



IMPACT OF FAMILY PRESENCE DURING EMERGENCY RESUSCITATION ON PARENTAL ANXIETY AND NURSE PERFORMANCE IN NISHTAR HOSPITAL, MULTAN

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ABSTRACT

Aim: This study examined the influence of family presence during pediatric emergency resuscitation on parental anxiety and nurse performance in a tertiary care hospital setting.

Methods: This study utilized an analytical, cross-sectional, and pretest-posttest design to evaluate the impact of family presence on the anxiety levels of parents and the performance of nurses during emergency resuscitation procedures in a pediatric emergency department. The investigation was carried out in the Pediatric Emergency Department of Nishtar Hospital, Multan, between September 1 and December 30, 2024. The study population consisted of all nurses (N = 150) working in the pediatric unit. The sample consisted of 120 nurses who met the inclusion criteria and provided consent. Data were collected using a demographic information form, the State-Trait Anxiety Inventory (STAI) for nurses and parents, and a Nurse Performance Checklist. Participants first completed the information form and the Trait Anxiety Inventory. The research was conducted in two phases with the same nurse sample.

In the first phase (Family Presence), nurses performed resuscitation with a family member present in a designated area, after which they and the accompanying parent immediately completed the State Anxiety Inventory. Nurse performance was simultaneously rated by an independent observer. In the second phase (Standard Care), after a 15-day interval, the same nurses performed resuscitations without family presence, and the same post-procedure assessments were conducted.

Result and Conclusion: The mean trait anxiety score for nurses was at a moderate level. A statistically significant increase ($p < 0.001$) in nurses' state anxiety was observed during resuscitation with family presence compared to those without. Conversely, parental anxiety was significantly lower when they were present. Nurse performance scores showed no significant difference between the two groups. Despite increased personal anxiety, supporting family presence during pediatric resuscitation is recommended due to its benefits for parents. Continuous training in family-centered care and communication strategies is essential for emergency nursing staff.

INTRODUCTION

Emergency resuscitation is a high-stakes, stressful event for all involved, particularly the child, their family, and the healthcare team (Vardanjani et al., 2021). For parents, witnessing their child in a critical condition can provoke intense anxiety and psychological distress. Within the hospital, nurses are at the forefront of performing these life-saving interventions, and their performance can be influenced by numerous factors, including the presence of family members (Considine et al., 2022).

The concept of Family Presence During Resuscitation (FPDR) has been a subject of extensive debate. Proponents argue that it aligns with the principles of patient- and family-centered care, promoting transparency, alleviating parental anxiety by reducing uncertainty, and facilitating the grieving process if a negative outcome occurs (Afzali Rubin et al., 2023). Studies indicate that most families desire the option to be present (Sofee et al., 2024). However, healthcare professionals often express reservations. Concerns include fear of increased stress and performance anxiety among staff, potential interference with the procedure, psychological trauma to the family, and legal ramifications (Alhofaian et al., 2023).

Traditionally, many hospitals restricted parental presence during resuscitation, citing concerns about parental psychological trauma, interference with procedures, and reduced staff performance (Najafi et al., 2024). However, the global trend toward family-centered care emphasizes the importance of involving families in their child's treatment, including critical events such as resuscitation (Park et al., 2025).

Research indicates that family presence during invasive or emergency interventions may reduce 67% children's anxiety, improve trust between families and

healthcare teams, and foster transparency in care (Bossei et al., 2025). At the same time, studies also highlight potential drawbacks, such as increased stress for healthcare providers, fear of mistakes under observation, and parental distress. The balance between these benefits and challenges remains a subject of debate (Porter et al., 2015).

The dynamic and high-pressure environment of a pediatric emergency room necessitates optimal performance from nurses (Rahmawati et al., 2025). While the effect of FPDR on family anxiety has been studied, its concurrent impact on the anxiety levels of nurses and its correlation with their clinical performance during pediatric resuscitation remains less explored (Guo et al., 2024). Understanding this relationship is crucial for developing protocols that balance family needs with staff well-being and procedural efficacy.

In Pakistan, evidence on this issue is limited, particularly in tertiary care emergency settings. Considering the cultural significance of family support, it is crucial to explore how parental presence during pediatric resuscitation influences parental anxiety and nurse performance. This study aimed to fill this gap by assessing these variables in the pediatric emergency department of Nishtar Hospital, Multan. This research was conducted to evaluate the effect of family presence on both parental anxiety and nurse performance metrics during emergency resuscitation in children.

Objective

To assess the impact of family presence during emergency resuscitation on parental anxiety and nurse performance in Nishtar Hospital, Multan.

Research questions:

Does family presence influence the clinical performance scores of nurses during resuscitation?

Material and methods

Study Design

This research employed an analytical, cross-sectional, and pretest-posttest design to assess the impact of family presence on parental anxiety and nurse performance during pediatric emergency resuscitation.

Population and Sample

The study was conducted in the Pediatric Emergency Department of Nishtar Hospital, Multan. The population comprised 150 nurses. Using a known population sampling formula with a 95% confidence level and a 5% margin of error, a sample size of 120 nurses was calculated. All 120 nurses who met the criteria participated. Inclusion criteria were a minimum of one year of experience in the pediatric department and voluntary participation.

Data collection tool

Data were collected using:

Information Form: A researcher-developed form covering socio-demographic and professional characteristics.

State-Trait Anxiety Inventory (STAI): Used to measure anxiety in both nurses and parents. The inventory has well-established reliability and validity, with high scores indicating greater anxiety.

Nurse Performance Checklist: A 10-item observational checklist developed by the researchers to assess critical performance elements during resuscitation (e.g., adherence to algorithms, communication clarity, timeliness of interventions). Scores ranged from 10 to 50.

Data collection procedure

Ethical approvals were obtained. Nurses completed the information form and the Trait Anxiety Inventory. The study occurred in two phases:

Phase 1 (Family Presence): During a resuscitation event, one parent was allowed to be present in a predefined, non-interfering location. Immediately post-procedure, the

nurse and the parent completed the State Anxiety Inventory. An independent clinical supervisor simultaneously completed the Nurse Performance Checklist.

Phase 2 (Standard Care): After a 20-day washout period, the same nurses participated in resuscitations conducted under standard protocol (no family presence). The same post-procedure assessments (nurse STAI, Performance Checklist) were conducted. Parental STAI was not applicable in this phase.

Data Analysis

Data were analyzed using SPSS Version 26. Descriptive statistics (frequency, mean, standard deviation) were used. Normality was assessed with the Kolmogorov-Smirnov test. A paired-sample t-test compared nurse state anxiety and performance scores between the two phases. An independent t-test compared parental anxiety scores with normative data. Relationships between variables were examined using Pearson correlation. A p-value <0.05 was considered significant.

Ethical Considerations

Approval was granted by the Ethical Review Board of Nishtar Medical University. Written informed consent was obtained from all nurses and parent participants.

Results

The majority of nurses were female (72.5%), held a Bachelor's degree (75.8%), and were married (65.8%). The mean age was 31.2 ± 5.8 years, with an average professional experience of 7.8 ± 4.1 years and 4.5 ± 2.9 years specifically in pediatric emergency care.

Table 1: Descriptive Characteristics of Nurses (N=120)

Variables	Mean \pm SD	Min-Max
Age (years)	31.2 \pm 5.8	23-52
Duration of working in the profession (years)	7.8 \pm 4.1	1-28
Working time in pediatric emergency (years)	4.5 \pm 2.9	1-15
Gender	n	%

Male	33	27.5
Female	87	72.5
Education Status	n	%
Bachelor's degree	91	75.8
Postgraduate	29	24.2

Nurses reported high levels of procedural stress: 70% experienced stress during resuscitation, and 88% felt that family presence could be a potential stressor.

Variables		n	%
Stress during resuscitation	Yes	84	70.0
	No	36	30.0
Perception of family presence as a stressor	Yes	106	88.3
	No	14	11.7

The mean Trait Anxiety score for nurses was 41.85 ± 6.92 . The mean State Anxiety score was significantly higher during resuscitations with family presence (54.40 ± 7.15) compared to without (35.60 ± 7.80) ($p < 0.001$). Conversely, the mean State Anxiety score for parents present during resuscitation was 48.30 ± 8.45 , which was significantly lower than reported norms for parents waiting outside. Nurse performance scores showed no significant difference between the two scenarios (With Family: 42.10 ± 3.50 ; Without Family: 41.95 ± 3.75 , $p = 0.720$).

Table 3: State-Trait Anxiety and Performance Scores (N=120)

Parameter	Mean \pmSD	t	P
Trait Anxiety Scale (Nurses)	41.85 ± 6.92	-	-
State Anxiety Scale - Nurses (With Family)	54.40 ± 7.15	15.841	0.000
State Anxiety Scale - Nurses (Without Family)	35.60 ± 7.80		
Nurse Performance (With Family)	42.10 ± 3.50	0.358	0.720
Nurse Performance (Without Family)	41.95 ± 3.75		
State Anxiety Scale (Parents Present)	48.30 ± 8.45	-	-

DISCUSSION

This study found that while nurses' inherent anxiety levels were moderate, their situational anxiety surged significantly when families were present during pediatric resuscitation. This aligns with previous research indicating that healthcare workers often perceive FPDR as an additional psychological burden (Abualruz et al., 2025). Factors contributing to this anxiety may include fear of being judged, concerns about managing family reactions, and the pressure to perform flawlessly under observation (Alhofaian et al., 2023). Crucially, however, this increased self-reported anxiety did not translate into objectively measured decrements in clinical performance. The lack of a significant difference in performance scores suggests that nurses can maintain professional standards even under heightened stress. This finding is

vital for addressing staff concerns about FPDR(Considine et al., 2022).

On the other hand, allowing parents to be present was associated with lower anxiety levels for them compared to being separated from their child during a critical moment. This supports the core tenets of family-centered care, which emphasize reducing parental distress and promoting shared decision-making (Najafi et al., 2024).

The discrepancy between nurse anxiety and parental benefit highlights a critical area for intervention. The solution is not to prohibit FPDR but to better prepare nurses for it. Implementing structured training programs that simulate FPDR scenarios, enhance communication skills for interacting with distressed families, and clarify roles during a code can help mitigate nurse anxiety. Developing clear, standardized hospital protocols for FPDR is equally important to ensure safety and consistency.

Limitations

This study was conducted in a single tertiary care center in Multan, which may limit the generalizability of the findings. The Hawthorne effect, where nurses may have performed differently because they were being observed, is also a potential limitation.

Recommendations

Despite increasing nurse anxiety, FPDR should be offered as an option due to its benefits for parents. We recommend: Developing and implementing formal FPDR guidelines and training programs for emergency staff and incorporating communication and stress management techniques into nursing education and in-service training and designating a dedicated staff member to support the family during FPDR, which may alleviate the primary team's burden.

CONCLUSION

This study concludes that family presence during pediatric resuscitation significantly increases the state anxiety of nurses but does

not adversely affect their clinical performance. Simultaneously, it serves to reduce anxiety for parents. Therefore, healthcare institutions should strive to implement supported FPDR practices. Empowering nurses through targeted training and robust protocols is essential to harness the benefits of family-centered care while safeguarding the well-being and performance of the healthcare team.

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