

Effectiveness Of Pre-Visualization Of Nursing Procedures On Anxiety And Stress Among Hospitalized Children During Nursing Procedures; A Study Protocol

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Abstract

Stress and anxiety adversely affecting on human being especially among children when they are separated from parents and got hospitalized. This planned study evaluating effectiveness of pre-visualization of nursing procedures to minimize stress and anxiety among hospitalised children.

Aim: To minimize stress and anxiety of hospitalised children related to nursing procedures

Settings and Design: This study is planned at tertiary care hospitals from Karad tehsil Maharashtra, by using Quasi experimental non randomized control group design.

Methods and Material: 400 (200 control & 200 experimental) Hospitalised children between the age group of 6 years to 10 years, who are undergoing selected nursing procedures and willing to participate will be included in the study by using non-probability convenient sampling technique. For assessing anxiety and stress, Venham Picture Test (VPT) and Children's Emotional Manifestation Scale (CEMS) will be used respectively

Statistical analysis used: Data will be analysed in terms of objectives by using Descriptive and Inferential statistics.

To find the association chi square test and to find co-relation between variables Pearson's co-relation coefficient test will be used.

Conclusion: pre-visualization may help children to reduce their nursing procedure related stress and anxiety and cooperate to nurses for the same.

Keywords: stress, anxiety, hospitalised children, nursing procedures.

INTRODUCTION:

Hospitalization is very unpleasant experience of every child. Almost all children have to undergone certain hospital related medical or nursing procedures. During such procedures children are under high pressure of stress and facing severe anxiety and this may affect later in life. Many interventions are taken to minimize stress and anxiety for hospitalised children, but that may not be working every time. Pre-visualization is concept from cinematography which will allow children to visualize the procedures prior to perform and this may help to minimize stress and anxiety and helpful to gain cooperation during nursing procedures.

OBJECTIVES:

1. To assess the impact of pre-visualization on reducing nursing procedure related anxiety and stress among the hospitalized children
2. To assess pretest – post-test anxiety and stress level among experimental and control group.
3. To assess anxiety and stress level among experimental and control group during actual nursing procedure.

SUBJECTS AND METHODS:

- *Study design:* in a planned study quasi-experimental non randomized control group design (non-equivalent control group pre-test- post-test research design) will be used.
- *Study duration:* 3 years duration is planned if time requires till 5 years it may extend.
- *Study setting:* tertiary care hospitals from Karad Taluka of Maharashtra state.

- *Sampling method:* In a planned study non-probability convenient sampling method will be used.
- *Sample size:* 400 hospitalised children (total 4 selected nursing procedures, each procedure comprises of 50 samples in control group and 50 samples in experimental group).

$$n = \frac{(SD_C^2 + SD_E^2) \times (Z_{1-\frac{\alpha}{2}} + Z_{1-\beta})^2}{(M_C - M_E)^2}$$

- n = sample size
- SD_C = standard deviation of control group reference study
- SD_E = standard deviation of experimental group reference study
- $(Z_{1-\frac{\alpha}{2}} + Z_{1-\beta})^2 = 7.84$
- M_C = Mean of control group reference study
- M_E = Mean of experimental group reference study

By referencing a study done by Cardinal FG, Arroyo GM, Magbanua S, Sajnani AK, in 2017 on Measurement of anxiety in 3–9-year-old children receiving nursing intervention, sample size is calculated.¹

- *Study population:* hospitalised children aged between 6 years to 10 years
- *Inclusion criteria:*
 - Hospitalized children undergoing selected nursing procedures. (Intramuscular injection, intravenous canulation, nebulization, administration of oral medication)
 - Age group of children in between 6 years to 10 years.
 - Children who can understand Marathi language.
- *Exclusion criteria:*
 - Children who are critically ill.
 - Children who are mentally ill.
 - Children and parents not willing to participate.
- *Tool:*
 1. Demographic Data of Hospitalised Children.
 2. For assessment of anxiety Venham Picture Test (VPT)² will be used, it's a projective, psychometric, self-measure test which is used to measure the state anxiety of the young children
 3. For assessment of stress Children's Emotional Manifestation Scale (CEMS)³ will be used, it is a simple, objective and consistent method which allows nurses to document children's emotional behavior during stressful medical procedures.
- *Intervention:*

In designed study, previsualization of nursing procedures refers to visualizing selected animated nursing procedures in story manner and orient children about the procedure prior to perform procedures included in the study are Intramuscular injection, intravenous canulation, nebulization, administration of oral medication.
- *Method of data collection:*

after obtaining the required permission data will be obtained in three phases by using non-probability convenient sampling technique phase 1 will be prior to the intervention, phase 2 will be after the intervention and phase 3 will be during actual nursing procedures.
- *Statistical analysis:*

The obtained data will be analyzed in the terms of the objective of the study using descriptive and inferential statistics
- *Ethical consideration:* ethical clearance is obtained from KIMS deemed to be University, Karad. Ethical Approval Letter No. KIMSDU/IEC/05/2021

DISCUSSION:

Stress and anxiety are necessary up to some level but if it is beyond the level it may lead to consequences of mental wellbeing. During childhood, if children are facing severe anxiety and stressful situations it may affect adversely throughout life. Hospitalization is one of a condition where children face severe stress and anxiety, being a Pediatric nurse its prime responsibility to maintain calm and stress-free environment of hospital. Many studies shows that hospital related stress and anxiety can be reduced by various therapies like diversional, play, art therapy and so on. In proposed study children will be oriented to the situation first and then expected co-operation during actual nursing procedure. Empirical studies suggest that children express anxiety through regression in behavior, aggression, lack of cooperation, withdrawal, and difficulty recovering from procedures⁴.

A study done by Melamed, B. G., & Siegel, L. J. (1975), titled Reduction of anxiety in children facing hospitalization and surgery by use of filmed modelling revealed that, children who underwent filmed modelling of hospital environment showed significant reduction in anxiety level as compared to routine explanations⁵. This shows that if children are oriented instead of diverting mind or engaging them into other activities can be useful for gaining co-operation and reducing anxiety.

CONCLUSION:

Pre-visualization may help children to reduce their nursing procedure related stress and anxiety. Nurses will get the co-operation from children while performing nursing procedures.

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