

# Conducting a Systematic Review using PRISMA guidelines from a Student's Perspective

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## RESEARCH QUESTION

To understand how to conduct a systematic review using PRISMA guidelines.

## INTRODUCTION

The purpose of this presentation is to depict a student's point of view about conducting a systematic review using PRISMA guidelines. We sought to determine what inflammatory markers have been identified for preeclampsia.

\*\* A faculty team is conducting this systematic review and invited the student to participate.

## BACKGROUND

Conducting and using systematic reviews provide critical assessment of research findings to inform practice. Learning about this process is invaluable to student nurses.

## THE TEAM



## MATERIALS AND METHODS

### Materials:

- CINAHL and OVID/Medline databases
- The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)
- Abstract examination Process

### Methods:

- Conducted a systematic review to appraise and synthesize research evidence .
- Identified relevant articles from CINAHL and OVID/Medline databases using search terms with specified inclusion and exclusion criteria.
- Used The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method guided the process
- Determined if the article fit our inclusion criteria and utilized our abstract examination process (i.e., author/year, purpose, participants, design & methods, biomarkers, key findings, strengths and limitations, quality rating/ level of evidence) to condense relevant aspects and to determine eligibility for full text review
- Results were extracted for examination across studies followed by analysis by the faculty team with inclusion of the student.

## DISCUSSION

- Systematic reviews are beneficial to nursing research because it focuses on answering the clinical question, prevents bias, and focuses on primarily connecting the nurse practice to evidence-based practice.
- Providing opportunities to undergraduate nursing students can help develop student nurse researchers connect evidence-based practice (EBP) to clinical interventions and health services.
- While systematic reviews are vital to EBP there are still several setbacks such as limited content, limited search abilities and paid subscriptions that are required for full content that affects clinical research.

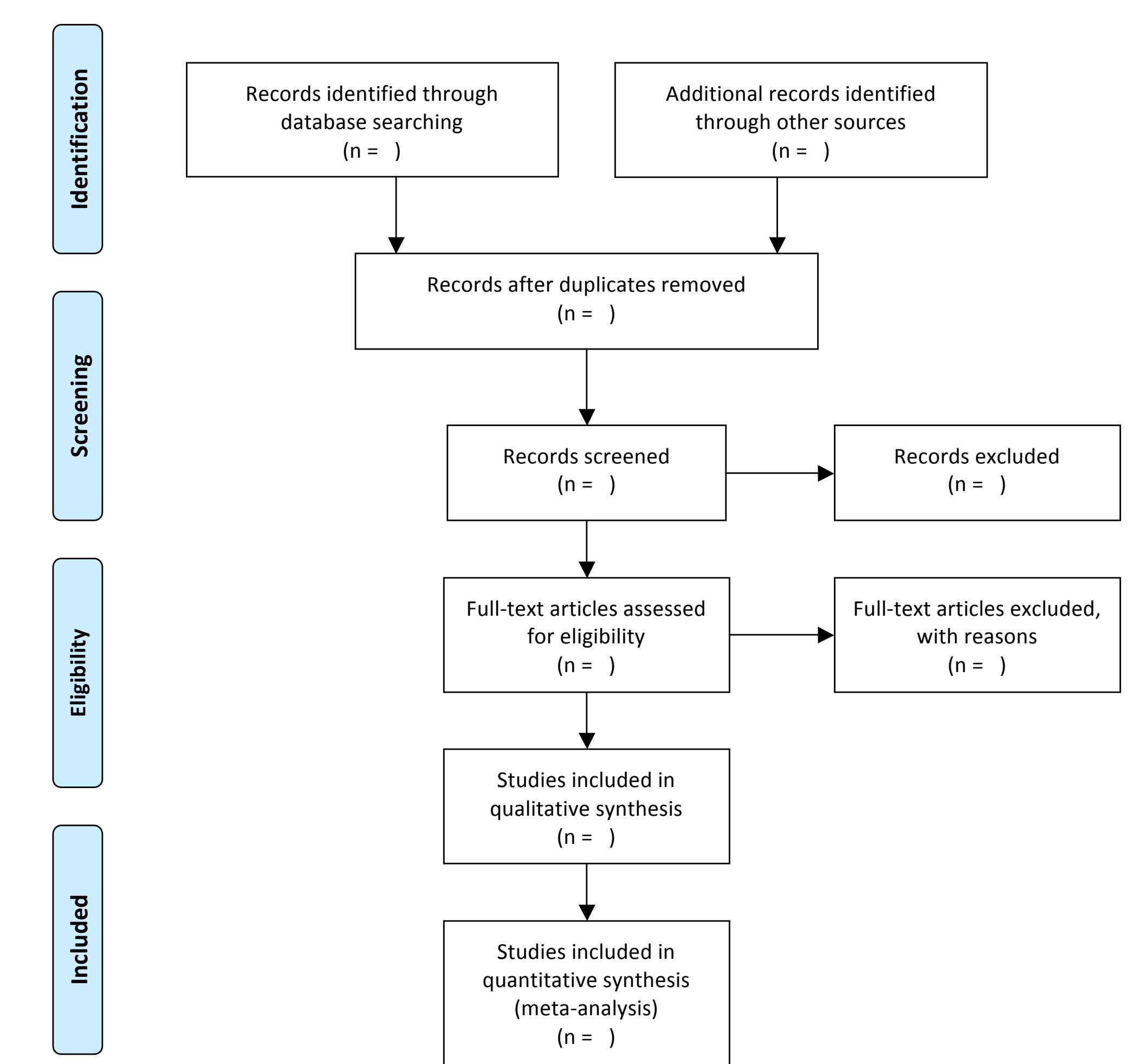
## DATA RESULTS

We identified 77 articles for inclusion from the original 672. A hallmark of the systematic review process is that others can replicate it. I learned the meaning of *systematic* review as part of a team and how this process generates evidence for practice.

## PRISMA PROCESS



### PRISMA 2009 Flow Diagram



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed.1000097

For more information, visit [www.prisma-statement.org](http://www.prisma-statement.org).

## CONCLUSION AND SUMMARY

- Involvement in a systematic review taught me about narrowing selection of articles based on criteria and how to extract findings across studies to analyze a body of outcomes.
- Learning about conducting a systematic review as a student helped me to build foundational skills to synthesize research findings to answer a focused clinical question to contribute to evidence-based practice.

**Acknowledgements:** JCN for support