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Monet Rose

Western Governors University

Scholarship in Nursing Practice – D219

Darlene McCombs

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In modern healthcare, Evidence-Based Practice (EBP) is an indispensable step in clinical decision-making, especially in nursing. With so much research data and resources at the fingertips of most healthcare professionals, the evidence on which clinical decisions are based must be placed on a solid evidence base by critical appraisal by healthcare professionals. Since EBP is vital in nursing practice and directly affects patient care, the profession relies heavily on EBP to improve patient outcomes, quality of care and utilization of healthcare resources.

Pain is one of the most pressing healthcare problems, particularly for patients who suffer from acute or chronic conditions that cause immense physical pain but also confer a tremendous amount of psychological distress to patients. The ability to manage pain in patients is critically important to allow for a complete healing process. It is best achieved using a multidisciplinary approach to deal with pain's physical and emotional aspects. Until recently, pharmacological interventions have predominated in pain management, but there has been growing interest in nonpharmacological and complementary options capable of offering wither complementary or novel treatment for pain.

For the healthcare organization, ineffective pain management can affect quality of care, patient and family satisfaction, and staff workflow. When patients experience higher pain and distress, procedures may take longer, require more staff support, and create a more stressful care environment. Current critical care guidelines also emphasize the importance of routine pain assessment and the use of nonpharmacologic interventions to improve comfort and comprehensive care, showing that this issue is important to both clinical outcomes and organizational practice.

- P – patients at risk for pain

- I – use of non-pharmacological interventions
- C – not using non-pharmacological interventions
- O – reduce pain

C1. Evidence-Based Practice Question

Will the use of non-pharmacological interventions reduce pain in patients at risk for pain as compared to not using non-pharmacological interventions?

Küçük Alemdar, D., Bulut, A., & Yılmaz, G. (2023). Impact of music therapy and hand massage in the pediatric intensive care unit on pain, fear and stress: Randomized controlled trial. *Journal of Pediatric Nursing, 71*, 95–103.

This article is appropriate for evidence appraisal because it is a peer-reviewed randomized controlled trial, which is a strong research design for evaluating the effectiveness of an intervention. The study examined whether two non-pharmacological interventions, music therapy and hand massage, reduced pain, fear, and stress in adolescents in the PICU during blood drawing. The investigators used comparison groups and standardized pain measures, which strengthens the credibility of the findings.

This article supports the EBP question because its population, intervention, comparison, and outcome closely align with the PICO components. The population consisted of pediatric patients at risk for procedural pain, the intervention was non-pharmacological pain management, the comparison was standard care, and the outcome was reduced pain. The study found that music therapy and hand massage were more effective than standard care in reducing pain and fear during the procedure. These findings directly support the idea that non-pharmacological interventions can reduce pain in patients at risk for pain.

Cooper, A. S. (2025). Nonpharmacological interventions for preventing pain during endotracheal suctioning in neonates receiving mechanical ventilation. *Critical Care Nurse*, 45(2), 77–79.

This article is appropriate for non-research evidence appraisal because it is a clinical review article that synthesizes existing evidence and translates it into practical nursing interventions. Unlike primary research studies, this type of article focuses on summarizing best practices and providing guidance for clinical application. The article highlights the use of non-pharmacological interventions such as therapeutic touch, repositioning, and nonnutritive sucking to reduce pain during endotracheal suctioning in neonates. These interventions are especially valuable in critical care settings where minimizing additional stress and discomfort is essential.

This article supports the EBP question by reinforcing that non-pharmacological interventions are effective in reducing procedural pain in patients at risk. It emphasizes that integrating these strategies into routine care is both evidence-based and essential for improving patient comfort and outcomes, further validating their role alongside or in place of standard care without such interventions.

Pain management is not just a clinical task—it reflects the quality, compassion, and intentionality behind patient care. This clinical practice problem highlights the gap that can occur when non-pharmacological interventions are not consistently implemented, especially in vulnerable populations such as pediatric and neonatal patients. The evidence-based practice question explored whether incorporating non-pharmacological strategies could reduce pain compared to not using them. The evidence clearly supports that interventions such as music therapy, hand massage, and therapeutic comfort measures are effective in reducing pain, fear,

and stress. When nurses intentionally integrate these approaches into practice, they are not only improving patient outcomes but also enhancing the overall care experience.

Küçük Alemdar, D., Bulut, A., & Yilmaz, G. (2023). Impact of music therapy and hand massage in the pediatric intensive care unit on pain, fear and stress: Randomized controlled trial. *Journal of Pediatric Nursing*, 71, 95–103.

Cooper, A. S. (2025). Nonpharmacological interventions for preventing pain during endotracheal suctioning in neonates receiving mechanical ventilation. *Critical Care Nurse*, 45(2), 77–79.

Evidence Review Summary

A summary of evidence with implications for critical care nursing

Nonpharmacological Interventions for Preventing Pain During Endotracheal Suctioning in Neonates Receiving Mechanical Ventilation

Adam S. Cooper, DNP, RN, NPD-BC, EBP-C

Review Question

What are the benefits and harms of nonpharmacological interventions for preventing pain during endotracheal suctioning in neonates receiving mechanical ventilation?

Relevance to Critical Care Nursing

The understanding of neonatal pain continues to advance, and it is now well established that newborns are capable of detecting, processing, and responding to pain. In fact, neonates have an immature nervous system that creates a hypersensitivity to pain, resulting in a greater risk for experiencing pain.¹ Repeated painful experiences in neonates can cause harmful systemic physiological effects, leading to long-term complications and potentially life-threatening risks. However, pain-relief interventions in neonates remain insufficient and inconsistently applied, with some studies showing that only half of the painful procedures in neonates are accompanied by appropriate pain relief.² These inconsistencies, combined with gaps in knowledge, evidence, and practice, present significant challenges in the effective assessment and management of neonatal pain.¹

A considerable proportion of premature neonates require mechanical ventilation at some point during their hospitalization, which often involves repeated endotracheal tube (ETT) suctioning. Endotracheal tube suctioning, performed using either the closed in-line method or the open method requiring disconnection from the ventilator, consists of applying negative pressure as the catheter is being withdrawn. This type of suctioning is recognized as

Author

Adam S. Cooper is the Director of Nursing Continuous Improvement and Affiliate Nursing Quality and Director of the UCSF JBI Centre for Evidence Implementation, UCSF Health, San Francisco, California. He is also a member of the Cochrane Nursing Care Field.

Corresponding author: Adam S. Cooper, DNP, RN, NPD-BC, EBP-C, UCSF Health Nursing, 2001 The Embarcadero, San Francisco, CA 94143 (email: adam.cooper@ucsf.edu).

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Non-Research Article

one of the most common and painful interventions used for preterm infants.³ Even with efforts to limit the frequency of ETT suctioning in neonates, certain conditions require repeated suctioning. Because of the associated pain and discomfort, evaluating nonpharmacological options to minimize and manage pain is necessary. The main categories for nonpharmacological pain management in neonates are environmental and behavioral strategies. The environmental strategies include decreasing noise and lighting, clustering procedures to minimize activities, and aromatherapy. Behavioral strategies include repositioning, holding or human touch, and nonnutritive sucking, such as with a pacifier.⁴ Although previous systematic reviews have been conducted on nonpharmacological pain management strategies in neonates, none focused on pain related to ETT suctioning in neonates undergoing mechanical ventilation.

Study Description and Results

As new evidence on a topic becomes available, updates are necessary to account for the results that the new evidence presents. This summary is based

on an updated version of a systematic review that was originally published in 2019. This update, conducted in 2024 by Pirlotte et al,⁵ included 8 randomized controlled trials involving 386 preterm neonates receiving ventilation. The review investigated 3 primary outcomes: premature infant pain profile (PIPP), measured using a composite of various validated pain tool scores; physiological changes (eg, heart rate), measured in the standard way; and behavioral indicators, including stress and defensive or self-regulatory behaviors (eg, facial changes, body movements), measured via observation. For this systematic review, 3 different categories of interventions were explored. The first category encompassed several positioning or touch interventions. One of these interventions was facilitated tucking, which involved gently holding the neonate in a flexed posture under the head and buttocks (eg, turning the neonate to the side, back curled gently, legs flexed >90° and brought to midline, and shoulders brought to midline with elbows flexed >90° and hands near the mouth or on the neonate's face). The next intervention was the 4-handed approach, which involved 2 clinicians, with 1 providing gentle touch while the other performed the procedure (eg, 1 team member warms their hands and provides supportive care such as allowing a finger grasp to promote self-regulation while the other performs the procedure). The last intervention in this group was gentle human touch, which involved skin-to-skin contact, such as cupping 1 hand around the neonate's head while cupping the other hand around the neonate's bottom. The second category of interventions included using a

familiar odor, such as breast milk, and the third category of interventions was the use of white noise (using a combination of all audible sound frequencies to minimize distractions).⁵

Pirlotte et al⁵ independently assessed the risk of bias for each study, including selection, performance, detection, attrition, reporting, and publication biases. Any disagreements were resolved by reviewing the data together and through discussion. Mean differences (MDs) with 95% CIs were used as measures of treatment effect between various comparisons and outcomes. The internationally approved Grading of Recommendations Assessment, Development and Evaluation (GRADE)⁶ approach was used to determine the certainty of evidence—high, moderate, low, or very low—for each outcome.

Outcome 1: Facilitated Tucking/4-Handed Care/Gentle Human Touch

- Moderate-certainty evidence indicated that facilitated tucking or gentle human touch was associated with a lower PIPP than standard care (148 neonates; MD, -2.76; 95% CI, -3.57 to -1.96).
- Low-certainty evidence indicated that facilitated tucking or gentle human touch had no significant effect on physiological indicators such as heart rate (80 neonates; MD, -3.06 beats per minute; 95% CI, -9.33 to 3.21).
- Low-certainty evidence indicated that facilitated tucking or gentle human touch had no significant effect on stress or defensive behaviors (20 neonates; MD, -1.20; 95% CI, -3.47 to 1.07) and may result

in a slight increase in self-regulatory behaviors (20 neonates; MD, 0.90; 95% CI, 0.20-1.60).

Outcome 2: Familiar Odor (Breast Milk Smell)

- Low-certainty evidence indicated that a familiar smell had no significant effect on PIPP or physiological indicators. Behavioral indicators were not included in any of the studies focusing on familiar odor.

Outcome 3: White Noise

- Low-certainty evidence indicated that white noise had no significant effect on PIPP or physiological indicators. Behavioral indicators were not included in any of the studies focusing on white noise.

Nursing Implications

This review showed that the non-pharmacological approaches of facilitated tucking, a 4-handed approach, and gentle human touch probably reduce pain and stress behaviors during neonate ETT suctioning compared with standard pain management practices. Only 1 study explored using a familiar odor or white noise, and the results showed no significant effect on the outcomes.

The results from this review align with other studies that explored pain management in critically ill neonates. Hartley et al⁷ found that using facilitated tucking reduced pain in neonates. The technique is described as holding an infant in a flexed position with minimal repositioning, which is ideal for those receiving mechanical ventilation. The positioning used mimics the position in utero, enhancing comfort and

physiological stability and reducing pain responses.⁷

One benefit of the interventions included in this review is that they all can be relatively easily applied in practice, although the use of facilitated tucking, the 4-handed approach, or gentle human touch requires a second team member. Adequate training of health care team members is important to ensure effectiveness and sustainability. Parents can also provide such comfort and would require adequate training to do so successfully.⁵ Notably, the studies included only preterm neonates; therefore, how effective these methods would be for term neonates is unknown. The low-quality scores for some of the findings were due to the fact that several of the included studies had small sample sizes and used a variety of measurement methods.

This systematic review was based on the best available evidence and highlights the ongoing need for further investigation related to the interventions used. Nevertheless, the evidence from this review may affect the decisions of clinical care teams in creating pain management plans for neonates, especially those undergoing ETT suctioning. As nurses caring for critically ill patients, we must regard advocating for the best evidence-based treatment as an important part of our role. We must always consider the best available evidence and understand the feasibility, appropriateness, meaningfulness, and effectiveness of any intervention to determine whether it is most appropriate to implement in our individual context. CCN

Financial Disclosures
None reported.

References

1. Perry M, Tan Z, Chen J, Weidig T, Ku W, Cong XS. Neonatal pain: perceptions and current practice. *Crit Care Nurs Clin North Am*. 2018;30(4):549-561.
2. American Academy of Pediatrics Committee on Fetus and Newborn and Section on Anesthesiology and Pain Medicine. Prevention and management of procedural pain in the neonate: an update. *Pediatrics*. 2015;137(2):e20154271. doi:10.1542/peds.2015-4271
3. Hadian ZS, Sabet RS. The effect of endotracheal tube suctioning education of nurses on decreasing pain in premature neonates. *Iran J Pediatr*. 2013;23(3):340-344.
4. Riddell RRP, Bucsea O, Shiff I, et al. Non-pharmacological management of infant and young child procedural pain. *Cochrane Database Syst Rev*. 2023;6(6):CD006275. doi:10.1002/14651858.CD006275.pub4
5. Pirlotte S, Beeckman K, Ooms I, Cools F. Non-pharmacological interventions for the prevention of pain during endotracheal suctioning in ventilated neonates. *Cochrane Database Syst Rev*. 2024;1(1):CD013353. doi:10.1002/14651858.CD013353.pub2
6. Schünemann H, Brozek J, Guyatt G, Oxman A, eds. Handbook for Grading the Quality of Evidence and the Strength of Recommendations Using the GRADE Approach. Updated October 2013. Accessed October 4, 2024. <https://gdt.gradepro.org/app/handbook/handbook.html>
7. Hartley KA, Miller CS, Gephart SM. Facilitated tucking to reduce pain in neonates: evidence for best practice. *Adv Neonatal Care*. 2015;15(3):201-208.

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Abstract: Purpose This study was performed with the aim of assessing the effect of music therapy and hand massage on pain, fear and stress among 12–18 year-old adolescents treated in the pediatric intensive care unit (PICU). Design This study was a randomized controlled trial, with single-blind design. Methods The adolescents were divided into groups with 33 receiving hand massage, 33 receiving music therapy and 33 in the control group. Collection of data used the Wong-Baker FACES (WB-FACES) Pain Rating Scale, Children's Fear Scale (CFS) and blood cortisol levels. Findings In the study, adolescents in the music therapy group had lower mean points for WB-FACES before, during and after the procedure by a significant level compared to the control group ($p < 0.05$). Additionally, the CFS mean points before and during the procedure were lowest in the music therapy group, while the music therapy and massage groups were determined to have lower points by a significant level after the procedure compared to the control group ($p > 0.05$). Conclusions It was determined that hand massage and music therapy were more effective than standard care at reducing pain and fear levels during blood drawing among 12–18-year-old adolescents in the PICU. Practice implications Nurses may use music therapy and hand massage to manage fear and pain related to blood drawing in the PICU.

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Language: English

Subjects: Fear; Hand-massage; Music therapy; Pain; PICU;

plink: <https://research.ebsco.com/linkprocessor/plink?id=c1875bb4-5ee9-3fb7-9873-29ec39b1bde8>

Research
Article

MYM3 – MYM3 TASK 2: EVIDENCE-BASED PRACTICE AND APPLIED NURSING RESEARCH

SCHOLARSHIP IN NURSING PRACTICE – D219
PRFA – MYM3

Preparation

Task Overview

Submissions

Evaluation Report

COMPETENCIES

738.2.2: Literature Review and Analysis

The learner demonstrates knowledge of the process and outcomes of conducting a literature review.

738.2.3: Ethics and Research

The learner demonstrates an understanding of the ethics of nursing research, particularly human subjects' protections, informed consent, and alignment with patient and family values and preferences.

738.2.4: Patient Outcomes

The learner discriminates between evidence-based standards of practice and conventional practices to improve patient outcomes.

738.2.5: Data Collection, Analysis, and Dissemination

The learner describes the process of data collection, analysis, and implementation of evidence that can improve clinical practice from an interprofessional perspective.

INTRODUCTION

Note: Task 2 should not be submitted prior to successfully completing Task 1. If Task 1 has not been successfully completed, Task 2 will be returned without Evaluation. Task 2 builds directly on the work completed in Task 1.

Evidence-based literature comes from many sources. The discipline of nursing has an abundance of research data and resources to guide clinical decisions. Therefore, it is crucial to understand the basic tenets of critically appraising such evidence for its use in interprofessional healthcare practices.

This assessment is divided into two tasks. In the first task, you identified a healthcare problem, formulated your PICO components, developed an evidence-based practice (EBP) question, and selected one research-based article and one non-research-based article, published in a peer-reviewed journal within the past five years, to find answers to that question. These articles were approved as a requirement of Task 1.

 Help

In this second task, you will review the approved research-based article and non-research-based article to find answers to your EBP question.

Note that while you will be analyzing only one research-based article and one non-research-based article in this task, an actual evidence-based practice change would require the support of many high-quality sources of evidence.

Recommendation: It is highly recommended that you complete the Johns Hopkins Evidence-Based Practice (JHEBP) modules throughout the course of study before beginning the performance assessment. The modules will help you understand the criteria for selecting the articles and applying the JHEBP model effectively.

REQUIREMENTS

Your submission must represent your original work and understanding of the course material. Most performance assessment submissions are automatically scanned through the WGU similarity checker. Students are strongly encouraged to wait for the similarity report to generate after uploading their work and then review it to ensure Academic Authenticity guidelines are met before submitting the file for evaluation. See Understanding Similarity Reports for more information.

Grammarly Note:

Professional Communication will be automatically assessed through Grammarly for Education in most performance assessments before a student submits work for evaluation. Students are strongly encouraged to review the Grammarly for Education feedback prior to submitting work for evaluation, as the overall submission will not pass without this aspect passing. See Use Grammarly for Education Effectively for more information.

Microsoft Files Note:

Write your paper in Microsoft Word (.doc or .docx) unless another Microsoft product, or pdf, is specified in the task directions. Tasks may not be submitted as cloud links, such as links to Google Docs, Google Slides, OneDrive, etc. All supporting documentation, such as screenshots and proof of experience, should be collected in a pdf file and submitted separately from the main file. For more information, please see Computer System and Technology Requirements.

A. Provide a copy of your completed Task 1 submission.

Note: Using the articles from Task 1 will help you maintain consistency between Task 1 and this task, and ensure that your EBP question and selected clinical problem are clearly aligned with the evidence appraisal and analysis in this task.

Note: If Task 1 is not submitted, this task will be returned without Evaluation.

B. Evaluate the quality and usefulness of the research-based article from Task 1 by doing the following:

1. Provide a PDF file of the research-based article approved in Task 1.

Note: If the research-based article is not included in your submission, this task will be returned without Evaluation.

2. Summarize the purpose of the research-based article.
3. Describe the research methodology used in the research-based article (e.g., quantitative, qualitative, mixed-methods, etc.).
4. Identify the level of evidence for the research-based article using the JHEBP model.

Note: Refer to the "Appendix D: Hierarchy of Evidence Guide" web link for information on how to level a research-based article.

5. Explain how the researcher analyzed the data in the research-based article.
6. Summarize the ethical considerations of the research-based article, such as protection of human subjects, informed consent, and ethics committee/institutional review board approvals. If none are present, explain why.
7. Identify the quality rating of the research-based article using the JHEBP model.

Note: Refer to the "Appendix E: Research Evidence Appraisal Tool" web link for information on how to assign a quality rating to a research-based article.

8. Summarize the main results and conclusions of the research-based article, highlighting findings that support the evidence-based recommendation.
 - a. Explain how the article helps answer your EBP question from Task 1.

- C. Evaluate the quality and usefulness of the non-research-based article from Task 1 by doing the following:
1. Provide a PDF file of the non-research-based article approved in Task 1.

Note: If the non-research-based article is not included in your submission, this task will be returned without Evaluation.

2. Summarize the purpose of the non-research-based article.
3. Describe the type of evidence presented in the non-research-based article (e.g., clinical practice guidelines, literature reviews with a systematic approach, quality improvement project).

Note: Refer to the "Appendix D: Hierarchy of Evidence Guide" web link for information on how to assign the type of evidence for the non-research-based article.

4. Identify the level of evidence in the non-research-based article using the JHEBP model.

Note: Refer to the "Appendix D: Hierarchy of Evidence Guide" web link for information on how to level a non-research-based article.

5. Identify the quality rating of the non-research-based article using the JHEBP model.

Note: Refer to the "Appendix F: Non-Research Evidence Appraisal Tool" web link for information on how to assign a quality rating for the non-research-based article.

6. Summarize the main results and conclusions of the non-research-based article, highlighting findings that support the evidence-based recommendation.
 - a. Explain how the article helps answer your EBP question from Task 1.

- D. Recommend a practice change that addresses your EBP question from Task 1, using *both* the research-based article and the non-research-based article that you evaluated in parts A and B of this task. Include evidence to support your recommendation and to show how the change should be made.
 1. Identify **three** key stakeholders affected by the practice change.
 - a. Explain how *each* individual stakeholder from part C1 would be involved in implementing the recommended practice change.
 2. Identify **one** specific barrier you may encounter when implementing the practice change.
 3. Identify **one** strategy you could use to overcome the barrier identified in part C2.
 4. Identify **one** outcome (the C component in PICO) from your EBP question from Task 1 that will be used to measure the recommended practice change.

- E. Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized.

- F. Demonstrate professional communication in the content and presentation of your submission.

File Restrictions

File name may contain only letters, numbers, spaces, and these symbols: ! - _ . * ' ()

File size limit: 200 MB

File types allowed: doc, docx, rtf, xls, xlsx, ppt, pptx, odt, pdf, csv, txt, qt, mov, mpg, avi, mp3, wav, mp4, wma, flv, asf, mpeg, wmv, m4v, svg, tif, tiff, jpeg, jpg, gif, png, zip, rar, tar, 7z

RUBRIC

A:TASK 1

<p>NOT EVIDENT Task 1 is not provided.</p>	<p>APPROACHING COMPETENCE Not applicable.</p>	<p>COMPETENT Task 1 is provided.</p>
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B1:RESEARCH-BASED ARTICLE

<p>NOT EVIDENT A PDF file of the research-based article from Task 1 is not provided.</p>	<p>APPROACHING COMPETENCE Not applicable.</p>	<p>COMPETENT A PDF file of the research-based article from Task 1 is provided.</p>
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reynolds3226@bellsouth.net

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For the healthcare organization, ineffective pain management can affect quality of care, patient and family satisfaction, and staff workflow. When patients experience higher pain and distress, procedures may take longer, require more staff support, and create a more stressful care environment. Current critical care guidelines also emphasize the importance of routine pain assessment and the use of nonpharmacologic interventions to improve comfort and comprehensive care, showing that this issue is important to both clinical outcomes and organizational practice.

- P – patients at risk for pain