

Comfort Measures in Pediatrics

Enhancing Patient Experiences During Needle Related Procedures in Pediatric Care

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Background

Needle-related procedures—such as injections, blood draws, and infusions—are common in pediatric care and often cause significant distress. According to the CDC, two in three children have needle fears that interfere with their ability to receive necessary care (CDC, 2021). These anxieties may be heightened in specialties like Rheumatology, Hematology-Oncology, Allergy, Nephrology, and Endocrinology due to the frequency of procedures. When used consistently, comfort measures can reduce distress and improve the patient experience (Uman et al., 2006; McMurtry et al., 2015). However, current approaches to managing needle-related anxiety vary widely (Dasgupta et al., 2018).

Methods

- A literature review was conducted using PubMed, PsycINFO, Google Scholar, and ScienceDirect, focusing on peer-reviewed articles (2005–2023) related to pediatric needle anxiety, pain management, and non-pharmacologic comfort strategies.
- Keywords included: pediatric procedural anxiety, needle fear, comfort measures, child life, and therapeutic positioning.
- An internal provider survey was also developed to assess current practices, perceived effectiveness, barriers, and resource needs related to comfort measures across pediatric specialties.
- Findings from the literature and survey will guide the development of a standardized comfort plan for needle-related procedures in pediatric care.

Perceived Benefits of Pediatric Comfort Measures

"Implementing non-pharmacologic comfort interventions such as distraction, parental presence, and child life support during needle procedures has been associated with reduced procedural distress, improved cooperation, and increased satisfaction among both children and caregivers."
— Uman, L. S., Chambers, C. T., McGrath, P. J., & Kisely, S. R. (2006)

Main Findings

An internal survey was conducted within Pediatric Rheumatology (N = 8), including **3 physicians, 2 APPs, 1 nurse**, and **2 additional clinical staff involved in patient care** (roles unspecified). The goal was to assess current practices and barriers related to comfort measures during needle-related procedures.

Results:

➤ Providers most frequently recommended **parental presence (100%), distraction (86%), topical anesthetics (86%),** and **child life involvement (86%)** during needle-related procedures.

➤ While comfort measures were widely recommended, perceived effectiveness varied: only **14%** rated interventions as *very effective*, while **87%** rated them as *somewhat to moderately effective*.

➤ The most commonly reported barriers included:

- Lack of staff training (86%)**

- Time constraints (71%)**

- Patient refusal (57%)**

- Lack of resources (57%)**

➤ Providers expressed strong interest in additional support tools:

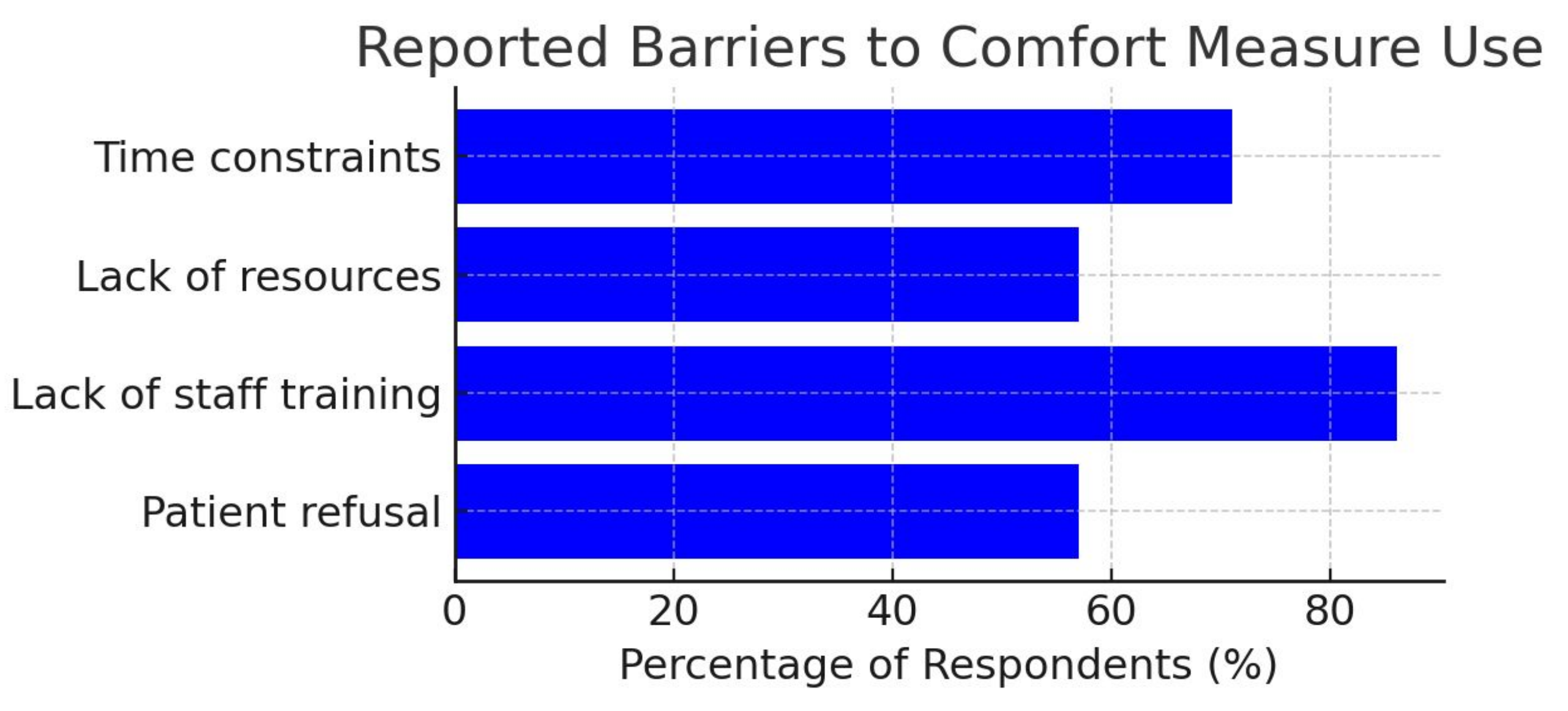
- 71%** desired more staff training in pediatric comfort techniques

- 57%** requested more distraction tools and dedicated child life support

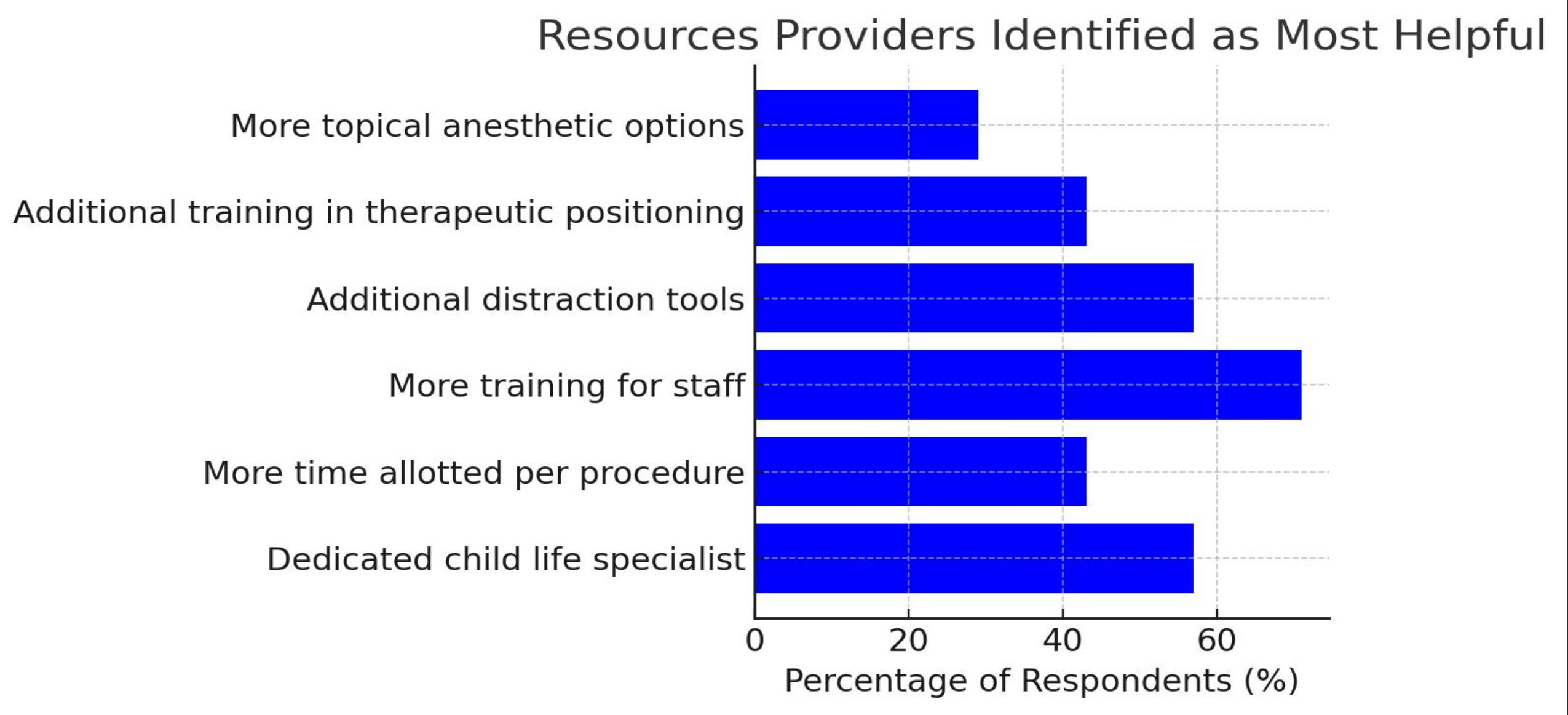
- 43%** noted a need for more time per procedure

➤ These findings highlight both the **value** of comfort measures and the **systemic barriers** that limit consistent implementation, underscoring the need for a standardized, family-centered workflow.

Perceived Barriers



Desired Outcomes



Discussion

Needle-related anxiety is common among pediatric patients and can interfere with care, particularly in specialties requiring frequent procedures. Both literature and provider feedback highlight the value of comfort measures, yet their use remains inconsistent due to barriers like time constraints and limited training. Given that up to two-thirds of children experience needle fear (CDC, 2021), developing a standardized, evidence-based, and family-centered comfort workflow is essential. Doing so supports trauma-informed care, improves the patient and family experience, and has the potential to significantly enhance treatment adherence.

Conclusions

This assessment revealed strong provider support for enhanced comfort measures during needle procedures. Top needs included staff training and access to child life specialists—both aligning with key barriers like limited training and time constraints. These findings underscore a gap between the value of comfort strategies and challenges to implementation. Future efforts should focus on scalable, evidence-based interventions that promote standardized, trauma-informed, and family-centered care.

Select References

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