

CovCo Writing Workshop

Session Five: The Introduction Section



Structured Manuscripts

Title and Abstract: Summarizes your work

Introduction

- Highlights gaps in current scientific knowledge
- Explains the focus of your manuscript

Methods: Describes what you did in enough detail that someone else could reproduce your study

Results: Objectively share your findings, often using tables or graphs

Discussion

- Interprets your findings in the context of the literature and limitations
- Suggests scientific, clinical, or operational next steps

Declarations: Provides transparency to support ethical conduct of researcher



Content of introduction sections

- ✓ Provide necessary background information with relevant citations
- ✓ Highlight gaps in current scientific knowledge that motivate your research question
- ✓ Explain focus of manuscript
- ✗ Do not repeat abstract
- ✗ Do not include detailed methods or results
- ✗ Do not provide unnecessary background information

Content of introduction sections

Big picture: Why is this topic important?

What is currently known and what is the gap?

What will you do in this paper? How will this address the gap?



Structure of the introduction

- Introduction are typically 3-4 paragraph
- Typically, a paragraph for: (1) Big picture (2) Currently evidence and the gap (3) What this paper will achieve
 - May be shorter depending on article type

Big picture: Why is this topic important?

- Provide background information and set the context
- First 1-2 sentences are typically broad

“Despite the initially promising results of nationwide vaccination campaigns, many countries are currently experiencing a resurgence of COVID-19, dominated by the delta (B.1.617.2) variant of SARS-CoV-2.” (Barda et al., *The Lancet*, 2021)

“Hormonal contraceptive use has been increasing worldwide. In 2019, approximately 1.1 billion women of reproductive age were in need of family planning services worldwide, with almost 50% of those women using various hormonal contraceptive methods,¹ including either estrogen and progesterone or progesterone only.” (Brabaharan et al., *JAMA Network Open*, 2021)



What is currently known and what is the gap?

- Provide relevant citations but do not get bogged down in the details of other studies

“Faced with rising rates of COVID-19-related admissions to hospital, and based on initial evidence suggesting a pronounced humoral response to a third dose of the mRNA vaccines,⁵⁻⁷ the Israeli Ministry of Health announced a campaign to administer a third dose of the BNT162b2 mRNA COVID-19 vaccine (Pfizer–BioNTech).” (Barda et al., *The Lancet*, 2021)

“However, contradictory results have been reported from several meta-analyses^{2,4} on the associations between hormonal contraceptive use and adverse health outcomes. The use of hormonal contraception has been associated with either reduced or increased risk of many adverse health outcomes, including cancer, cardiovascular, fracture, gastrointestinal, and metabolic outcomes.⁴” (Brabaharan et al., *JAMA Network Open*, 2021)



What will you do in this paper?

- Include a clear sentence about the goal of the work, including the exposure, outcome, and population
 - Can also include the method of analysis (at a high level!)
- Should clearly tie back to “addressing the gap”

“We aimed to use the data repositories of Israel's largest health-care organisation to estimate the effectiveness of a third dose of the BNT162b2 COVID-19 vaccine in preventing severe COVID-19-related outcomes.” (Barda et al., *The Lancet*, 2021)

“This umbrella review aimed to systematically identify relevant meta-analyses of randomized clinical trials (RCTs) and cohort studies of hormonal contraceptive agents, summarize their findings, and assess the certainty of their evidence to provide a comprehensive understanding of the associations between hormonal contraception and adverse health outcomes.” (Brabaharan et al., *JAMA Network Open*, 2021)

Style of the introduction

- Use concise, specific sentences
 - “What is the goal of this sentence?”
- Define abbreviations before their first use
 - Note that some journals have specific guidelines about how to handle abbreviations
- Provide citations, but do not get bogged down in details of other studies
 - If you want to call attention to a specific study, you can add weave in specific examples: “*Some interventions are coupled with CHW programmes to assist health workers; specific examples include an SMS-based monitoring system in Rwanda (Hategeka et al., 2019) and a mobile application used by CHWs in India (Ilozumba et al., 2018).*”
- Use past tense to describe what *you* did
- Use present tense for current evidence

Introduction section overview

Content

- ✓ Provide necessary background information with relevant citations
- ✓ Highlight gaps in current scientific knowledge that motivate your research question
- ✓ Explain focus of manuscript
- ✗ Do not repeat abstract
- ✗ Do not include detailed methods or results
- ✗ Do not provide unnecessary background information

Structure

1. Why is this topic important?
2. Current evidence
3. “The gap”
4. What will you do in this paper?

Style

- Use concise, specific sentences.
- Define abbreviations
- Provide citations
- Use present tense for current evidence
- Use past tense to describe what you did