **Setting** | 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 |

The Structure of the Paper

- **Indexing and searching the topics:**
  - Title
  - Authors (and affiliations)
  - Abstract
  - Keywords

- **Main text:** **IMRaD format**
  - Introduction
  - Methods
  - Results
  - Discussion
  - Conclusions

- **Acknowledgements, References, and Supplementary Materials.**
Main Text

Introduction/ Background

(What did you/others do? Why did you do it?)

• State why the problem you address is important
• State what is lacking in the current knowledge
• State the objectives of your study or the research question

- Literature Review
- Problem statement
- Primary objectives
- Secondary Objectives
Main Text

Methods

(How did you do it?)

- Describe the context and setting of the study
- Specify the study design
- Describe the ‘population’ (patients, doctors, hospitals, etc.)
- Describe the sampling strategy
- Describe the intervention (if applicable)
- Identify the main study variables
- Describe data collection instruments and procedures
- Outline analysis method

- Study Design
- Population and sampling:
- Data collection
- Ethics
- Analysis
Main Text

Results

(What did you find?)

• Report on data collection and recruitment (response rates, etc.)
• Describe participants (demographic, clinical condition, etc.)
• Present key findings with respect to the central research question
• Present secondary findings (secondary outcomes, subgroup analyses, etc.)
Main Text

Discussion

(What does it all mean?)

• State the main findings of the study
• Discuss the main results with reference to previous research
• Discuss policy and practice implications of the results
• Analyze the strengths and limitations of the study
• Offer perspectives for future work

• Strengths
• Limitations
• Implication to practice
Main Text

Conclusion

(What is the answer to your research question? What is the importance of the work (applications, recommendations, and implications?)

• Introduce the work and then briefly state the major results.
• State the major points of the discussion.
• End with a statement of how this work contributes to the overall field of study.
Submission process

Online-submission: Create account (corresponding author)

• Author Centre - onscreen instructions
  • Original word processing file to copy/paste information
  • Main document (manuscript text) does not mostly contain title/authorship page
  • Figures and tables are mostly uploaded separately
  • Order of submitted documents is confirmed

• Complete manuscript proof is automatically generated for approval and submission by author

• Confirmation email indicates successful submission

• A manuscript number is used in all future correspondence
Research Social Networks

• Orcid  http://orcid.org/about
  – registry of unique researcher identifiers and a transparent method of linking research activities and outputs to these identifiers

• Research Gate  https://www.researchgate.net/
  – mission ... to connect researchers and make it easy ... to share and access scientific and expertise
Activity

What are the BARRIERS / FACILITATORS in CHANGING BEHAVIOURS to publish more?

Piano Stairs video ....
The COM-B Model

The COM-B system: Behaviour occurs as an interaction between three necessary conditions

- **Capability**: Psychological or physical ability to enact the behaviour

- **Motivation**: Reflective and automatic mechanisms that activate or inhibit behaviour

- **Opportunity**: Physical and social environment that enables the behaviour

*Michie et al. (2011) Implementation Science*
Activity

3 x Flipcharts: C - O - M & ‘Post it’ notes

Discuss BARRIERS / FACILITATORS for each of (5 mins)

Post your ‘Post-its’ after each & Review others

Group Discussion
Summary
Basics of Manuscript Preparation & General Writing Tips

1. The importance of this work and relevance of the problem addressed
2. The quality of the writing style (language, well-written, clear, and logical)
3. The study design and methodology (i.e. appropriate and comprehensive)
4. Literature review (focused, and up-to-date)
5. Sample size (sufficiently large)

Summary
Things to consider when writing a manuscript

1. Think about why you want to publish your work and whether it's publishable.
2. Choose the target journal.
3. Pay attention to journal requirements in the Guide for Authors.
4. Pay attention to the structure of the paper.
5. Understand publication ethics to avoid violations.
Other Web Resources

• Glanville J, Light K, Stirk L. How to write a good research paper. J Health Serv Res Policy. 2008;13(2):127-128

• Guyatt GH, Brian Haynes R. Preparing reports for publication and responding to reviewers’ comments. Journal of Clinical Epidemiology. 2006;59(9):900-906