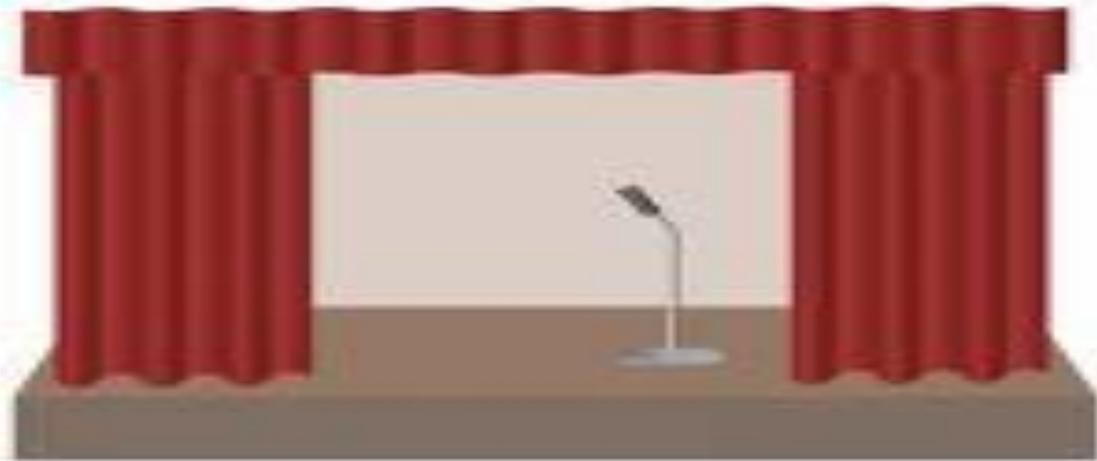


ASEAN+3 FETN

Scientific Writing Workshop

LECTURE 5 INTRODUCTION

Presented by Dorothy L Southern, MPH



Objectives

- Focus on organization of a manuscript: **The Introduction section**
- Understand that plagiarism, whether intentional or not, is unacceptable
- Writing Time: expand on your draft manuscript's **Introduction section**



Purpose of Introduction section

1. Provide **background** information about topic (what is known)
2. Identify the **gap(s)** in information (what is unknown)
3. Provide the **rationale** for the study: why study is needed
4. Present study **objective(s)**

Funnel organization: descriptive manuscript



1. Disease description
2. Global to regional to local burden
3. Study objective

Funnel organization: descriptive manuscript example

1. **Disease description:** Cholera bacterium, symptoms, fatality rate
2. **Global to regional to local burden (death/disability):** 500,000 people die annually globally, 20,000 in Africa, 10,000 in Zimbabwe
3. **Study objectives:** Investigate cholera outbreak in Harare, identify causative agent, source, provide recommendations

1 Describe the problem investigated

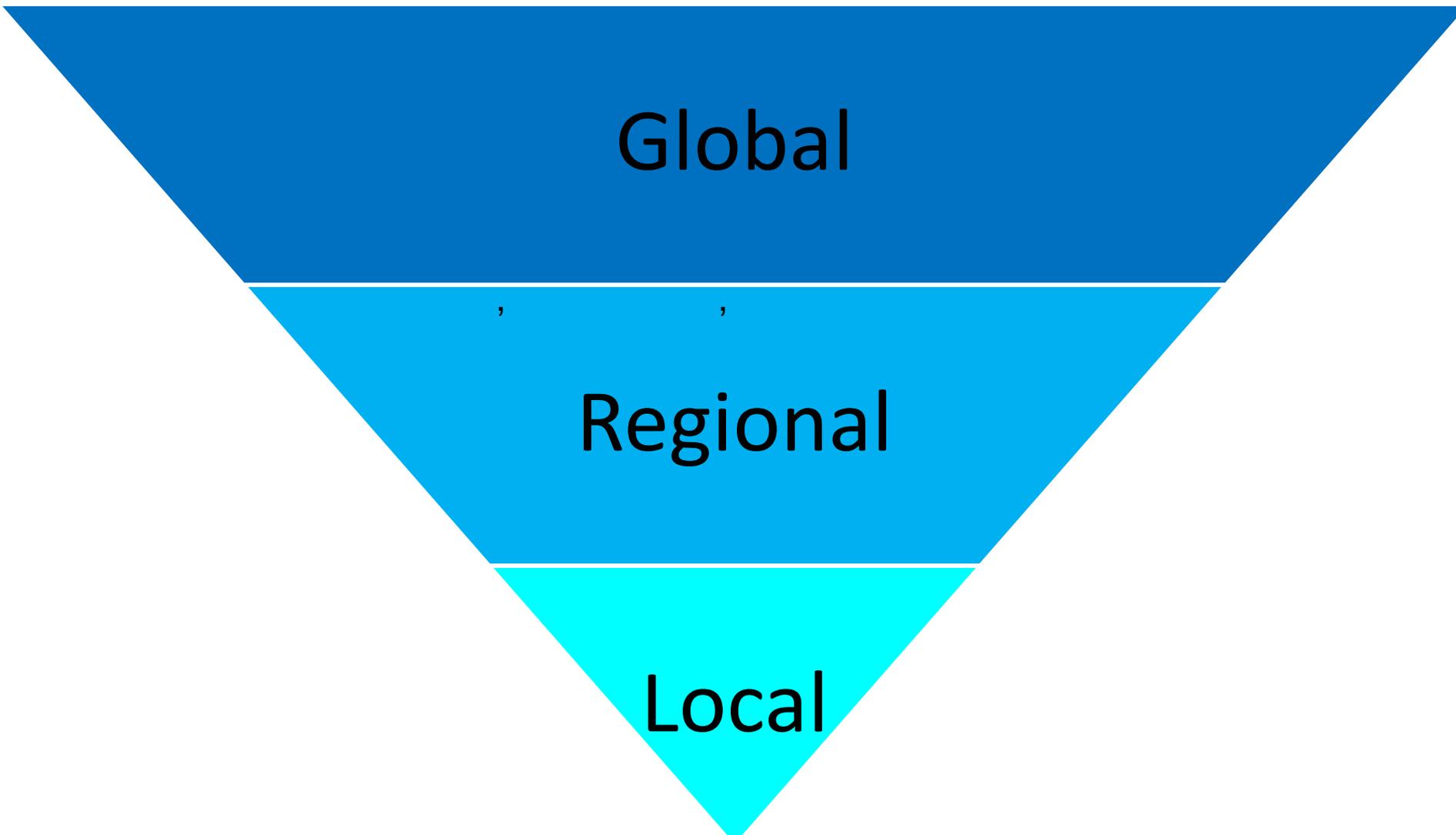
Describe the problem/issue being studied. *Use references*

What is the global, regional, or local context that is relevant to your study question? *Use references.*

What is the proof that this issue is a problem? *Use references*

Define key terms and concepts so your reader can understand your study.

Zooming in....



Global

Regional

Local

2 What is the gap in knowledge?

- What other studies back up the identified gap? *Use references.*
- Sometimes the lack of previous studies is the gap
 - Previous studies:
 - Linked to a particular population
 - Used a different methodology

3 Why is this study relevant?

Provide a justification for why your study is important and for conducting the study. *Use references*

What impact will results have on public health policy or practice? *Use references*

4 What is the objective(s) of the study?

- The objective is always the last sentence in the Introduction

Introduction do's and don'ts

Do's

- Use present tense
- Define new, unusual, vague terms
- Keep it short
- Ask question or state hypothesis, or state study objectives in last sentence

Don'ts

- Don't give historical or detailed account
- Don't over-reference
- Don't go off on tangent
- Don't answer your question/hypothesis

Errors linked to the Introduction section

A1. Insufficient knowledge of the literature

A2. Not referencing statements



Poor or no literature review

Consequences

If you don't read the relevant literature...

... then you cannot frame the research question or the gap that your study will address

If you don't demonstrate your understanding of the topic...

...then your protocol/study will not be credible to your readers

If you ignore work that contradicts your findings...

...then your protocol/study will not be credible to your readers

If you don't reference statements in your literature review...

...your readers will not know if your protocol/study is based on sound research AND you risk committing plagiarism

If you can't answer the question:

“What does this paper add to what is already known about this subject in the literature?”

Then you are not ready to write the paper.

Luby, S. and Southern, D. *A Guide to Quantitative Scientific Writing.*

Errors linked to the Introduction section

A1. Insufficient knowledge of the literature

A2. Not referencing statements



The *high crimes* of scientific misconduct

1. Fabrication
2. Falsification
3. Plagiarism

Fabrication is making up data or results and recording or reporting them.

Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

Source: National Science and Technology Council. Federal Policy on Research Misconduct. Downloaded from http://www.ostp.gov/cs/federal_policy_on_research_misconduct on June 10, 2009.

Plagiarism

“The appropriation of another person’s ideas, processes, results, or words without giving appropriate credit.”

Source: National Science and Technology Council. Federal Policy on Research Misconduct.

Plagiarism of text

Verbatim

Mosaic

Inappropriate paraphrasing



Appropriate paraphrasing

- Appropriate paraphrasing is a restatement of someone else's work by ***substantially*** modifying the original material, not just by using synonyms or changing the order of the words. Always include a citation at the end of a paraphrase, that links to the correct reference.

Why paraphrase?

- To know that you have understood the text and you are not simply copying it
- To avoid using an author's exact words without quotation marks – scientific manuscripts rarely use direct quotations



When to paraphrase?

- When writing your **Introduction** and/or the **Discussion** of your manuscript

How should I paraphrase?

1. Read and understand the text



5. Check your paraphrasing

- Meaning is the same, but links to your study's context
- Length is approximately the same
- Style is your own and matches the rest of your paper
- Citation is in the text linked to the correct reference

6. Use citation management software such as EndNote or Zotero or Mendeley

Citation management software

- Collect citations from online databases and library catalogues
- Organize, edit, and search through the citations you've saved
- Insert in-text citations, footnotes, and bibliographies into your Word document
- Create bibliographies in well-known styles like APA, Vancouver, and even specific journal styles like Nature
- Share your citations and collaborate with colleagues on projects

What is 'appropriate' paraphrasing?

- Google test <http://www.google.com>
- Primarily a search engine and not a plagiarism detector, Google is able to detect phrases and can rapidly identify source material from the Internet.
 - PROS: Quick and free. Google extracts from pdf files, which many search engines cannot do.
 - CONS: Unsystematic, and involves manual entry of strings. Labor-intensive.

Plagiarism Detection Software (PDS)

- Turnitin
- iThenticate
- Click on <https://elearningindustry.com/top-10-free-plagiarism-detection-tools-for-teachers>
for 2017 update of top 10 free plagiarism detection tools

What to aim for in the future?

- Draft your introduction without references first
 - Then back up with appropriate references

Items for discussion

1. How do I cite something that might be considered a commonly known statistic in the field, but not necessarily common knowledge, such as the child mortality rate? For example, I saw the rate listed in one article, but that article cites UNICEF for the child mortality rate. Do I cite the article or UNICEF?
2. I want to refer to a phenomena or situation that is not documented anywhere. For example, I would like to refer to the fact that the government has plans to roll out Integrated Management of Childhood Illness (IMCI) in the country. However, this plan is not published anywhere or even stated in a policy brief. I do not have a personal communication to cite either.

Consequences of scientific misconduct

1. A historian resigns from the Pulitzer board after allegations that she had appropriated text from other sources in one of her books.
2. A biochemist resigns from a prestigious clinic after accusations that a book he wrote contained appropriated portions of text from a National Academy of Sciences report.
3. A famous musician is found guilty of unconscious plagiarism by including elements of another musical group's previously recorded song in one of his new songs that then becomes a hit. The musician is forced to pay compensation for the infraction.

4. A college president is forced to resign after allegations that he failed to attribute the source of material that was part of a college convocation speech.
5. A member of Congress running for his party's nomination withdraws from the presidential race after allegations of plagiarism in one of his speeches.
6. A psychologist has his doctoral degree rescinded after the university finds that portions of his doctoral dissertation had been plagiarized.

**Whether intentional or
unintentional, plagiarism is
unacceptable.**



Handout:

Avoiding plagiarism, self-plagiarism, and other questionable writing practices: A guide to ethical writing

“The concept of ethical writing...entails an implicit contract between reader and writer whereby the reader assumes, unless otherwise noted, that the material was written by the author, is new, is original and is accurate to the best of the author’s abilities.”
(Roig, 2003)

Take away message to avoid plagiarism

1. Use appropriate paraphrasing
2. Cite and provide references for anything taken from another source, including facts, figures, opinions, or conversations
3. Incorporate appropriate citation management software in your literature review
4. Be conservative and always cite and use correct source information for referencing

This was found in the college library

Can I turn in a paper
without citing all sources?

“No”.¹

¹ William Shakespeare, *Hamlet*,
Act III, Scene I, line 96

VIA 9GAG.COM

Handout

Tips for writing the Introduction



Errors linked to the Introduction section

- A1 Insufficient knowledge of the literature
- A2 Not referencing statements
- A3 Weak citations
- A8 Characterizing an observation as 'the first'
- B12 An insufficiently focused Introduction
- B16 Presenting rationale in the last sentence of the Introduction



Writing Time



- Review your draft manuscript's **Introduction section**
- Decide if you want to start with global, regional or local context
- Make sure you include only the required information
- The **Introduction** should only be about one page of text