



# Children's pre-operative tonsillectomy pain education: Clinical outcomes

Margie Crandall <sup>a,\*</sup>, Cathy Lammers <sup>b</sup>, Craig Senders <sup>c</sup>,  
Jerome V. Braun <sup>d</sup>, Marilyn Savedra <sup>e</sup>

<sup>a</sup> Department of Patient Care Services, University of California Davis Health System, United States

<sup>b</sup> Department of Anesthesiology and Pain Medicine, University of California Davis Health System, States

<sup>c</sup> Department of Otolaryngology, University of California Davis Health System, United States

<sup>d</sup> Department of Statistics, University of California, Davis, United States

<sup>e</sup> Department of Family Health Nursing, University of California, San Francisco, United States

Received 23 April 2008; received in revised form 30 June 2008; accepted 3 July 2008

## KEYWORDS

Post-operative pain;  
Pre-operative  
education;  
Tonsillectomy  
outcomes

## Summary

**Objective:** To examine the effects of pre-operative tonsillectomy pain education on children's (7–13 years) self-reported pre-operative anxiety and post-operative clinical outcomes (i.e., anxiety, pain intensity, quality of pain and sleep, oral intake, perceptions of pre-operative education, and pain expectation).

**Method:** A prospective, repeated measures, quasi-experimental design using an age appropriate pain education booklet ( $n = 30$ ) and a standard care comparison group ( $n = 30$ ) was employed to investigate children's pre- and post-education anxiety and post-operative tonsillectomy with or without adenoidectomy subjective experiences in the hospital and home settings. Group comparisons were performed using the Wilcoxon test, Fisher's exact test, repeated measures analysis of variance, and mixed model regression.

**Results:** There were no significant differences between groups for measures of anxiety, pain intensity, quality of pain and sleep, oral intake, or expected pain. There was no change in anxiety before or after pre-operative education ( $P = 0.85$ ). Ninety-six percent ( $n = 25$ ) of the children in the intervention group reported that pre-operative pain education helped with their post-operative pain and 72% ( $n = 16$ ) in the control group stated that it would be helpful to learn about pain before surgery. The majority of children in both the intervention and control groups (96%, 91%, respectively) stated learning about the 0–10 numeric pain intensity scale helped or would be helpful to learn pre-operatively.

\* Corresponding author at: University of California Davis Health System, The Center for Nursing Research, N-4 Nursing Administration, 2315 Stockton Boulevard, Sacramento, CA 95817, United States. Tel.: +1 916 734 7819; fax: +1 916 734 7837.

E-mail address: [margie.Crandall@ucdmc.ucdavis.edu](mailto:margie.Crandall@ucdmc.ucdavis.edu) (M. Crandall).

*Conclusion:* Pre-operative pain education did not affect anxiety. Children valued pre-operative pain education. Pre-operative pain education may influence children's perceptions of medical care.

© 2008 Elsevier Ireland Ltd. All rights reserved.

## 1. Introduction

Children's pre-operative anxiety influences their post-operative pain experiences and behaviors [1]. Common causes for children's pre-operative anxiety are fear of the unknown, needles, and post-operative pain [2]. Despite school age children's interest in pre-operative pain preparation [3] and their ability to describe pain [4,5], little is known about the clinical outcomes pre-operative pain education has on children's anxiety and post-operative pain experiences. In addition, parental satisfaction with health care is related to clinicians' providing developmentally appropriate information directly to their child [6]. Yet, children's pre-operative education is usually not specific to a particular surgery and clinicians rarely obtain children's views about what is important [3].

Children's pre-procedure pain education studies [7–11] have focused on written/or video information developed by clinicians and provided primarily to parents. Only one study [10] was identified that specifically addressed children's pre-operative pain education. This study's findings [10] reported that pain education developed by clinicians did not influence children's post-operative pain intensity, location, quality of pain, pain behaviors or satisfaction with patient control analgesia. However, clinical outcomes (i.e., anxiety, sleep problems, expectation for pain, and quality of pain) associated with children who are highly anxious [1] or experiencing post-operative pain [12–14] were either not measured or reported.

Since tonsillectomy and adenoidectomy procedures are the most common elective surgeries performed on children of various ages, this population was chosen to investigate the outcomes of children's pre-operative pain education. Based on a review of the tonsillectomy research [15–22], the influence of pre-operative pain education was measured on the reported post-operative outcomes.

There is a paucity of knowledge regarding how pre-operative pain education influences pre-operative anxiety and post-operative outcomes including outcomes associated with children experiencing tonsillectomies. Although children's pre-operative pain education is important to both parents and children, there is little substantive knowledge to guide the practice of clinicians. Therefore, the

purpose of this study was to examine the effects of pre-operative tonsillectomy pain education, with input from children, on the following: (1) children's pre-operative anxiety and (2) post-operative subjective experiences including anxiety, pain intensity, quality of pain and sleep, oral intake, perceptions of pre-operative pain education, and pain expectations. A component of this study, an initial validation of a children's self-report numeric anxiety scale is previously reported [23].

## 2. Methods

A prospective repeated measures, quasi-experimental design using an age appropriate pain education booklet and standard care comparison group was employed to investigate the influence pre-operative pain education had on children's pre- and post-education anxiety and post-operative experiences.

### 2.1. Sample

Sixty children, between 7 and 13 years, scheduled for tonsillectomy with or without adenoidectomy participated with 30 each in the control and intervention groups. Due to the university hospital's pediatric otolaryngology (ENT) clinic's tertiary level of care and provision of services to primarily high risk populations, inclusion criteria were: history of obstructive sleep apnea (OSA), ability to speak and read English, and no prior history of neurological impairments or chronic pain related conditions. Convenience sampling was used to recruit participants in a timely manner with children sequentially assigned to treatment groups, alternating between the two assignments. Children's post-operative clinical status determined the time of discharge (i.e., night in hospital or home).

### 2.2. Intervention

The pain education booklet was specific for children experiencing tonsillectomy and adenoidectomy. The content of the booklet was developed from interviews in the ENT clinic with 12 children (7–13 years) who had recently experienced a tonsillectomy and adenoidectomy. Semi-structured questions focused on what they perceived was important to learn

Download English Version:

<https://daneshyari.com/en/article/4114920>

Download Persian Version:

<https://daneshyari.com/article/4114920>

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