



Patterns of Parental Anxiety Before and After Paediatric Surgery: A 24-Hour Comparative Study at a Tertiary Hospital in Ghana

OWUSU DARKWA EBENEZER, IDOKO CHIAMAKA KENDRA, DJAGBLETEY ROBERT

University of Ghana, Korle-Bu Teaching Hospital, Department of Anaesthesia, Accra, Ghana

Background

Paediatric surgery is frequently accompanied by considerable emotional stress for both children and their caregivers.

Limited access to information and uncertainty about surgical outcomes can heighten pre- and post-operative anxiety, which in turn may adversely influence the child's peri-operative experience and recovery.

The study examined patterns of anxiety among parents and primary caregivers of children undergoing elective surgery and aimed to determine sociodemographic factors associated with pre- and post-operative anxiety.

Methods

Study Design

Cross-sectional study at Korle-Bu Teaching Hospital, Accra, Ghana

Participants

250 parents or primary caregivers of children aged 0–14 years scheduled for elective procedures

Data Collection

Validated, modified anxiety questionnaire administered 24 hours before and 24 hours after surgery

Statistical Analysis

SPSS · Descriptive statistics · Paired t-tests · Multivariate regression for sociodemographic predictors · $p < 0.05$

Results

There Was a High Preoperative & Postoperative Anxiety Score Among Caregivers			
Measure	Pre-operative	Post-operative	p-value
Anxiety Score (mean ± SD)	36.36 ± 6.51	33.56 ± 6.97	< 0.001 ★
Demographic Predictors of Anxiety Score			
Gender	♂ ≈ ♀ both equally affected (p = 0.230)	♀ > ♂ (p = 0.034) ★	
Primary Concerns Affecting Anxiety			
Primary Concern	Sleep disruption due to uncertainty (mean score: 4.18)	Child's recovery process (mean score 3.48)	
★ Statistically significant			

- Preoperative anxiety (36.36 ± 6.51) was significantly greater than postoperative anxiety (33.56 ± 6.97), $p < 0.001$.
- Pre-operative anxiety showed no significant association with demographic variables ($p = 0.230$).
- Postoperatively, gender was a significant predictor ($p = 0.034$): mothers reported higher anxiety than fathers.

Discussion

Parental anxiety is markedly elevated prior to paediatric surgery but decreases significantly following the procedure. While pre-operative anxiety is consistently high across all demographic groups, mothers experience significantly greater postoperative distress than fathers ($p = 0.034$). Post-operative parental concerns centred on the child's recovery (mean score = 3.48), underscoring the importance of clear discharge communication and targeted family support. These findings highlight the importance of structured perioperative support particularly for mothers to enhance family coping and potentially improve surgical outcomes.

Conclusion

Parental anxiety is significantly elevated pre-operatively and decreases after paediatric surgery. Mothers bear a disproportionate post-operative emotional burden.

Clinical Implications:

- Implement structured pre-operative counselling for all caregivers
- Design targeted post-operative support programmes for mothers
- Improve discharge communication on child recovery to alleviate post-surgical caregiver anxiety

References

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