Study Protocol

Assessing the effectiveness of cartoon videos on post operative pain and discomfort among 5 to 10 years children.

Abstract

Introduction:A study to evaluate to assess the effectiveness of cartoon videos on post-operative pain and discomfort among 5-to-10-year children. It's needed for the improvement in health as well as a diversion from pain and wellbeing of children. The important part of every person's life is to understand children, without understanding we cannot communicate with children. Our whole life has been greatly influenced by our childhood and our experiences. In the hospital, children frequently encounter unpredictable and acute procedure-related pain, which can have detrimental emotional and psychological consequences

Objective: To assess the level of pain among the children of the control group.To evaluate the effectiveness and compare of cartoon videos on post-operative pain and discomfort among 5-to-10-year children in experimental group and control group.To associate the level of pain score of the control group and experimental group with selected demographic variables.

Methodology: An interventional research strategy is used in this study. The true-experimental two-group post-test control design is used in this research. This research was carried out in Acharya Vinoba Bhave Rural Hospital (AVBRH) on Postoperative youngsters aged 5 to 10 years.

Conclusion: The statistical analysis will lead to a conclusion.

Keywords: Assess, Effectiveness, Cartoon Video, true-experimental two-group post-test control design.

Introduction

A study to see how effective cartoon videos are at reducing post-operative pain and discomfort in children aged 5 to 10. It is essential for our children's health, as well as their relief from discomfort and overall well-being. Understanding children is a crucial element of everyone's life; without understanding, we can't communicate with them. Our entire lives have been fantastic. In the hospital, children frequently encounter unpredictable and severe procedure-related pain, which can have detrimental emotional and psychological consequences.1.

Pain in children with acute and chronic disorders has become a serious public health concern in the last 20 years. Pain may be experienced as a result of the surgery. The degree to which a youngster perceives pain differs from one child to the next; pre-schoolers still have limited ability to comprehend anything beyond the present incident. Despite having various temperaments, school-aged children are readily distracted, according to Whaley and Wong. Diversional activities such as play, games, radio, video-cassette recorder, and television can be used to reduce the pain experienced during treatments. Cartoon videos are a great way to keep a child occupied while they are in the hospital 2.

Background Of Study

The goal of the study was to see how effective are at re cartoon videos reducing pain and discomfort in children aged 5 to 10. Painful procedures are fairly common in children during hospitalization. The number of people who want to participate in a study into pediatric pain is growing every day.Nurses can use cartoon distractions to alleviate the problem of a lack of attention to pain management while saving time and effort. Children's acute and chronic diseases are a big public health issue that has gotten worse over the last 20 years. The activity that produces diversions entails capturing the attention of youngsters and diverting their attention away from difficult situations.1

Pain treatment is a basic necessity and a right for all children; effective pain management requires health providers to be able to use a variety of therapies to achieve the best results. The purpose of this study was to explore how children's perceptions of pain following surgery were impacted by cartoon videos.

Need Of Study

During hospitalization, children are frequently subjected to painful treatments. Many hospitalized children must endure painful treatments such as venepuncture, intramuscular injections, and other similar operations. The research of pediatric pain is becoming more popular by the day. The researcher intends to conduct a study on post-operative pain and

discomfort in youngsters using cartoon videos for this aim. As a result of the operation, you may experience pain. The degree to which a kid perceives pain differs from one child to the next; pre-schoolers still have limited ability to comprehend anything beyond the present experience. Despite having varied temperaments, school-aged children are readily distracted, according to Whaley and Wong] Diverse activities such as play, games, radio, video-cassette recorder, and television can be used to alleviate discomfort during surgery. Cartoon movies are an excellent method to keep a child entertained while they are in the hospital.3 Pain is a subjective experience that includes cognitive, behavioral, and emotional components and is influenced by an individual's environment, emotional, sociocultural, and evolutionary factors. Venipuncture used to be conceived of as a painful, invasive medical treatment that entailed puncturing a vein with an injection needle. Venipuncture is a painful and uncomfortable technique for children. Anxiety, lower pain tolerance, and reduced analgesic effects for subsequent procedures, as well as avoidance of medical care, can all be caused by venipuncture, which can include rough treatment, insufficient preparation, or excruciating pain. The distraction allows the youngster to divert their attention away from the pain. They are more likely to work because they stimulate kids to manipulate them with their aural, visual, tactile, and kinaesthetic senses, which effectively lessens the anguish connected with the painful occurrence.

Methodology:

Research Approach and Design: An interventional research strategy is used in this study. The true-experimental two-group post-test control designis used in this research.

The setting of the study: This research was carried out in Acharya Vinoba Bhave Rural Hospital (AVBRH).

Sample: Post-operative youngsters aged 5 to 10 years.

Criteria For Sample Selection

Withdrawal Criteria - Participants who fulfill the following criteria will be withdrawn from the study:

1. Want to withdraw from the study
2. Not fulfilling study schedule

Reliability

Reliability of the tool will be check by the parallel method.

Validity

Validity will be done by the expert of the subject.

Sample size:

In previous studies, the sample size ranges from 20 to 30.

For this study, the power is set at 0.84 and it is considered a superior design.So the sample size is calculated by using the following formula.

$\eta = (Z\alpha + Z\beta)^2 (\delta_1^2 + \delta_2^2 / K) / \Delta^2$

Were,

Zα is the level of significance at 5% i.e., 95%

Confidence interval= 196

Zβ is the power of test=80%=0.84

From a pilot study done on 6 samples in each group

δ_1=SD of pain score in experimental group=1.137

δ_2=SD of pain score in control group=1.57

Δ^2=Difference between two means=9.13 – 8.17=1.01

K=1

$n = (1.96+0.84)^2(1.137^2+1.57^2/1)/1.01^2$

n =28.87

∴n= 30 patients needed in each group.

Outcome measures –

1. **Primary outcomes include-** Assess Knowledge of effectiveness of cartoon videos on post-operative pain and discomfort among 5 to 10 years children
2. **Secondary outcomes include -** Reduced level of pain in children after watching a cartoon video.

Data management and monitoring –

Validated structured questions were used to assess knowledge and practices, including the effectiveness of cartoon movies on post-operative patients among children aged 5 to 10. The tool was created with the study's aims in mind. There were three sections to the tool.

Section 1: -Demographic variables. There were 4 demographic variables age, Gender, no. of time day after surgery and name of surgery.

Section 2: -A standardized pain scale to assess the pain level on post-operative pain among 5 to 10 years children. There are ten responses to each item. For no pain, a score of 0 was assigned. Mild pain received a score of 1-2, moderate pain received a score of 3-4, severe pain received a score of 5-6, extremely severe pain received a score of 7-8, and the worst conceivable agony received a score of 9-10. Every right response received a one-point score. The total score of overall knowledge was used to assess the pain level among post-operative children.

Section3: -Observational checklist based on control and experimental group. Information will be gathered at the Acharya Vinobha Bhave Rural Hospital in Sawangi Meghe, Wardha district. Wardha district only picked the 5-to-10-year post-operative children when data was obtained. To collect data, use a checklist or demographic instrument to assess knowledge and an observational checklist to observe practice.

Statistical analysis-. Statistical analysis will be carried out. Demographic data will be examined using frequency and percentage (%), and presented as tables and graphs. B. The connection between knowledge and practice of post craniotomy care among caregivers of patients with specific demographic factors was investigated using an unpaired t-test and a one-way ANOVA test.

Ethics and dissemination-. The DMIMS Institutional Ethics Committee has accepted this study (DMIMS (DU/IEC/Dec-2020-21/153). The informed consent form will be read and signed by all participants. The findings of the study will be shared with research participants and published in peer-reviewed journals.

Expected Outcomes/Results: This study plan to find the effectiveness of cartoon video display to children for reducing pain and distracting their mind from the pain. We assume to see more effectiveness on the experimental group because we show cartoon videos to children to reduce pain. We will expect this study to show effectiveness on children for reducing pain.

Discussion: The current study will determine that cartoon videos have a favorable effect on reducing pain levels in children aged 5 to 10, allowing them to cope with discomfort and have favorable responses to treatment.

Conclusion: The statistical analysis will lead to a conclusion.

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