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# Exploring Anxiety Levels Among Hospitalised School Age Children facing Pediatric Nursing Procedures

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## ABSTRACT

**Background:**
Anxiety is required at certain level but excessive anxiety may affect adversely on emotional status of children. Current trend of Pediatric nursing says do not harm physically and psychologically, to understand this we need to investigate anxiety level among children related to nursing procedure.

**Aim:**
This study is aiming to investigate anxiety level of hospitalised children facing selected nursing procedures.

**Methods:**
A descriptive survey included 400 hospitalised children aged in between 6-10 years by using purposive sampling technique. Anxiety of children related to nursing procedure was assessed through standardized tool Venham Picture Test (VPT), along with demographic data was assessed. Frequency & percentage of anxiety level determined by using MS excel.

**Results**:
Survey reveals that majority of 66% children had average anxiety, 24% were having high anxiety and 1.75% having very high level of anxiety; while only 8.25% children stated they having low anxiety, not a single child reported very low & no anxiety related to nursing procedure.

**Conclusion:**
Hospitalised children having anxiety not only related to doctors or hospital but the nursing procedures are a notable cause to think of it. Measures needs to be determined to relieve anxiety of children.

***Keywords:*** *Investigation, Anxiety, Hospitalised Children, Nursing Procedure, Schooler Children*

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## 1. INTRODUCTION

Anxiety is good when its beneficial to an individual but if that anxiety is leading to create difficulty in performing activities, then we should think of it. Pediatric anxiety is somewhat different than that of the adult anxiety, as children may not cope with the situation if they are suffering with excessive anxiety. Hospitalization has a negative effect on child's development [1].

Hospitalised environment is fearful and anxious for children as they are away from their parents, siblings, school or even their own houses. More to that they have to face new environment, new people at hospital and procedures related to diagnosis & treatment. Many studies have focused on hospital related anxiety among children even various interventions are also being carried out to minimize that.

Pain and anxiety are frequent side effects of procedures performed in the hospitals for children and this may influence behavior of child [2]. Procedures not only the medical or diagnostic procedures but nursing procedures like administration of medications, intravenous cannulation, nebulization, injection and so on. These procedures are also leading to anxiety among children.

According to Erikson's Theory of Psychosocial Development, school-age youngsters experience both a sense of industry and inferiority. During this developing stage, children may come into contact with adverse effects from experiences that could give rise to feelings of inadequacy. Children in good physical and mental health are the one and only, who can learn specific abilities. The hospital setting and feeling of being out of control might be exacerbated by illness. It has been revealed that one of the biggest issues facing kids in this age range is boredom [3]. Children need to be treated with greater care. Due to their constantly shifting emotions, they require more tolerance, adaptability, and self-control. In order to overcome elevated anxiety levels and trauma responses, which can obstruct the provision of high-quality healthcare and have negative long-term psychological impacts, their fundamental requirement is to know they are safe; and information to be given appropriately for their ages and development [4].

To understand how much anxiety is caused by nursing intervention or procedure we have undertaken this survey and with the help of this survey we can take appropriate measures to overcome children anxiety related to nursing procedures.

## 2. MATERIALS & METHODS

**Research design:**
To conduct the survey, a descriptive survey research design with a post-test alone was opted.

**Setting of the study:**
The study was executed in tertiary care hospitals located in Karad, Maharashtra, India.

**Sample & Sampling technique:**
The study recruited 400 hospitalized children in the middle of 6 and 10 years using a purposive sampling technique.

**Inclusion & Exclusion Criteria:**
Children admitted in hospital aged between 6-10, facing selected nursing procedures with their willingness involved in the study; where as children who were severely ill & not willing to participate in study were excluded.

**Tool:**
To gather the data from children assessment scales were utilised which includes following:
1. Demographic data consists of age (in years), gender, education status of child, residence, day/s after admission, previous experience of hospitalisation. For obtaining demographic data.
2. Self-Report Anxiety Scale [Venham Picture Test (VPT)] for assessing anxiety of children

**Ethical Considerations:**
Ethical approval obtained from Krishna Vishwa Vidyapeeth (DU), Karad. Informed & assent obtained from study participant and consent obtained from parents of participant. (Ref. No. KIMSDU/IEC/05/2021A).

## 3. RESULTS

**Table No. 1: Frequency and percentage distribution of hospitalised children according to sample characteristics N=400**

| Sr. No. | Demographic variables | Frequency | Percentage (%) |
|---|---|---|---|
| **1.** | **Age (in years)** | | |
| A. | 6 | 112 | 27 % |
| B. | 7 | 67 | 15 % |
| C. | 8 | 59 | 13 % |
| D. | 9 | 74 | 16 % |
| E. | 10 | 128 | 30 % |
| **2.** | **Gender** | | |
| A. | Male | 232 | 58 % |
| B. | Female | 168 | 42 % |
| **3.** | **Education status of child** | | |
| A. | 1st std | 148 | 37 % |

| | | | |
|---|---|---|---|
| B. | 2nd std | 56 | 14 % |
| C. | 3rd std | 82 | 21 % |
| D. | 4th std | 114 | 29 % |
| **4.** | **Residence** | | |
| A. | Urban | 192 | 48 % |
| B. | Rural | 208 | 52 % |
| **5.** | **Day/s after admission to hospital** | | |
| A. | 1 | 299 | 75 % |
| B. | 2 | 101 | 25 % |
| **6.** | **Previous experience of hospitalization** | | |
| A. | Yes | 88 | 22 % |
| B. | No | 312 | 78 % |
| **6.1** | **If 'yes' how many times in a last year** | | |
| A. | 1 | 62 | 70 % |
| B. | 2 | 26 | 30 % |

Demographic data in table no 1 shows that majority of children 30% belongs to age group of 10 years, 58% were male children, 37% children was in first standard, 52% were residing at rural area, 75% children were included on 1st day of admission of hospitalization and 78% children stated that, they didn't have any previous experience of hospitalization, amongst previously experienced 70% children were admitted only once in last one year.

**Table No. 2 level of anxiety among hospitalised children regarding nursing procedures N=400**

| Sr. No. | Anxiety Level | Frequency | Percentage (%) |
|---|---|---|---|
| 1 | No anxiety | 0 | 0 |
| 2 | Very low anxiety | 0 | 0 |
| 3 | Low anxiety | 33 | 8.25 % |
| 4 | Average anxiety | 264 | 66 % |
| 5 | High anxiety | 96 | 24 % |
| 6 | Very high anxiety | 7 | 1.75 % |
| | Total | 400 | 100 % |

Table no 2 depicts that majority of 264 (66%) children had average anxiety, 96 (24%) were had high anxiety and 7 (1.75%) were having very high level of anxiety, while only 33 (8.25%) children reported they have low anxiety, not a single child reported very low & no anxiety related to nursing procedure.

**Table No. 3 Level of anxiety among hospitalised children according to each nursing procedure N=400**

| Sr. No | Anxiety Level | Intramuscular Injection (%) | Intravenous Cannulation (%) | Nebulization (%) | Administration of Oral Medicine (%) |
|---|---|---|---|---|---|
| 1 | No anxiety | 0 | 0 | 0 | 0 |
| 2 | Very low anxiety | 0 | 0 | 0 | 0 |
| 3 | Low anxiety | 0 | 0 | 13 | 20 |
| 4 | Average anxiety | 67 | 43 | 76 | 78 |
| 5 | High anxiety | 30 | 53 | 11 | 2 |
| 6 | Very high anxiety | 3 | 4 | 0 | 0 |
| | Total | 100 | 100 | 100 | 100 |

Table no. 3 shows anxiety level of hospitalised children during each nursing procedure. During intramuscular injection procedure majority of children shows average anxiety 67%, followed by high anxiety 30% & very high anxiety 3%. During intravenous cannulation 53% children shows high anxiety, 43% average anxiety & 4% very high anxiety. Whereas during nebulization majority of children was in average level 76% of anxiety, 13% low anxiety & 11% high anxiety. During administration of oral medicine 78% children reported average anxiety, 20% low anxiety & 2% high anxiety. When

compared to other procedures, children who had intravenous cannulation experienced higher levels of anxiety; conversely, children who taken oral medication experienced lower levels of anxiety.

## 4. DISCUSSION

Findings of the study showing that 66% children having average anxiety while 24% children have high anxiety followed by 8.25% low anxiety & 1.75% very high anxiety. Nursing procedures were included to assess anxiety was Intravenous cannulation, intramuscular injection, nebulization & administration of oral medicines. Similar studies done on hospitalised children with painful medical procedures found that most children had severe anxiety. Also, A strong correlation was seen between the anxiety levels and the diagnosed condition, children undergoing hurtful procedure and children on intravenous therapy ($p< 0.5$) [2,5].

A study done by Siva Ramya R. A found that in experimental group, Pre-test findings showed that 30 (100%) children had moderate level of anxiety and in post-test 27 (90%) had mild level of anxiety and 3(10%) experienced moderate anxiety level. In control group, Pre-test showed that 30 (100%) children had moderate level of anxiety and 8 (26.67%) had mild level of anxiety and in post-test 22 (73.3%) had moderate level of anxiety. In this study researcher used origami therapy to reduce anxiety and stress [6]. In present study majority of children had average anxiety 66% followed by high anxiety 24%but amongst four procedure painful procedures showing high no of children suffering with anxiety i.e., intravenous cannulation and intramuscular injection average anxiety 43% & 67% and high anxiety 53% & 30% respectively.

Study of Davidson B stating that greater number of children in control group had moderate anxiety in pretest as well as in post-test (70%, 66.3%), whereas in the experimental group over half of children had moderate anxiety (66.6%). Twenty-six percent had mild anxiety and 6.6% of children had severe anxiety during pre-test [7]. In a study also, we can see children are feeling moderate anxiety and results are same like present study.

## 5. CONCLUSION

Hospitalised children having anxiety not only related to doctors or hospital environment but the nursing procedures are also a notable cause of it. Invasive nursing procedures are causing high anxiety compared with non-invasive nursing procedures. It is essential to take action in order to reduce children's anxiety.

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**Conflicts of interest:** There are no conflicts of interest.

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