

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: <http://www.elsevier.com/journals/international-journal-of-nursing-sciences/2352-0132>

Original Article

Effect of interesting games on relief of preoperative anxiety in preschool children

Xing-Lian Gao^{a,*}, Ying Liu^b, Shi Tian^a, Dong-Qing Zhang^a, Qing-Ping Wu^c

^a Operation Room, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

^b Postgraduate Class, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

^c Anesthesiology Department, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

ARTICLE INFO

Article history:

Received 21 October 2013

Accepted 23 January 2014

Available online 20 March 2014

Keywords:

Anxiety

Child

Game and playthings

Preoperative care

Preschool

ABSTRACT

Purpose: To evaluate the effect of interesting games on reducing preoperative anxiety and improving compliance with anaesthesia in children.

Methods: Ninety preschool-aged children undergoing elective surgery were randomly assigned to two groups. The children in the control group were admitted to a general preoperative room with one parent for 15–20 min, and were then taken into the anaesthesia room. During anaesthetic induction, the nurse attracted the children's attention using an interesting game with encouragement and attention diversion. The children's anxiety was assessed using the Modified Yale Preoperative Anxiety Scale (mYPAS) when they entered the operating room, while they were waiting to undergo surgery, and during anaesthetic induction. Moreover, the children's compliance with anaesthetic induction was assessed using the Induction Compliance Checklist (ICC).

Results: No statistically significant differences in the mYPAS scores were observed between the two groups upon entering the operating room ($p > 0.05$). The mYPAS scores were significantly lower in the experimental group than in the control group while waiting for surgery and during anaesthetic induction ($p < 0.05$), while there were no significant differences in the mYPAS scores upon entering the operating room. The children's compliance with anaesthetic induction was significantly higher in the experimental group than in the control group ($p < 0.05$).

Conclusion: Engagement in an interesting game can reduce preschool-aged children's preoperative anxiety and improve their compliance with anaesthetic induction.

Copyright © 2014, Chinese Nursing Association. Production and hosting by Elsevier (Singapore) Pte Ltd. All rights reserved.

* Corresponding author.

E-mail address: sssgx1@sina.com (X.-L. Gao).

Peer review under responsibility of Chinese Nursing Association



1. Introduction

Due to psychological immaturity, children usually feel scared and nervous in the operating room, which is a strange environment to them. In addition, more than 60% of children feel anxious [1] while undergoing anaesthetic induction. These unhealthy emotions may have serious negative impacts such as timidity, nocturnal enuresis, anxiety, depression, action displacement, and other sequelae in later life; in some cases, these negative impacts may last for years [2]. According to some research reports [3], children inherently feel interested in games, which can reduce operation-associated pain and improve compliance during venipuncture. The present study focused on preoperative intervention in the form of interesting games in preschool-aged children to relieve their negative emotions and allow for smoother anaesthetic induction.

2. Materials and methods

2.1. Patients

Preschool children who had undergone operations in the Paediatric Surgery Department of our hospital from September 2011 to January 2012 were selected for inclusion in the present study. Ill children who met the following inclusion criteria were enrolled: age of 3–6 years; had undergone his or her first operation or had undergone an elective operation; no mental disorders, developmental retardation, or hypophrenia; presence of routine surgical disease, but no heart disease, bone fracture, or serious disease; operations requiring general anaesthesia; and parents agreed to participate in the research. In total, 59 children met these inclusion criteria. All children were divided into an experimental group and control group using a random number table.

The experimental group comprised 29 children, including 20 male and 9 female children with an average age of 4.52 ± 1.21 years. Of these 29 children, 10 underwent oblique inguinal hernia repair, 8 underwent superficial tumour excision, 7 underwent cryptorchidopexy, and 4 underwent hypospadias repair. The control group comprised 30 children, including 23 male and 7 female children with an average age of 4.37 ± 1.09 years. Of these 30 children, 13 underwent oblique inguinal hernia repair, 6 underwent superficial tumour excision, 5 underwent cryptorchidopexy, and 6 underwent hypospadias repair. All 59 children underwent intravenous anaesthetic induction. No statistically significant differences were noted in age, sex, or operation mode between the experimental and control groups (age: $t = 0.50$, $p = 0.62$; sex: $\chi^2 = 0.44$, $p = 0.51$; operation mode constituent ratio: $\chi^2 = 1.39$, $p = 0.71$).

2.2. Research methods

2.2.1. Experimental group

The anaesthesia induction room was decorated with items of interest to children. Cartoons were pasted onto all walls; the floor was covered by splicing foam floorboards of

different colours; many kinds of toys were provided, including cartoon car models, puppets, and drawing boards; and a mini DVD player and various cartoon discs were provided. A bookshelf was placed in one corner of the room and contained books full of illustrations appropriate for preschool children, such as *Grimm's Fairy Tales*, *A Hundred Thousand Whys*, and others.

Within 15–20 min before the operation, the children in the experimental group entered the decorated anaesthesia induction room with their parents. One nurse from the operating room accompanied them. The children selected a game according to their own interest, and the nurse joined them to increase the sense of trust. For instance, if the child elected to watch an animated cartoon, the nurse asked questions such as, "Who do you like in the cartoon and why do you like it?" and provided explanations such as, "I shall give an injection in your hand after a while, just like the mosquito bites you, and you will not feel pain." The goal was to provide psychological preparation for the surgery. The nurse then began the venipuncture procedure while another nurse attracted the child's attention using various methods of encouragement, such as implied wording, encouraging wording, or reward methods such as, "You are so good, The Pleasant Sheep does not cry when it is given the injection, you are so brave like the sheep," "You are so brave, your teachers and friends in the nursery school like you," and so on. The nurse also offered the child a cartoon smile poster as a reward. After finishing the venipuncture procedure, a pulse oximeter was pasted up with the cartoon pictures, or pictures were used to observe the child's oxygen saturation and heart rate. The anaesthetist injected the anaesthetic in the anaesthesia induction room in accordance with the child's weight and age. After induction of anaesthesia, a transfer trolley was used to move the child to the operating room. The child's parents then left the anaesthesia induction room.

2.2.2. Control group

The children in the control group underwent routine care and preparation for 15–20 min before the operation. One parent accompanied the child into the waiting room before the operation. The nurse said a few words to comfort the child and answered any questions raised by the child and his or her parent to address their concerns about the anaesthesia and the operation. The operating room nurse brought the child into the general anaesthesia induction room to perform the venipuncture procedure and anaesthetic induction. The child was then moved to the operating room.

2.3. Assessment method

The Modified Yale Preoperative Anxiety Scale (mYPAS) was used to assess the children as they entered the operating room, waited to undergo the operation, and underwent anaesthetic induction. The mYPAS is used to describe the mental anxiety of children aged 2–12 years during the perioperative period. It contains 5 sections and 22 items. The five sections are mental status, language, emotion expression, wakefulness, and dependency on parents; every item has a

Download English Version:

<https://daneshyari.com/en/article/2655973>

Download Persian Version:

<https://daneshyari.com/article/2655973>

[Daneshyari.com](https://daneshyari.com)