Global Trends in Non-Drug Acute Pain Care in Emergency Departments: A Scoping Review

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BACKGROUND

- 50% of Australian ED patients experience acute pain[1].
- Opioids prescribed in 60% of cases despite ineffectiveness for some pains and adverse effects[2].
- ED-related acute pain and opioid prescribing contribute to 12% of long-term opioid use and 15% of chronic pain cases[3].
- Urgent need for safe, effective, non-drug approaches in ED settings.

AIM

To review global inclusion of non-pharmacological interventions in ED acute pain management guidelines.

METHODS

- Systematic search: PubMed, EMBASE, CNKI, CBM, Wanfang, VIP, Google, Google scholar, ChatGPT
- Key words: "acute pain", "emergency department", "guideline", "country name".
- Selection Criteria: National & international ED acute pain management guidelines developed within last 10 years (2015-2025) for adult population.
- Quality appraisal: AGREE II tool.

RESULTS

- **Guidelines/Studies identified: 894; Included: 14 (USA=4, China=5, Europe=5).**
- **Australia: No national ED acute pain guidelines found.**
- **Only 2/14 guidelines recommend non-pharmacological strategies as first-line treatment.**
- **Core recommended interventions: Education/self-management (13/14), Exercise (11/14), Thermal therapies (10/14), Pain education (10/14), Acupuncture (6/14).**
- **Guideline quality: Moderate (orange) to high (green) overall; High on scope & purpose, Low on applicability.**

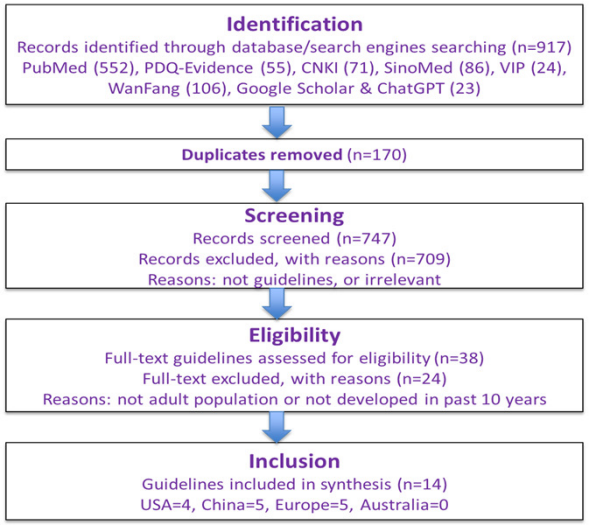

Figure 1. PRISMA flow chat of guidelines selection

Table 1. Summary of non-drug interventions in ED guidelines for acute pain

Core Non-Drug Interventions	Education & self-management (13/14)	Exercise Therapy (11/14)	Thermal Therapies (Heat/Cold) (10/14)	Pain Education (10/14)	Acupuncture (6/14)
Regional & Specialty Variations					
USA	focuses on thermal, exercis, education and relaxation approach; acupuncture were suggested in 2/4 guidelines/policies				
Europe	More broader tools, expecially in Spain, including all above core intervations plus acupuncture, dry needling and yoga/tai chi.				
China	Conditions specific, focuses on thermal therapies (heat/cold) and exercise; mentioned acupuncture (2/5) and education (2/5)				

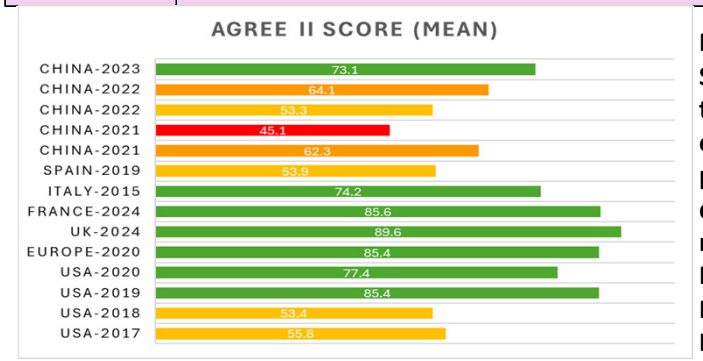

Figure 2. AGREE II Score evaluation of the overall quality of the clinical practice guideline's development and reporting. High=Green, Medium=Orange, Low=Red.

CONCLUSION

- **Non-pharmacological interventions are widely recommended but poorly implemented.**
- **Key barriers: lack of implementation support, inadequate training, limited system readiness.**
- **Addressing these gaps could reduce opioid reliance and prevent chronic pain globally.**

REFERENCES

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