Closing the Gap: Transforming Evidence-Based Practice From Knowledge to Action in High-Acuity Nursing Environments

An Interactive Educational Intervention to Improve EBP Beliefs and Implementation

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Quasi-experimental quality improvement project using validated EBP instruments

INTRODUCTION

Despite strong emphasis on evidence-based practice, a persistent gap remains between knowledge and clinical implementation. It is estimated that it takes an average of 17 years for evidence to be translated into practice, limiting the impact of research on patient outcomes.

Consistent with existing literature, this gap reflects a disconnect between EBP beliefs and real-world application in clinical settings. High-acuity environments, such as pediatric hematology and oncology, require rapid, informed clinical decision-making. Strengthening both EBP beliefs and implementation behaviors is essential to improving consistency and quality of care.

PURPOSE

To evaluate the impact of an interactive educational intervention on nurses' evidence-based practice beliefs and implementation behaviors.

METHODS

Design **Sample** **Setting**	Quasi-experimental, repeated measures Registered nurses (n = 18) Pediatric hematology/oncology
Measures	• EBP Beliefs Scale (EBP-BS) • EBP Implementation Scale (EBP-IS)
Data Collection	Baseline → Immediate Post → 4-Week Follow-Up
Analysis	• Wilcoxon Signed-Rank (EBP-BS) • Paired t-test (EBP-IS)

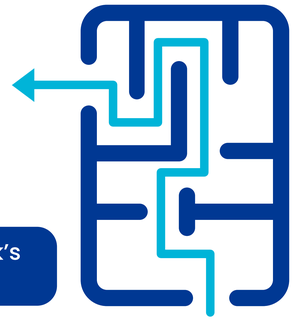
PICOT

In registered nurses working in a pediatric hematology and oncology setting, how does participation in an interactive EBP educational intervention, compared to no intervention, affect EBP beliefs and implementation behaviors over time?

INTERVENTION

A structured, interactive **"EBP Escape Room"** experience designed to reinforce key evidence-based practice concepts through problem-solving, collaboration, and real-world clinical scenarios.

Developed and implemented using Melnyk's 7-Step Evidence-Based Practice Model.

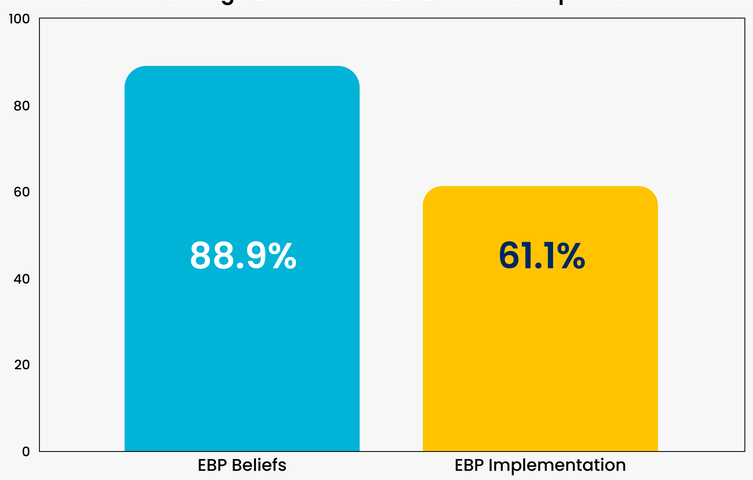


FOCUS AREAS

- Formulating PICOT questions
- Identifying and appraising evidence
- Applying evidence to clinical decision-making

RESULTS

Sustained Change at 4 Weeks: EBP Beliefs vs. Implementation



STATISTICAL SUMMARY

EBP Beliefs: Z = -2.528, p = .011 (significant)

EBP Implementation: t(17) = -1.336, p = .199 (positive trend)

DISCUSSION

Findings support the use of interactive, experiential learning approaches to strengthen engagement with evidence-based practice in high-acuity environments. Participants demonstrated increased confidence in EBP, along with improved application in clinical decision-making over time. Findings align with existing evidence indicating that belief change precedes sustained behavioral change.

IMPLICATIONS FOR PRACTICE

- Supports integration of interactive EBP education in clinical settings
- Reinforces the value of engaging, application-based learning strategies
- Provides a scalable model for broader implementation across units

MEASUREMENT & RIGOR

- Validated instruments (Melnyk et al., 2008)
- Cronbach's α:
  - **Beliefs:** .877 → .938
  - **Implementation:** .954 → .957
  - Established content and construct validity

CONCLUSION

Interactive educational strategies offer a practical approach to strengthening evidence-based practice in complex clinical environments. Beliefs changed first. Behaviors are following. The foundation has been laid.

REFERENCES

Melnyk & Fineout-Overholt (2023)
Melnyk et al. (2008)

QR CODE

See Full Project and Outcomes

SWOT

Strengths	Weaknesses	Opportunities	Threats
Strong EBP culture Leadership support	Time constraints Small sample	Expand to additional units Integrate into onboarding	Staffing challenges Competing priorities

Bridging the gap between what clinicians know and what is consistently applied in practice.