

A Descriptive Cross- Sectional Study to Assess the Level of Anxiety among Hospitalized Children Admitted in Pediatric Wards of Ggsmch, Faridkot, Punjab

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ABSTRACT

Background: Hospitalization is often stressful for children, leading to anxiety, fear and emotional distress. India, with its vast pediatric population, faces a significant burden of child hospitalizations. Understanding the extent of anxiety experienced by hospitalized children is essential for identifying their emotional needs and planning appropriate supportive interventions during hospital care.

Objectives: To assess the level of anxiety among hospitalized children admitted to the pediatric wards of GGSMCH, Faridkot, Punjab and to determine their association with selected socio demographic variables.

Methods: A quantitative descriptive cross-sectional study was conducted on 80 hospitalized children admitted to pediatric wards who were selected through convenient sampling. The tool adopted for the study was socio demographic profile and Modified Revised Children Anxiety and Depression Scale. Descriptive and inferential statistics, including the chi-square test, were used for analysis.

Results: The findings revealed that the majority of hospitalized children 63.75% had moderate anxiety, followed by 28.75% with severe anxiety and 7.5% with low anxiety. The overall mean anxiety score was 26.57 ± 7.12 , indicating a moderate level of anxiety among hospitalized children. The anxiety scores ranged from 1 to 45. Father's occupation and family monthly income were significantly associated with anxiety scores

Conclusion: Majority of the hospitalized children experienced moderate anxiety, followed by severe and low anxiety. These findings highlight the need for implementing appropriate therapeutic interventions to reduce anxiety and promote the emotional well being of hospitalized children.

Keywords: hospitalized children; anxiety level; pediatric hospitalization; Anxiety assessment

INTRODUCTION

Children experience stress during hospital stays due to various medical procedures, unfamiliar surroundings, and separation from family. Children are afraid of doctors, nurses, general health workers, hospital routines and usually have white uniform phobia often associated with that which is called as

white collar syndrome. These stressors in children may contribute to increased anxiety among hospitalized children. Anxiety in hospitalized children may also contribute to increased anxiety among hospitalized children. Anxiety during hospitalization may also influence children's emotional well being, cooperation with healthcare procedures, communication, and overall hospital experience.

The present study emphasizes the anxiety experienced by hospitalized children admitted to pediatric wards. The thesis highlights that hospitalized children may experience varying degrees of anxiety, ranging from low to moderate and severe levels. Assessment of anxiety among hospitalized children is therefore important for identifying the extent of emotional distress experienced during hospitalization and for understanding the psychological needs of children receiving inpatient care. Early identification of anxiety can provide a basis for appropriate supportive and therapeutic approaches in pediatric healthcare settings.

The available literature reviewed in the study indicates that anxiety is commonly reported among hospitalized children across different pediatric wards and hospital settings. Studies conducted in various hospitals have reported differences in the distribution and severity of anxiety levels among hospitalized children, with children experiencing low, moderate, or severe anxiety to varying degrees. These findings indicate that anxiety is an important psychological concern in pediatric hospitalization and support the need for systematic assessment of anxiety among children admitted to pediatric wards. These observations support the need to assess the anxiety level of hospitalized children within the local context of Faridkot, Punjab.

The present study was therefore undertaken to assess the level of anxiety among hospitalized children admitted in pediatric wards of GGSMCH, Faridkot, Punjab.

OBJECTIVES

1. To assess the level of anxiety among hospitalized children admitted to the pediatric wards of GGSMCH, Faridkot, Punjab.
2. To find out the association of level of anxiety among hospitalized children with selected socio demographic variables.

MATERIALS AND METHODS

Research design and approach: A quantitative descriptive cross-sectional design was used.

Setting and participants: The study was conducted in the pediatric wards of Guru Gobind Singh Medical College and Hospital (GGSMCH), Faridkot, Punjab. The sample comprised hospitalized children aged 8 years - 12 years who were admitted in pediatric wards of GGSMCH, Faridkot, Punjab.

Sample size and sampling: Eighty hospitalized children fulfilling the inclusion criteria were recruited using convenience sampling. Physically handicapped, mentally disabled and children who were under strict isolation were excluded.

Tools: Tool I was a socio-demographic proforma covering child and family characteristics. Tool II was Modified Revised Child Anxiety and Depression Scale consisting of 15 items and each item was scored on a 4 point Likert scale, with the total scores ranging from 1 to 45.

Validity and reliability: Content validity was established through review by nursing, pediatric medical, and language experts. Test Retest reliability coefficient was 0.93 for Modified Revised Child Anxiety and Depression Scale.

Pilot study and data collection: A pilot study was conducted among 8 participants (10% of the sample), and the study was found feasible. Data for the main study were collected personally by the investigator from February to March using a paper-and-pencil method after obtaining informed written consent.

Ethical considerations: Ethical approval was obtained from the Institutional Research and Ethical Clearance Committee of Baba Farid University of Health Sciences, Faridkot. Administrative permissions were obtained from the relevant institutions. Written informed consent was obtained from the subject's parents, and confidentiality was maintained.

Statistical analysis: Data were analyzed using SPSS version 18.0. Frequency, percentage, mean, standard deviation, and chi-square tests were used. Statistical significance was considered at $p < 0.05$.

RESULTS

Socio-demographic characteristics

Among the 80 children, the majority were males (55%), aged 8–9 years (42.5%), and belonged to nuclear families (53.7%), with most being first-born children (65.7%). Most fathers had secondary education (71.2%) and were private employees (65%), while most mothers had secondary education (47.5%) and were unemployed (68.7%). More than half of the families had 1–2 siblings (53.7%) and a monthly income of Rs. 18,859–31,435 (55%). Most children were admitted to the general ward (43.7%), accompanied by their mothers (46.2%), had no previous hospitalization history (53.7%), and were diagnosed with GI illness (35%).

Characteristic	Category	n (%)
Child age	8-9 years	34 (42.5)
Child gender	Male	44 (55.0)
Education of the child	Middle Primary	30 (37.5)
Type of family	Nuclear	43 (53.7)
Number of Siblings	1-2	43 (53.7)
Child's birth order	First child	57 (65.7)
Father's education	Secondary education	46 (71.2)
Mother's education	Secondary education	38 (47.5)
Father's occupation	Private employee	52 (65.0)
Mother's occupation	Unemployed	55 (68.7)
Family monthly income	Rs 18,859- Rs 31,435	44 (55.0)
Area of the pediatric department child was admitted to	General ward	35 (43.7)
Presence of caregiver with child	Mother	37 (46.2)
Previous history of hospitalization	No	43 (53.7)
Medical condition child is currently diagnosed with	GI Illness	28 (35.0)

Level of anxiety among hospitalized children

The mean anxiety score among hospitalized children was 26.57 ± 7.10 out of a maximum score of 45. Regarding the level of anxiety, the majority of hospitalized children had moderate anxiety, with 51 (63.7%) children scoring between 16–30, followed by 23 (28.7%) children with severe anxiety who scored between 31–45. Only 6 (7.5%) children had low anxiety, with scores ranging from 1–15.

N=80

CRITERIA MEASUREMENT OF ANXIETY SCORE			
Level of anxiety	Score range	n	%
Severe Anxiety	31-45	23	28.7
Moderate Anxiety	16-30	51	63.7
Low Anxiety	1-15	6	7.5

Minimum Anxiety Score = 45

Maximum Anxiety Score = 1

Association with demographic variables

Father's occupation ($\chi^2=25.564$, $p=0.000$) and family monthly income ($\chi^2=18.164$, $p=0.006$) were significantly associated with anxiety scores. Other assessed demographic variables did not show statistically significant associations with knowledge or practices at the 0.05 level.

N=80

Significant demographic variable	χ^2	p value
Father's occupation	25.564	0.000
Family monthly income	18.164	0.006

DISCUSSION

The present study was conducted to assess the level of anxiety among hospitalized children admitted in the pediatric wards of Guru Gobind Singh Medical College and Hospital, Faridkot, Punjab. The findings of the study revealed that a considerable proportion of hospitalized children experienced anxiety during hospitalization. The majority of the children had moderate anxiety, followed by severe anxiety and low anxiety.

The findings suggest that hospitalization can be a stressful experience for children due to unfamiliar surroundings, separation from family, painful procedures, and disruption of their routine. The presence of moderate and severe anxiety among a considerable proportion of children highlights the importance of early identification and appropriate emotional support during hospitalization.

The findings of the present study are consistent with previous research conducted among hospitalized children, which has reported the presence of different levels of anxiety during hospitalization, with moderate anxiety being commonly observed. The findings also support the observation that hospitalization can negatively influence the emotional well-being of children and that anxiety may vary according to the child's age, previous hospital experiences, illness, treatment procedures, and environmental factors.

The study also revealed a statistically significant association between anxiety level and selected socio-demographic variables, particularly father's occupation and family monthly income. This indicates that

certain socio-demographic characteristics may influence the anxiety experienced by hospitalized children, emphasizing the need for individualized assessment and appropriate nursing support.

Overall, the findings of the present study highlight that anxiety is an important psychological concern among hospitalized children. Regular assessment of anxiety using an appropriate standardized tool can help healthcare professionals identify children who require additional emotional support. Pediatric nurses can play an important role in reducing anxiety by providing age-appropriate information, maintaining a supportive environment, encouraging parental involvement, communicating therapeutically with children, and identifying children with higher levels of anxiety for timely psychological support.

CONCLUSION

The present study concluded that anxiety is a common psychological concern among hospitalized children, with the majority experiencing moderate anxiety, followed by severe and low anxiety. The findings highlight the need for regular assessment of anxiety among hospitalized children to identify those requiring additional emotional support. The significant association between anxiety level and selected socio-demographic variables further emphasizes the importance of considering individual characteristics while providing holistic and child-centred nursing care.

IMPLICATIONS FOR NURSING PRACTICE

1. Pediatric nurses should include assessment of anxiety as part of the regular care of hospitalized children to identify those experiencing moderate or severe anxiety.
2. Nursing care should be adapted according to the child's age, developmental level, emotional response, and identified anxiety level.
3. Nurses can use simple communication, reassurance, play, distraction, and involvement of parents to help children feel more secure during hospitalization.
4. Children showing higher levels of anxiety should be identified at an early stage and provided appropriate emotional support or referred to the concerned healthcare professional when required.

LIMITATIONS

1. The study was conducted among a relatively small sample of 80 hospitalized children.
2. The study was confined to GGSMCH hospital in Faridkot, Punjab, limiting generalizability.
3. Convenience sampling may have introduced selection bias.
4. The study did not include qualitative methods that could have explored children emotions, beliefs, and fears in greater depth.

RECOMMENDATIONS

1. Regular anxiety assessment should be included in pediatric nursing care.
2. Nurses should provide age-appropriate emotional support to hospitalized children.
3. Similar studies should be conducted with larger samples in different settings.
4. Further research should evaluate simple non-pharmacological methods for reducing anxiety.

REFERENCES

1. World Health Organization. Global status report on child and adolescent health. Geneva: WHO; 2023. Available from: <https://www.who.int/publications>

2. Johnson B, Moore D. The psychological impact of hospitalization on children: A systematic review. *J Pediatr Psychol.* 2022;47(4):255-67.
3. Ministry of Health and Family Welfare, Government of India. National Health Profile 2023. New Delhi: Central Bureau of Health Intelligence; 2023.
4. Sharma R, Gupta N. Common causes of pediatric hospital admissions in India: A retrospective study. *Indian J Pediatr.* 2023;90(5):422-9.
5. Patel M, Reddy S. Addressing psychological distress in hospitalized children: The need for holistic care. *Indian J Child Health.* 2022;59(2):112-8.
6. Punjab Health Department. Annual report on pediatric admissions in government hospitals. Chandigarh: Punjab Government; 2023. Available from: <https://health.punjab.gov.in>
7. Tuncel DA, Çaka SY, Topal S, Acıpayam C, Alkan N, Çelebi SB. Anxiety and depression in adolescents with beta thalassaemia major. *Cukurova Med J.* 2025;50(1):125–136
8. Guller B, Yaylaci F. The Effects of Quarantine or Hospitalisation on Mental Health of Children and Parents with the COVID-19 Suspicion: A Case-Control Study. *Hong Kong J Paediatr.* 2023;28(1):109–118.
9. Terin H, Açikel SB, Yılmaz MM, Şenel S. The effects of anxiety about their parents getting COVID-19 infection on children's mental health. *Eur J Pediatr.* 2023;182(1):165–71. doi:10.1007/s00431-022-04655-0
10. Simmonds MK, Dick BD, Verrier MJ, Reid KL, Jamieson-Lega K, Balisky KJ, Davey AE, Freeman KM. The Effect of a Brief Physician-Delivered Neurobiologically Oriented, Cognitive Behavioural Therapy (Brief-CBT) Intervention on Chronic Pain Acceptance in Youth with Chronic Pain—A Randomized Controlled Trial. *Children (Basel).* 2022;9(9):1293.