BLOWING BUBBLES AS BREATHING EXERCISE IN PREVENTING THE OCCURRENCE OF ATELECTASIS AMONG POST OPEN HEART SURGERY PRESCHOOLERS

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ABSTRACT

Background of the study

Atelectasis, defined as a collapsed part of the alveoli or all portions of the lungs, is the most common pulmonary complication noted post-operatively among patients who undergo open heart surgery. Several techniques have been extensively studied to prevent atelectasis, and in this study, deep breathing exercises and blowing bubbles were compared.

Objective

The study aimed to determine the effectiveness of blowing bubbles as a breathing exercise in preventing the occurrence of atelectasis among preschoolers aged 3-6 years who underwent open heart surgery.

Methods

This study was conducted in the pediatric units of the Philippine Heart Center. It utilized randomized controlled trial as the study design. A total of 60 patients passed the inclusion and exclusion criteria and were subjected to the interventions. A chest radiograph was done in both groups in order to confirm the presence or absence of atelectasis. T-Test, Fisher's Test, Chi-Square, and Risk Ratio Analysis were the statistical tests used to analyze the data.

Results

Results revealed that blowing bubbles is better as compared to the routine breathing exercise in preventing the occurrence of atelectasis among post open heart surgery pre-schoolers, with a relative reduction of 23.34%.

Keywords: Blowing bubbles, breathing exercise, open heart surgery, preschoolers, atelectasis