

# Aseptic technique in clinical nursing settings: A scoping review

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# Evidence-based practice and Practice-based evidence

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## Aseptic technique



There is an internationally accepted definition of aseptic technique



Guidelines across Australia refer to the same principles of aseptic technique



Aseptic technique is taught consistently across Universities



# Why

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## Variation in Guidelines and literature

- Lack of consensus surrounding the definition and implementation of aseptic technique outside the operating theatre environment <sup>1 2 3</sup>
- Led to the emergence of various terms in literature over time <sup>4 5 6</sup>
- Variations in State/National and International guidelines <sup>7</sup>





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Review

## Aseptic technique in clinical nursing settings: a scoping review

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### SUMMARY

Aseptic technique forms a component of standard precautions and is a foundational concept in nursing practice. The application of that standard appears to vary between context and nurse. The variation of principles and application between facilities and individuals may reflect the current disparity in evidence-based literature. The purpose of this scoping review is to map the current literature and to seek clarification of key concepts and definitions of asepsis and aseptic technique in relation to clinical nursing. A systematic search was conducted in alignment with Joanna Briggs Institute guidelines and PRISMA-ScR for scoping reviews. Electronic databases Medline and CINAHL were searched using a combination of Medical Subject Headings (MeSH) and free-text terms. Studies published between January 1<sup>st</sup>, 2004 and 31<sup>st</sup>, December 2024 were included. Studies were screened in Covidence. One reviewer screened the titles and abstracts, with a second checking a random sample. Two reviewers conducted full text reviews. Data extraction was undertaken using a pre-specified database. A total of 2812 studies were initially identified, with 31 articles included in the review following the screening and full-text review. Half of the included papers originated from three countries, the UK ( $N = 6$ ), USA ( $N = 5$ ), and Australia ( $N = 4$ ). Many papers do not define asepsis or aseptic technique, and there are notable variations in the terminology used to apply aseptic technique. This scoping review highlights the variation in the definitions, principles, and application of aseptic technique in clinical nursing settings across evidence-based literature. It will inform a larger planned program of research.

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# Method

## How is aseptic technique defined and applied in clinical nursing settings?

- Electronic databases MEDLINE and CINAHL were searched using a combination of Medical Subject Headings (MeSH) and free-text terms.
- Studies published between 1st January 2004 and 31st December 2024 were included. Studies were screened in Covidence.

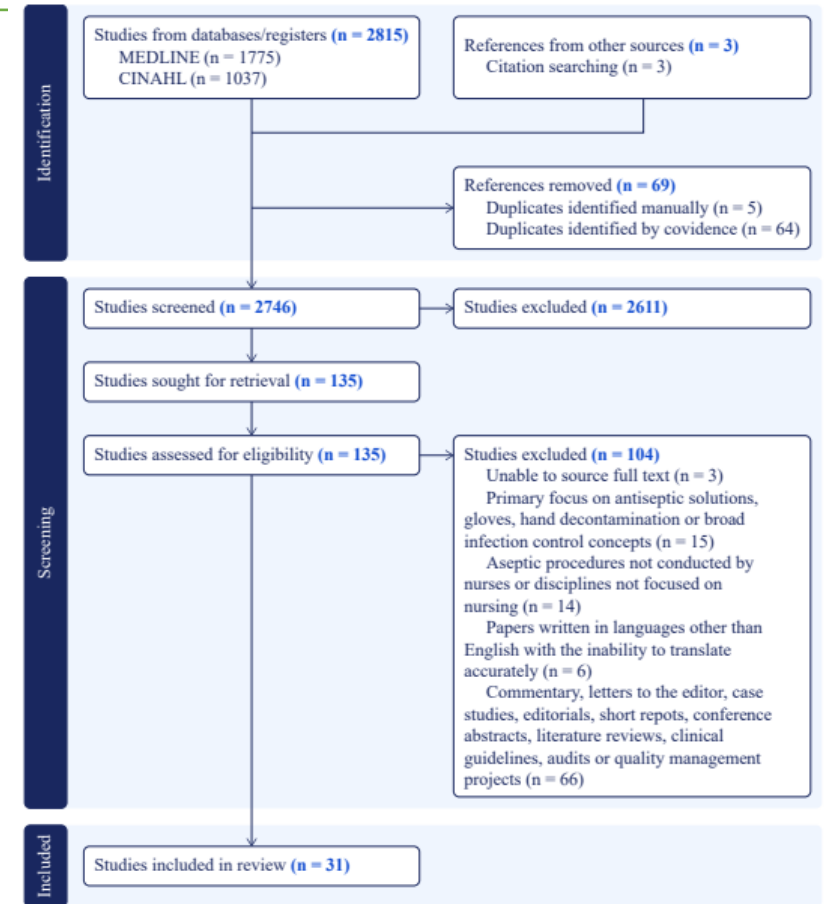


Figure 1. PRISMA flow diagram.

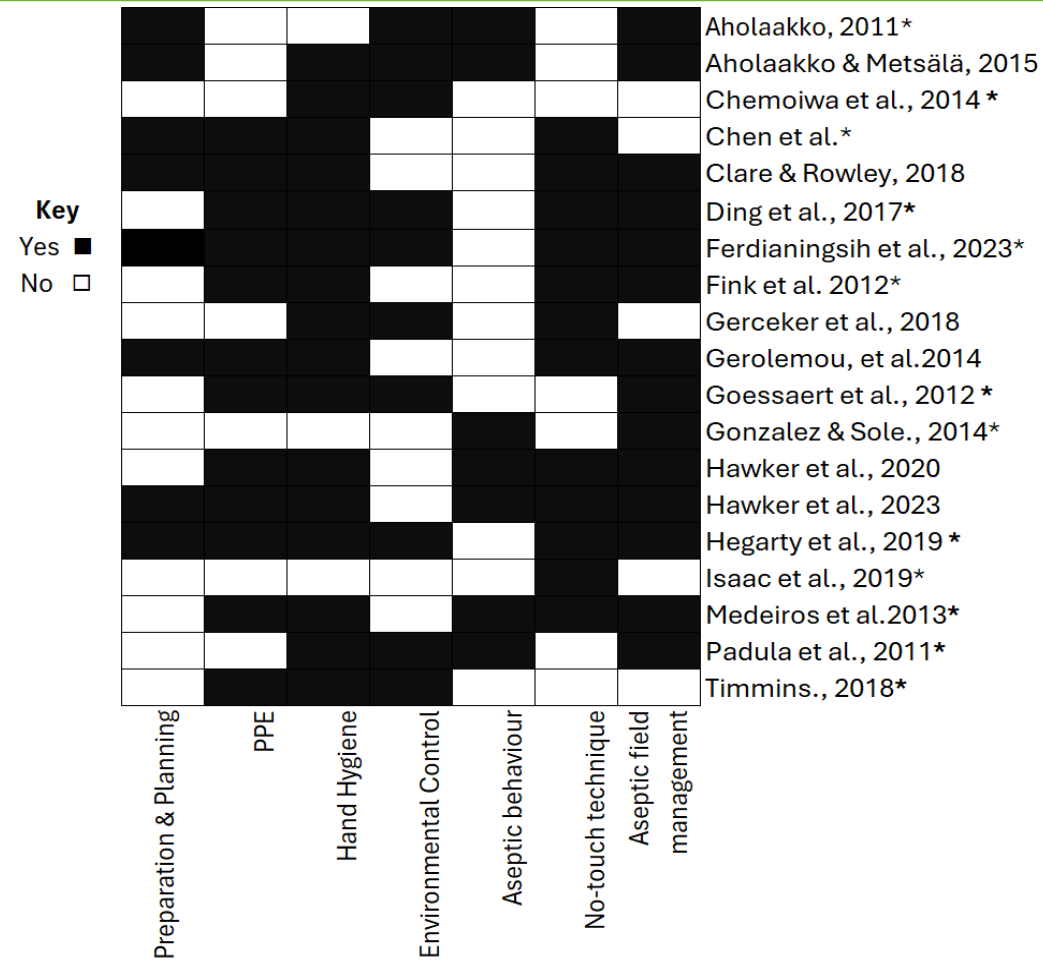
# Results

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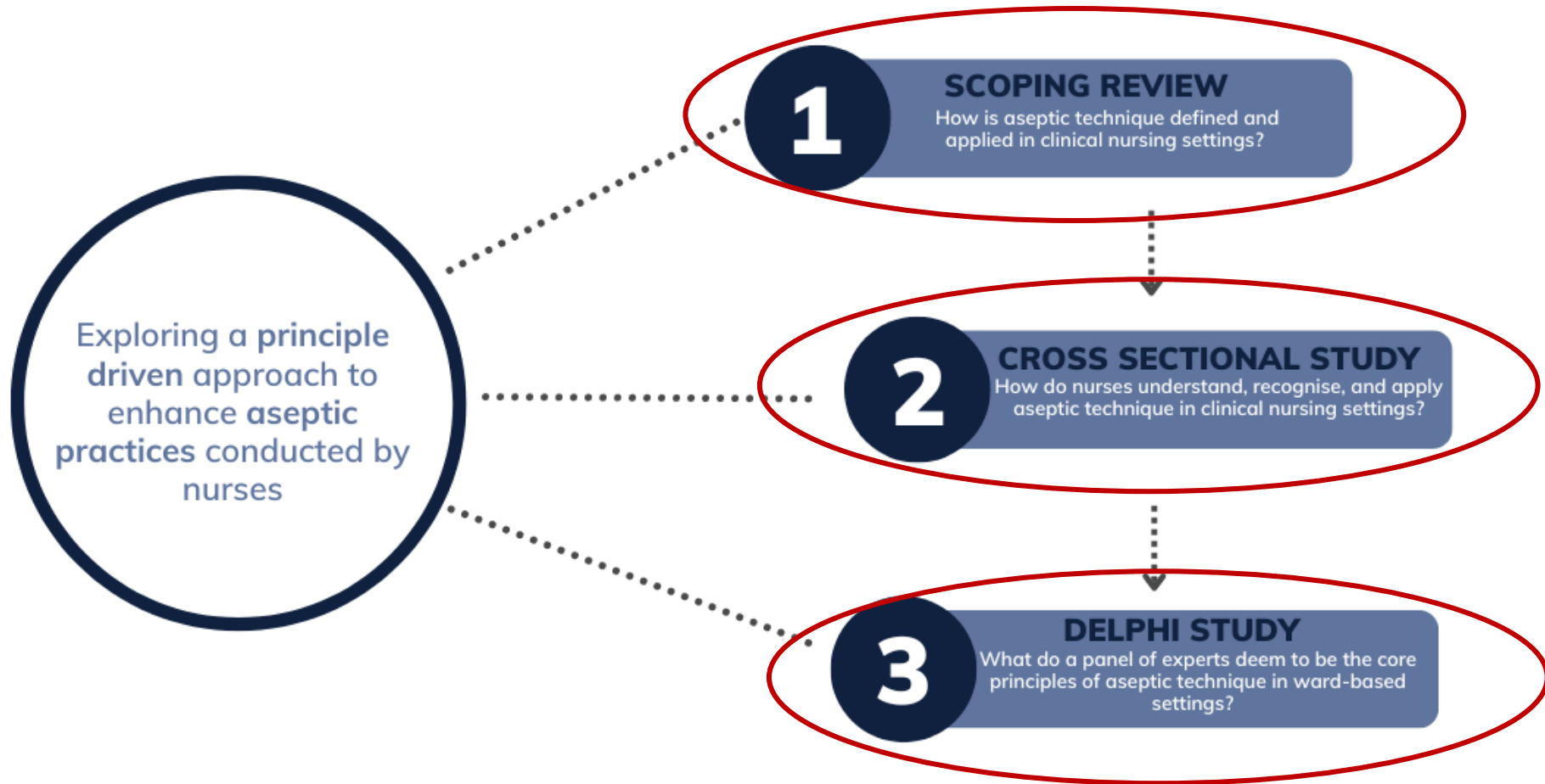
- 2812 studies were initially identified, with 31 articles included in the review following the screening and full-text review.
- Half of the included papers originated from three countries, the UK (6), USA (5), and Australia (4).
- Many papers **did not define asepsis** or **aseptic technique**, and there were **notable variations in the terminology** used to apply aseptic technique.



# Results



# Next steps



# References

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