

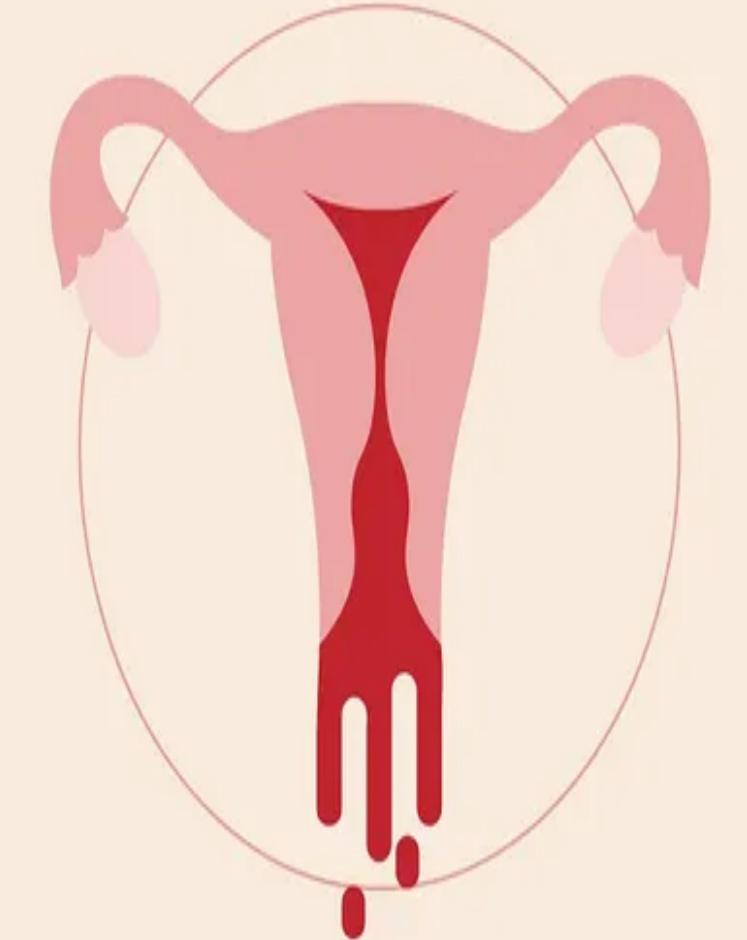
From Knowledge to Care: A Systematic Review on Training Health Workers for Menstrual and Associated Pain Management

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Menstruation and Related Conditions

Menstruation, or a period, is the regular vaginal bleeding during a woman's monthly cycle, where the uterus sheds its lining if no pregnancy occurs.^{1, 2}



Conditions associated with menstruation primarily include **menorrhagia, endometriosis, Polycystic Ovarian Syndrome (PCOS), pelvic floor disorders, and chronic pelvic pain.**^{3, 1, 2, 4, 5, 6-9}

Training and Sensitization

Educational programs and training focus on developing knowledge, skills, and professional qualities, aiming to achieve clinical competence through consistent application of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflective practices, evaluated by competency and performance standards.⁴

Competency-based training is essential for health workers to effectively support individuals with menstrual discomfort and related disorders.

Assessing training impacts on knowledge, competence, and care is crucial for alleviating menstrual pain and improving quality of life.

PICO and Inclusion Criteria

"How does training health workers to provide client-centered care for menstrual pain and related disorders (e.g., endometriosis, PCOS, PMDD) impact their knowledge, competency, care quality, and client satisfaction compared to no or different training?"

P: Health workers

I: Training and sensitization to provide client-centered care for menstrual pain and pain associated with related disorders (e.g. confirmed or suspected endometriosis, polycystic ovarian syndrome (PCOS), pre-menstrual dysphoric disorder (PMDD), etc.)

C: No training/sensitization, or training/sensitization on different topic/less intensive training/sensitization, or training/sensitization that is less client-centered

O: Increase in knowledge, competency, provision of appropriate care, client satisfaction, and pain alleviation

Study designs include **randomized controlled trials, non-randomized controlled trials, and comparative observational studies, published in peer-reviewed journals.**

Search Strategies and Screening

Four databases, PubMed, CINAHL, LILACS, and EMBASE, along with ongoing randomized control trials (RCT) via clinicaltrials.gov, WHO ICTRP, PACTR, and the Australian New Zealand Clinical Trials Registry were explored to search for relevant literature. The search strategy encompasses terms related to "health workers," "training," and "menstrual pain and related disorders."

The screening process involves an initial title/abstract review by one reviewer using Zotero, followed by a second-level review independently conducted by two reviewers in Covidence, who discussed for consensus. Full-text screening and data extraction was similarly done by two reviewers in Covidence to ensure consensus.

Results

Figure 1: PRISMA Flowchart of Literature Scoped

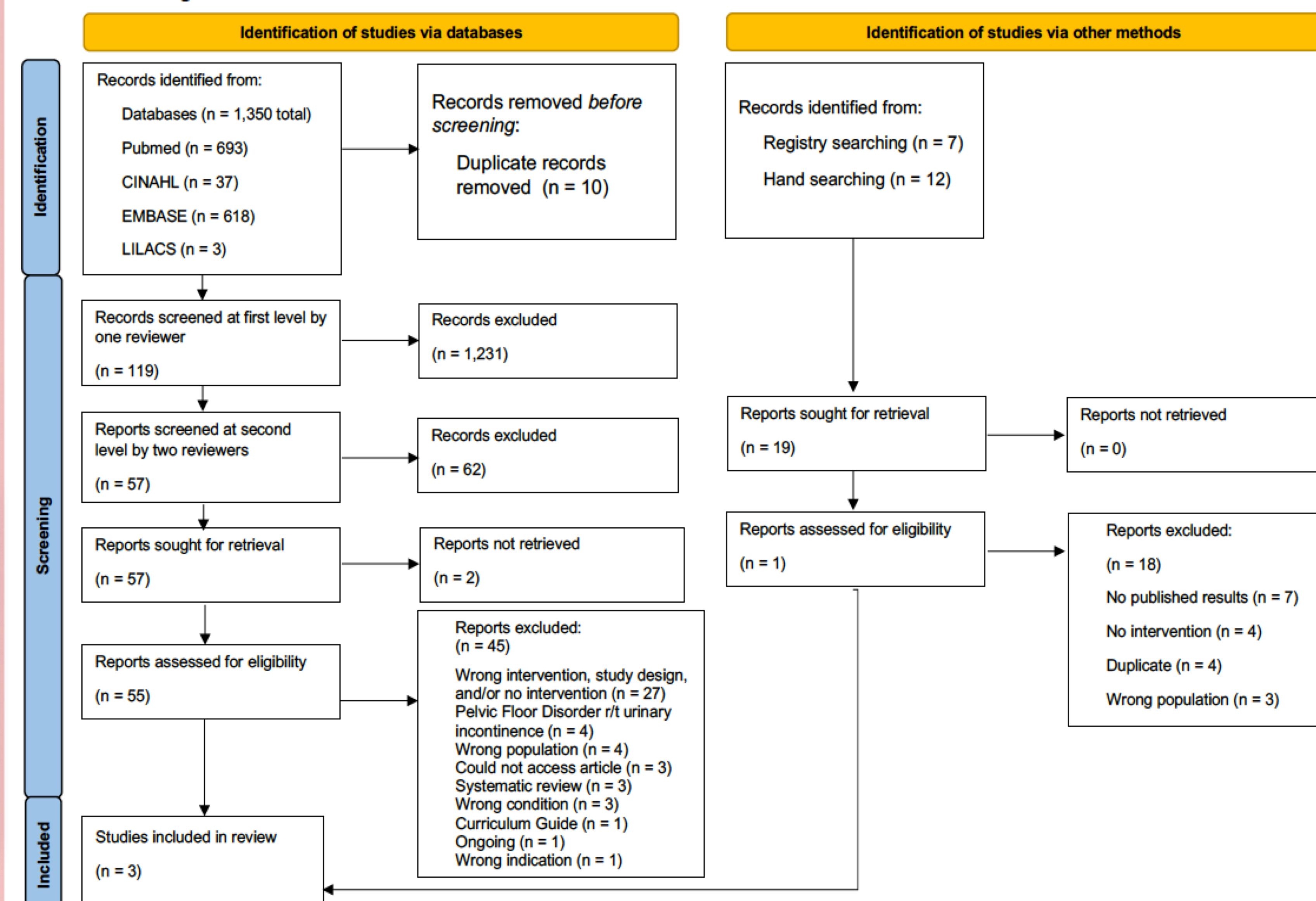


Table 1: Included Studies

Study	Study Design and Sample Size	Population	Intervention	Comparator	Outcomes
Carron et al., 2018	Pretest = 48 people Posttest = 43 people	Nurse Practitioners, Clinical Nurse Specialists, and Nurse Practitioner students	Continuing Education (CE) program on Polycystic Ovarian Syndrome (PCOS)	Pretest score	Improvement in knowledge on PCOS: -Rotterdam criteria (51.2% to 77.5%) -Essential laboratory tests (50% to 95.4%) -Treatment options (55.1% to 95.3%) -Long-term consequences (37.2% to 93%)
Fender et al., 1999	Randomized-control Trial of 100 practices (Intervention group = 54) (Control group = 45)	General Practitioners	Educational Package (presentation, printed summaries, management flow chart, and follow-up after 6 months)	Control group receiving no educational package	Referral rates for menorrhagia were 31% lower in the intervention group, and, increase (adjusted odds ratio 2.38) in the prescription of tranexamic acid
Giroux et al., 2021	Randomized-control Trial of 46 people (Video intervention = 23) (In-person intervention = 23)	Medical Students, Resident Physicians, Staff Family Physicians, Obstetricians and Gynecologists	Training Program using a Pelvic Floor Model	Video-based versus In-person teaching	No statistical significant difference: -participants' mean written assessment scores ($p = 0.58$) -OSCE scores ($p = 0.15$) -perceived comfort level ($p = 0.19$) Mean pre- and post-assessment scores improved significantly ($p < 0.001$)

Implications

Continued Education (CE):

Significantly improves healthcare providers' abilities to manage conditions such as PCOS and have potential for broader implementation across various healthcare settings.³

Clinical Practice:

Reduces referrals and increase evidence-based treatment usage, underscoring the importance of incorporating evidence-based practices into training to enhance clinical decision-making and management.²

Training Methods:

Both video-based and in-person training are effective, indicating that flexible delivery methods can accommodate different resources and learner preferences while ensuring training remains directly relevant and useful in clinical practice.⁵

Exploration into Pain Alleviation:

Not directly addressed in literature as primary focuses are on improvements in knowledge, competency, and clinical practices rather than specific outcomes related to pain relief and client satisfaction.

Future Steps and Recommendations

Expand Training Programs:

Extend continuing education programs to include more diverse healthcare providers and settings to ensure broad-based improvement in knowledge and skills.³

Incorporate Technology Training:

Leveraging video-based and in-person training methods can allow for greater flexibility and accessibility in training.⁵

Simulation Models:

Consider simulation-based educational interventions to include comprehensive scenarios and student feedback for continual improvement.⁶

Monitor the long-term impact:

Conducting longitudinal studies to assess the long-term impact of training programs on clinical outcomes and patient satisfaction to ensure benefits from interventions.²

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References