



## The Impact of a Cartoon Video on Post-Operatal Pain and Discomfort in Children

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### ABSTRACT

**Introduction:** Children in hospitals frequently experience unpredictable and severe procedure-related pain, which can have significant emotional and psychological impacts. Among youngsters, any surgical procedure is accompanied by pain and anguish. As an outcome, health care practitioners must diminish such terrible suffering to the greatest degree while maintaining patient safety by implementing a variety of pharmacological and non-pharmacological interventions. Aim: The study's goal is to evaluate the impacts of a cartoon video on children's post-operative pain and discomfort. **Methods and Material:** This observational study on the effects of cartoon movies on post-operative pain and discomfort in children is being conducted in the pediatrics department of a Datta Meghe institution of medical college and research Centre in Sawangi Meghe Dist. Wardha. Interventional approach used in this study. The current study used a true experimental two-group post-test control design the observational study design was a Post-test control group design study with a interventional research approach. Simple random sampling was the sampling method used to collect the data. The said study was carried out in the Acharya Vinoba Bhare rural hospital of Sawangi. The sample size was 60. Standard facial scale was used. Data were collected. The software used in the analysis was SPSS 24.0. Descriptive Statistics and Frequency distribution and compare were presented for categorical variables.

**Result:** The findings show that effect of cartoon videos on post-operative pain and discomfort among children of experimental group and control group. The calculated 't' value is 5.246. The calculated 't' value was much higher than the tabulated value at 5% level of significance 'p' value was 0.0001 less than 0.05. Hence it is statically interpreted that the effect of cartoon video on pain discomfort among the 5-10 year is effective. Thus the H1 is accepted. **CONCLUSION:** It was concluded that cartoon distraction is an effective distraction strategy to reduce post-operative pain and discomfort among children.

**KEYWORDS:** Animation, operative pain, Ache, Children, Distraction.

### INTRODUCTION:

In the hospital setting, children often experience unpredictable and severe procedure-related pain that can be associated with negative emotional and psychological implications.<sup>1</sup> there are so many operative procedures in children and its consequences are health problems in today's society. They lead to the imposition of physical, psychological, social and economic injuries to the patient, family and society. The pain caused by operative procedure is considered as the one of the worst form of pain. However, the daily care of surgical wounds including dressing removal, cleaning and dressing again is the main cause of pain in these patients. There is numerous physiological, psychological and social risks threat the patients in the absence of pain control. Pain relief is the basic need and right of every child and one of the priorities in nursing care. There are some most common method involves to control the pain and discomfort in these patients such as analgesics, anti-anxiety, muscle relaxants, etc. When benzodiazepines are combined with opioids analgesics or other type of analgesics, reduces the pain of post-operative children, but they are usually not sufficient to reduce pain and discomfort. Some opioids analgesics are Narcotics, and will cause many side effects such as constipation, nausea, vomiting and drowsiness while drug-free pain reliever considerations have few side effects and their use is relatively easy and free of charge for the patients; in addition, using them simultaneously with analgesic increases pain relief. According to literature review so far, numerous methods were used for decrease the pain of children. The positive effect of jaw relaxation on pain of dressing changes, breathing relaxation technique on burn pain, and effect of hypnotherapy on pain were confirmed. But these methods need much experience and presence of experts that have a lot of costs for health units. Distraction is one of the non-pharmacological interventions for pain relief. Playing games is one of the distraction methods to reduce the pain and anxiety associated with hospitalization and medical procedures. Therefore, it appears to be necessary in the children ward of the hospitals. Play therapy is a way to reduce emotional and social stress in children. For 60 years, play therapy has been used as an appropriate method in the treatment of children. One of these games is playing with bubbles-individually or in a group which is effective in reducing anxiety, anger and stress in children.<sup>2</sup>

## NEED OF THE STUDY:-

The pain response in individual and is learned through social learning and experience. Early pain experience may play a particularly important role in shaping an individual's pain responses. Inadequate relief of pain during childhood surgery may have long- term negative effects on future pain tolerance and pain responses. Pain is a subjective experience, and infants and children respond to pain with behavioral reactions that depend upon age and cognitive processes. According to the International Association for the Study of pain, "Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage.

Relief of pain is a basic need and right of all children. Management of pain in the child must be individualized. Age, sex, birth order, cultural background, parents, caregiver's response, and past experiences affects the child response. The nurse must be aware of the child's response to pain through the assessment of behavioral responses and differentiation of crying.

As distraction is a promising, cost effective, non-pharmacological technique in reducing pain and discomfort among school age children undergoing operative procedure. The researcher in this study is, intended to use cartoon animation show, an audio visual aid as a distracter among children during surgical care.

## Materials and methods:

True experimental design -test control group design was used in the study. The experimental group is exposed to a cartoon video are measured. The study was conducted in Acharya Vinoba Bhave rural hospital of Sawangi. The sample size was 60. Validated structured questionnaires were used. Data were collected. Standard pain scale was used to observe the pain level in children. Sample size: 30- Experimental group 30-Control group. The written informed consent duly signed by the parents was obtained. The inclusion criteria Patients those who are willing to participate in the study. Both young male and young female children present at that time of data collection and exclusion criteria are those who are admitted with complete mechanical ventilation support. The study began after the Institutional Ethical Committee granted Ethical Clearance. A total of 60 patients in the age range of 5 to 10 years old were postoperatively treated. The study also received ethical approval.

### Statistical analysis:

The collected data were coded, tabulated, and analyzed by using descriptive statistics (mean percentage, standard deviation) and inferential statistics. The software used in the analysis was SPSS 24.0 and Graph Pad Prism 7.0 version and  $p < 0.05$  is considered as a level of significance. The statistical tests used for the analysis of the result were: Students unpaired t-test, Pearson' Correlation Coefficient, Reliability Analysis

## Results:

[Table/fig.1]: Comparison of the effectiveness of cartoon video on Post-Operative Pain And Discomfort Among The 5 To 10 Year Children Of Experimental Group And Control Group.

effectiveness of cartoon video on post-operative pain and discomfort among the 5-to-10-year children of experimental group and control group				
Control Group	Experimental group	Mean Difference	t-value	p-value
6.50±1.52	4.40±1.58	2.10±0.211	5.246	<b>0.0001</b> <b>S, p&gt;0.05</b>

The findings show that effect of cartoon videos on post-operative pain and discomfort among 5 to 10 year children of experimental group and control group. The calculated' value is 5.246. The calculated' value was much higher than the tabulated value at 5% level of significance 'p' value was 0.0001 less than 0.05. Hence it is statically interpreted that the effect of cartoon video on pain discomfort among the 5-10 year is effective. Thus the H1 is accepted. According to the findings, none of the children in the experimental group experienced no pain, whereas three individuals in the control group had moderate pain and 15 people in the experimental group had moderate pain, 12 people in the control group had severe pain and 6 people in the experimental group had severe pain, and 12 people in the control group had extremely severe pain, In the experimental group, six patients were in excruciating agony. Three persons in the control group had the most excruciating pain, while none in the experimental group did. The experimental group had a minimum score of 2 and the control group had a minimum score of 4, with the control group's highest score of 9 and the experimental group's maximum score of 7. The experimental group had a mean score of 4.50158, whereas the control group received a mean score of 6.50152. The experimental group earned a score of 4415.8, whereas the control group got a score of 6515.2.

## DISCUSSION:

Hence, It has been proven that using cartoon videos to divert youngsters from discomfort is a successful technique. Modern medical research is too expensive to cure pain, and the medications it prescribes have side effects. As a result, non-pharmacological pain therapy is straightforward, easy to implement, less costly, and easy to distract the mind from pain sensations. This evaluation of studies demonstrates that cartoon video is one of the most effective ways to reduce pain throughout the post-operative period. This finding has the potential to be used in the treatment of pain without the use of

pharmaceuticals. This study uses a defined pain scale to measure the level of pain among children aged 5 to 10. There was a statistically significant reduction in pain in the experimental group ( $P < 0.05$ ). As a result, statistics show that the cartoon videos are effective. Nursing education, nursing practice, nursing administration, and nursing research will all benefit from these findings.

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