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*Health, Climate, and Population Dynamics:  
Building Resilient Health Systems for a Sustainable and Equitable Future*

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## Research Title

**Systematic Review of Evidence based Practice of  
Forecasting and Procurement of Essential Drugs and  
Medicines (Paracetamol and Iron Tablets) in Public  
Health Logistics System.**

**Name of Author**

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## Background:

- The quantification, forecasting, and procurement of drugs within public health logistics systems are critical components for ensuring the availability and accessibility of essential medicines.
- Evidence-based approaches are essential for optimizing these processes, particularly in low-resource settings countries like Nepal where health systems face significant challenges.

## Objective:

- The objective of this systematic review of literature is to find out the evidence based quantification, forecasting and procurement of Paracetamol and Iron tablets or health products around the globe:

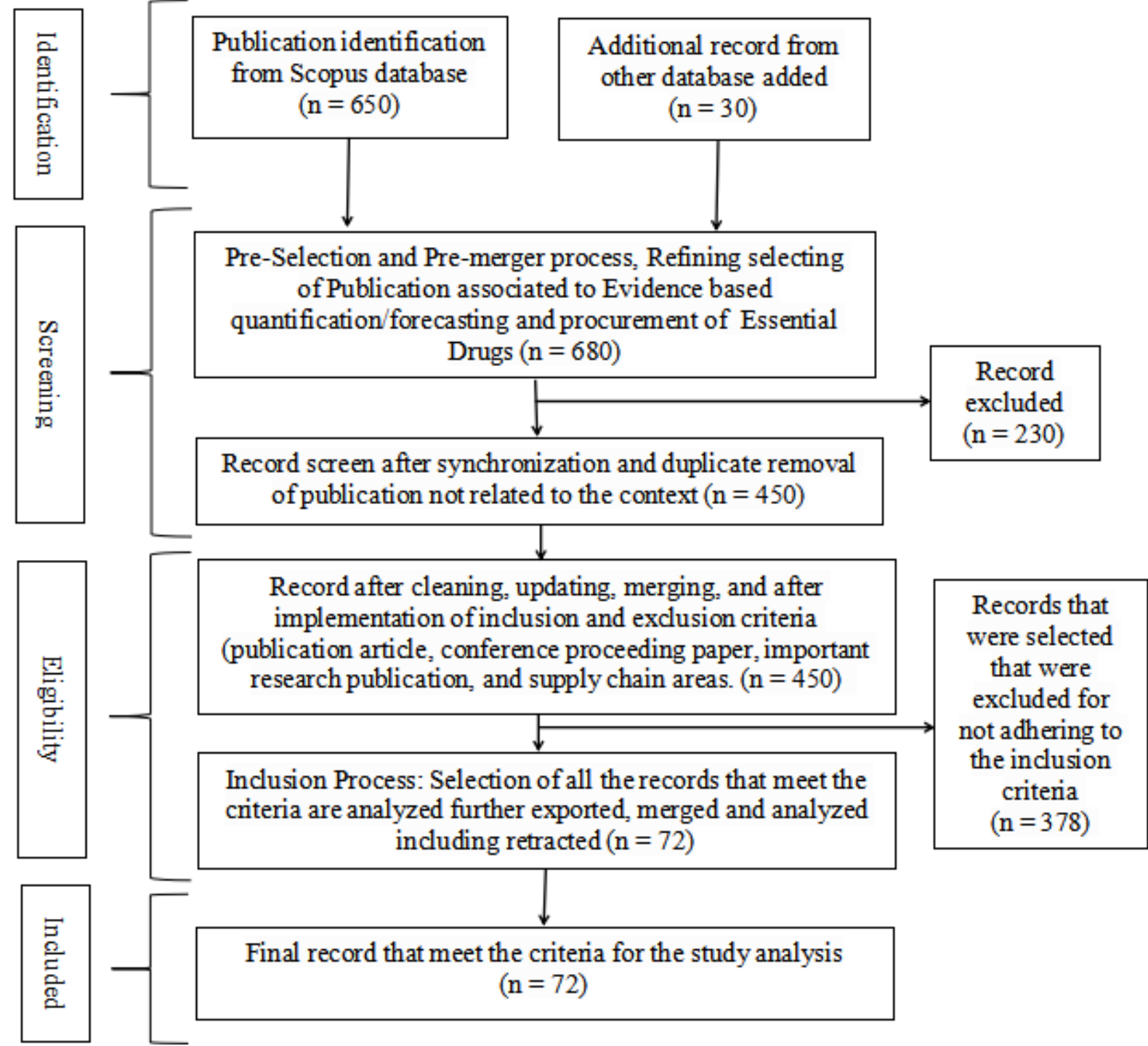
‘So that it helps to do a research on evidence based practice of quantification, forecasting, and procurement of Paracetamol and Iron Tablets in public health institutions in Nepal.’

# Methodology:

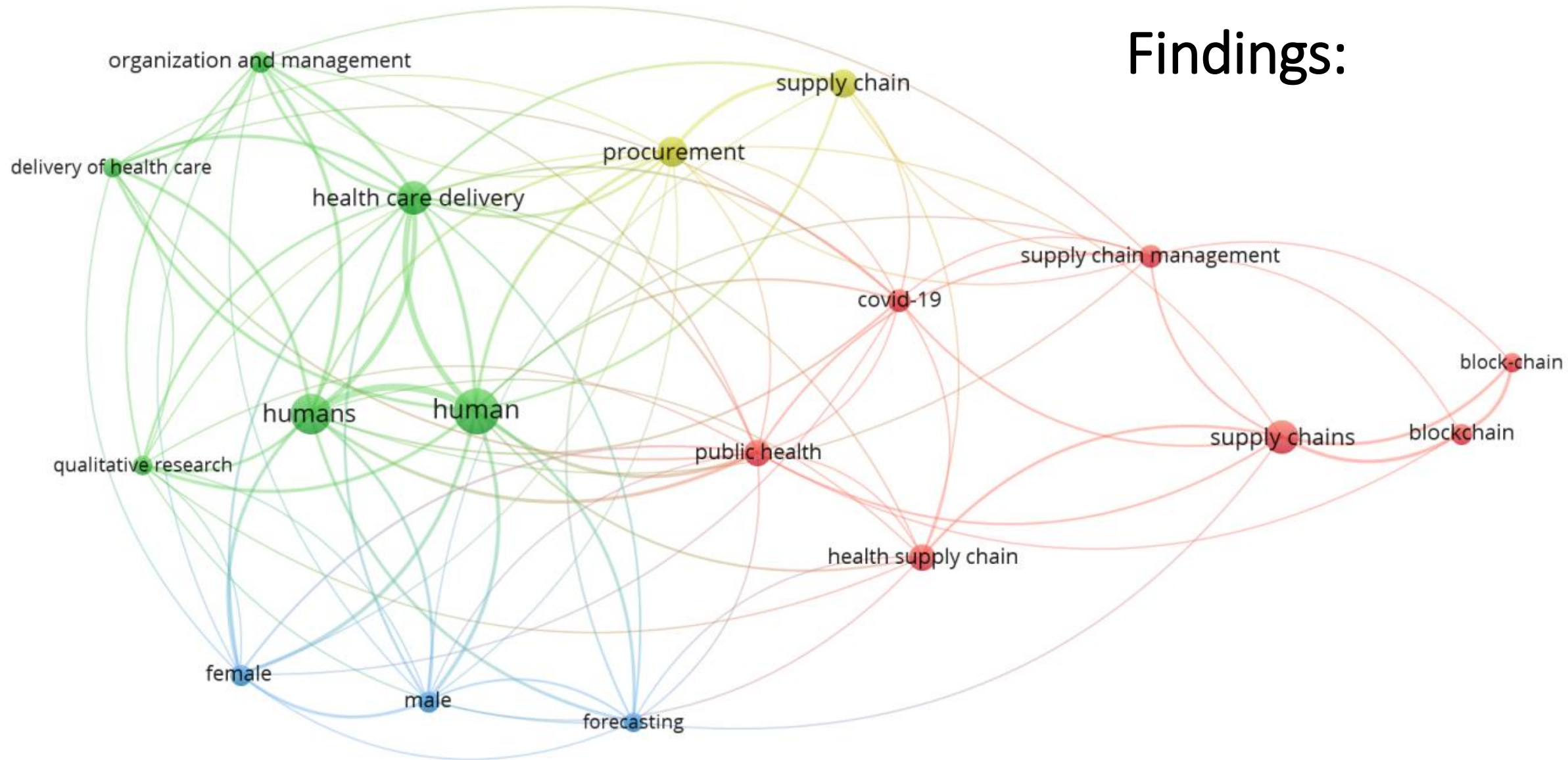
- A systematic review is conducted to synthesize the extant literature and analyze the content to ascertain the evidence based practices of quantification and procurement of essential drugs.
- The PRISMA Flow Statement was followed.
  - PRISMA stands for “Preferred Reporting Items for Systematic reviews and Meta-Analyses”.
  - The PRISMA flow statement diagram visually summarises the screening process. It initially records the number of articles found and then makes the selection process transparent by reporting on decisions made at various stages of the systematic review. Numbers of articles are recorded at the different stages.

# Methodology:

## PRIMA FLOW STATEMENT



# Findings:



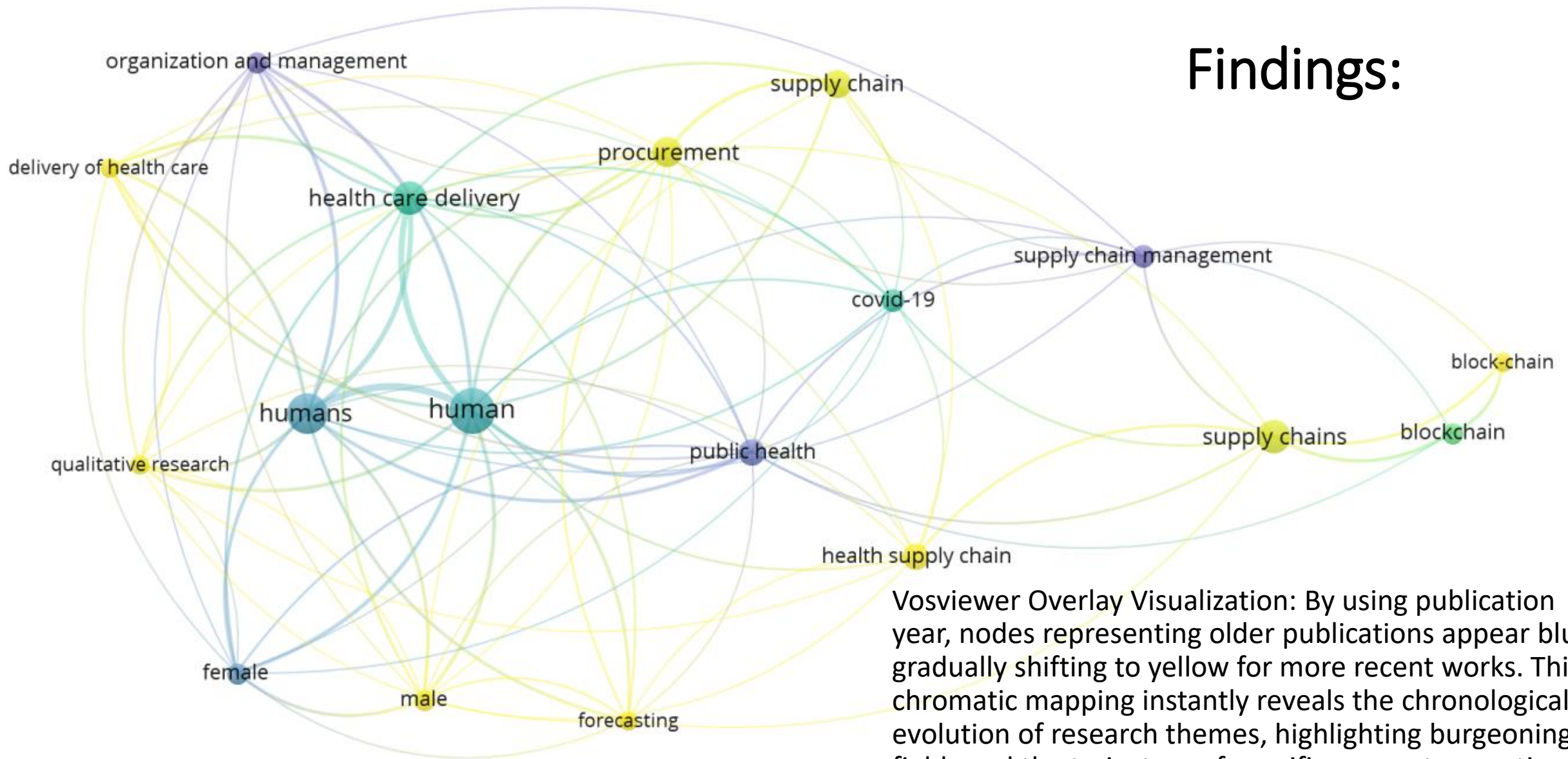
VOSviewer Network Visualization of Keyword Coupling of studies researching Evidence based Practice of Forecasting and Procurement of Essential Drugs (Paracetamol and Iron Tablets) in Public Health Logistics System. Each node indicates a research article labeled by the keywords and its publication year. The size of the nodes is proportional to the number of global citations of the paper.



VOSviewer



# Findings:



Vosviewer Overlay Visualization: By using publication year, nodes representing older publications appear blue, gradually shifting to yellow for more recent works. This chromatic mapping instantly reveals the chronological evolution of research themes, highlighting burgeoning fields and the trajectory of specific concepts over time.



## Results:

- Evidence-based quantification, forecasting, and procurement of drugs in public health logistics systems are essential for ensuring the availability of essential medicines.
- The integration of high-quality data systems, functioning logistics management information systems (LMIS) and use of the LMIS information is the key.

## Results:

- Also, effective coordination and collaboration, well trained health staff, use of modern technology, and optimized procurement processes are crucial for enhancing health outcomes, particularly in resource-limited settings.
- The literature consistently supports the notion that strategic improvements in these areas can lead to significant advancements in public health logistics.

## Conclusion: A TAKE AWAY MESSAGE

- There is a need to conduct a research on “Evidence based Practice of Forecasting and Procurement of Essential Drugs and Medicines (Paracetamol and Iron Tablets) in Public Health Institutions in Nepal” to achieve the following broad objectives:
  1. Establish what methods are currently employed for quantification/forecasting and procurement in public health institutions
  2. Determine how these methods affect the success and efficiency of procurement, forecasting, and quantification.
  3. Determine whether there are any obstacles in the way of putting the best supply management techniques into practice.

## Short Bio of the Presenter:

- Heem Shakya is a Procurement, Supply Chain Management and Health System expert with 25+ years of professional experience in Nepal, Indonesia, Cambodia, and Afghanistan.
- Mr. Shakya is currently a Ph.D Scholar at NOIDA International University, New Delhi India.



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**Thank you!**