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Post-mastectomy pain syndrome in low-and middle-income countries: a systematic review

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Background and Objectives

- Breast cancer, one of the most prevalent cancers worldwide, poses a significant health burden, particularly in low- and middle-income countries (LMICs)
- This systematic review synthesizes evidence on PMPS prevalence, characteristics, and management in LMICs
- It also evaluates the prevalence of PMPS and its impact on the quality of life among women in LMICs

Methods

- This systematic review adhered to PRISMA guidelines, analysing studies on post-mastectomy pain syndrome in LMICs.
- Data were searched in PubMed, PubMed Central, Cochrane Central Register of Controlled Trials (CENTRAL), Global Index Medicus, Embase and Web of Science, Dimensions Ai, Google Scholar, Google, ProQuest, and WHO library.
- All studies were appraised for their methodological quality using Joana Briggs Institutes' critical appraisal tool.
- Studies extracted were qualitatively synthesised.

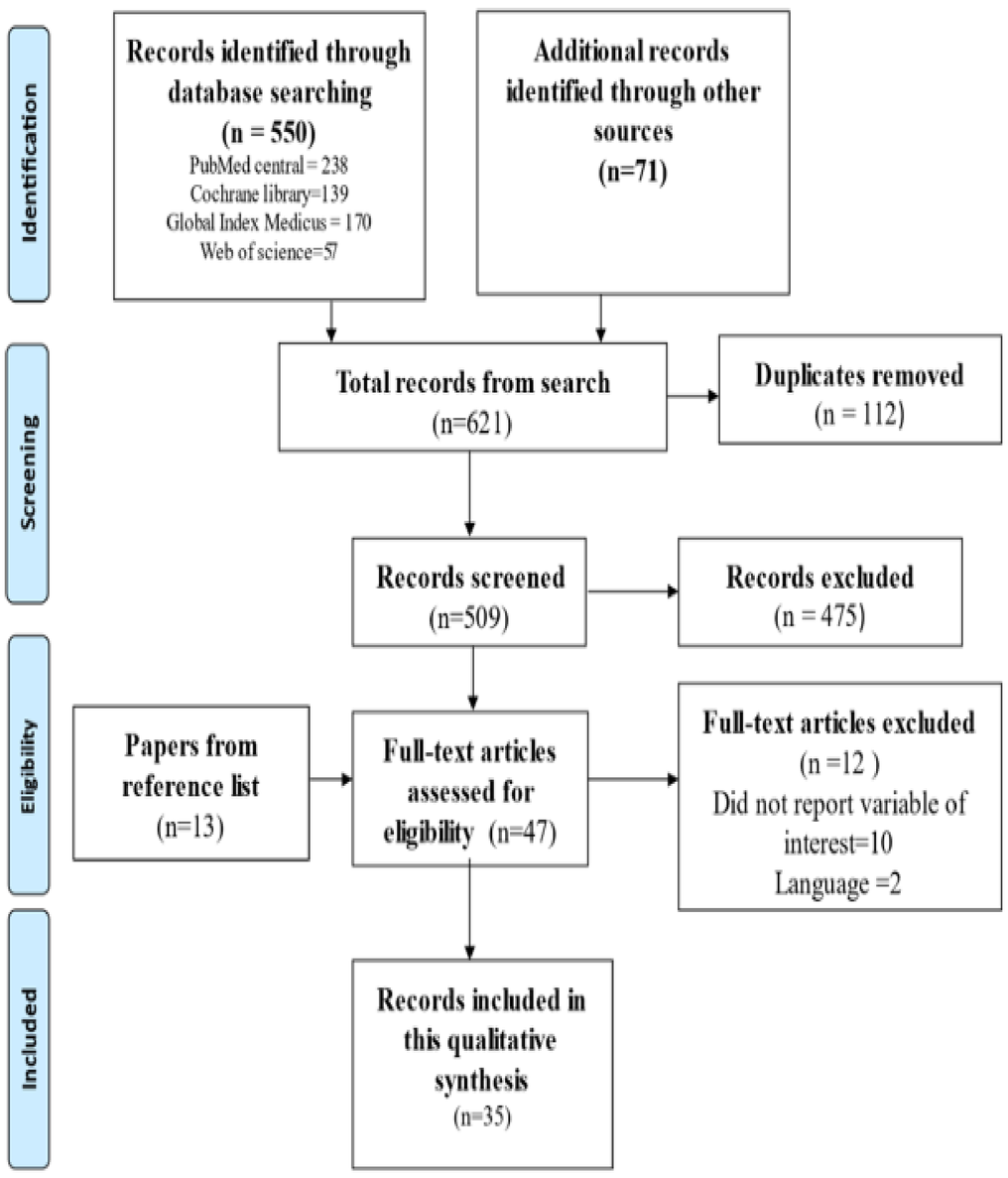

Figure 1 presents a flow chart that summarizes the search results and screening process.

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Results

- Findings revealed significant variability in its prevalence which varied from a low of 14.40% to a high of 44.40% depending on the type of surgery
- Pain characteristics often include mild severity, with common sites being the axilla, chest wall, and ipsilateral arm
- Neuropathic pain, such as burning and throbbing, is prevalent, with physical exertion exacerbating symptoms
- Key risk factors include younger age, higher body mass index (BMI), extensive surgical procedures, and adjuvant therapies like radiotherapy and chemotherapy
- Treatment strategies encompass simple analgesics, nerve blocks, sympathetic denervation, and advanced techniques such as transcranial direct current stimulation, highlighting a multifaceted approach to managing PMPS effectively

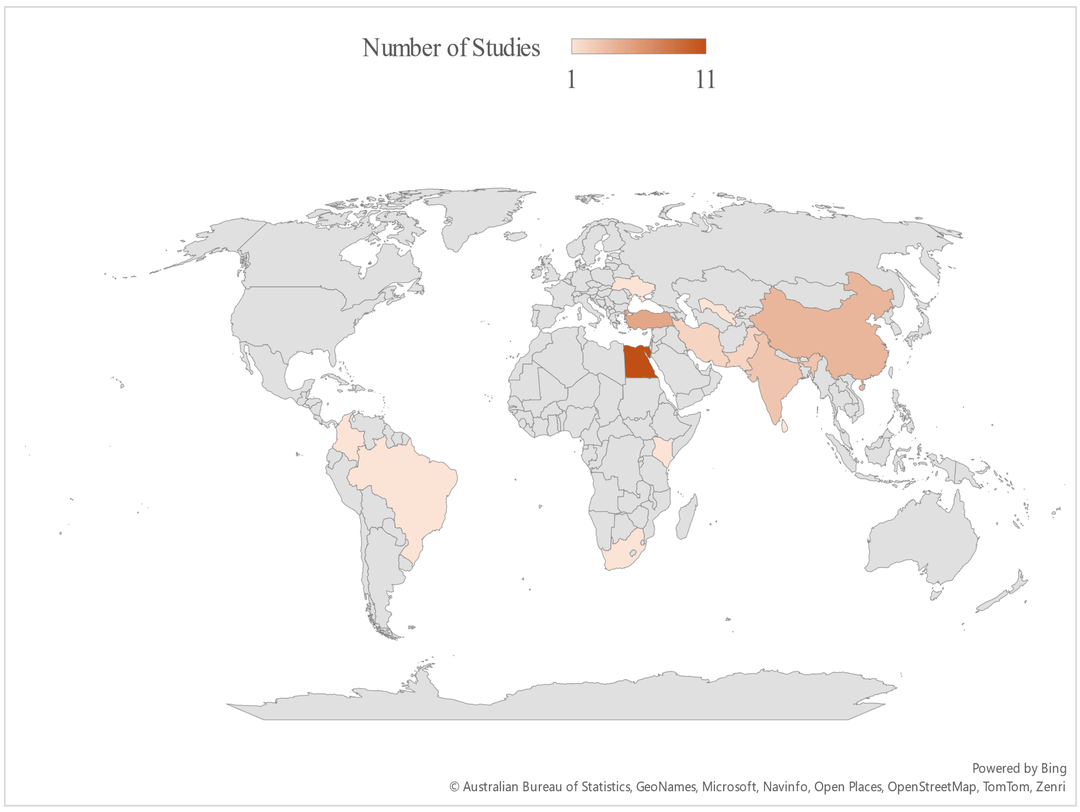

Figure 2: Showing the global distribution of the included studies

Discussion and Conclusion

PMPS remains a complex challenge, requiring ongoing research to refine diagnostics, understand underlying mechanisms, and develop personalized treatments to improve patient outcomes

References

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