

The Little Platypus initiative: A Mixed-Method Evaluation of a Novel Nurse-Led Intervention to Improve Paediatric Perioperative Experience.

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BACKGROUND

Preoperative anxiety affects 65–80% of paediatric surgical patients, which may lead to adverse clinical and developmental outcomes (Mustafa et al., 2024; Lerwick, 2016). Current clinical and research strategies often fail to meet the needs of children and young people (CYP) by omitting interactive components that promote active participation (Löf & Lönnqvist, 2022) — leaving them under-represented, reducing generalisability, and perpetuating health disparities.

Paediatric patients typically have very little input in the decision-making about their own care, which may cause a sense powerlessness, lack of autonomy and control — the LPI addresses this potentially isolating aspect through shared, matching surgical caps.

AIMS

To evaluate the Little Platypus initiative (LPI) — a nurse-led intervention where CYP select matching themed surgical caps for themselves and the anaesthetic team — reviewing its impact on:

- Autonomy and sense of control
- Rapport with the clinical/anaesthetic team
- The overall perioperative experience for CYP and caregivers



METHODS

A cross-sectional, quasi-experimental study using a mixed-methods approach:

- 197 eligible surgical patients at an NHS District General Hospital (William Harvey Hospital, EKHUFT) received the intervention from October 2022 to October 2023
- 81 questionnaires collected anonymously (41.1% response rate)
- Quantitative data analysed using descriptive statistics
- 65 free-text qualitative responses subjected to reflexive thematic analysis

RESULTS

Choice & Autonomy

91.4% of patients valued the option to choose their cap, 98.8% of caregivers were satisfied with the autonomy this gave their child

Rapport with Staff

77.8% of CYP and 88.9% of caregivers reported increased comfort with the anaesthetic team

Emotional Response

81.5% of patients reported a positive emotional response to wearing the cap; caps were described as a "gesture of kindness" that softened the clinical environment

Reduction of worry

63.0% of patients and only 45.7% of caregivers reported reduced worry — suggesting limited efficacy for highly anxious or neurodivergent groups

Family & Carer Voice

"This was a lovely idea and definitely helped my son settle into the ward better"
"It gave a sense of community"

Implementation Challenge

Inconsistent staff engagement and communication, especially after a leadership transition, reduced intervention fidelity in later phases



DISCUSSION & CONCLUSIONS

- By positioning CYP as active decision-makers, this initiative challenges the "small adult" approach and promotes authentic engagement
- The model is cost-neutral, sustained via hospital charity funding and community volunteers who handmade every cap
- Future phases must incorporate Patient and Public Involvement (PPI) to co-produce more customised, sensory-inclusive interventions
- Sustained leadership and institutional integration — not just funding — are critical to long-term viability; the project's decline after a leadership transition is a key lesson
- The LPI successfully operationalises shared decision-making and provides a scalable, evidence-based blueprint for inclusive paediatric care

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